

James Fraser STODDART

List of Publications and Patents

COMMUNICATIONS, PAPERS AND REVIEWS

1. The analytical importance of the methoxy content of Acacia gum exudates (D.M.W. Anderson, G.M. Cree, M.A. Herbich, K.A. Karamalla, J.F. Stoddart), *Talanta* **1964**, *11*, 1559–1560.
2. An infrared method for the determination of small amounts of acetaldehyde in aqueous solution (D.M.W. Anderson, J.F. Stoddart) in Proceedings of S.A.C. Symposium, Nottingham, ed. P.W. Shallis (Heffer and Sons, Cambridge) 1965, 232–238.
3. The use of Biogel-P in the gel filtration of polysaccharides (D.M.W. Anderson, I.C.M. Dea, S. Rahman, J.F. Stoddart), *Chem. Commun.* **1965**, 145–146. [28]
4. Some observations on molecular weight estimations by molecular-sieve chromatography (D.M.W. Anderson, J.F. Stoddart), *Anal. Chim. Acta* **1966**, *34*, 401–406. [55]
5. The use of molecular-sieve chromatography in studies on Acacia senegal gum (gum arabic) (D.M.W. Anderson, J.F. Stoddart), *Carbohyd. Res.* **1966**, *2*, 104–114.
6. Some structural features of *Acacia senegal* gum (gum arabic) (D.M.W. Anderson, Sir Edmund Hirst, J.F. Stoddart), *J. Chem. Soc. (C)* **1966**, 1959–1966. [63]
7. Theories of molecular-sieve chromatography (D.M.W. Anderson, J.F. Stoddart), *Lab. Practice* **1967**, *16*, 841–846.
8. Some structural features of *Acacia arabica* gum (D.M.W. Anderson, Sir Edmund Hirst, J.F. Stoddart), *J. Chem. Soc. (C)* **1967**, 1476–1486. [40]
9. Analytical Chemistry (D.M.W. Anderson, T.B. Pierce, J.F. Stoddart, J.D. Wilson), *Ann. Reports Chem. Soc.* **1967**, *63*, 657–687. [0]
10. Isolation of two arabinoses from *Acacia nilotica* gum (R.C. Chalk, J.K.N. Jones, J.F. Stoddart, W.A. Szarek), *Canad. J. Chem.* **1968**, *46*, 2311–2313. [5]
11. Medium heterocyclic rings from carbohydrate precursors (J.F. Stoddart, W.A. Szarek), Abstracts of 156th Amer. Chem. Soc. Mtg., Atlantic City, September 1968, CARB 28; *Canad. J. Chem.* **1968**, *46*, 3061–3069. [20]
12. Some structural features of *Citrus limonia* gum (lemon gum) (J.K.N. Jones, J.F. Stoddart), *Carbohyd. Res.* **1968**, *8*, 29–42. [21]
13. Some structural features of the mucilage from the bark of *Ulmus fulva* (slippery elm mucilage) (R.J. Beveridge, J.K.N. Jones, J.F. Stoddart, W.A. Szarek), *Carbohyd. Res.* **1969**, *9*, 429–439. [14]
14. Conformational studies on 1,3-dioxepans. Part I. 1,3:2,5:4,6-Tri-*O*-methylene-D-mannitol and some related compounds (T.B. Grindley, J.F. Stoddart, W.A. Szarek), *J. Chem. Soc. (B)* **1969**, 172–175. [19]
15. Conformational studies on 1,3-dioxepans. Part II. 1,3:2,5:4,6-Tri-*O*-methylene-D-mannitol and some related compounds (T.B. Grindley, J.F. Stoddart, W.A. Szarek), *J. Chem. Soc. (B)* **1969**, 623–626. [12]
16. Isochronous and anisochronous *O*-methylene protons in 4,5:9,10-bis-cyclo-hexano-1,3,6,8-tetraoxacyclodecanes (T.B. Grindley, J.F. Stoddart, W.A. Szarek), 52nd Chemical Institute of Canada Conference in Montreal, May 1969; *J. Am. Chem. Soc.* **1969**, *91*, 4722–4724. [13]
17. Large heterocyclic rings from carbohydrate precursors (J.K.N. Jones, J.F. Stoddart, W.A. Szarek), *Canad. J. Chem.* **1969**, *47*, 3213–3215. [9]
18. Conformational studies on 1,3-dioxepans. Part III. 1,6-Dideoxy-2,5-*O*-methylene-D-mannitol and some related compounds (J.F. Stoddart, W.A. Szarek), Abstracts of 158th Amer. Chem. Soc. Meeting, New York, 1969, CARB 24; *J. Chem. Soc. (B)* **1971**, 437–442. [18]
19. Stereochemistry (J.F. Stoddart), *Chem. Br.* **1971**, *9*, 250. [2]
20. Stereochemistry at Sheffield (J.F. Stoddart), *Chem. Br.* **1972**, *10*, 216. [1]
21. Stereochemistry (J.F. Stoddart) in MTP International Review of Science, Organic Chemistry, Series One, Volume 1, ed. W.D. Ollis (1973), 1–28.
22. Molecular structure and conformations of carbohydrates (J.F. Stoddart) in MTP International Review of Science, Organic Chemistry, Series One, Volume 7, ed. G.O. Aspinall, 1973, 1–30.
23. Stereochemistry at Sheffield (J.F. Stoddart), *Chem. Br.* **1973**, *11*, 362–363. [1]

24. Conformational behaviour of di-*o*-thymotide and di-*o*-carvocrotide (W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1973**, 571–572. [18]
25. The conformational behaviour of 5,6,11,12,17,18-hexahydrotribenzo[*a,e,l*]cyclododecane and its derivatives (D.J. Brickwood, W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1973**, 638–640. [8]
26. Synthesis of medium heterocyclic rings from 6-deoxy-D-allose (R.G.S. Ritchie, J.F. Stoddart, W.A. Szarek, D.M. Vyas), *Carbohyd. Res.* **1974**, *32*, 279–285. [8]
27. Stereospecific synthesis of the *trans-anti-trans*- and *trans-syn-trans*-isomers of dicyclohexyl-18-crown-6 (J.F. Stoddart, C.M. Wheatley), *J. Chem. Soc., Chem. Commun.* **1974**, 390–391. [22]
28. The conformational behaviour of some medium-sized ring systems (W.D. Ollis, J.F. Stoddart, I.O. Sutherland), *Tetrahedron* **1974**, *30*, 1903–1921. [60]
29. Synthesis of macrobicyclic polyethers with carbon bridgeheads (A.C. Coxon, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1974**, 537. [14]
30. Constitutional isomerism in bicyclic diacetals and the conformational behaviour of *cis*-fused 1,3,6,8-tetraoxabicyclo[5,3,0]decanes (I.J. Burden, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1974**, 863–864. [7]
31. Configurational equilibria in 2,4-disubstituted- γ -butyrolactones (S.A.M.T. Hussain, W.D. Ollis, C. Smith, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1974**, 873–874. [2]
32. Conformational studies on aza and thia derivatives of 12,13-dihydro-11*H*-dibenzo[*a,e*]cyclononene (W.D. Ollis, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1974**, *13*, 727–729. [3]
33. Conformational studies on aza and thia derivatives of 6,11,12,13-tetrahydro-5*H*-dibenzo[*a,f*]cyclononene and 5,6,7,12,13,14-hexahydrodibenzo[*a,f*]cyclodecene (W.D. Ollis, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1974**, *13*, 730–731. [3]
34. Conformational studies on oxa, thia, and aza derivatives of 7,8,13,14-tetrahydro-benzo[1,2]cyclonona[5,6,7-*de*]naphthalene and 8*H*,15*H*-7,16-dioxacyclodeca-[1,2,3-*de*:6,7,8-*d'e*] dinaphthalene (D.J. Brickwood, W.D. Ollis, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1974**, *13*, 731–732. [2]
35. The conformational behaviour of 6*H*,12*H*,18*H*-5,11,17-trithiatribenzo[*a,e,l*]cyclododecene (W.D. Ollis, M. Nogradi, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1975**, *14*, 168–169. [9]
36. The synthesis and conformational behaviour of *N,N',N''*-trimethyltrianthranilide (W.D. Ollis, J.A. Price, J.S. Stephanatou, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1975**, *14*, 169. [18]
37. Isomerism in bicyclic diacetals. Part I. 1,3:2,4- and 1,4:2,3-di-*O*-methylene-erythritol (I.J. Burden, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1975**, 666–674. [24]
38. Isomerism in bicyclic diacetals. Part II. Bicyclic methylene diacetals in the *galacto*, *arabino*, and *ribo* series (I.J. Burden, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1975**, 675–682. [22]
39. The stereochemistry of 2,4- and 2,3-disubstituted- γ -butyrolactones (S.A.M.T. Hussain, W.D. Ollis, C. Smith, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1975**, 1480–1492. [100]
40. Synthesis of configurationally chiral cryptands and cryptates from carbohydrate precursors (W.D. Curtis, G.H. Jones, D.A. Laidler, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1975**, 833–835. [53]
41. Chiral recognition by configurationally chiral cryptands (W.D. Curtis, G.H. Jones, D.A. Laidler, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1975**, 835–837. [48]
42. Synthesis of a [2]cryptand with carbon bridgeheads (A.C. Coxon, J.F. Stoddart), *Carbohyd. Res.* **1975**, *44*, C1–C4. [11]
43. Stereochemistry in Sheffield (J.F. Stoddart), *Chem. Br.* **1975**, *13*, 369.
44. The use of symmetry and carbohydrates in the design of cryptands (W.D. Curtis, D.A. Laidler, J.F. Stoddart), Abstracts of Centennial Amer. Chem. Soc. Mtg., New York, April 1976, CARB 54.
45. The isolation of conformational diastereoisomers of *N,N',N''*-tribenzyltrianthranilide (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart, A.G. Ferrige), *Angew. Chem., Int. Ed. Engl.* **1976**, *15*, 223–224. [16]
46. The conformational behaviour of 5,6,7,12-tetrahydrodibenzo[*a,d*]cyclooctene (F.E. Elhadi, W.D. Ollis, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1976**, *15*, 224–225. [14]

47. Conformational behaviour of medium-sized rings. Part III. Heterocyclic analogues of 12,13-dihydro-11*H*-dibenzo[*a,e*]cyclononene, 6,11,12,13-tetrahydro-5*H*-dibenzo[*a,e*]cyclononene, and 5,6,7,12,13,14-hexahydrodibenzo[*a,f*]cyclodecene (W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1976**, 926–937. [21]
48. Enantiomeric differentiation by chiral macrocyclic polyethers derived from D-mannitol and binaphthol (W.D. Curtis, R.M. King, J.F. Stoddart, G.H. Jones), *J. Chem. Soc., Chem. Commun.* **1976**, 284–285. [28]
49. Chiral crowns incorporating pyridyl units and tertiary amine functions (D.A. Laidler, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1976**, 979–980. [42]
50. Conformational studies on twelve-membered heterocycles. Crystal structure of 5,18-dimethyl-5,18-diazatribenzo[*a,e,f*]cyclododecene-6,17(5*H*,18*H*)dione (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart, A. Quick, D. Rogers, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1976**, 15, 757–759. [3]
51. The *trans,anti,trans*- and *trans,syn,trans*- isomers of dicyclohexyl-18-crown-6 and their complexes (I.J. Burden, A.C. Coxon, J.F. Stoddart, C.M. Wheatley), *J. Chem. Soc., Perkin Trans. 1* **1977**, 220–226. [54]
52. Macrobicyclic polyethers with bridgehead carbon atoms (A.C. Coxon, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1977**, 767–785. [58]
53. 1,6,13,25,30-Hexaoxa[6.6.6](1,3,5)cyclophane. Attempted synthesis of a [4]cryptand (W.D. Curtis, J.F. Stoddart, G.H. Jones), *J. Chem. Soc., Perkin Trans. 1* **1977**, 785–788. [25]
54. Chiral asymmetrical crown-ethers (D.A. Laidler, J.F. Stoddart), *Carbohydr. Res.* **1977**, 55, C1–C4. [32]
55. Stereoselectivity in complexation of primary alkylammonium cations by the diastereotopic faces of chiral asymmetric crowns (D.A. Laidler, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1977**, 481–483. [49]
56. Enantiomeric differentiation by a chiral symmetrical crown derived from L-iditol (W.D. Curtis, D.A. Laidler, J.F. Stoddart, J.B. Wolstenholme, G.H. Jones), *Carbohydr. Res.* **1977**, 57, C17–C22. [9]
57. To enzyme analogues by lock and key chemistry with crown compounds. Part 1. Enantiomeric differentiation by configurationally chiral cryptands synthesised from L-tartaric acid and D-mannitol (W.D. Curtis, D.A. Laidler, J.F. Stoddart, G.H. Jones), *J. Chem. Soc., Perkin Trans. 1* **1977**, 1756–1770. [96]
58. The complexation of primary alkylammonium salts and secondary dialkylammonium salts by *N,N*-dimethyl-1,7-diaza-4,10-dioxacyclodecane (J.C. Metcalfe, J.F. Stoddart, G.H. Jones) *J. Am. Chem. Soc.* **1977**, 99, 8317–8319. [48]
59. Complexes of primary alkylammonium salts and secondary dialkylammonium salts with diazaparacyclophanes (H.F. Beckford, R.M. King, J.F. Stoddart, R.F. Newton), *Tetrahedron Lett.* **1978**, 171–174. [22]
60. Conformational behaviour of medium-sized rings. Part 4. Heterocyclic analogues of 7,8,13,14-tetrahydrobenzo[6,7]cyclonona[1,2,3-*de*]naphthalene and 7,8,15,16-tetrahydrocyclodeca[1,2,3-*de*:6,7,8-*d'e*]dinaphthalene (D.J. Brickwood, W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1978**, 1385–1392. [7]
61. Conformational behaviour of medium-sized rings. Part 5. Transannular reactions of (16*Z*)-8,9-dihydro-8-methyl-17*H*-dinaphth[1,8-*cd*:1',8'-*h*]azacycloundecine and (12*Z*)-6,7-dihydro-6-methyl-5*H*-benz[*cg*]azonine. Two examples of "reverse Hofmann eliminations" (D.J. Brickwood, A.M. Hassan, W.D. Ollis, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1978**, 1393–1398. [12]
62. Conformational behaviour of medium-sized rings. Part 6. 5,6,11,12,17,18-Hexahydrotribenzo[*a,e,f*]cyclododecene and its 2,3,8,9,14,15- and 1,4,7,10,13,16-hexamethyl derivatives. 2,3,8,9- and 1,4,7,10-Tetramethyl-5,6,11,12-tetrahydrodibenzo[*a,e*]cyclooctene (D.J. Brickwood, W.D. Ollis, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1978**, 1398–1414. [33]
63. Conformational behaviour of medium-sized rings. Part 7. 5,6,7,12-Tetrahydrodibenzo[*a,d*]cyclooctene (F.E. Elhadi, W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1978**, 1415–1421. [7]
64. Conformational behaviour of medium-sized rings. Part 8. 6*H*,12*H*,18*H*-Tribenzo[*b,f,j*][1,5,9]-trithiacyclododecin and its 5,5,11,11,17,17-hexaoxide (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart, M. Nogradi), *J. Chem. Soc., Perkin Trans. 1* **1978**, 1421–1428. [11]
65. On the stereochemistry of noncovalent interactions in organic and metal cationic complexes (A.C. Coxon, D.A. Laidler, R.B. Pettman, J.F. Stoddart), *J. Am. Chem. Soc.* **1978**, 100, 8260–8262. [53]

66. The complexing properties of chiral crown ethers incorporating 1,3:4,6-di-*O*-methylene-D-mannitol residues. A secondary dipole-induced dipole interaction (D.A. Laidler, J.F. Stoddart), *Tetrahedron Lett.* **1979**, 453–456. [26]
67. Complexation selectivity by chiral asymmetric crowns incorporating the 4,6-*O*-benzylidene derivatives of methyl- α -D-glucopyranoside and methyl- α -D-galacto-pyranoside. A secondary anomeric effect (R.B. Pettman J.F. Stoddart), *Tetrahedron Lett.* **1979**, 457–460. [19]
68. Chiral asymmetric crowns incorporating the 4,6-*O*-benzylidene derivatives of methyl- α -D-mannopyranoside and methyl- α -D-altropyranoside. The influence of stereochemistry upon complexation of organic cations (R.B. Pettman, J.F. Stoddart), *Tetrahedron Lett.* **1979**, 461–464. [21]
69. Chiral asymmetric crowns incorporating the 4,6-*O*-benzylidene derivatives of methyl- α -D-glucopyranoside and methyl- α -D-galactopyranoside. A configurational impediment to complexation of organic cations by 18-crown-6 derivatives (D.A. Laidler, J.F. Stoddart, J.B. Wolstenholme), *Tetrahedron Lett.* **1979**, 465–468. [30]
70. Nomenclature and stereochemistry (J.F. Stoddart) in Barton and Ollis's *Comprehensive Organic Chemistry*, Vol. 1 (ed., J.F. Stoddart), Pergamon Press, Oxford, 1979, Part 1, pp. 3–33.
71. The complexing properties of a chiral 18-crown-6 derivative incorporating a 2,5-anhydro-D-mannitol residue. A constitutional and stereochemical means of enhancing complexation (J.A. Haslegrave, J.F. Stoddart, D.J. Thompson), *Tetrahedron Lett.* **1979**, 2279–2282. [17]
72. The synthesis of a chiral receptor molecule containing three carbohydrate residues within a 20-crown-6 constitution (D.G. Andrews, P.R. Ashton, D.A. Laidler, J.F. Stoddart, J.B. Wolstenholme), *Tetrahedron Lett.* **1979**, 2629–2632. [12]
73. From carbohydrates to enzyme analogues (Tate and Lyle Lecture) (J.F. Stoddart), *Chem. Soc. Rev.* **1979**, 8, 85–142. [211]
74. Lock and key chemistry with crown compounds (A.C. Coxon, W.D. Curtis, D.A. Laidler, J.F. Stoddart) in *Asymmetry in Carbohydrates* (ed. R.E. Harmon), Marcel Dekker, New York, 1979, pp. 167–197; *J. Carbohyd. Nucl.* **1979**, 6, 167–197. [6]
75. The design and development of enzyme analogues (J.F. Stoddart) in *Enzymic and Non-Enzymic Catalysis* (ed. P. Dunnill, A. Wiseman, N. Blakebrough), Ellis Horwood, Chichester, 1980, pp. 84–110.
76. The synthesis and complexing properties of oxo-12-crown-3 and oxo-18-crown-5 (G.D. Beresford, J.F. Stoddart), *Tetrahedron Lett.* **1980**, 867–870. [18]
77. Holes, handedness, handles, and hopes - meeting the requirements of primary binding, chirality, secondary binding, and functionality in enzyme analogues (J.F. Stoddart) in *Proceedings of the Summer School on Bioenergetics and Thermodynamics: Model systems*, 21 May-1 June 1979, Tabiano, Italy (ed. A. Braibanti), Reidel, Dordrecht, Holland, 1980, pp. 43–62.
78. High resolution ^{13}C NMR spectroscopy and X-ray crystallography of complexes formed by *N,N'*-dimethyl-1,7-diaza-4,10-dioxacyclododecane (J.C. Metcalfe, J.F. Stoddart, G. Jones, W.E. Hull, A. Atkinson, I.S. Kerr, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1980**, 540–543. [17]
79. Old crowns and new chemistry: Molecular receptors and intermolecular conformational analysis (J.F. Stoddart), *Lectures in Heterocyclic Chemistry*, Vol. 5 (ed. R.N. Castle, S.W. Schneller), **1980**, S-47–S-60.
80. Enzymes to order? (J.F. Stoddart) in *Spectrum* (ed. M.J. Quan) published by The Central Office of Information, London, (1980) No. 170, pp. 5–7.
81. Dithiosalicylides and trithiosalicylides. Their conformational behaviour in solution (G.B. Guise, W.D. Ollis, J.A. Peacock, J.S. Stephanatou, J.F. Stoddart), *Tetrahedron Lett.* **1980**, 4203–4206. [9]
82. Synthesis and conformational behaviour of tetraanthranilides (A. Hoorfar, W.D. Ollis, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1980**, 4211–4214. [5]
83. Synthesis and conformational behaviour of 1,9,17-triaza[2.2.2]metacyclophane-2,10,18-trione derivatives (F.E. Elhadi, W.D. Ollis, J.F. Stoddart, D.J. Williams, K.A. Woode), *Tetrahedron Lett.* **1980**, 4215–4218. [13]
84. Synthesis of crown ethers and analogs (D.A. Laidler, J.F. Stoddart) in the *Chemistry of the Functional Groups. Supplement E1: The Chemistry of Ethers, Crown Ethers, Hydroxyl Groups and Their Sulfur Analogs* (ed. S. Patai), Wiley-Interscience, 1981, pp. 1–57.

85. Synthetic chiral receptor molecules from natural products (J.F. Stoddart) in Progress in Macrocyclic Chemistry (ed. R.M. Izatt, J.J. Christensen), Vol. 2, Wiley-Interscience, 1981, pp. 173–250.
86. Conformational behaviour and inclusion compound forming properties of 5,18-disubstituted derivatives of 5,11,12,18-tetrahydrotribenzo[*b,f*][1,4]-diazacyclo-dodecine-6,17-dione (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart, G. Unal, D.J. Williams), *Tetrahedron Lett.* **1981**, 2225–2228. [3]
87. Synthesis and conformational behaviour of tri-3-methyltrianthranilides. A new example of spontaneous resolution and inclusion compound formation on crystallisation (S.J. Edge, W.D. Ollis, J.S. Stephanatou, J.F. Stoddart, D.J. Williams, K.A. Woode), *Tetrahedron Lett.* **1981**, 2229–2232. [12]
88. The solid state and solution conformational behaviour of a chiral 30-crown-10 derivative synthesised from 1,4:3,6-dianhydro-D-mannitol (J.C. Metcalfe, J.F. Stoddart, G. Jones, T.H. Crawshaw, A. Quick, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1981**, 430–432. [14]
89. The complexing properties of a bisdianhydro-D-mannitol-30-crown-10 derivative in solution and in the solid state (J.C. Metcalfe, J.F. Stoddart, G. Jones, T.H. Crawshaw, E. Gavuzzo, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1981**, 432–434. [15]
90. Second-sphere co-ordination of neutral and cationic transition metal complexes by crown ethers (H.M. Colquhoun, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1981**, 612–613. [31]
91. The binding of neutral and platinum complexes by crown ethers. X-Ray crystal structures of [*trans*-PtCl(PMe₃)NH₃-dibenzo-18-crown-6] and [{*trans*-PtCl₂(PMe₃)NH₃]₂-18-crown-6] (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1981**, 847–849. [42]
92. Isolation and X-ray crystal structure of [Cu(NH₃)₄H₂O-18-crown-6]_n²⁺[PF₆]_{2n}. A linear face-to-face hydrogen bonded chain copolymer (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1981**, 849–850. [36]
93. Formation and X-ray crystal structure of [Pt(H₂NCH₂CH₂NH₂)₂-18-crown-6]_n²⁺[PF₆]_{2n}. A hydrogen bonded stepped-chair copolymer (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1981**, 851–852. [26]
94. Second-sphere co-ordination of a cationic platinum complex by crown ethers. The X-ray crystal structure of [Pt(bipy)(NH₃)₂-dibenzo-30-crown-10]₂²⁺[PF₆]₂·0.6H₂O (H.M. Colquhoun, J.F. Stoddart, J.B. Wolstenholme, D.J. Williams, R. Zarzycki), *Angew. Chem., Int. Ed. Engl.* **1981**, 20, 1051–1053 (featured in *Nachr. Chem. Tech. Lab.* **1981**, 29, 684. [80]
95. Coronation of ligating acetonitrile by 18-crown-6. The X-ray crystal structure of {[*trans*-Ir(CO)(CH₃CN)(PPh₃)₂]⁺-18-crown-6} [PF₆]₂⁻·2CH₂Cl₂ (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1982**, 1426–1428. [26]
96. Stereochemical principles in the design and function of synthetic molecular receptors (T.H. Crawshaw, D.A. Laidler, J.C. Metcalfe, R.B. Pettman, J.F. Stoddart, J.B. Wolstenholme) in The Proceedings of the 26th OHOLO Biological Conference on Biomimetic Chemistry and Transition State Analogs as Approaches to Understanding Enzyme Catalysis (ed. B.S. Green, Y. Ashani, D. Chipman), Elsevier, Amsterdam, 1982, 49–65.
97. Stereoselective epoxidation of divinylcarbinol. A synthetic approach to the pentitols (D. Holland, J.F. Stoddart), *Carbohydr. Res.* **1982**, 100, 207–220. [11]
98. Conformational behaviour of medium-sized rings. Part 9. Disalicylides and Trisalicylides (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1629–1636. [9]
99. Conformational behaviour of medium-sized rings. Part 10. Dithiosalicylides and Trithiosalicylides (G.B. Guise, W.D. Ollis, J.A. Peacock, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1637–1648. [9]
100. Conformational behaviour of medium sized rings. Part 11. Dianthranilides and Trianthranilides. (A. Hoorfar, W.D. Ollis, J.A. Price, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1649–1699. [27]
101. Conformational behaviour of medium-sized rings. Part 12. Tri-3-methyltrianthranilides (S.J. Edge, W.D. Ollis, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1701–1714. [11]

102. Conformational behaviour of medium-sized rings. Part 13. Derivatives of 5,11,12,18-tetrahydrotribenzo [*b,f*][1,4]-diazacyclododecine-6,17-dione (W.D. Ollis, J.S. Stephanatou, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1715–1720. [7]
103. Conformational behaviour of medium-sized rings. Part 14. Tetraanthranilides (A. Hoorfar, W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1721–1726. [8]
104. Conformational behaviour of medium-sized rings. Part 15. Derivatives of 1,9,17-triaza[2.2.2]metacyclophane-2,10,18-triones (F.E. Elhadi, W.D. Ollis, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1982**, 1727–1732. [8]
105. The X-ray crystal structure of the aquo complex of 1,3:1',3':4,6:4',6'-tetra-*O*-methylene-2,2':5,5'-bis-*O*-oxydiethylenedi-*D*-mannitol (S.E. Fuller, D.A. Laidler, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1982**, 23, 1835–1836. [8]
106. A comparison between the solid state structures and solution behaviour of molecular complexes formed between primary alkylammonium salts and chiral crown ethers incorporating 1,3:4,6-diacetals of *D*-mannitol (S.E. Fuller, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1982**, 1093–1096. [7]
107. 1,3:4,6-Di-*O*-benzylidene-2,5-*O*-oxypentaethylene-*D*-mannitol and the solution state structure of its molecular complex with the benzylammonium cation. A variable temperature ¹H NMR spectroscopic investigation (S.E. Fuller, B.E. Mann, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1982**, 1096–1097. [13]
108. A stereoselective synthesis of xylitol (D.H. Holland, J.F. Stoddart), *Tetrahedron Lett.* **1982**, 23, 5367–5370. [4]
109. Crown ethers as second sphere ligands. The interaction of transition metal amines with 18-crown-6 and dibenzo-18-crown-6 (H.M. Colquhoun, D.F. Lewis, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Dalton Trans.* **1983**, 607–613. [88]
110. Regioselective and stereoselective methods for the synthesis of the pentitols (D. Holland, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 1* **1983**, 1553–1571. [18]
111. Complex formation between dibenzo-3*n*-crown-*n* ethers and the diquat dication (H.M. Colquhoun, E.P. Goodings, J.M. Maud, J.F. Stoddart, D.J. Williams, J.B. Wolstenholme), *J. Chem. Soc., Chem. Commun.* **1983**, 1140–1142. [60]
112. Crown ethers as enzyme models (J.F. Stoddart), in *The Chemistry of Enzyme Action* (ed. M.I. Page), Elsevier, Amsterdam, 1984, 529–561.
113. Crystal and supramolecular structures of BF₃NH₃·18-crown-6 and BH₃NH₃·18-crown-6 (H.M. Colquhoun, G. Jones, J.M. Maud, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Dalton Trans.* **1984**, 63–66. [39]
114. Second sphere coordination of cationic rhodium complexes by dibenzo-3*n*-crown-*n* ethers (H.M. Colquhoun, S.M. Doughty, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1984**, 23, 235–236. [37]
115. The isolation and X-ray crystal structure of a complex between sodium hexafluorophosphate and dibenzo-36-crown-12 (J.M. Maud, J.F. Stoddart, H.M. Colquhoun, D.J. Williams), *Polyhedron* **1984**, 3, 675–679. [15]
116. The trianthranilides: A new class of organic hosts (W.D. Ollis, J.F. Stoddart), in *Inclusion Compounds, Volume 2, Structural Aspects of Inclusion Compounds formed by Organic Host Lattices* (eds. J.L. Atwood, J.E.D. Davies, D.D. Macnicol), Academic Press, London, 1984, 169–205.
117. Stereospecific synthesis of macrobicyclic polyethers with carbon bridgeheads from chiral glycerol derivatives (B.L. Allwood, S.E. Fuller, P.C.Y.K. Ning, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1984**, 1356–1360. [31]
118. Enantioselective reductions of aromatic ketones with ammonia-borane complexes of chiral tetraphenyl-18-crown-6 derivatives (B.L. Allwood, H. Shahriari-Zavareh, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1984**, 1461–1464. [30]
119. Macrobicyclic polyethers as V-shaped hosts for cis-diammine-transition metal complexes (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1984**, 23, 821–823. [27]
120. Crown ether complexes of phosphonium salts - The X-ray structure analysis of [(Ph₃PMe)₂][18-crown-6][PF₆]₂ (B.L. Allwood, H.M. Colquhoun, J. Crosby, D.A. Pears, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1984**, 23, 824–825. [11]

121. Host-guest chemistry (J.F. Stoddart), RSC Annual Reports B 1983, (eds. A.G. Davies, P.J. Garratt), 1984, 353–378.
122. Crown ether complexes of sulphonium salts – The X-ray crystal structures of $[\text{PhCOCH}_2\text{SMe}_2 \cdot 18\text{C}6]_n[\text{PF}_6]_n$ and $[(\text{PhCOPhCHSMe}_2)_2 \cdot 18\text{C}6][\text{PF}_6]_2$ (B.L. Allwood, J. Crosby, D.A. Pears, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1984**, *23*, 977–979. [12]
123. A 1:1 complex between 1,4,7,10,13,16-hexaoxacyclooctadecane (18-crown-6) and phenacylammonium hexafluorophosphate (J.M. Maud, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1985**, *C41*, 137–140. [11]
124. Diamminebis(1,5-cyclooctadiene) (\square -1,4,10,13)-tetraoxa-7,16-diazacycloocta-decane-N7,N16-dirhodium bis-(hexafluorophosphate). An example of simultaneous first and second sphere coordination (H.M. Colquhoun, S.M. Doughty, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1985**, *24*, 135–136. [20]
125. Complexation of diquat by a regiospecifically-synthesised macrobicyclic receptor molecule (B.L. Allwood, F.H. Kohnke, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1985**, 311–314. [49]
126. An investigation of the kinetic and thermodynamic stability of a tribenzomacro-bicyclic polyether complex with diquat in acetone solution (F.H. Kohnke, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1985**, 314–317. [22]
127. Complexation of diquat by disubstituted dibenzo-30-crown-10 derivatives (F.H. Kohnke, J.F. Stoddart, B.L. Allwood, D.J. Williams), *Tetrahedron Lett.* **1985**, *26*, 1681–1684. [27]
128. An investigation by high resolution ^1H NMR spectroscopy of the kinetic stabilities of solution complexes of diquat with disubstituted dibenzo-30-crown-10 derivatives (F.H. Kohnke, J.F. Stoddart), *Tetrahedron Lett.* **1985**, *26*, 1685–1688. [16]
129. The isolation and X-ray structure of an adduct formed between 18-crown-6 and cisplatin (D.R. Alston, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1985**, 532–533. [30]
130. Second sphere coordination of $[\text{Pt}(\text{bipy})(\text{NH}_3)_2]^{2+}$ by dibenzo-crown ethers. Solution spectroscopic studies of the crystal and molecular structures of $[\text{Pt}(\text{bipy})(\text{NH}_3)_2 \cdot \text{dibenzo-36-crown-12}][\text{PF}_6]_2 \cdot 0.6\text{H}_2\text{O}$ and $[\text{Pt}(\text{bipy})(\text{NH}_3)_2 \cdot \text{dibenzo-24-crown-8}][\text{PF}_6]_2$ (H.M. Colquhoun, S.M. Doughty, J.M. Maud, J.F. Stoddart, D.J. Williams, J.B. Wolstenholme), *Israel J. Chem.* **1985**, *25*, 15–26. [31]
131. The complexation of the diquat dication by dibenzo-3*n*-crown-*n* ethers (H.M. Colquhoun, E.P. Goodings, J.M. Maud, J.F. Stoddart, J.B. Wolstenholme, D.J. Williams), *J. Chem. Soc., Perkin Trans. II* **1985**, 607–624. [117]
132. The isolation and X-ray crystal structure of a complex between lithium picrate and dibenzo-36-crown-12 (S.M. Doughty, J.F. Stoddart, H.M. Colquhoun, A.M.Z. Slawin, D.J. Williams), *Polyhedron* **1985**, *4*, 567–575. [22]
133. Synthesis of an octamethyl-18-crown-6 derivative and the X-ray crystal structure of its 2:1 complex with borane-ammonia (D.R. Alston, J.F. Stoddart, J.B. Wolstenholme, B.L. Allwood, D.J. Williams), *Tetrahedron* **1985**, *41*, 2923–2926. [18]
134. The stereospecific synthesis of macrobicyclic and macropolycyclic polyethers from carbohydrate precursors (J.F. Stoddart, S.E. Fuller, S.M. Doughty, P.C.K.Y. Ning, M.K. Williams, D.J. Williams, B.L. Allwood, A.M.Z. Slawin, and H.M. Colquhoun), *Pure Appl. Chem., Organic Synthesis: an Interdisciplinary Challenge*. Eds. J. Streith, H. Prinzbach, G. Schill. Blackwell Scientific, Oxford, 1985, 295–305.
135. The supramolecular structures and reactivities of some complexes of chiral crown ethers with borane-ammonia (H. Shahriari-Zavareh, J.F. Stoddart, M.K. Williams, B.L. Allwood, D.J. Williams), *J. Incl. Phenom.* **1985**, *3*, 355–377. [18]
136. A macrobicyclic receptor molecule for the diquat dication (B.L. Allwood, F.H. Kohnke, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1985**, *24*, 581–584. [33]
137. Controversial glycosaminoglycan conformations (D.A. Rees, E.R. Morris, J.F. Stoddart, E.S. Stevens), *Nature* **1985**, *17*, 480. [31]
138. Dynamic ^1H NMR spectroscopic studies of complexes formed between substituted ammonium cations and two chiral diazacrown ethers incorporating asymmetric carbohydrate units (M. Pietraszkiewicz, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. II* **1985**, 1559–1562. [12]

139. Cyclodextrins as second-sphere ligands for transition metal complexes – The X-ray crystal structure of $[\text{Rh}(\text{cod})(\text{NH}_3)_2 \cdot \alpha\text{-cyclodextrin}][\text{PF}_6][\text{H}_2\text{O}]$ (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1985**, *24*, 786–787. [76]
140. The binding of 1,1-cyclobutanedicarboxylatodiammeplatinum(II) by α -cyclodextrin in aqueous solution (D.R. Alston, T.H. Lilley, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1985**, 1600–1602. [56]
141. The X-ray crystal structure of a 1:1 adduct between α -cyclodextrin and 1,1-cyclo-butanedicarboxylato-diammineplatinum(II) (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1985**, 1602–1604. [41]
142. A 1:1 complex between 1,4,7,10,13,16-hexaoxacyclooctadecane (18-crown-6) and mercury (II) iodide, HgI_2 (D.A. Pears, J.F. Stoddart, J. Crosby, B.L. Allwood, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 51–53. [31]
143. The isolation and X-ray structure of a 2:1 complex between picric acid and dibenzo-24-crown-8 (H.M. Colquhoun, S.M. Doughty, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *J. Chem. Soc., Perkin Trans. II* **1986**, 253–257. [16]
144. Structure of a chiral monopyrido crown ether, 1,4:1',4':3,6:3',6'-tetra-anhydro-2,2'-O-[pyridine-2,6-diylbis-(methylene)]-5,5'-O-oxydiethylenedi-D-mannitol (T.H. Crawshaw, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 211–214. [4]
145. Chemistry beyond the molecule (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *New Scientist*, 1 May 1986, No 1506, 44–48. [6]
146. The meeting season (R.L. Wife, J.F. Stoddart), *Chem. Br.* **1986**, *22*, 474.
147. A 1:2 complex between 1,4,7,10,13,16-hexaoxacyclooctadecane(18-crown-6) and diphenylmethyl-sulphonium tetraiododi- μ -iododimercurate(II) (D.A. Pears, J.F. Stoddart, J. Crosby, B.L. Allwood, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 804–806. [12]
148. Structure of a macrobicyclic diaza polyether bis-sulphonamide (D.R. Alston, A.P. Bushell, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 903–905. [2]
149. Structure of a chiral bisanisylene crown ether, 1,4:1',4':3,6:3',6'-tetraanhydro-2,2':5,5'-bis-O-[2-methoxy-1,3-phenylenebis(methylene)]di-D-mannitol (T.H. Crawshaw, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 905–908. [2]
150. Structure of a chiral macrobicyclic crown ether, 1,4:1',4':3,6:3',6'-tetraanhydro-2,2':5,5'-O-[2,2'-(3,6-dioxaoctane-1,8-diylidyoxy)bis-1,3-phenylene-tetrakis-(methylene)di-D-mannitol (T.H. Crawshaw, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1986**, *C42*, 908–911. [1]
151. Second-sphere coordination – a novel role for molecular receptors (H.M. Colquhoun, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1986**, *25*, 487–507. [263]
152. Second-sphere coordination of cationic rhodium complexes $[\text{Rh}(\text{L})(\text{NH}_3)_2]^+$ by dibenzo-3*n*-crown-*n* ethers [*n* = 6–12; L = 1,5-cyclooctadiene (cod) or norbornadiene (nbd)]. Solution ^1H NMR spectroscopic studies and X-ray crystal structures of $[\text{Rh}(\text{cod})(\text{NH}_3)_2 \cdot \text{DB21C7}][\text{PF}_6]$, $[\text{Rh}(\text{cod})(\text{NH}_3)_2 \cdot \text{DB24C8}][\text{PF}_6]$, $[\text{Rh}(\text{nbd})(\text{NH}_3)_2 \cdot \text{DB24C8}][\text{PF}_6]$, $[\text{Rh}(\text{cod})(\text{NH}_3)_2 \cdot \text{DB30C10}][\text{PF}_6]$, and $\{[\text{Rh}(\text{cod})(\text{NH}_3)_2] \cdot 2\text{DB36C12}\}[\text{PF}_6]_2$ (H.M. Colquhoun, S.M. Doughty, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *J. Chem. Soc., Dalton Trans.* **1986**, 1639–1652. [45]
153. Crown ethers as Molecular Receptors and Reagents, in "Supermolecules: Biological and Chemical Aspects" (J.F. Stoddart), *Accademia Nazionale dei Lincei* **1987**, 37–39.
154. Chiral crown ethers (J.F. Stoddart), *Top. Stereochem.* **1987**, *17*, 207–288. [120]
155. Novel 4,15-polyether analogues of macrocyclic trichothecenes (D.W. Anderson, R.M. Black, D.A. Leigh, J.F. Stoddart), *Tetrahedron Lett.* **1987**, *28*, 2653–2656. [6]
156. Novel 3,4- and 8,15-polyether analogues of macrocyclic trichothecenes (D.W. Anderson, R.M. Black, D.A. Leigh, J.F. Stoddart), *Tetrahedron Lett.* **1987**, *28*, 2657–2660. [7]
157. The facile conversion of T-2 toxin and neosolaniol into anguidine (D.W. Anderson, R.M. Black, D.A. Leigh, J.F. Stoddart, N.E. Williams), *Tetrahedron Lett.* **1987**, *28*, 2661–2664. [5]

158. Second sphere coordination of tetra-ammineplatinum(II) by a macrocyclic crown ether bisamide receptor (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams, R. Zarzycki), *Angew. Chem., Int. Ed. Engl.* **1987**, *26*, 692–693. [20]
159. Macrobicyclic polyethers as second sphere ligands for tetra-ammineplatinum(II) (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams, R. Zarzycki), *Angew. Chem., Int. Ed. Engl.* **1987**, *26*, 693–696. [27]
160. A comparison of the receptor stereochemistry in [Pt(bipy)(NH₃)₂·dinaphtho-30-crown-10][PF₆]₂ and [Diquat·dinaphtho-30-crown-10][PF₆]₂ (bipy = 2,2'-bipyridine) (H.M. Colquhoun, S.M. Doughty, F.H. Kohnke, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams, R. Zarzycki), *J. Chem. Soc., Chem. Commun.* **1987**, 1054–1058. [29]
161. Complexation of paraquat and diquat by a bismetaphenylene-32-crown-10 derivative (B.L. Allwood, H. Shahriari-Zavareh, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1987**, 1058–1061. [121]
162. Complexation of diquat by a bisparaphenylene-34-crown-10 derivative (B.L. Allwood, N. Spencer, H. Shahriari-Zavareh, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1987**, 1061–1064. [65]
163. Complexation of paraquat by a bisparaphenylene-34-crown-10 derivative (B.L. Allwood, N. Spencer, H. Shahriari-Zavareh, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1987**, 1064–1066. [209]
164. Complex formation between bisparaphenylene-(3n+4)-crown-n ethers and the paraquat and diquat dications (P.R. Ashton, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1987**, 1066–1069. [64]
165. The dependence of the solid state structures of bisparaphenylene-(3n+4)-crown-n ethers upon macrocyclic ring size (A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1987**, 1070–1072. [50]
166. Stereoselective synthesis of non-carbohydrates from cyclic precursors (F.H. Kohnke, J.F. Stoddart), Abstracts of 194th American Chemical Society National Meeting, New Orleans, 30 Aug–4 Sept 1987, CARB 32.
167. The structural mapping of an unsymmetrical chemically-modified cyclodextrin by high field nuclear magnetic resonance spectroscopy (C.M. Spencer, J.F. Stoddart, R. Zarzycki), *J. Chem. Soc., Perkin Trans. II* **1987**, 1323–1336. [64]
168. Noncovalent bonding interactions between tetraphenylborate anions and paraquat and diquat (G.J. Moody, R.K. Owusu, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, J.D.R. Thomas, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1987**, *26*, 890–892. [48]
169. Molecular belts and collars in the making: A hexaepoxyoctacosahydro-[12]cyclacene derivative (F.H. Kohnke, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1987**, *26*, 892–894. [122]
170. Enzyme models: crown ethers (J.F. Stoddart), RSC Special Publication on Enzyme Mechanisms, Eds. M.I. Page, A. Williams, London, 1987, pp. 35–55.
171. The extramolecular approach to enzyme analogues (J.F. Stoddart), *Biochem. Soc. Trans.* **1987**, *15*, 1188–1191. [18]
172. Complexation of diquat and paraquat by macrocyclic polyethers incorporating two dihydroxynaphthalene residues (P.R. Ashton, E.J.T. Chrystal, J.P. Mathias, K.P. Parry, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1987**, *28*, 6367–6370. [87]
173. Piezoelectric quartz crystal detection of benzene vapour using chemically-modified cyclodextrins (C.S.I. Lai, G.J. Moody, J.D.R. Thomas, D.C. Mulligan, J.F. Stoddart, R. Zarzycki), *J. Chem. Soc. Perkin Trans. II* **1988**, 319–324. [45]
174. Cholesteric phases induced by chiral substituted cyclohexylenemethanes (P.M.A. Bonaccorsi, D.A. Dunmur, J.F. Stoddart), *New J. Chem.* **1988**, *12*, 83–85. [6]
175. The conception and birth of new receptor chemistry from dibenzo-18-crown-6 (J.F. Stoddart), *Pure Appl. Chem.* **1988**, *60*, 467–472. [54]
176. Diazadibenzo-30-crown-10 derivatives as receptors for diquat (P.L. Anelli, N. Spencer, J.F. Stoddart), *Tetrahedron Lett.* **1988**, *29*, 1569–1572. [16]
177. Solid state structure of the molecular complex between a diazadibenzo-30-crown-10 derivative and diquat (P.L. Anelli, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1988**, *29*, 1573–1574. [9]

178. Solid state structure of a diazadibenzo-30-crown-10 disulphonamide (P.L. Anelli, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1988**, 29, 1575–1576. [8]
179. Mass spectrometric investigation of adduct formation by methylated cyclodextrins (P.R. Ashton, J.F. Stoddart, R. Zarzycki), *Tetrahedron Lett.* **1988**, 29, 2103–2106. [38]
180. Methyl rel-(2R,3S,5R,6S)-7-oxabicyclo[2.2.2]heptane 2,3,5,6-tetracarboxylate (F.H. Kohnke, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 736–737. [9]
181. rel-(1R,4S,5S,8R)-1,4:5,8-Diepoxy-1,4,5,8-tetrahydroanthracene: An example of polymorphism (F.H. Kohnke, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 738–740. [16]
182. Methyl-rel-(1R,2R,3S,4S,5S,6S,7R,8R)-1,4:5,8-diepoxy-1,2,3,4,5,6,7,8-octahydro-anthracene-2,3,6,7-tetracarboxylate (F.H. Kohnke, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 740–742. [4]
183. rel-(1R,4S,5R,8S)-1,4:5,8-Diepoxy-1,4,5,8-tetrahydroanthracene (F.H. Kohnke, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 742–745. [13]
184. Second-sphere photochemistry and photophysics: Luminescence of the [Pt(bpy)(NH₃)₂]²⁺-dibenzo[30]crown-10 adduct (R. Ballardini, M.T. Gandolfi, V. Balzani, F.H. Kohnke, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1988**, 27, 692–694. [29]
185. Structure of the cis-cisoid-cis isomer of 2,3,11,12-tetra-anisyl-18-crown-6: rel-(2R,3S,11R,12S)-2,3,11,12-tetrakis-4-methoxyphenyl-1,4,7,10,13,16-hexaoxacyclooctadecane (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1097–1100. [10]
186. A 1:1 adduct between the cis-cisoid-cis isomer of 2,3,11,12-tetra-anisyl-18-crown-6 and borane ammonia, BH₃NH₃ (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1101–1104. [9]
187. Structure of the cis-transoid-cis isomer of 2,3,11,12-tetra-anisyl-18-crown-6: rel-(2R,3S,11S,12R)-2,3,11,12-tetrakis-4-methoxyphenyl-1,4,7,10,13,16-hexaoxa-cyclooctadecane (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1104–1106. [5]
188. A 1:2 adduct between the cis-transoid-cis isomer of 2,3,11,12-tetra-anisyl-18-crown-6 and borane ammonia, BH₃NH₃ (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1106–1109. [9]
189. Structure of the trans-cisoid-trans isomer of 2,3,11,12-tetra-anisyl-18-crown-6: rel-(2R,3R,11S,12S)-2,3,11,12-tetrakis-4-methoxyphenyl-1,4,7,10,13,16-hexaoxacyclooctadecane (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1109–1111. [5]
190. A 1:2 adduct between the trans-cisoid-trans isomer of 2,3,11,12-tetra-anisyl-18-crown-6 and borane ammonia, BH₃NH₃ (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1112–1115. [9]
191. Structure of the dextrorotatory trans-transoid-trans isomer of 2,3,11,12-tetra-anisyl-18-crown-6: (2R,3R,11R,12R)-2,3,11,12-tetrakis-4-methoxyphenyl-1,4,7,10,13,16-hexaoxacyclooctadecane (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1115–1118. [4]
192. A 1:1 adduct between the trans-transoid-trans isomer of 2,3,11,12-tetra-anisyl-18-crown-6 with the (RRRR)-configuration and borane ammonia, BH₃NH₃ (B.L. Allwood, J. Crosby, D.A. Pears, H. Shahriari-Zavareh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Acta Crystallogr.* **1988**, C44, 1118–1121. [7]
193. The complexing properties of some unnatural and natural macrocyclic trichothecenes (D.W. Anderson, P.R. Ashton, R.M. Black, D.A. Leigh, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1988**, 904–908. [9]
194. Supramolecular chemistry: Unnatural product synthesis (J.F. Stoddart), *Nature* **1988**, 334, 10–11. [38]
195. Ion-sensing studies on two disubstituted diphenyl ethers of tetraethyleneglycol (G.J. Moody, Bahruddin, B. Saad, J.D.R. Thomas, F.H. Kohnke, J.F. Stoddart), *Analyst* **1988**, 113, 1295–1298. [18]
196. Towards the making of [12]collarene (P.R. Ashton, N.S. Isaacs, F.H. Kohnke, A.M.Z. Slawin, C.M. Spencer, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1988**, 27, 966–969. [113]

197. Ammonium chloride complexes of 18-crown-6 (D.A. Pears, J.F. Stoddart, M.E. Fakley, B.L. Allwood, D.J. Williams), *Acta Crystallogr.* **1988**, *C44*, 1426–1430. [35]
198. Stereoelectronically-programmed molecular 'LEGO' sets (P. Ellwood, J.P. Mathias, J.F. Stoddart, F.H. Kohnke), *Bull. Soc. Chem. Belg.* **1988**, *97*, 669–678. [27]
199. Second sphere coordination adducts of transition metal phosphines with β -cyclodextrin and its methylated derivative (D.R. Alston, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams, R. Zarzycki), *Angew. Chem., Int. Ed. Engl.* **1988**, *27*, 1184–1185. [40]
200. Cyclodextrins as second sphere ligands for transition metal complexes (J.F. Stoddart, R. Zarzycki), *Rec. Trav. Chim. Pays-Bas* **1988**, *107*, 515–528. [90]
201. Bisparaquat(1,4)cyclophane. A tetracationic multipurpose receptor (B. Odell, M.V. Reddington, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1988**, *27*, 1547–1550. [406]
202. Isostructural alternately-charged receptor stacks. The inclusion complexes of hydroquinol and catechol dimethyl ethers with bisparaquat(1,4)cyclophane (P.R. Ashton, B. Odell, M.V. Reddington, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1988**, *27*, 1550–1553. [147]
203. Molecular lego (J.F. Stoddart), *Chem. Br.* **1988**, *24*, 1203–1208. [27]
204. Chemically-modified cyclodextrins as second sphere ligands for transition metal complexes (J.F. Stoddart, R. Zarzycki), Proceedings of the Fourth International Symposium on Cyclodextrins, Eds. J. Szejtli, O. Huber, Kluwer, Dordrecht, 1988, pp. 197–203.
205. Piezoelectric quartz crystal detection of nitrobenzene using a hexaepoxyoctacosahydro[12]cyclacene derivative (M.A.F. Elmosalamy, G.J. Moody, J.D.R. Thomas, F.H. Kohnke, J.F. Stoddart), *Analytical Proceedings* **1989**, *26*, 12–15.
206. New cyclophane hosts: A hexaoxacyclophane (G.R. Brown, S.S. Chana, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Perkin Trans. 1* **1989**, 211–212. [6]
207. New cyclophane hosts: Polyether-bridged hexaoxacyclophanes (G.R. Bower, G.R. Brown, S.S. Chana, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Perkin Trans. 1* **1989**, 212–213. [8]
208. Chemically-modifying cyclodextrins (D.R. Alston, P. Ellwood, D.C. Mulligan, J.F. Stoddart, R. Zarzycki), Abstracts of 197th American Chemical Society National Meeting, Dallas, 9–14 April, 1989, CARB 3. [0]
209. The making of molecular belts and collars (J.F. Stoddart), *J. Incl. Phenom.* **1989**, *7*, 227–245. [17]
210. The evolution of molecular belts and collars (F.H. Kohnke, J.F. Stoddart), *Pure Appl. Chem.* **1989**, *61*, 1581–1586. [40]
211. An efficient procedure for the synthesis and isolation of (+)(2R,3R,11R,12R)- and (-)(2S,3S,11S,12S)-tetraphenyl-18crown-6 (J. Crosby, M.E. Fakley, C. Gemmell, K. Martin, A. Quick, A.M.Z. Slawin, H. Shahriari-Zavareh, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1989**, *30*, 3849–3852. [14]
212. Supramolecular photochemistry and photophysics. Adducts of $[\text{Pt}(\text{bpy})(\text{NH}_3)_2]^{2+}$ with aromatic crown ethers (R. Ballardini, M.T. Gandolfi, L. Prodi, M. Ciano, V. Balzani, F.H. Kohnke, H. Shahriari-Zavareh, N. Spencer, J.F. Stoddart), *J. Am. Chem. Soc.* **1989**, *111*, 7072–7078. [43]
213. A new coordinating chiral lithium amide (D. Barr, D.J. Berrisford, R.V.H. Jones, A.M.Z. Slawin, R. Snaith, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1989**, *28*, 1044–1047. [37]
214. The structure-directed synthesis of new organic materials (F.H. Kohnke, J.P. Mathias, J.F. Stoddart), *Angew. Chem. Adv. Mater.* **1989**, *101*, 1103–1110. [58]
215. Stereoregular oligomerization by repetitive Diels-Alder reactions (P.R. Ashton, N.S. Isaacs, F.H. Kohnke, J.P. Mathias, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1989**, *28*, 1258–1261. [35]
216. Trinacene – a product of structure-directed synthesis (P.R. Ashton, N.S. Isaacs, F.H. Kohnke, G.S. d'Alcontres, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1989**, *28*, 1261–1263. [44]
217. A polynuclear donor-acceptor stack (J.Y. Ortholand, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1989**, *28*, 1394–1395. [105]
218. A [2]catenane made to order (P.R. Ashton, T.T. Goodnow, A.E. Kaifer, M.V. Reddington, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, C. Vicent, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1989**, *28*, 1396–1399. [333]

219. Structure-directed synthesis of unnatural products (F.H. Kohnke, J.P. Mathias, J.F. Stoddart), Proceedings of the International Symposium on Chemical and Biochemical Problems in Molecular Recognition, Exeter, 17–21 April 1989, Ed. S.M. Roberts, Special Publication No. 78, Royal Society of Chemistry, Cambridge, 1989, 241–269.
220. A century of cyclodextrins (J.F. Stoddart), *Carbohydr. Res.* **1989**, *192*, xii–xv. [31]
221. Second sphere coordination of carboplatin and rhodium complexes by cyclodextrins (D.R. Alston, P.R. Ashton, T.H. Lilley, J.F. Stoddart, R. Zarzycki, A.M.Z. Slawin, D.J. Williams), *Carbohydr. Res.* **1989**, *192*, 259–281. [45]
222. All-carbon compounds. Towards the cyclo[*n*]carbons (J.F. Stoddart), *Nature* **1989**, *342*, 482–483. [1]
223. Poly(vinylchloride) matrix membrane uranyl ion-selective electrodes based on cyclic and acyclic neutral carrier sensors (S. Johnson, F.H. Kohnke, G.J. Moody, J.F. Stoddart, J.D.R. Thomas), *Analyst* **1989**, *114*, 1025–1028. [42]
224. Host-guest chemistry (J.F. Stoddart), RSC Annual Reports B 1988 (eds. J.R. Hanson, D. Whiting), **1989**, 353–386.
225. rel-(1R,2S,3R,4S,5R,6S,7R,8S)-1,4:5,8-Diepoxy-2,3,6,7-tetrakis(chloromethyl)-1,2,3,4,5,6,7,8-octahydro-anthracene (F.H. Kohnke, J.P. Mathias, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1990**, *C46*, 1043–1046. [7]
226. rel-(1R,4S,5R,8S)-1,4:5,8-Diepoxy-1,4,5,8-tetrahydro-2,3,6,7-tetramethylidene-anthracene (F.H. Kohnke, J.P. Mathias, J.F. Stoddart, A.M.Z. Slawin, D.J. Watts, D.J. Williams), *Acta Crystallogr.* **1990**, *C46*, 1046–1049. [6]
227. rel-(1R,4S,5S,8R)-1,4,5,8-Diepoxy-1,4,5,8-tetrahydro-2,3,6,7-tetramethylidene-anthracene (F.H. Kohnke, J.P. Mathias, J.F. Stoddart, A.M.Z. Slawin, D.J. Watts, D.J. Williams), *Acta Crystallogr.* **1990**, *C46*, 1049–1051. [5]
228. Second sphere coordination of transition metal complexes by crown ethers (J.F. Stoddart, R. Zarzycki), in Cation Binding by Macrocycles: Complexation of Cationic Species by Crown Ethers, Eds. Y. Inoue, G.W. Gokel, Marcel Decker, New York, 1990, 631–699.
229. Complexation and molecular recognition of neutral and anionic substrates in the solid and solution states by bisparaquat(1,4)cyclophane (M.V. Reddington, N. Spencer, J.F. Stoddart), Inclusion Phenomena and Molecular Recognition, Ed. J. Atwood, Plenum Press, New York, 1990, p. 41–48.
230. 11,28-Bis(chloroacetyl)-6,7,9,10,12,13,15,16,23,2,26,27,29,30,32,33-hexadeca-hydrodibenzo[b,q][1,4,7,13,-16,19,22,28,10,25]octaoxadiazacyclotriacotin (P.L. Anelli, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1990**, *C46*, 1464–1467. [3]
231. 2,5,11,14,19,22,28,31-Octaoxa-8,25-diazatricyclo[30.2.2.215,18]octatriaconta-15,17,32,34,35,37-hexaene (P.L. Anelli, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1990**, *C46*, 1468–1470. [3]
232. From enzyme mimics to molecular self-assembly processes (J.F. Stoddart), in Chirality in Drug Design and Synthesis, Ed. C. Brown, Academic Press, London, 1990, 5–22.
233. Synthesis and characterization of per-3,6-anhydrocyclodextrins (P. Ellwood, J.F. Stoddart), Minutes of the Fifth International Symposium on Cyclodextrins, Ed. D. Duchêne, Editions de Santé, Paris, 1990, p. 86–89. [8]
234. Natural Compounds (P. Ellwood, J.P. Mathias, J.F. Stoddart), The Guinness Encyclopedia, Ed. I. Crofton, Guinness Publishing, Enfield, 1990, p. 52–53.
235. Man-made products (P. Ellwood, J.P. Mathias, J.F. Stoddart), The Guinness Encyclopedia, Ed. I. Crofton, Guinness Publishing, Enfield, 1990, p. 54–55.
236. Chemicals in everyday life (P. Ellwood, J.P. Mathias, J.F. Stoddart), The Guinness Encyclopedia, Ed. I. Crofton, Guinness Publishing, Enfield, 1990, p. 56–57.
237. Template-directed synthesis of new organic materials (J.F. Stoddart), in Frontiers in Supramolecular Organic Chemistry and Photochemistry, Eds. H.-J. Schneider, H. Dürr, VCH, Weinheim, 1990, 251–263.
238. A new mode of metal encapsulation (J.S. Bartlett, J.F. Costello, S. Ramdas, S. Mehani, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1990**, *29*, 1404–1406. [7]
239. The third allotropic form of carbon (J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 70–71. [60]

240. Synthesis and characterization of per-3,6-anhydro-cyclodextrins (P.R. Ashton, P. Ellwood, I. Staton, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 80–81. [55]
241. Aggregation of aza crown ethers by metalation: Synthesis and crystal structure of 1-lithio-1,7-diazo[12]crown-4 – the first lithiated crown ether (D. Barr, D.J. Berrisford, L. Mendez, A.M.Z. Slawin, R. Snaith, J.F. Stoddart, D.J. Williams, D.S. Wright), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 82–84. [13]
242. Molecular self-assembly processes (J.F. Stoddart), Ciba Foundation Symposium No. 158, Host-Guest Molecular Interactions: From Chemistry to Biology, Wiley, Chichester, 1991, 5–22. [19]
243. Second sphere coordination and beyond (J.F. Stoddart), Abstracts of ACS Meeting in Atlanta, April 14–19, 1991, INOR 425.
244. The structure-directed synthesis of polyacene derivatives (P.R. Ashton, J.P. Mathias, J.F. Stoddart), *Polymer Preprints* **1991**, *32(1)*, 419–420.
245. Towards synthetic supramolecular polymers (P.L. Anelli, C.L. Brown, D. Philp, N. Spencer, J.F. Stoddart), Abstracts of ACS Meeting in Atlanta, April 14–19, 1991, POLY 270; see also *Polymer Preprints* **1991**, *32(1)*, 405–406.
246. Towards a molecular abacus (M.V. Reddington, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, C. Vicent, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1991**, 630–634. [60]
247. The self-assembly of a highly ordered [2]catenane (P.R. Ashton, C.L. Brown, E.J.T. Chrystal, T. Goodnow, A.E. Kaifer, K.P. Parry, D. Philp, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1991**, 634–639. [89]
248. Cyclobis(paraquat-*p*-phenylene): A novel synthetic receptor for amino acids with electron-rich aromatic moieties (T.T. Goodnow, M.V. Reddington, J.F. Stoddart, A.E. Kaifer), *J. Am. Chem. Soc.* **1991**, *113*, 4335–4337. [95]
249. A molecular shuttle (P.L. Anelli, N. Spencer, J.F. Stoddart), *J. Am. Chem. Soc.* **1991**, *113*, 5131–5133. [506]
250. Self-assembly in organic synthesis (D. Philp, J.F. Stoddart), *Synlett* **1991**, 445–458. [281]
251. The self-assembling of a [2]catenane (C.L. Brown, D. Philp, J.F. Stoddart), *Synlett* **1991**, 459–461. [30]
252. The template directed synthesis of a rigid tetracationic cyclophane receptor (C.L. Brown, D. Philp, J.F. Stoddart), *Synlett* **1991**, 462–464. [48]
253. Self-assembling [2]pseudorotaxanes (P.L. Anelli, P.R. Ashton, N. Spencer, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 1036–1039. [88]
254. Self-assembling [3]catenanes (P.R. Ashton, C.L. Brown, E.J.T. Chrystal, T.T. Goodnow, A.E. Kaifer, K.P. Parry, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 1039–1042. [94]
255. Molecular trains. The self-assembly and dynamic properties of two new catenanes. (P.R. Ashton, C.L. Brown, E.J.T. Chrystal, K.P. Parry, M. Pietraszkiwicz, N. Spencer, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1991**, *30*, 1042–1045. [48]
256. Making molecules to order (J.F. Stoddart), *Chem. Br.* **1991**, *27*, 714–718. [35]
257. Macrocycles – seeds of a revolution (J.F. Stoddart), *Chem. Ind.* **1991**, 622.
258. The template-directed synthesis of a [2]rotaxane (P.R. Ashton, M. Grognez, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1991**, *32*, 6235–6238. [63]
259. The complexation of tetrathiafulvalene by cyclobis(paraquat-*p*-phenylene) (D. Philp, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1991**, 1584–1586. [156]
260. The self-assembly of [n]pseudorotaxanes (P.R. Ashton, D. Philp, N. Spencer, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1991**, 1677–1679. [98]
261. The self-assembly of complexes with [2]pseudorotaxane superstructures (P.R. Ashton, D. Philp, M.V. Reddington, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1991**, 1680–1683. [78]
262. Per-3,6-anhydro- α -cyclodextrin (P.R. Ashton, P. Ellwood, I. Staton, J.F. Stoddart), *J. Org. Chem.* **1991**, *56*, 7274–7280. [47]

263. Host-guest adducts of aromatic crown ethers with $[\text{Pt}(\text{bpy})(\text{NH}_3)_2]^{2+}$. Structure effects on the photochemical and photophysical properties. (M.T. Gandolfi, T. Zappi, R. Ballardini, L. Prodi, V. Balzani, J.F. Stoddart, J.P. Mathias, N. Spencer), *Gazz. Chim. Ital.* **1991**, *121*, 521–525. [8]
264. Molecular Meccano 1. [2]Rotaxanes and a [2]catenane made to order (P.L. Anelli, P.R. Ashton, R. Ballardini, V. Balzani, M. Delgado, M.T. Gandolfi, T.T. Goodnow, A.E. Kaifer, D. Philp, M. Pietraszkiewicz, L. Prodi, M.V. Reddington, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, C. Vicent, D.J. Williams), *J. Am. Chem. Soc.* **1992**, *114*, 193–218. [766]
265. The fortuitous discovery of a synthetic cationic molecular receptor system for methanol (B.L. Allwood, L. Méndez, J.F. Stoddart, D.J. Williams, M.K. Williams), *J. Chem. Soc., Chem. Commun.* **1992**, 331–333. [7]
266. Conformational mobility in chemically-modified cyclodextrins (P. Ellwood, C.M. Spencer, N. Spencer, J.F. Stoddart, R. Zarzycki), *J. Incl. Phenom. Mol. Recog.* **1992**, *12*, 121–150. [22]
267. rel-(1R,4S,5R,8S)-1,4:5,8-Diepoxy-1,4,5,8-tetrahydro-9,10-dimethylphenanthrene (F.H. Kohnke, J.P. Mathias, J.F. Stoddart, A.M.Z. Slawin, D.J. Williams), *Acta Crystallogr.* **1992**, *C48*, 663–665. [10]
268. Self-assembling synthetic supramolecular polymers (P.R. Ashton, D. Philp, N. Spencer, J. F. Stoddart), *Makromol. Chem. Macromol. Symp.* **1992**, *54/55*, 441–464. [18]
269. Designing synthetic cationic molecular receptors for alcohols (L. Mendez, R. Singleton, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams, M.K. Williams), *Angew. Chem., Int. Ed. Engl.* **1992**, *31*, 478–480. [12]
270. Self-assembly in chemical systems (P.R. Ashton, R.A. Bissell, D. Philp, N. Spencer, J.F. Stoddart), in *Supramolecular Chemistry*, Eds. V. Balzani, L. De Cola, Kluwer, Dordrecht, 1992, 1–16. [6]
271. Molecular LEGO 1. Substrate-directed synthesis via stereoregular Diels-Alder oligomerizations (P.R. Ashton, G.R. Brown, N.S. Isaacs, D. Giuffrida, F.H. Kohnke, J.P. Mathias, A.M.Z. Slawin, D.R. Smith, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1992**, *114*, 6330–6353. [149]
272. Cyclodextrins, off-the-shelf-components for the construction of mechanically interlocked molecular systems (J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1992**, *31*, 846–848. [78]
273. A new design strategy for the self-assembly of molecular shuttles (P.R. Ashton, D. Philp, N. Spencer, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1992**, 1124–1128. [97]
274. The template-directed synthesis of porphyrin-stoppered [2]rotaxanes (P.R. Ashton, M.R. Johnston, J.F. Stoddart, M.S. Tolley, J.W. Wheeler), *J. Chem. Soc., Chem. Commun.* **1992**, 1128–1131. [77]
275. Creating creative chemists (J.F. Stoddart), *Chem. Ind.* **1992**, 655. [2]
276. The regioselective generation of arynes from polyhalogenobenzenes. An improved synthesis of syn- and anti-1,4,5,8,9,12-hexahydro-1,4:5,8:9,12-triepoxytriphenylene (F. Raymo, F.H. Kohnke, F. Cardullo, U. Girreser, J.F. Stoddart), *Tetrahedron* **1992**, *48*, 6827–6838. [13]
277. Controlling self-assembly in organic synthesis (P.R. Ashton, D. Philp, N. Spencer, J.F. Stoddart), in *Molecular Recognition: Chemical and Biochemical Problems II*, Ed. S.M. Roberts, RSC Special Publication. 1992, 51–63.
278. Towards controllable molecular shuttles – 1 (P.R. Ashton, R.A. Bissell, N. Spencer, J.F. Stoddart, M.S. Tolley), *Synlett* **1992**, 914–918. [58]
279. Towards controllable molecular shuttles – 2 (P.R. Ashton, R.A. Bissell, R. Górski, D. Philp, N. Spencer, J.F. Stoddart, M.S. Tolley), *Synlett* **1992**, 919–922. [47]
280. Towards controllable molecular shuttles – 3 (P.R. Ashton, R.A. Bissell, N. Spencer, J.F. Stoddart, M.S. Tolley), *Synlett* **1992**, 923–926. [89]
281. Characterisation of molecular and supramolecular systems by electrospray mass spectrometry (P.R. Ashton, C.L. Brown, J.R. Chapman, R.T. Gallagher, J.F. Stoddart), *Tetrahedron Lett.* **1992**, *33*, 7771–7774. [33]
282. Decamethylcucurbituril (A. Flinn, G. Hough, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1992**, *31*, 1475–1477. [153]
283. Whither and thither molecular machines (J.F. Stoddart), *Chem. Aust.* **1992**, *59*, 576–577 and 581.
284. Constructing a molecular LEGO set (J.P. Mathias, J.F. Stoddart) *Chem. Soc. Rev.* **1992**, *21*, 215–225. [95]
285. The mechanisms of making molecules to order (C.L. Brown, D. Philp, N. Spencer, J.F. Stoddart), *Israel J. Chem.* **1992**, *32*, 61–67. [33]

286. Cyclobis-(paraquat-*p*-phenylene) as a synthetic receptor for electron-rich aromatic compounds: Electrochemical and spectroscopic studies of neurotransmitter binding (A.R. Bernado, J.F. Stoddart, A.E. Kaifer), *J. Am. Chem. Soc.* **1992**, *114*, 10624–10631. [134]
287. The structure-directed synthesis of cyclacene and polyacene derivatives (U. Girreser, D. Giuffrida, F.H. Kohnke, J.P. Mathias, D. Philp, J.F. Stoddart), *Pure Appl. Chem.* **1993**, *65*, 119–125. [60]
288. The synthesis of a chiral hexaphenyl-18-crown-6 derivative (J. Crosby, J.F. Stoddart, X. Sun, M.R.W. Venner), *Synthesis* **1993**, 141–145. [22]
289. The oligoselective synthesis of polyacene derivatives (P.R. Ashton, J.P. Mathias, J.F. Stoddart), *Synthesis* **1993**, 221–224. [17]
290. Self-assembly and shuttling properties of some multisite [2]rotaxanes (X. Sun, D.B. Amabilino, I.W. Parsons, J.F. Stoddart), *Polymer Preprints* **1993**, *34*(1), 104–105.
291. Substrate-directed synthesis: The rapid assembly of novel macropolycyclic structures via stereoregular Diels-Alder oligomerizations (F.H. Kohnke, J.P. Mathias, J.F. Stoddart), *Top. Curr. Chem.* **1993**, *165*, 1–67. [32]
292. Molecular recognition and self-assembly (J.F. Stoddart), *An. Quim.* **1993**, *89*, 51–56 [10]
293. The self-assembly of catenated cyclodextrins (D. Armspach, P.R. Ashton, C.P. Moore, N. Spencer, J.F. Stoddart, T.J. Wear, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1993**, *32*, 854–858. [75]
294. The self-assembly of a chiral bis[2]catenane (P.R. Ashton, A.S. Reder, N. Spencer, J.F. Stoddart), *J. Am. Chem. Soc.* **1993**, *115*, 5286–5287. [39]
295. Charge recombination in cyclophane-derived intimate radical ion-pairs (A.C. Benniston, A. Harriman, D. Philp, J.F. Stoddart), *J. Am. Chem. Soc.* **1993**, *115*, 5298–5299. [65]
296. Molecular organization via ionic interactions at interfaces. 1. Monolayers and LB Films of cyclic bisbipyridinium tetracations and dimyristoylphosphatidic acid (R.C. Ahuja, P.-L. Caruso, D. Möbius, G. Wildburg, H. Ringsdorf, D. Philp, J.A. Preece, J.F. Stoddart), *Langmuir* **1993**, *9*, 1534–1544. [96]
297. New approach to controlling catenated structures (D.B. Amabilino, J.F. Stoddart), *Rec. Trav. Chim. Pays Bas* **1993**, *112*, 429–430. [8]
298. Molecular LEGO 2. Substrate-directed synthesis of belt-type and cage-type structures (P.R. Ashton, U. Girreser, D. Giuffrida, F.H. Kohnke, J.P. Mathias, F.M. Raymo, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1993**, *115*, 5422–5429. [98]
299. Molecular and supramolecular self-assembly processes (R.A. Bissell, J.F. Stoddart) in *Computations for the Nano-Scale*. Eds. P.E. Blöchl, A.J. Fisher, C. Joachim, Kluwer, Dordrecht, 1993, 141–152.
300. Dilithiation of two diphenyl ethers each containing two NHCH₂CH₂Y (Y = OMe, NMe₂) side arms in *ortho* positions: Assembly of “Adamantoid” Li₄O₂N₄ cores (I. Cragg-Hine, M.G. Davidson, O. Kocian, F.S. Mair, E. Pohl, P.R. Raithby, R. Snaith, N. Spencer, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1993**, *32*, 1182–1184. [11]
301. Slippage – an alternative method for assembling [2]rotaxanes (P.R. Ashton, M. Belohradsky, D. Philp, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1993**, 1269–1274. [102]
302. The self-assembly of [2]- and [3]-rotaxanes by slippage (P.R. Ashton, M. Belohradsky, D. Philp, N. Spencer, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1993**, 1274–1277. [66]
303. Monometallation of a di(aminoaryl)ether induces a Smiles rearrangement leading to a sodium aryloxide complex: The synthesis and crystal structure of [(MeOCH₂CH₂)(C₆H₄NHCH₂CH₂OMe)NC₆H₄O·Na]₂ (I. Cragg-Hine, M.G. Davidson, O. Kocian, T. Kottke, F.S. Mair, R. Snaith, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1993**, 1355–1357. [10]
304. Isomeric self-assembling [2]catenanes (D.B. Amabilino, P.R. Ashton, M.S. Tolley, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1993**, *32*, 1297–1301. [50]
305. A photochemically-driven molecular machine (R. Ballardini, V. Balzani, M.T. Gandolfi, L. Prodi, M. Venturi, D. Philp, H.G. Ricketts, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1993**, *32*, 1301–1303. [225]
306. The control of translational isomerism in catenated structures (P.R. Ashton, M. Blower, D. Philp, N. Spencer, J.F. Stoddart, M.S. Tolley, R. Ballardini, M. Ciano, V. Balzani, M.T. Gandolfi, L. Prodi, C.H. McLean), *New J. Chem.* **1993**, *17*, 689–695. [63]

307. Novel rotaxanes based on the inclusion complexation of biphenyl guests by cyclobis (paraquat-*p*-phenylene) (E. Córdova, R.A. Bissell, N. Spencer, P.R. Ashton, J.F. Stoddart, A.E. Kaifer), *J. Org. Chem.* **1993**, *58*, 6550–6552. [82]
308. Bent aromatic rings in naphthalene derivatives (P.R. Ashton, G.R. Brown, A.J. Foubister, D.R. Smith, N. Spencer, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1993**, *34*, 8333–8336. [6]
309. Stereoselectivity in the synthesis of polyacene derivatives by repetitive Diels-Alder reactions (P.R. Ashton, G.R. Brown, D.R. Smith, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1993**, *34*, 8337–8340. [7]
310. Self-assembly and macromolecular design (D.B. Amabilino, J.F. Stoddart), *Pure Appl. Chem.* **1993**, *65*, 2351–2359. [64]
311. The self-assembly of controllable [2]catenanes (P.R. Ashton, R. Ballardini, V. Balzani, M.T. Gandolfi, D.J.-F. Marquis, L. Pérez-García, L. Prodi, J.F. Stoddart, M. Venturi), *J. Chem. Soc., Chem. Commun.* **1994**, 177–180. [62]
312. A self-organised layered superstructure of arrayed [2]pseudorotaxanes (P.R. Ashton, D. Philp, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1994**, 181–184. [63]
313. Molecules that build themselves (D.B. Amabilino, J.F. Stoddart), *New Scientist*, 19 Feb 1994, No 1913, p. 25–29. [10]
314. The two-step self-assembly of a [4]- and [5]-catenane (D.B. Amabilino, P.R. Ashton, A.S. Reder, N. Spencer, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1994**, *33*, 433–437. [75]
315. Towards the self-assembly of polyrotaxanes (X. Sun, D.B. Amabilino, P.R. Ashton, I.W. Parsons, J.F. Stoddart, M.S. Tolley), *Macromol. Symp.* **1994**, *77*, 191–207. [23]
316. Polyrotaxanes (D.B. Amabilino, I.W. Parsons, J.F. Stoddart), *Trends Polym. Sci.* **1994**, *2*, 146–152.
317. Cyclodextrins: 'Linking lampshades' (D. Armspach, P.R. Ashton, N. Spencer, J.F. Stoddart, D.J. Williams), *Pesticide Science* **1994**, *41*, 232–235.
318. A simple approach to modelling supramolecular complexes and mechanically interlocked molecules (H.G. Ricketts, J.F. Stoddart, M.M. Hann) in *Computational Approaches in Supramolecular Chemistry*. Ed. G. Wipff, Kluwer, Dordrecht, **1994**, 377–390. [13]
319. An optically-active [2]catenane made to order (P.R. Ashton, I. Iriepa, M.V. Reddington, N. Spencer, A.M.Z. Slawin, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1994**, *35*, 4835–4838. [27]
320. A new route to phenanthrene derivatives (D. Giuffrida, F.H. Kohnke, M. Parisi, F.M. Raymo, J.F. Stoddart), *Tetrahedron Lett.* **1994**, *35*, 4839–4842. [3]
321. Photoinduced electron transfer in supramolecular assemblies composed of dialkoxybenzene-tethered ruthenium(II) trisbipyridine and bipyridine salts (M. Seiler, H. Durr, I. Willner, E. Joselevich, A. Doron, J.F. Stoddart), *J. Am. Chem. Soc.* **1994**, *116*, 3399–3404. [57]
322. A chemically and electrochemically switchable molecular device (R.A. Bissell, E. Córdova, A.E. Kaifer, J.F. Stoddart), *Nature* **1994**, *369*, 133–137. [946]
323. Olympiadane (D.B. Amabilino, P.R. Ashton, A.S. Reder, N. Spencer, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1994**, *33*, 1286–1290. [159]
324. A new class of novel macrocyclic mesogens (P.R. Ashton, D. Joachimi, N. Spencer, J.F. Stoddart, C. Tschierske, K. Zab), *Angew. Chem., Int. Ed. Engl.* **1994**, *33*, 1503–1506. [31]
325. From solid-state structures and superstructures to self-assembly processes (D.B. Amabilino, J.F. Stoddart, D.J. Williams), *Chem. Mater.* **1994**, *6*, 1159–1167. [64]
326. Chemical synthesis of nanostructures (J.F. Stoddart, D.B. Amabilino), *MRS 1993 Fall Meeting Symposium Proceedings* **1994**, *330*, 57–60. [1]
327. Supramolecular chemistry (J.P. Mathias, J.F. Stoddart) in *The Encyclopedia of Advanced Materials*, Eds. D. Bloor, R.J. Brook, M.C. Flemings, S. Mahajan, Pergamon, Oxford, 1994, 2729–2740.
328. Template-directed syntheses of a bis[2]catenane and a bis[2]rotaxane – towards self-assembling polymers (P.R. Ashton, J.A. Preece, J.F. Stoddart, M.S. Tolley), *Synlett* **1994**, 789–792. [31]

329. Self-assembled [2]catenanes exhibiting highly selective translational isomerism (D.B. Amabilino, P.R. Ashton, G.R. Brown, W. Hayes, J.F. Stoddart, M.S. Tolley, D.J. Williams) *J. Chem. Soc., Chem. Commun.* **1994**, 2475–2478. [24]
330. The solid-state self-organisation of a self-assembled [2]catenane (D.B. Amabilino, P.R. Ashton, J.F. Stoddart, S. Menzer, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1994**, 2475–2478. [25]
331. Per-6-bromo-per-2,3-dimethyl- β -cyclodextrin (D. Alker, P.R. Ashton, V.D. Harding, R. Königer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Tetrahedron Lett.* **1994**, 35, 9091–9094. [15]
332. The self-assembly and dynamic properties of thiophene-containing [2]catenanes (P.R. Ashton, J.A. Preece, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams), *Synthesis* **1994**, 1344–1352. [38]
333. The design and self-assembly of a furan-containing [2]catenane (P.R. Ashton, M.A. Blower, S. Iqbal, C.H. McLean, J.F. Stoddart, M.S. Tolley, D.J. Williams), *Synlett* **1994**, 1059–1062. [12]
334. The design and self-assembly of a pyridine-containing [2]catenane (P.R. Ashton, M.A. Blower, C.H. McLean, J.F. Stoddart), *Synlett* **1994**, 1063–1066. [12]
335. Concept transfer from biology to materials (J.A. Preece, J.F. Stoddart), *Nanobiology* **1994**, 3, 149–166. [28]
336. Self-assembly in the metallation of bis(aminoaryl)ethers (O. Kocian, N. Spencer, J.F. Stoddart, I. Cragg-Hine, M. Davidson, F.S. Mair, P. Raithby, R. Snaith, T. Kottke, E. Pohl), *Tetrahedron* **1995**, 51, 579–590. [2]
337. The self-assembly of redox-active and photo-active catenanes and rotaxanes (J.A. Preece, J.F. Stoddart) in *Molecular Engineering for Advanced Materials*, Eds. J. Becher, K. Schaumburg, Kluwer, Dordrecht, **1995**, 1–28. [9]
338. Advantages of the rotaxane framework for the construction of switchable molecular devices (R.A. Bissell, E. Córdova, J.F. Stoddart, A.E. Kaifer) in *Molecular Engineering for Advanced Materials*, Ed. J. Becher, Kluwer, Dordrecht, **1995**, 29–40. [9]
339. Molecular meccano 2. The self-assembly of [n]catenanes (D.B. Amabilino, P.R. Ashton, C.L. Brown, E. Córdova, L.A. Godínez, T.T. Goodnow, A.E. Kaifer, S.P. Newton, M. Pietraszkiewicz, D. Philp, F.M. Raymo, A.S. Reder, M.T. Rutland, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1995**, 117, 1271–1293. [170]
340. Controlling translational isomerism in a preprogrammed [2]catenated structure (P.R. Ashton, L. Pérez-García, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1995**, 34, 571–574. [43]
341. Catenated cyclodextrins (D. Armspach, P.R. Ashton, R. Ballardini, V. Balzani, A. Godi, C.P. Moore, L. Prodi, N. Spencer, J.F. Stoddart, M.S. Tolley, T.J. Wear, D.J. Williams), *Chem. Eur. J.* **1995**, 1, 33–55. [76]
342. The controlled self-assembly of a [3]rotaxane incorporating three constitutionally different components (D.B. Amabilino, P.R. Ashton, M. Belohradsky, F.M. Raymo, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1995**, 747–750. [46]
343. The self-assembly of branched [n]rotaxanes – the first step towards dendritic rotaxanes (D.B. Amabilino, P.R. Ashton, M. Belohradsky, F.M. Raymo, J.F. Stoddart), *J. Chem. Soc., Chem. Commun.* **1995**, 751–753. [81]
344. Supported monolayers containing preformed binding sites. Synthesis and interfacial binding properties of a thiolated β -cyclodextrin derivative (M.T. Rojas, R. Königer, J.F. Stoddart, A.E. Kaifer) *J. Am. Chem. Soc.* **1995**, 117, 336–343. [397]
345. Self-assembly of [n]rotaxanes (M. Belohradsky, D. Philp, F.M. Raymo, J.F. Stoddart), *Proceedings of the International Symposium on Organic Reactivity: Physical and Biological Aspects*, Newcastle, 11–16 July 1993, Ed. B.T. Golding, Special Publication No 148, Royal Society of Chemistry, Cambridge, **1995**, 387–398.
346. Macrocyclic polyethers incorporating resorcinol residues as templates for cyclobis(paraquat-*p*-phenylene) in the self-assembly of [2]catenanes (D.B. Amabilino, P.R. Ashton, J.F. Stoddart), *Supramolecular Chemistry* **1995**, 5, 5–8.
347. The self-assembly of two bis[2]catenanes and a bis[2]rotaxane – model compounds for mechanically-linked polymers (D.B. Amabilino, P.R. Ashton, J.A. Preece, J.F. Stoddart, M.S. Tolley), *Polymer Preprints* **1995**, 36, 587–588.
348. The molecular olympics: going for gold (D.B. Amabilino, J.F. Stoddart), *Chemistry Review* **1995**, 4, 10–15.
349. Towards molecular and supramolecular devices (J.A. Preece, J.F. Stoddart) in *Ultimate Limits of Fabrication and Measurement*, Eds. M.E. Welland, J.K. Gimzewski, Kluwer, Dordrecht, **1995**, 1–8.

350. Self-assembly: whither and thither molecular machines (J.A. Preece, J.F. Stoddart) in *Ultimate Limits of Fabrication and Measurement*, Eds. M.E. Welland, J.K. Gimzewski, Kluwer, Dordrecht, **1995**, 225–228.
351. A novel approach to the synthesis of some chemically-modified cyclodextrins (P.R. Ashton, S.E. Boyd, G. Gattuso, E.Y. Hartwell, R. Königer, N. Spencer, J.F. Stoddart), *J. Org. Chem.* **1995**, *60*, 3898–3903. [49]
352. The synthesis and structural mapping of unsymmetrical chemically-modified α -cyclodextrins by high-field nuclear magnetic resonance spectroscopy (P.R. Ashton, E.Y. Hartwell, D. Philp, N. Spencer, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 2* **1995**, 1263–1277. [13]
353. Molecular mosaics formed by a square cyclophane and its inclusion complex with ferrocene (P.R. Ashton, C.G. Claessens, W. Hayes, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew., Chem. Int. Ed. Engl.* **1995**, *34*, 1862–1865. [52]
354. Dialkylammonium ion/crown ether complexes: The forerunners of a new family of interlocked molecules (P.R. Ashton, P.J. Campbell, E.J.T. Chrystal, P.T. Glink, S. Menzer, D. Philp, N. Spencer, J.F. Stoddart, P.A. Tasker, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 1865–1869. [333]
355. Doubly encircled and double stranded pseudorotaxanes (P.R. Ashton, E.J.T. Chrystal, P.T. Glink, S. Menzer, C. Schiavo, J.F. Stoddart, P.A. Tasker, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 1869–1871. [89]
356. Towards mechanically-linked polymers (J.A. Preece, J.F. Stoddart), *Macromol. Symp.* **1995**, *98*, 527–540. [12]
357. Molecular recognition by catenated structures (D.B. Amabilino, J.F. Stoddart) in *Supramolecular Stereochemistry*, Ed. J. Siegel, Kluwer, Dordrecht, 1995, 33–40. [2]
358. Towards molecular devices (J.F. Stoddart, N.M. Rowley) in *From Simplicity to Complexity in Chemistry*, Eds. A. Müller, A. Dress, F. Vögtle, Verlag Vieweg, Wiesbaden, 1995, 99–112.
359. Photochemical, photophysical and electrochemical properties of a photoisomerizable cyclophane and its [2]catenanes with aromatic crown ethers (R. Ballardini, V. Balzani, A. Credi, M.T. Gandolfi, L. Pérez-García, L. Prodi, J.F. Stoddart, M. Venturi), *Gazz. Chim. Ital.* **1995**, *125*, 353–359. [3]
360. Self-assembling catenanes and rotaxanes (D. Pasini, F.M. Raymo, J.F. Stoddart), *Gazz. Chim. Ital.* **1995**, *125*, 431–443. [29]
361. Kinetic selection in the template-directed self-assembly of [2]catenanes (D.A. Amabilino, P.R. Ashton, L. Pérez-García, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1995**, *34*, 2378–2380. [41]
362. Molecular meccano 3: Constitutional and translational isomerism in [2]catenanes and [n]pseudorotaxanes (D.B. Amabilino, P.L. Anelli, P.R. Ashton, G.R. Brown, E. Córdova, L.A. Godínez, W. Hayes, A.E. Kaifer, D. Philp, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, M.S. Tolley, D.J. Williams), *J. Am. Chem. Soc.* **1995**, *117*, 11142–11170. [137]
363. Molecular meccano 4: The self-assembly of [2]catenanes incorporating photoactive and electroactive π -extended systems (P.R. Ashton, R. Ballardini, V. Balzani, A. Credi, M.T. Gandolfi, S. Menzer, L. Pérez-García, L. Prodi, J.F. Stoddart, M. Venturi, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1995**, *117*, 11171–11197. [174]
364. Self-assembly in chemical synthesis (S.J. Langford, L. Pérez-García, J.F. Stoddart), *J. Supramol. Chem.* **1995**, *6*, 11–27. [14]
365. Interlocked and intertwined structures and superstructures (D.B. Amabilino, J.F. Stoddart), *Chem. Rev.* **1995**, *95*, 2725–2828. [1444]
366. Cyclophanes with self-recognising components (P.L. Anelli, M. Asakawa, P.R. Ashton, G.R. Brown, W. Hayes, O. Kocian, S. Rodríguez Pastor, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams), *J. Chem. Soc., Chem. Commun.* **1995**, 2541–2545. [8]
367. Bis[2]catenanes and a bis[2]rotaxane – model compounds for polymers with mechanically interlocked components (P.R. Ashton, J. Huff, I.W. Parsons, J.A. Preece, J.F. Stoddart, M.S. Tolley, D.J. Williams, A.J.P. White), *Chem. Eur. J.* **1996**, *2*, 31–44. [86]
368. Towards supramolecular polymers (J. Huff, J.A. Preece, J.F. Stoddart), *Macromol. Symp.* **1996**, *102*, 1–8. [9]
369. Hydrogen-bonded pseudorotaxanes (M. Asakawa, P.R. Ashton, G.R. Brown, W. Hayes, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Adv. Mater.* **1996**, *8*, 37–41. [37]

370. Amino acid derivatives of β -cyclodextrin (D. Alker, P.R. Ashton, V.D. Harding, R. Königer, J.F. Stoddart), *J. Org. Chem.* **1996**, *61*, 903–908. [135]
371. Template-directed syntheses of rotaxanes (M. Belohradsky, F.M. Raymo, J.F. Stoddart), *Collect. Czech. Chem. Commun.* **1996**, *61*, 1–43. [60]
372. Self-assembling wholly-synthetic systems (F.M. Raymo, J.F. Stoddart), *Curr. Opin. Coll. Interf. Sci.* **1996**, *1*, 116–126. [27]
373. The self-assembly and metal-mediated disassembly of a multitopic [2]pseudorotaxane (P.R. Ashton, S. Iqbal, J.F. Stoddart, N.D. Tinker), *Chem. Commun.* **1996**, 479–481. [11]
374. The self-assembly of some novel [2]rotaxanes and their alkali metal cation complexes (M. Asakawa, P.R. Ashton, S. Iqbal, J.F. Stoddart, N.D. Tinker, A.J.P. White, D.J. Williams), *Chem. Commun.* **1996**, 483–486. [13]
375. The template-directed synthesis of cyclobis(paraquat-4,4'-biphenylene) (P.R. Ashton, S. Menzer, F.M. Raymo, G.K.H. Shimizu, J.F. Stoddart, and D.J. Williams), *Chem. Commun.* **1996**, 487–490. [14]
376. Effects of strained bicyclic annelation on the benzene nucleus: The X-ray crystal structures of a triphenylene and two anthracene derivatives (F. Cardullo, D. Giuffrida, F.H. Kohnke, F. Raymo, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1996**, *35*, 339–341. [24]
377. Self-assembling cyclobis(paraquat-4,4'-biphenylene) (F.M. Raymo, J.F. Stoddart), *Pure Appl. Chem.* **1996**, *68*, 313–322. [57]
378. Crown ethers (D.B. Amabilino, J.A. Preece, J.F. Stoddart), in *Macrocyclic Synthesis: A Practical Approach*, Ed. D. Parker, Oxford University Press, Oxford, 1996, 71–91.
379. A prototypical optically responsive molecular device (M. Asakawa, S. Iqbal, J.F. Stoddart, N.D. Tinker), *Angew. Chem., Int. Ed. Engl.* **1996**, *35*, 976–978. [43]
380. Simple molecular machines. Cyclical chemically-driven unthreading and re-threading of a [2]pseudorotaxane (R. Ballardini, V. Balzani, A. Credi, M.T. Gandolfi, S.J. Langford, S. Menzer, L. Prodi, J.F. Stoddart, M. Venturi, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1996**, *35*, 978–981. [76]
381. Synthetic cyclic oligosaccharides. Syntheses and structural properties of a cyclo[(1 \rightarrow 4)- α -L-rhamnopyranosyl-(1 \rightarrow 4)- α -D-mannopyranosyl]-trioside and -tetraoside (P.R. Ashton, C.L. Brown, S. Menzer, S.A. Nepogodiev, J.F. Stoddart, D.J. Williams), *Chem. Eur. J.* **1996**, *2*, 580–591. [57]
382. A switchable hybrid [2]-catenane based on transition metal complexation and π -electron donor–acceptor interactions (D.B. Amabilino, C.O. Dietrich-Buchecker, A. Livoreil, L. Pérez-García, J.-P. Sauvage, J.F. Stoddart), *J. Am. Chem. Soc.* **1996**, *118*, 3905–3913. [78]
383. Self-assembly in natural and unnatural systems (D. Philp, J.F. Stoddart), *Angew. Chem., Int. Ed. Engl.* **1996**, *35*, 1155–1196. [1941]
384. Pseudorotaxanes formed between secondary dialkylammonium salts and crown ethers (P.R. Ashton, E.J.T. Chrystal, P.T. Glink, S. Menzer, C. Schiavo, N. Spencer, J.F. Stoddart, P.A. Tasker, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1996**, *2*, 709–728. [214]
385. Self-assembling [2]- and [3]-rotaxanes from secondary dialkylammonium salts and crown ethers (P.R. Ashton, P.T. Glink, J.F. Stoddart, P.A. Tasker, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1996**, *2*, 729–736. [137]
386. Molecular meccano 9. Self-assembly, spectroscopic and electrochemical properties of [n]rotaxanes (P.R. Ashton, R. Ballardini, V. Balzani, M. Belohradsky, M.T. Gandolfi, D. Philp, L. Prodi, F.M. Raymo, M.V. Reddington, N. Spencer, J.F. Stoddart, M. Venturi, D.J. Williams), *J. Am. Chem. Soc.* **1996**, *118*, 4931–4951. [152]
387. The self-assembly of a complex with a [3]pseudorotaxane superstructure (P.R. Ashton, S.J. Langford, N. Spencer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Commun.* **1996**, 1387–1388. [29]
388. Self-assembly in chemical synthesis (S.J. Langford, J.F. Stoddart) in *Chemical Synthesis: Gnosis and Prognosis*, Eds. C. Chatgililoglu, V. Snieckus, Kluwer, Dordrecht, 1996, 381–401. [3]
389. Making unnatural products by natural means (S.J. Langford, J.F. Stoddart) in *Chemical Synthesis: Gnosis and Prognosis*, Eds. C. Chatgililoglu, V. Snieckus, Kluwer, Dordrecht, 1996, 475–510. [2]

390. Self-assembly in chemical systems (S.J. Langford, J.F. Stoddart), *Pure Appl. Chem.* **1996**, *68*, 1255–1260. [12]
391. Molecular nanostructures (M. Gómez-López, J.A. Preece, J.F. Stoddart), Proceedings of the Robert A Welch Foundation, 39th Conference on Chemical Research, Nanophase Chemistry, October 23-24, 1995, Foundation Offices, Houston, 1996, 95–107.
392. The genesis of a new range of interlocked molecules (P.T. Glink, C. Schiavo, J.F. Stoddart, D.J. Williams), *Chem. Commun.* **1996**, 1483–1490. [102]
393. Polyrotaxanes and pseudopolyrotaxanes (F.M. Raymo, J.F. Stoddart), *Trends Polym. Sci.* **1996**, *4*, 208–211. [38]
394. Donor-acceptor template-directed syntheses of catenanes and rotaxanes (D.B. Amabilino, F.M. Raymo, J.F. Stoddart), in *Comprehensive Supramolecular Chemistry*, Ed.: M.W. Hosseini, J.-P. Sauvage, 1996, vol. 9, 85–130.
395. Polyrotaxanes (J.A. Preece, F.M. Raymo, J.F. Stoddart) in *The Polymeric Materials Encyclopedia*, Ed. J.C. Salamone, CRC Press Inc, 1996, 9, 6695–6704.
396. Molecular meccano. 8. Cyclobis(paraquat-4,4'-biphenylene) – An organic molecular square (M. Asakawa, P.R. Ashton, S. Menzer, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1996**, *2*, 877–893. [63]
397. Bifunctional homopolymeric hydrogen-bonded tapes (P.R. Ashton, G.R. Brown, W. Hayes, S. Menzer, D. Philp, J.F. Stoddart, D.J. Williams), *Adv. Mater.* **1996**, *8*, 564–567. [12]
398. Mechanically-interlocked molecules: Prototypes of molecular machinery (F.M. Raymo, J.F. Stoddart) in *Magnetism: A Supramolecular Function*, NATO ARW, (Ed. O. Kahn), Kluwer, Dordrecht, 1996, 33–51. [2]
399. Switchable interlocked molecules, threaded complexes, and interlocking in crystals (D.B. Amabilino, C.O. Dietrich-Buchecker, A. Livoreil, L. Pérez-García, J.-P. Sauvage, J.F. Stoddart), in “Magnetism: A Supramolecular Function”, NATO-ARW Series (Ed. O. Kahn), Kluwer, Dordrecht, 1996, 65–83. [7]
400. Towards controllable [2]catenanes and [2]rotaxanes (S.J. Langford, J.F. Stoddart), in “Magnetism: A Supramolecular Function”, NATO-ARW Series (Ed. O. Kahn), Kluwer, Dordrecht, 1996, 85–106. [2]
401. Synthesis of ligands containing two and three 2,2'-(bisamino)diphenyl ether units designed for molecular self-assembly on lithiation (P.R. Ashton, B. Hörner, O. Kocian, S. Menzer, A.J.P. White, J.F. Stoddart, D.J. Williams), *Synthesis* **1996**, 930–940. [13]
402. A novel fluorine-containing [2]catenane (R.E. Gillard, J.F. Stoddart, B.J. Williams, D.J. Williams), *J. Org. Chem.* **1996**, *61*, 4504–4505. [37]
403. A convergent synthesis of carbohydrate-containing dendrimers (P.R. Ashton, C.L. Brown, S. Boyd, N. Jayaraman, S. Nepogodiev, J.F. Stoddart), *Chem. Eur. J.* **1996**, *2*, 1115–1128. [140]
404. The art and science of self-assembling molecular machines (M. Gómez-López, J.A. Preece, J.F. Stoddart), *Nanotechnology* **1996**, *7*, 183–192. [96]
405. Thermodynamically-controlled self-assembly of pseudorotaxanes and pseudopolyrotaxanes with different recognition motifs operating self-selectively (P.R. Ashton, P.T. Glink, M.-V. Martínez-Díaz, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1996**, *35*, 1930–1933. [61]
406. Second-sphere coordination (F.M. Raymo, J.F. Stoddart), *Chem. Ber.* **1996**, *129*, 981–990. [67]
407. The solid state structures of a [3]rotaxane and its [3]pseudorotaxane precursor (P.R. Ashton, P.T. Glink, J.F. Stoddart, S. Menzer, P.A. Tasker, A.J.P. White, D.J. Williams), *Tetrahedron Lett.* **1996**, *37*, 6217–6220. [27]
408. Highly enantioselective recognition of amino acids by axially-chiral π -electron deficient receptors (M. Asakawa, C.L. Brown, D. Pasini, J.F. Stoddart, P.G. Wyatt), *J. Org. Chem.* **1996**, *61*, 7234–7235. [35]
409. Chromatography of mechanically-interlocked molecular compounds (M. Asakawa, D. Pasini, F.M. Raymo, J.F. Stoddart), *Anal. Chem.* **1996**, *68*, 3879–3881. [4]
410. Supramolecular chemistry (M. Gómez-López, J.F. Stoddart) in 1997 Yearbook of Science and Technology, Ed. S.P. Parker, McGraw-Hill, New York, 1996, 448–452.

411. Molecular meccano 13. Self-assembly of [n]rotaxanes bearing dendritic stoppers (D.B. Amabilino, P.R. Ashton, V. Balzani, C.L. Brown, A. Credi, J.M.J. Fréchet, J.W. Leon, F.M. Raymo, N. Spencer, J.F. Stoddart, M. Venturi), *J. Am. Chem. Soc.* **1996**, *118*, 12012–12020. [115]
412. Dipotassium complex of per-3,6-anhydro- β -cyclodextrin (P.R. Ashton, G. Gattuso, R. Königer, J.F. Stoddart, D.J. Williams), *J. Org. Chem.* **1996**, *61*, 9553–9555. [22]
413. Improved template-directed synthesis of cyclobis(paraquat-*p*-phenylene) (M. Asakawa, W. Dehaen, G. L'abbé, S. Menzer, J. Nouwen, F.M. Raymo, J.F. Stoddart, D.J. Williams), *J. Org. Chem.* **1996**, *61*, 9591–9595. [186]
414. Synthesis and properties of a new family of cyclodextrin analogues (S.A. Nepogodiev, G. Gattuso, J.F. Stoddart), Proceedings of the 8th International Cyclodextrin Symposium, Budapest, 1996 (Eds. J. Szejtli, L. Szente), Kluwer, The Netherlands, pp. 89–94. [1]
415. Self-assembled macromolecular and macrosupramolecular systems (S.P. Newton, J.F. Stoddart, W. Hayes), *Supramolecular Science* **1996**, *3*, 221–236.
416. Cyclic molecules formed by self-assembly (W. Hayes, J.F. Stoddart), in *Large Ring Molecules*, Ed. J.A. Semlyen, J. Wiley & Sons Ltd, New York, 1996, pp. 433–471.
417. Langmuir films and Langmuir-Blodgett multilayers incorporating mechanically-threaded molecules (R.C. Ahuja, P.-L. Caruso, D. Möbius, D. Philp, J.A. Preece, H. Ringsdorf, J.F. Stoddart, G. Wildburg), *Thin Solid Films* **1996**, *284/285*, 671–677. [27]
418. Self-assembly and self-organisation: Programming molecules to form nanoscale structures (J.A. Preece, H. Ringsdorf, J.F. Stoddart), in Proceedings of One Day Symposium on Living Computers, Eds. A.M. Fedorec, P.J. Marcer, Greenwich University Press, 1996, pp. 12–21.
419. Functionalized [2]rotaxanes (M. Asakawa, P.R. Ashton, S. Iqbal, A. Quick, J.F. Stoddart, N.D. Tinker, A.J.P. White, D.J. Williams), *Israel J. Chem.* **1996**, *36*, 329–340. [6]
420. From biology to materials (J.A. Preece, J.F. Stoddart) in *Nanotechnology in Medicine and the Biosciences*, Ed. R.R.H. Combs, Gordon and Breach, Reading, 1996, pp. 211–230.
421. Molecular meccano 11. Recognition of bipyridinium-based derivatives by hydroquinone- and/or dioxynaphthalene-based macrocyclic polyethers – From inclusion complexes to the self-assembly of [2]catenanes (M. Asakawa, P.R. Ashton, S.E. Boyd, C.L. Brown, R.E. Gillard, O. Kocian, F.M. Raymo, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams), *J. Org. Chem.* **1997**, *62*, 26–37. [85]
422. Molecular meccano 12. The slipping approach to self-assembling [n]rotaxanes (M. Asakawa, P.R. Ashton, R. Ballardini, V. Balzani, M. Belohradsky, M.T. Gandolfi, O. Kocian, L. Prodi, F.M. Raymo, J.F. Stoddart, M. Venturi), *J. Am. Chem. Soc.* **1997**, *119*, 302–310. [140]
423. Molecular meccano 14. Simple mechanical molecular and supramolecular machines: Photochemical and electrochemical control of switching processes (P.R. Ashton, R. Ballardini, V. Balzani, S.E. Boyd, A. Credi, M.T. Gandolfi, M. Gómez-López, S. Iqbal, D. Philp, J.A. Preece, L. Prodi, H.G. Ricketts, J.F. Stoddart, M.S. Tolley, M. Venturi, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 152–170. [192]
424. An interwoven supramolecular cage (P.R. Ashton, A. Collins, M.C.T. Fyfe, P.T. Glink, S. Menzer, J.F. Stoddart, D.J. Williams), *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 59–62. [40]
425. Molecular meccano 15. Structure-reactivity relationship in interlocked molecular compounds and in their supramolecular model complexes (M. Asakawa, C.L. Brown, S. Menzer, F.M. Raymo, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1997**, *119*, 2614–2627. [40]
426. Molecular logic. An XOR gate based on a mechanical molecular machine (A. Credi, V. Balzani, S.J. Langford, J.F. Stoddart), *J. Am. Chem. Soc.* **1997**, *119*, 2679–2681. [471]
427. Molecular meccano 16. Axially-chiral catenanes and π -electron deficient receptors (M. Asakawa, P.R. Ashton, S.E. Boyd, C.L. Brown, S. Menzer, D. Pasini, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams, P.G. Wyatt), *Chem. Eur. J.* **1997**, *3*, 463–481. [50]
428. Thiamacrocyclic chemistry: Synthesis of novel oxadithiacrown and its copper iodide complex (P.R. Ashton, A.L. Burns, C.G. Claessens, G.K.H. Shimizu, K. Small, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Chem. Soc., Dalton Trans.* **1997**, 1493–1496. [27]

429. A convergent synthesis of a carbohydrate-containing dendrimer (P.R. Ashton, S.E. Boyd, C.L. Brown, N. Jayaraman, J.F. Stoddart), *Angew. Chem.* **1997**, *109*, 756–759; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 732–735. [78]
430. Supramolecular weaving (P.R. Ashton, A.N. Collins, M.C.T. Fyfe, S. Menzer, J.F. Stoddart, D.J. Williams), *Angew. Chem.* **1997**, *109*, 760–763; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 735–739. [53]
431. Towards a molecular anchor chain: Synthesis and catenations of spiro crown ethers (P.R. Ashton, T. Horn, N. Spencer, S. Menzer, J.A. Preece, J.F. Stoddart, D.J. Williams), *Synthesis* **1997**, 480–488. [10]
432. Template-directed synthesis of catenanes (M. Belohradsky, F.M. Raymo, J.F. Stoddart), *Collect. Czech. Chem. Commun.* **1997**, *62*, 527–557. [33]
433. Molecular meccano 19. Self-assembly of novel [2]catenanes and [2]pseudorotaxanes incorporating either thiacyclic ethers or their acyclic analogs (M. Asakawa, P.R. Ashton, W. Dehaen, G. L'abbé, S. Menzer, J. Nouwen, F.M. Raymo, J.F. Stoddart, M.S. Tolley, S. Toppet, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 772–787. [25]
434. Molecular meccano 20. A novel type of isomerism in [3]catenanes (P.R. Ashton, S.E. Boyd, C.G. Claessens, R.E. Gillard, S. Menzer, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 788–798. [27]
435. Synthesis of glycodendrimers by modification of poly(propylene imine) dendrimers (P.R. Ashton, S.E. Boyd, C.L. Brown, S.A. Nepogodiev, E.W. Meijer, H.W.I. Peerlings, J.F. Stoddart), *Chem. Eur. J.* **1997**, *3*, 974–984. [147]
436. Molecular meccano 10. Toward controllable molecular shuttles (P.-L. Anelli, M. Asakawa, P.R. Ashton, R.A. Bissell, G. Clavier, R. Górski, A.E. Kaifer, S.J. Langford, G. Mattersteig, S. Menzer, D. Philp, A.M.Z. Slawin, N. Spencer, J.F. Stoddart, M.S. Tolley, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 1113–1135. [144]
437. Molecular meccano 18. Molecular and supramolecular synthesis with dibenzofuran-containing systems (M. Asakawa, P.R. Ashton, C.L. Brown, M.C.T. Fyfe, S. Menzer, D. Pasini, C. Scheuer, N. Spencer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 1136–1150. [39]
438. Molecular meccano 17. Translational isomerism in some two- and three-station [2]rotaxanes (D.B. Amabilino, P.R. Ashton, S.E. Boyd, M. Gómez-López, W. Hayes, J.F. Stoddart), *J. Org. Chem.* **1997**, *62*, 3062–3075. [21]
439. A self-complexing macrocycle acting as a chromophoric receptor (P.R. Ashton, M. Gómez-López, S. Iqbal, J.A. Preece, J.F. Stoddart), *Tetrahedron Lett.* **1997**, *38*, 3635–3638. [18]
440. Detecting a transition metal ammine at tailored surfaces (S. Iqbal, F.J.B. Kremer, J.A. Preece, H. Ringsdorf, M. Steinbeck, J.F. Stoddart, J. Shen, N.D. Tinker), *J. Mater. Chem.* **1997**, *7*, 1147–1154. [4]
441. Synthetic carbohydrate-containing dendrimers. A concept article (N. Jayaraman, S.A. Nepogodiev, J.F. Stoddart), *Chem. Eur. J.* **1997**, *3*, 1193–1199. [140]
442. Synthetic cyclic oligosaccharides. Part 2. Achiral cyclodextrin analogs (P.R. Ashton, S.J. Cantrill, G. Gattuso, S. Menzer, S.A. Nepogodiev, A.N. Shipway, J.F. Stoddart, D.J. Williams), *Chem. Eur. J.* **1997**, *3*, 1299–1314. [31]
443. The self-assembly of the first fullerene-containing [2]catenane (F. Diederich, M. Gómez-López, J.-F. Nierengarten, J.A. Preece, F.M. Raymo, J.F. Stoddart), *Angew. Chem.* **1997**, *109*, 1611–1614; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 1448–1451. [58]
444. Synthetic cyclic oligosaccharides. Part 3. Carbohydrate nanotubes (G. Gattuso, S. Menzer, S.A. Nepogodiev, J.F. Stoddart, D.J. Williams), *Angew. Chem.* **1997**, *109*, 1615–1617; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 1451–1454. [94]
445. The quest for nanoscaled devices (S.J. Langford, F.M. Raymo, J.F. Stoddart), in *Molecular Electronics*, Eds. M. Ratner, J. Jortner, Blackwell, Oxford, 1997, pp. 325–342.
446. Self-assembly in chemical systems (F.M. Raymo, J.F. Stoddart), in *New Trends in Materials Chemistry*, Eds. C.R.A. Catlow, A. Cheetham, Kluwer, The Netherlands, 1997, pp. 495–511. [1]
447. Molecular machines (F.M. Raymo, J.F. Stoddart), in *New Trends in Materials Chemistry*, Eds. C.R.A. Catlow, A. Cheetham, Kluwer, The Netherlands, 1997, pp. 513–528. [1]

448. Self-assembly of a water-soluble [2]rotaxane with carbohydrate stoppers (P.R. Ashton, S.R.L. Everitt, M. Gómez-López, N. Jayaraman, J.F. Stoddart), *Tetrahedron Lett.* **1997**, *38*, 5691–5694. [27]
449. Synthesis of carbohydrate-containing dendrimers 5. Preparation of dendrimers using unprotected carbohydrates (N. Jayaraman, J.F. Stoddart), *Tetrahedron Lett.* **1997**, *38*, 6767–6770. [39]
450. Slippage – a simple and efficient way to self-assemble [n]rotaxanes (F.M. Raymo, J.F. Stoddart), *Pure Appl. Chem.* **1997**, *69*, 1987–1997. [46]
451. A supramolecular analog of the photosynthetic special pair (M.C. Fieters, M.C.T. Fyfe, M.-V. Martínez-Díaz, S. Menzer, R.J.M. Nolte, J.F. Stoddart, P.J.M. van Kan, D.J. Williams), *J. Am. Chem. Soc.* **1997**, *119*, 8119–8120. [44]
452. π - π Interactions in self-assembly (C.G. Claessens, J.F. Stoddart), *J. Phys. Org. Chem.* **1997**, *10*, 254–272. [312]
453. The self-assembly of a switchable [2]rotaxane (M.-V. Martínez-Díaz, N. Spencer, J.F. Stoddart), *Angew. Chem.* **1997**, *109*, 1991–1994; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 1904–1907. [174]
454. Synthetic supramolecular chemistry (M.C.T. Fyfe, J.F. Stoddart), *Acc. Chem. Res.* **1997**, *30*, 393–401. [585]
455. Molecular meccano 26. Hydrogen bonded complexes of aromatic crown ethers with (9-anthracenyl)methylammonium derivatives. Supramolecular photochemistry and photophysics. pH-Controllable supramolecular switching (P.R. Ashton, R. Ballardini, V. Balzani, M. Gómez-López, S.E. Lawrence, M.-V. Martínez-Díaz, M. Montali, A. Piersanti, L. Prodi, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1997**, *119*, 10641–10651. [123]
456. Discussion of the Harada and Meijer lectures (J.F. Stoddart), in *Modular Chemistry*, Ed. J. Michl, Kluwer, The Netherlands, 1997, pp. 385–396. [1]
457. New modules – new families of interlocked molecules (P.T. Glink, J.F. Stoddart), in *Modular Chemistry*, Ed. J. Michl, Kluwer, The Netherlands, 1997, pp. 609–622.
458. Building supramolecular nanostructures on surfaces: the influence of the substrate (P. Laitenberger, C.G. Claessens, L. Kuipers, F.M. Raymo, R.E. Palmer, J.F. Stoddart), *Chem. Phys. Lett.* **1997**, *279*, 209–214. [19]
459. Anion-assisted self-assembly (M.C.T. Fyfe, P.T. Glink, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem.* **1997**, *109*, 2158–2160; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 2068–2070. [165]
460. The five-stage self-assembly of a branched heptacatenane (D.B. Amabilino, P.R. Ashton, S.E. Boyd, J.Y. Lee, S. Menzer, J.F. Stoddart, D.J. Williams), *Angew. Chem.* **1997**, *109*, 2160–2162; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 2070–2072. [62]
461. Controlling self-assembly (R.E. Gillard, F.M. Raymo, J.F. Stoddart), *Chem. Eur. J.* **1997**, *3*, 1933–1940. [120]
462. Electrochemically induced molecular motions in pseudorotaxanes: a case of dual mode (oxidative and reductive) dethreading (M. Asakawa, P.R. Ashton, V. Balzani, A. Credi, G. Mattersteig, O.A. Matthews, M. Montali, N. Spencer, J.F. Stoddart, M. Venturi), *Chem. Eur. J.* **1997**, *3*, 1992–1996. [171]
463. Molecular meccano 27. A template-directed synthesis of a molecular trefoil knot (P.R. Ashton, O.A. Matthews, S. Menzer, F.M. Raymo, N. Spencer, J.F. Stoddart, D.J. Williams), *Leibigs Ann./Recueil* **1997**, 2485–2494. [79]
464. Molecular and supramolecular switching systems (M. Gómez-López, J.F. Stoddart), *Bull. Soc. Chim. Belg.* **1997**, *106*, 491–500. [14]
465. Polycationic dendrimers (P.R. Ashton, K. Shibata, A.N. Shipway, J.F. Stoddart), *Angew. Chem.* **1997**, *109*, 2902–2905; *Angew. Chem., Int. Ed. Engl.* **1997**, *36*, 2781–2783. [23]
466. Molecular meccano 22. Controlling catenations, properties and relative ring-component movements in catenanes with aromatic fluorine substituents (R. Ballardini, V. Balzani, A. Credi, C.L. Brown, R.E. Gillard, M. Montalti, D. Philp, J.F. Stoddart, M. Venturi, A.J.P. White, B.J. Williams, D.J. Williams), *J. Am. Chem. Soc.* **1997**, *119*, 12503–12513. [60]
467. Molecular meccano 24. Multiple stranded and multiply encircled pseudorotaxanes (P.R. Ashton, M.C.T. Fyfe, P.T. Glink, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1997**, *119*, 12514–12524. [58]
468. The chemistry of cyclic oligosaccharides (S.A. Nepogodiev, J.F. Stoddart) in *Carbohydrate Chemistry*, Ed. G.-J. Boons, Blackie, London, 1998, pp. 323–383.

469. Dendrimers – branching out from curiosities into new technologies (O.A. Matthews, A.N. Shipway, J.F. Stoddart), *Prog. Poly. Sci.* **1998**, *23*, 1–56. [560]
470. Molecular meccano 29. The synthesis and spectroscopic properties of a [2]catenane incorporating an anthracene chromophoric unit (R. Ballardini, V. Balzani, A. Credi, M.T. Gandolfi, D. Marquis, L. Pérez-García, J.F. Stoddart), *Eur. J. Org. Chem.* **1998**, 81–89. [11]
471. Molecular meccano. Part 25. Self-assembly of functionalized [2]catenanes bearing a reactive group on either one or both macrocyclic components – from monomeric [2]catenanes to polycatenanes (S. Menzer, A.J.P. White, D.J. Williams, M. Belohradsky, C. Hamers, F.M. Raymo, A.N. Shipway, J.F. Stoddart), *Macromolecules* **1998**, *31*, 295–307. [61]
472. A chemically and electrochemically switchable [2]catenane incorporating a tetrathiafulvalene unit (M. Asakawa, P.R. Ashton, V. Balzani, A. Credi, C. Hamers, G. Matternsteig, M. Montalti, A.N. Shipway, N. Spencer, J.F. Stoddart, M.S. Tolley, M. Venturi, A.J.P. White, D.J. Williams), *Angew. Chem.* **1998**, *110*, 357–361; *Angew. Chem., Int. Ed.* **1998**, *37*, 333–337. [278]
473. Molecular meccano. Part 23. Self-assembling cyclophanes and catenanes possessing elements of planar chirality (P.R. Ashton, S.E. Boyd, S. Menzer, D. Pasini, F.M. Raymo, N. Spencer, J.F. Stoddart, A.J.P. White, D.J. Williams, P.G. Wyatt), *Chem. Eur. J.* **1998**, *4*, 299–310. [34]
474. Molecular meccano. Part 21. Constitutionally asymmetric and chiral [2]pseudorotaxanes (M. Asakawa, P.R. Ashton, W. Hayes, H.M. Janssen, E.W. Meijer, S. Menzer, D. Pasini, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1998**, *120*, 920–931. [44]
475. Molecular meccano. Part 31. The synthesis and spectroscopic properties of macrocyclic polyethers containing two different aromatic moieties and their [2]catenanes incorporating cyclobis(paraquat-*p*-phenylene) (R. Ballardini, V. Balzani, M.T. Gandolfi, R.E. Gillard, J.F. Stoddart, E. Tabellini), *Chem. Eur. J.* **1998**, *4*, 449–459. [21]
476. Molecular meccano. Part 32. Kinetic and thermodynamic effects in the self-assembly of [3]catenanes in solution and solid states (D.B. Amabilino, P.R. Ashton, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1998**, *4*, 460–468. [26]
477. Novel clay-like and helical superstructures generated using arene-arene interactions (M.C.T. Fyfe, J.F. Stoddart, A.J.P. White, D.J. Williams), *New J. Chem.* **1998**, 155–157. [3]
478. Molecular meccano. Part 33. Rotaxane or pseudorotaxane? That is the question! (P.R. Ashton, I. Baxter, M.C.T. Fyfe, F.M. Raymo, N. Spencer, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1998**, *120*, 2297–2307. [231]
479. A molecular chameleon: chromophoric sensing by a self-complexing molecular assembly (R. Wolf, M. Asakawa, P.R. Ashton, M. Gómez-López, C. Hamers, S. Menzer, I.W. Parsons, N. Spencer, J.F. Stoddart, M.S. Tolley, D.J. Williams), *Angew. Chem.* **1998**, *110*, 1018–1022; *Angew. Chem., Int. Ed.* **1998**, *37*, 975–979. [37]
480. Synthesis and study of dendritic polysaccharides (N. Jayaraman, S.A. Nepogodiev, J.F. Stoddart), *Carbohydrates in Europe 20*, 1998, pp 30–33.
481. Self-assembling supermolecules and supramolecular arrays based on metal coordination (F.M. Raymo, J.F. Stoddart), *Curr. Op. Coll. Interface Sci.* **1998**, *3*, 150–159. [18]
482. Molecular meccano. Part 34. Combining different hydrogen bonding motifs to self-assemble interwoven superstructures (P.R. Ashton, M.C.T. Fyfe, S.K. Hickingbottom, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1998**, *4*, 577–589. [54]
483. Molecular meccano. Part 35. Cyclophanes and [2]catenanes as ligands for transition metal complexes. Synthesis, structure, absorption spectra, excited state, and electrochemical properties (P.R. Ashton, V. Balzani, A. Credi, O. Kocian, D. Pasini, L. Prodi, N. Spencer, J.F. Stoddart, M.S. Tolley, M. Venturi, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1998**, *4*, 590–607. [56]
484. Supramolecular daisy chains (P.R. Ashton, I. Baxter, S.J. Cantrill, M.C.T. Fyfe, P.T. Glink, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem.* **1998**, *110*, 1344–1347; *Angew. Chem., Int. Ed.* **1998**, *37*, 1294–1297. [158]

485. Molecular meccano 30. Oligocatenanes made to order (D.B. Amabilino, P.R. Ashton, V. Balzani, S.E. Boyd, A. Credi, J.Y. Lee, S. Menzer, J.F. Stoddart, M. Venturi, D.J. Williams), *J. Am. Chem. Soc.* **1998**, *120*, 4295–4307. [122]
486. The synthesis and characterization of a new family of polyamide dendrimers (P.R. Ashton, D.W. Anderson, C.L. Brown, A.N. Shipway, J.F. Stoddart, M.S. Tolley), *Chem. Eur. J.* **1998**, *4*, 781–795. [45]
487. Stable Langmuir and Langmuir-Blodgett films of fullerene-glycodendron conjugates (F. Cardullo, F. Diederich, L. Echegoyen, T. Habicher, N. Jayaraman, R.M. Leblanc, J.F. Stoddart, S. Wang), *Langmuir* **1998**, *14*, 1955–1959. [149]
488. Synthesis of carbohydrate-containing dendrimers. Part 6. Synthesis and biological evaluation of α -D-mannopyranoside-containing dendrimers (P.R. Ashton, E.F. Hounsell, N. Jayaraman, T.M. Nilsen, N. Spencer, J.F. Stoddart, M. Young), *J. Org. Chem.* **1998**, *63*, 3429–2437. [108]
489. Concept transfer from the life sciences into materials science (P.T. Glink, J.F. Stoddart), *Pure Appl. Chem.* **1998**, *70*, 419–424. [15]
490. Molecular meccano. Part 37. Self-assembly and self-organization of self-recognizing cyclophanes (P.R. Ashton, A. Chemin, C.G. Claessens, S. Menzer, J.F. Stoddart, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **1998**, 969–981. [17]
491. Molecular meccano. Part 38. Enantioselective discrimination in the self-assembly of [2]pseudorotaxanes (M. Asakawa, H.M. Janssen, E.W. Meijer, D. Pasini, J.F. Stoddart), *Eur. J. Org. Chem.* **1998**, 983–986. [21]
492. Noncovalent synthesis of donor/acceptor stacks (B Colonna, F.M. Raymo, J.F. Stoddart, D.J. Williams), *Tetrahedron Lett.* **1998**, *39*, 5155–5158. [5]
493. From supramolecular complexes to interlocked molecular compounds (F.M. Raymo, J.F. Stoddart), *Chemtracts – Organic Chemistry* **1998**, *11*, 491–511.
494. Mechanically-interlocked molecular systems incorporating cyclodextrins (S.A. Nepogodiev, J.F. Stoddart) in *Organic Synthesis Highlights III*, Eds. J. Mulzer, H. Waldmann, Wiley-VCH, Weinheim, 1998, pp 374–381.
495. A new slippage synthesis (P.R. Ashton, M.C.T. Fyfe, C. Schiavo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Tetrahedron Lett.* **1998**, *39*, 5455–5458. [25]
496. Synthesis of carbohydrate-containing dendrimers. Part 7. Synthesis of oligosaccharide dendrimers (B Colonna, V.D. Harding, S.A. Nepogodiev, F.M. Raymo, N. Spencer, J.F. Stoddart), *Chem. Eur. J.* **1998**, *4*, 1244–1254. [55]
497. Synthetic cyclic oligosaccharides (G. Gattuso, S.A. Nepogodiev, J.F. Stoddart), *Chem. Rev.* **1998**, *98*, 1919–1958. [106]
498. Cyclodextrin-based catenanes and rotaxanes (S.A. Nepogodiev, J.F. Stoddart), *Chem. Rev.* **1998**, *98*, 1959–1976. [804]
499. Self-assembling supramolecular daisy chains (P.R. Ashton, I.W. Parsons, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams, R. Wolf), *Angew. Chem.* **1998**, *110*, 2016–2019; *Angew. Chem., Int. Ed.* **1998**, *37*, 1913–1916. [113]
500. Molecular machines (V. Balzani, M. Gómez-López, J.F. Stoddart), *Acc. Chem. Res.* **1998**, *31*, 405–414. [754]
501. Supramolecular Science. Where it is and where it is going (D.N. Reinhoudt, J.F. Stoddart, R. Ungaro), *Chem. Eur. J.* **1998**, *4*, 1349–1351. [46]
502. Molecular meccano. Part 39. Doubly-docked pseudorotaxanes (P.R. Ashton, M.C.T. Fyfe, M.-V. Martínez-Díaz, S. Menzer, C. Schiavo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1998**, *4*, 1523–1534. [43]
503. Molecular crystals: Editorial overview (L. Lieserowitz, J.F. Stoddart), *Curr. Op. Solid State & Mater. Sci.* **1998**, *3*, 397–398. [1]
504. Synthesis of spacer-armed glycodendrimers based on the modification of poly(propylene imine) dendrimers (H.W.I. Peerlings, S.A. Nepogodiev, J.F. Stoddart, E.W. Meijer), *Eur. J. Org. Chem.* **1998**, 1879–1886. [29]
505. Molecular meccano. Part 28. Origins of selectivity in molecular and supramolecular entities. Solvent and electrostatic control of the translational isomerism in [2]catenanes (F.M. Raymo, K.N. Houk, J.F. Stoddart), *J. Org. Chem.* **1998**, *63*, 6523–6528. [58]

506. Molecular meccano. Part 40. The mechanism of the slippage approach to rotaxanes – Origin of the “all-or-nothing” substitution effect (F.M. Raymo, K.N. Houk, J.F. Stoddart), *J. Am. Chem. Soc.* **1998**, *120*, 9318–9322. [118]
507. Molecular meccano. Part 36. Aggregation of self-assembling branched [n]rotaxanes (D.B. Amabilino, M. Asakawa, P.R. Ashton, R. Ballardini, V. Balzani, M. Belohradsky, A. Credi, M. Higuchi, F.M. Raymo, T. Shimizu, J.F. Stoddart, M. Venturi, K. Yase), *New J. Chem.* **1998**, 959–972. [52]
508. Molecular meccano. Part 42. Main-chain and pendant poly([2]catenanes) incorporating complementary π -electron rich and deficient components (C. Hamers, F.M. Raymo, J.F. Stoddart), *Eur. J. Org. Chem.* **1998**, 2109–2117. [29]
509. Simple molecular-level machines. Interchange between different threads in pseudorotaxanes (A. Credi, V. Balzani, S.J. Langford, M. Montalti, F.M. Raymo, J.F. Stoddart), *New J. Chem.* **1998**, 1061–1065. [73]
510. A Poly(bis[2]catenane containing a combination of covalent, mechanical, and coordinative bonds (C. Hamers, O. Kocian, F.M. Raymo, J.F. Stoddart), *Adv. Mater.* **1998**, *10*, 1366–1369. [44]
511. Molecular meccano. Part 43. Hammett correlations “beyond the molecule” (P.R. Ashton, M.C.T. Fyfe, S.K. Hickingbottom, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Chem. Soc., Perkin Trans. 2* **1998**, 2117–2128. [86]
512. Molecular meccano. Part 45. High yielding template-directed synthesis of [2]rotaxanes (J.A. Bravo, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **1998**, 2565–2571. [42]
513. Supramolecular synthesis with carboxylic substituted secondary dialkylammonium salts and macrocyclic ethers (M.C.T. Fyfe, J.F. Stoddart, A.N. Collins, D.J. Williams), *Molecular Recognition and Inclusion*, Lyon, 1996, Ed. A.W. Coleman, Kluwer, the Netherlands, 1998, pp 333–336.
514. Towards rotaxane-based metal-ion sensors (O.A. Matthews, J.F. Stoddart, N.D. Tinker), *Molecular Recognition and Inclusion*, Lyon, 1996, Ed. A.W. Coleman, Kluwer, The Netherlands, 1998, pp 411–414.
515. Macrocyclic polyethers as ditopic co-receptors for dual-centred secondary dialkylammonium guests: from double-stranded to single-stranded pseudorotaxanes (C. Schiavo, J.F. Stoddart, D.J. Williams), *Molecular Recognition and Inclusion*, Lyon, 1996, Ed. A.W. Coleman, Kluwer, The Netherlands 1998, pp 491–494.
516. Synthetic supramolecular chemistry (S.J. Cantrill, M.C.T. Fyfe, F.M. Raymo, J.F. Stoddart), in “Current Challenges on Large Supramolecular Assemblies”, Ed. G. Tsoucaris, Kluwer, The Netherlands, 1998, pp 17–35. [2]
517. Molecular meccano. Part 41. Selective self-assembly and acid-base controlled de-/rethreading of pseudorotaxanes constructed using multiple recognition motifs (P.R. Ashton, R. Ballardini, V. Balzani, M.C.T. Fyfe, M.T. Gandolfi, M.-V. Martínez-Díaz, M. Morosini, C. Schiavo, K. Shibata, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1998**, *4*, 2332–2341. [38]
518. An acid/base-controlled supramolecular switch (O.A. Matthews, F.M. Raymo, J.F. Stoddart, A.J.P. White, D. J. Williams), *New J. Chem.* **1998**, 1131–1134. [24]
519. A light-fueled “piston-cylinder” molecular-level machine (P.R. Ashton, V. Balzani, O. Kocian, L. Prodi, N. Spencer, J. F. Stoddart), *J. Am. Chem. Soc.* **1998**, *120*, 11190–11191. [107]
520. Molecular meccano. Part 46. Acid-base controllable molecular shuttles (P.R. Ashton, R. Ballardini, V. Balzani, I. Baxter, A. Credi, M.C.T. Fyfe, M.T. Gandolfi, M. Gómez-López, M.-V. Martínez-Díaz, A. Piersanti, N. Spencer, J.F. Stoddart, M. Venturi, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1998**, *120*, 11932–11942. [323]
521. Fullerenes in supramolecular chemistry (M. Gómez-López, J.-P. Bourgeois, F. Cardullo, F. Diederich, L. Echegoyen, T. Habicher, A. Herrmann, U. Jona, R.M. Leblanc, N. Jayaraman, J.-F. Nierengarten, H. Ringsdorf, J.-P. Sauvage, J.F. Stoddart, C. Thilgen), in *Recent Advances in the Chemistry and Physics of Fullerenes and Related Materials*, ECS Proceedings Volume 98-8, Fullerenes Volume 6, 1998, pp 1057–1072. [0]
522. Ru(II)-Polypyridine complexes covalently linked to electron acceptors as wires for light-driven pseudorotaxane-type molecular machines (P.R. Ashton, R. Ballardini, V. Balzani, E.C. Constable, A. Credi, O. Kocian, S.J. Langford, L. Prodi, J.A. Preece, E.R. Schofield, N. Spencer, J.F. Stoddart, S. Wenger), *Chem. Eur. J.* **1998**, *4*, 2413–2422. [91]

523. (Supra)molecular systems based upon crown ethers and secondary dialkylammonium ions (M.C.T. Fyfe, J.F. Stoddart), *Adv. Supramol. Chem.* **1999**, *5*, 1–53.
524. Molecular meccano. Part 47. [C-H...O] Interactions as a control element in supramolecular complexes: experimental and theoretical evaluation of receptor affinities for the binding of bipyridinium-based guests by catenated hosts (K.N. Houk, S. Menzer, S.P. Newton, F.M. Raymo, J.F. Stoddart, D.J. Williams), *J. Am. Chem. Soc.* **1999**, *121*, 1479–1487. [197]
525. Probing self-assembly by NMR (S.J. Cantrill, M.C.T. Fyfe, F.M. Raymo, J.F. Stoddart) in Applications of NMR to the Study of Structure and Dynamics of Supramolecular Complexes, Kluwer, Dordrecht, 1999, pp 1–18. [2]
526. Interwoven supramolecular arrays via the noncovalent polymerization of pseudorotaxanes (M.C.T. Fyfe, J.F. Stoddart), *Coord. Chem. Rev.* **1999**, *183*, 139–155. [64]
527. Molecular meccano. Part 44. Photoactive azobenzene-containing supramolecular complexes and related interlocked molecular compounds (M. Asakawa, P.R. Ashton, V. Balzani, C.L. Brown, A. Credi, O.A. Matthews, S.P. Newton, F.M. Raymo, A.N. Shipway, N. Spencer, A. Quick, J.F. Stoddart, M.S. Tolley, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **1999**, *5*, 860–875. [87]
528. Hydrodynamic properties of carbohydrate-coated dendrimers (G.M. Pavlov, E.V. Korneeva, K. Jumel, S.E. Harding, E.W. Meijer, H.W.I. Peerlings, J.F. Stoddart, S.A. Nepogodiev), *Carbohydrate Polymers* **1999**, *38*, 195–202. [36]
529. Molecular Meccano. Part 48. Probing co-conformational changes in chiral [2]rotaxanes by ¹H NMR spectroscopy (P.R. Ashton, J.A. Bravo, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **1999**, 899–908. [33]
530. Cyclodextrins (D. Armspach, G. Gattuso, R. Königer, J.F. Stoddart) in Bioorganic Chemistry: Carbohydrates, Ed. S.M. Hecht, Oxford University Press, New York, 1999, pp 458–488.
531. Interlocked macromolecules (F.M. Raymo, J.F. Stoddart), *Am. Chem. Soc., Polym. Mater. Sci. Eng.* **1999**, *80*, 33–34.
532. A simple and efficient method for the preparation of 1-benzyloxy-5-hydroxynaphthalene (J. Becher, O.A. Matthews, M.B. Nielsen, F.M. Raymo, J.F. Stoddart), *Synlett* **1999**, 330–332. [17]
533. Molecular meccano. Part 53. A three-pole supramolecular switch (P.R. Ashton, V. Balzani, J. Becher, A. Credi, M.C.T. Fyfe, G. Mattersteig, S. Menzer, M.B. Nielsen, F.M. Raymo, J.F. Stoddart, M. Venturi, A.J.P. White, D.J. Williams), *J. Am. Chem. Soc.* **1999**, *121*, 3951–3957. [219]
534. Secondary dibenzylammonium ion binding by [24]crown-8 and [25]crown-8 macrocycles (P.R. Ashton, R.A. Bartsch, S.J. Cantrill, R.E. Hanes, Jr., S.K. Hickingbottom, J.N. Lowe, J.A. Preece, J.F. Stoddart, V.S. Talanov, Z.-H. Wang), *Tetrahedron Lett.* **1999**, *40*, 3661–3664. [51]
535. A new protocol for rotaxane synthesis (S.J. Cantrill, D.A. Fulton, M.C.T. Fyfe, J.F. Stoddart, A.J.P. White, D.J. Williams), *Tetrahedron Lett.* **1999**, *40*, 3669–3672. [39]
536. Heterosupramolecular chemistry. Programmed pseudorotaxane assembly at the surface of a nanocrystal (D. Fitzmaurice, S.N. Rao, J.A. Preece, J.F. Stoddart, S. Wenger, N. Zaccheroni), *Angew. Chem., Int. Ed.* **1999**, *38*, 1147–1150. [92]
537. Molecular meccano. Part 49. Pseudorotaxanes and catenanes containing a redox-active unit derived from tetrathiafulvalene (M. Asakawa, P.R. Ashton, V. Balzani, S.E. Boyd, A. Credi, G. Mattersteig, S. Menzer, M. Montalti, F.M. Raymo, C. Ruffilli, J.F. Stoddart, M. Venturi, D.J. Williams), *Eur. J. Org. Chem.* **1999**, 985–994. [63]
538. Molecular meccano. Part 51. Diastereoselective self-assembly of [2]catenanes (P.R. Ashton, A.M. Heiss, D. Pasini, F.M. Raymo, A.N. Shipway, J.F. Stoddart), *Eur. J. Org. Chem.* **1999**, 995–1004. [31]
539. Molecular Meccano 52. Template-directed synthesis of a rotacatenane (D.B. Amabilino, J.A. Bravo, F.M. Raymo, J.F. Stoddart, D.J. Williams), *Eur. J. Chem. Org.* **1999**, 1295–1302. [32]
540. Molecular meccano. Part 50. Diazapyrenium-containing catenanes and rotaxanes (P.R. Ashton, S.E. Boyd, A. Brindle, S.J. Langford, S. Menzer, L. Pérez-García, J.A. Preece, F.M. Raymo, N. Spencer, J.F. Stoddart, A.J.P. White, D.J. Williams), *New J. Chem.* **1999**, 587–602. [58]
541. X-Ray crystallographic studies on the noncovalent synthesis of supermolecules (M.C.T. Fyfe, J.F. Stoddart, D.J. Williams), *Struct. Chem.* **1999**, *10*, 243–259. [28]

542. Organic template-directed synthesis of catenanes, rotaxanes, and knots (F.M. Raymo, J.F. Stoddart), in *Molecular Catenanes, Rotaxanes and Knots*. Eds. C.O. Dietrich-Buchecker, J.-P. Sauvage, Wiley-VCH, Weinheim, 1999, pp 143–176.
543. Interlocked macromolecules (F. M. Raymo, J.F. Stoddart), *Chem. Rev.* **1999**, *99*, 1643–1663. [627]
544. Triphenylphosphonium-stoppered [2]rotaxanes (S.J. Rowan, S.J. Cantrill, J.F. Stoddart), *Org. Lett.* **1999**, *1*, 129–132. [75]
545. Rotaxane construction with a binaphthol-derived crown ether (S.J. Cantrill, M.C.T. Fyfe, A.M. Heiss, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Commun.* **1999**, 1251–1252. [27]
546. Electronically configurable molecular-based logic gates (C.P. Collier, E.W. Wong, M. Belohradsky, F.M. Raymo, J.F. Stoddart, P.J. Kuekes, R.S. Williams, J.R. Heath), *Science* **1999**, *285*, 391–394. [1290]
547. The self-assembly of fullerene-containing [2]pseudorotaxanes: formation of a supramolecular C-60 dimer (F. Diederich, L. Echegoyen, M. Gómez-López, R. Kessinger, J.F. Stoddart), *J. Chem. Soc., Perkin Trans. 2* **1999**, 1577–1586. [59]
548. Synthesis and studies of sugar-coated discotic liquid crystals (J. Barbéra, A.C. Gracés, N. Jayaraman, A. Omenat, J.-L. Serrano, J.F. Stoddart), *Am. Chem. Soc., Polym. Preprints* **1999**, *40(2)*, 488–489.
549. Wittig reactions on phosphonium-stoppered [2]rotaxanes. A new route to macromolecular daisy chains (S.J. Rowan, S.J. Cantrill, J.F. Stoddart), *Am. Chem. Soc., Polym. Preprints* **1999**, *40(2)*, 1119–1120.
550. Supramolecular daisy chains (S.J. Cantrill, J.F. Stoddart, D.J. Williams), *Am. Chem. Soc., Polym. Preprints* **1999**, *40(2)*, 1130–1131.
551. Templated synthesis of catenanes and rotaxanes (F.M. Raymo, J.F. Stoddart) in *Templated Organic Synthesis*, Eds. F. Diederich, P.J. Stang, Wiley-VCH: Weinheim, 1999, pp 75–104.
552. Rotaxane formation under thermodynamic control (S.J. Cantrill, S.J. Rowan, J.F. Stoddart), *Org. Lett.* **1999**, *1*, 1363–1366. [95]
553. Thermodynamic synthesis of rotaxanes by imine exchange (S.J. Rowan, J.F. Stoddart), *Org. Lett.* **1999**, *1*, 1913–1916. [80]
554. Anion-orchestrated formation in the crystalline state of [2]pseudorotaxane arrays (P.R. Ashton, S.J. Cantrill, J.A. Preece, J.F. Stoddart, Z.-H. Wang, A.J.P. White, D.J. Williams), *Org. Lett.* **1999**, *1*, 1917–1920. [23]
555. The introduction of [2]catenanes into Langmuir Films and Langmuir-Blodgett multilayers - A possible strategy for molecular information storage materials (C.L. Brown, U. Jonas, J.A. Preece, H. Ringsdorf, M. Seitz, J.F. Stoddart), *Langmuir* **2000**, *16*, 1924–1930. [61]
556. Molecular and supramolecular nanomachines (M. Gómez-López, J.F. Stoddart), in *Handbook of Nanostructured Materials and Nanotechnology*, Ed. H.S. Nalwa, Volume 5. Organics, Polymers, and Biological Materials, Academic Press, San Diego, 2000, pp 225–275.
557. Tribenzo[27]crown-9: A new ring for dibenzylammonium rods (S.J. Cantrill, M.C.T. Fyfe, A.M. Heiss, J.F. Stoddart, A.J.P. White, D.J. Williams), *Org. Lett.* **2000**, *2*, 61–64. [28]
558. Thermoregulated optical properties of peptidic pseudorotaxanes (J.-C. Meillon, N. Voyer, E. Biron, F. Sanschagrin, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2000**, *39*, 143–145. [32]
559. A self-complexing [2]catenane (B. Cabezon, J. Cao, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed.* **2000**, *39*, 148–151. [22]
560. Precision molecular grafting: Exchanging surrogate stoppers in [2]rotaxanes (S.J. Rowan, J.F. Stoddart), *J. Am. Chem. Soc.* **2000**, *122*, 164–165. [68]
561. Molecular meccano. Part 56. Anthracene-containing [2]rotaxanes: Synthesis, spectroscopic, and electrochemical properties (R. Ballardini, V. Balzani, W. Dehaen, A.E. Dell'Erba, F.M. Raymo, J.F. Stoddart, M. Venturi), *Eur. J. Org. Chem.* **2000**, 591–602. [67]
562. Molecular meccano. Part 57. Template-directed syntheses, spectroscopic properties, and electrochemical behavior of [n]catenanes (P.R. Ashton, V. Baldoni, V. Balzani, C.G. Claessens, A. Credi, H.D.A. Hoffmann, F.M. Raymo, J.F. Stoddart, M. Venturi, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **2000**, 1121–1130. [34]

563. Molecular meccano. Part 54. The switching of pseudorotaxanes and catenanes incorporating a tetrathiafulvalene unit by redox and chemical inputs (V. Balzani, A. Credi, G. Mattersteig, O.A. Matthews, F. M. Raymo, J.F. Stoddart, M. Venturi, A.J.P. White, D.J. Williams), *J. Org. Chem.* **2000**, *65*, 1924–1936. [230]
564. Molecular meccano. Part 55. Molecular shuttles by the protecting group approach (J. Cao, M.C.T. Fyfe, J.F. Stoddart, G.R.L. Cousins, P.T. Glink), *J. Org. Chem.* **2000**, *65*, 1937–1946. [99]
565. Molecular meccano. Part 58. The electrochemically-driven decomplexation/recomplexation of inclusion adducts of ferrocene derivatives with an electron-accepting receptor (V. Balzani, J. Becher, A. Credi, M.B. Nielsen, F.M. Raymo, J.F. Stoddart, A.M. Talarico, M. Venturi), *J. Org. Chem.* **2000**, *65*, 1947–1956. [28]
566. Toward daisy chain polymers: 'Wittig exchange' of stoppers in [2]rotaxane monomers (S.J. Rowan, S.J. Cantrill, J.F. Stoddart, A.J.P. White, D.J. Williams), *Org. Lett.* **2000**, *2*, 759–762. [90]
567. Supramolecular phthalocyanine dimers based on the secondary dialkylammonium cation/dibenzo-24-crown-8 recognition motif (M.V. Martínez-Díaz, M.S. Rodríguez-Morgade, M.C. Feiters, R.J.M. Nolte, J.F. Stoddart, T. Torres), *Org. Lett.* **2000**, *2*, 1057–1060. [42]
568. An efficient two-step synthesis of cyclodextrin-based carbohydrate cluster compounds (D.A. Fulton, J.F. Stoddart), *Org. Lett.* **2000**, *2*, 1113–1116. [84]
569. Constructing molecular machinery. A chemically-switchable [2]catenane (V. Balzani, A. Credi, S.J. Langford, F.M. Raymo, J.F. Stoddart, M. Venturi), *J. Am. Chem. Soc.* **2000**, *122*, 3542–3543. [104]
570. An extremely stable interwoven supramolecular bundle (M.C.T. Fyfe, J.N. Lowe, J.F. Stoddart, D.J. Williams), *Org. Lett.* **2000**, *2*, 1221–1224. [32]
571. Novel ether-linked secondary face-to-face 2-2' and 3-3' β -cyclodextrin dimers (S.-H. Chiu, D.C. Myles, R.L. Garrell, J.F. Stoddart), *J. Org. Chem.* **2000**, *65*, 2792–2796. [51]
572. Polymers with intertwined superstructures and interlocked structures (F.M. Raymo, J.F. Stoddart), in *Supramolecular Polymers*, Ed. A. Ciferri, Marcel Dekker, New York, 2000, pp 323–357.
573. Molecular meccano. Part 59. Self-complementary [2]catenanes and their related [3]catenanes (B. Cabezon, J. Cao, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **2000**, *6*, 2262–2273. [37]
574. Molecular meccano. Part 60. The influence of macrocyclic polyether constitution upon ammonium ion / crown ether recognition processes (S.J. Cantrill, D.A. Fulton, A.M. Heiss, A.R. Pease, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **2000**, *6*, 2274–2287. [82]
575. Fabrication and transport properties of single-molecule thick electrochemical junctions (E.W. Wong, C.P. Collier, M. Belohradsky, F.M. Raymo, J.F. Stoddart, J.R. Heath), *J. Am. Chem. Soc.* **2000**, *122*, 5831–5840. [156]
576. Heterosupramolecular chemistry: Recognition initiated and inhibited silver nanocrystal aggregation by pseudorotaxane assembly (D. Ryan, S.N. Rao, H. Rensmo, D. Fitzmaurice, J.A. Preece, S. Wenger, J.F. Stoddart, N. Zaccheroni), *J. Am. Chem. Soc.* **2000**, *122*, 6252–6257. [66]
577. An enlarged bis-bipyridinium cyclophane-Au nanoparticle superstructure for selective electrochemical sensing applications (M. Lahav, A.N. Shipway, I. Willner, M.B. Nielsen, J.F. Stoddart), *J. Electroanal. Chem.* **2000**, *482*, 217–221. [62]
578. Toward the synthesis of large oligosaccharide-based dendrimers (W.B. Turnbull, A.R. Pease, J.F. Stoddart), *ChemBioChem* **2000**, *1*, 70–74. [38]
579. Tetrathiafulvalenenaphthalenophanes: Planar chirality and *cis/trans* photoisomerization (R. Ballardini, V. Balzani, J. Becher, A. Di Fabio, M.T. Gandolfi, G. Mattersteig, M.B. Nielsen, F.M. Raymo, S.J. Rowan, J.F. Stoddart, A.J.P. White, D.J. Williams), *J. Org. Chem.* **2000**, *65*, 4120–4126. [37]
580. Dynamic hemicarcerands and hemicarceplexes (S. Ro, S.J. Rowan, A.R. Pease, D.J. Cram, J.F. Stoddart), *Org. Lett.* **2000**, *2*, 2411–2414. [76]
581. Current/voltage characteristics of monolayers of redox-switchable [2]catenanes on gold (M. Asakawa, M. Higuchi, G. Mattersteig, T. Nakamura, A.R. Pease, F.M. Raymo, T. Shimizu, J.F. Stoddart), *Adv. Mater.* **2000**, *12*, 1099–1102. [101]
582. A [2]catenane-based solid state electronically reconfigurable switch (C.P. Collier, G. Mattersteig, E.W. Wong, Y. Luo, K. Beverly, J. Sampaio, F.M. Raymo, J.F. Stoddart, J.R. Heath), *Science* **2000**, *289*, 1172–1175. [1166]

583. Toward interlocked molecules beyond catenanes and rotaxanes (T. Chang, A.M. Heiss, S.J. Cantrill, M.C.T. Fyfe, A.R. Pease, S.J. Rowan, J.F. Stoddart, D.J. Williams), *Org. Lett.* **2000**, *2*, 2943–2946. [30]
584. Ammonium ion binding with pyridine-containing crown ethers (T. Chang, A.M. Heiss, S.J. Cantrill, M.C.T. Fyfe, A.R. Pease, S.J. Rowan, J.F. Stoddart, A.J.P. White, D.J. Williams), *Org. Lett.* **2000**, *2*, 2947–2950. [46]
585. The idiosyncrasies of tetrabenzo[24]crown-8 in the solid state (S.J. Cantrill, J.A. Preece, J.F. Stoddart, Z.-H. Wang, A.J.P. White, D.J. Williams), *Tetrahedron* **2000**, *56*, 6675–6681. [42]
586. The reversible complexation of a tetrathiafulvalene functionalised self-assembled monolayer by cyclobis(paraquat-*p*-phenylene) (G. Cooke, F.M.A. Duclairioir, V.M. Rotello, J.F. Stoddart), *Tetrahedron Lett.* **2000**, *41*, 8163–8166. [23]
587. Artificial molecular machines (V. Balzani, A. Credi, F.M. Raymo, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2000**, *39*, 3349–3391. [2062]
588. Molecular meccano. Part 61. A photochemically driven molecular-level abacus (P.R. Ashton, R. Ballardini, V. Balzani, A. Credi, R. Dress, E. Ishow, O. Kocian, J.A. Preece, N. Spencer, J.F. Stoddart, M. Venturi, S. Wenger), *Chem. Eur. J.* **2000**, *6*, 3558–3574. [288]
589. Slippage and constrictive binding (M.C.T. Fyfe, F.M. Raymo, J.F. Stoddart) in Stimulating Concepts in Chemistry, Eds. M. Shibasaki, J.F. Stoddart, F. Vögtle, Wiley-VCH: Weinheim, 2000, pp. 211–220.
590. Self-assembly of an amphiphilic [2]rotaxane incorporating a tetrathiafulvalene unit (J.O. Jeppesen, J. Perkins, J. Becher, J.F. Stoddart), *Org. Lett.* **2000**, *2*, 3547–3550. [52]
591. A rotaxane-like complex with controlled-release characteristics (S.-H. Chiu, S.J. Rowan, S.J. Cantrill, P.T. Glink, R.L. Garrell, J.F. Stoddart), *Org. Lett.* **2000**, *2*, 3631–3634. [47]
592. A molecular meccano kit (S.J. Cantrill, A.R. Pease, J.F. Stoddart), *J. Chem. Soc., Dalton Trans.* **2000**, 3715–3734. [168]
593. Controlled dethreading/rethreading of a scorpion-like pseudorotaxane and a related macrobicyclic self-complexing system (V. Balzani, P. Ceroni, A. Credi, M. Gómez-López, C. Hamers, J.F. Stoddart, R. Wolf), *New J. Chem.* **2001**, *25*, 25–31. [34]
594. Macrocycles, pseudorotaxanes and catenanes containing a pyrrolo-tetrathiafulvalene unit. Absorption spectra, luminescence properties, redox behavior (R. Ballardini, V. Balzani, A.D. Fabio, M.T. Gandolfi, J. Becher, J. Lau, M.B. Nielsen, J.F. Stoddart), *New J. Chem.* **2001**, *25*, 293–298. [30]
595. Sugar-coated discotic liquid crystals (J. Barberá, A.C. Garces, N. Jayaraman, A. Omenat, J.L. Serrano, J.F. Stoddart), *Adv. Mater.* **2001**, *13*, 175–180. [42]
596. Tetrathiafulvalene-containing pseudorotaxanes formed between dibenzylammonium salts and crown ethers (P.R. Ashton, J. Becher, M.C.T. Fyfe, M.B. Nielsen, J.F. Stoddart, A.J.P. White, D.J. Williams), *Tetrahedron* **2001**, *59*, 947–956. [18]
597. Molecular Meccano. Part 62. Azopyridinium-containing [2]pseudorotaxanes and hydrazopyridinium-containing [2]catenanes (P.R. Ashton, C.L. Brown, J. Cao, J.Y. Lee, S.P. Newton, F.M. Raymo, J.F. Stoddart, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **2001**, 957–965. [19]
598. Slow shuttling in an amphiphilic bistable [2]rotaxane incorporating a tetrathiafulvalene unit (J.O. Jeppesen, J. Perkins, J. Becher, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2001**, *40*, 1216–1221. [152]
599. Preparation and properties of polymer-wrapped single-walled carbon nanotubes (A. Star, J.F. Stoddart, D. Steuerman, M. Diehl, A. Boukai, E.W. Wong, X. Yang, S.-W. Chung, H. Choi, J.R. Heath), *Angew. Chem., Int. Ed.* **2001**, *40*, 1721–1725. [878]
600. The balance between electronic and steric effects in the template-directed synthesis of [2]catenanes (M. Pérez-Alvarez, F.M. Raymo, S.J. Rowan, D. Schiraldi, J.F. Stoddart, A.J.P. White, D.J. Williams), *Tetrahedron* **2001**, *57*, 3799–3808. [17]
601. Toward artificial molecular devices (J. Perkins, C.P. Collier, J.R. Heath, J.O. Jeppesen, Y. Luo, K.A. Nielsen, A.R. Pease, J.F. Stoddart, E.W. Wong), *Molecular Electronics and Bioelectronics* **2001**, *12*, 69(23)–74(28).
602. Template-directed synthesis of a [2]rotaxane by clipping under thermodynamic control of a crown ether-like macrocycle around a dialkylammonium ion (P.T. Glink, A.I. Oliva, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed.* **2001**, *40*, 1870–1875. [150]

603. Binding studies between tetrathiafulvalene derivatives and cyclobis(paraquat-*p*-phenylene), M.B. Nielsen, J.O. Jeppesen, J. Lau, C. Lomholt, D. Damgaard, J.P. Jacobsen, J. Becher, J.F. Stoddart), *J. Org. Chem.* **2001**, *66*, 3559–3563. [119]
604. Switching devices based on interlocked molecules (A.R. Pease, J.O. Jeppesen, J.F. Stoddart, Y. Luo, C.P. Collier, J.R. Heath), *Acc. Chem. Res.* **2001**, *34*, 433–444. [674]
605. Switchable catenanes and molecular shuttles (F.M. Raymo, J.F. Stoddart) in *Molecular Switches*, Ed. B.L. Feringa, Wiley-VCH: Weinheim, 2001, pp. 219–248.
606. Computing at the molecular level (A.R. Pease, J.F. Stoddart), *Structure and Bonding* **2001**, *99*, 189–236. [50]
607. Toward interlocked polymers using the Wittig reaction (J.F. Stoddart, S.J. Rowan, S.-H. Chiu, S.J. Cantrill, L. Ridvan, S. Sivakova), *Am. Chem. Soc., Polym. Mater. Sci. Eng. Prepr.* **2001**, *84*, 148–149.
608. Spectroscopic and electrochemical properties of catenanes containing the 2,7-diazapyrenium unit (V. Balzani, A. Credi, S.J. Langford, A. Prodi, J.F. Stoddart, M. Venturi), *Supramol. Chem.* **2001**, *13*, 303–311. [16]
609. Cyclodextrin-based clusters by amide bond formation (D.A. Fulton, A.R. Pease, J.F. Stoddart), *Israel J. Chem.* **2001**, *40*, 325–333. [13]
610. Working supramolecular machines trapped in glass and mounted on a film surface (S. Chia, J. Cao, J.F. Stoddart, J.I. Zink), *Angew. Chem. Int. Ed.* **2001**, *40*, 2447–2451. [108]
611. Molecular meccano. Part 63. Dual mode “co-conformational” switching in catenanes incorporating bipyridinium and dialkylammonium recognition sites (P.R. Ashton, V. Baldoni, V. Balzani, A. Credi, H.D.A. Hoffmann, M.-V. Martínez-Díaz, F.M. Raymo, J.F. Stoddart, M. Venturi), *Chem. Eur. J.* **2001**, *7*, 3482–3493. [74]
612. The magnitude of [C-H···O] hydrogen bonding in molecular and supramolecular assemblies (F.M. Raymo, M.D. Bartberger, K.N. Houk, J.F. Stoddart), *J. Am. Chem. Soc.* **2001**, *123*, 9264–9267. [208]
613. Molecular Meccano. Part 64. Supramolecular daisy chains (S.J. Cantrill, G.J. Youn, J.F. Stoddart, D.J. Williams), *J. Org. Chem.* **2001**, *66*, 6857–6872. [123]
614. Artificial molecular-level machines. Dethreading/rethreading of a pseudorotaxane powered exclusively by light energy (V. Balzani, A. Credi, F. Marchioni, J.F. Stoddart), *Chem. Commun.* **2001**, 1860–1861. Highlighted under Editors' Choice in *Science* **2001**, *293*, 217. [93]
615. Neoglycoconjugates based on cyclodextrins and calixarenes (D.A. Fulton, J.F. Stoddart), *Bioconjugate Chemistry* **2001**, *12*, 655–672. [149]
616. Synthesis of cyclodextrin-based carbohydrate clusters by photoaddition reactions (D.A. Fulton, J.F. Stoddart), *J. Org. Chem.* **2001**, *66*, 8309–8319. [80]
617. Host-guest chemistry aids and abets a stereospecific photodimerization in the solid state (D.G. Amirsakis, M.A. Garcia-Garibay, S.J. Rowan, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed.* **2001**, *40*, 4256–4261. [81]
618. Molecular-based electronically switchable tunnel junction devices (C.P. Collier, J.O. Jeppesen, Yi Luo, J. Perkins, E.W. Wong, J.R. Heath, J.F. Stoddart), *J. Am. Chem. Soc.* **2001**, *123*, 12632–12641. [270]
619. Design and synthesis of glycodendrimers (W.B. Turnbull, J.F. Stoddart), *Rev. Mol. Biotech.* **2002**, *90*, 231–255.
620. Making molecular-necklaces from rotaxanes (S.-H. Chiu, S.J. Rowan, S.J. Cantrill, L. Ridvan, P.R. Ashton, R. Garrell, J.F. Stoddart), *Tetrahedron* **2002**, *58*, 807–814. [40]
621. A dendrimer with rotaxane-like mechanical branching (A.M. Elizarov, S.-H. Chiu, P.T. Glink, J.F. Stoddart), *Org. Lett.* **2002**, *4*, 679–682. [58]
622. A ring-in-ring complex (S.-H. Chiu, A.R. Pease, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem., Int. Ed.* **2002**, *41*, 270–274. [50]
623. Dynamic covalent chemistry (S.J. Rowan, S.J. Cantrill, G.R.L. Cousins, J.K.M. Sanders, J.F. Stoddart) *Angew. Chem., Int. Ed.* **2002**, *41*, 898–952. [1496]

624. Interactions between conjugated polymers and single-walled carbon nanotubes (D.W. Steuerman, A. Star, R. Narizzano, H. Choi, R.S. Ries, C. Nicolini, J.F. Stoddart, J.R. Heath), *J. Phys. Chem.* **2002**, *106*, 3124–3130. [195]
625. Molecular machines (F.M. Raymo, J.F. Stoddart), in *Supramolecular Organization and Materials Design*, Eds. W. Jones, C.N.R. Rao, Cambridge University Press: Cambridge, 2002, pp. 332–362.
626. Ferrocene-containing carbohydrate dendrimers (P.R. Ashton, V. Balzani, M. Clemente-Leon, B. Colonna, A. Credi, N. Jayaraman, F.M. Raymo, J.F. Stoddart, M. Venturi), *Chem. Eur. J.* **2002**, *8*, 673–684. [85]
627. Poised on the brink between a bistable complex and a compound (J.O. Jeppesen, J. Becher, J.F. Stoddart), *Org. Lett.* **2002**, *4*, 557–560. [44]
628. Reversing a rotaxane recognition motif: Threading oligoethylene glycol derivatives through a dicationic cyclophane (S.-H. Chiu, J.F. Stoddart), *J. Am. Chem. Soc.* **2002**, *124*, 4174–4175. [33]
629. Chemistry gets a fillip from molecular recognition and self-assembly processes (J.F. Stoddart, H.-R. Tseng), *Proc. Natl. Acad. Sci. USA* **2002**, *99*, 4797–4800. [157]
630. A supramolecular approach for the formation of fullerene-phthalocyanine dyads (M.V. Martínez-Díaz, N.S. Fender, M.S. Rodríguez-Morgade, M. Gómez-López, F. Diederich, L. Echegoyen, J.F. Stoddart, T. Torres), *J. Mater. Chem.* **2002**, *12*, 2095–2099. [82]
631. Two-dimensional molecular electronics circuits (Y. Luo, C.P. Collier, J.O. Jeppesen, K.A. Nielsen, E. Delonno, G. Ho, J. Perkins, H.-R. Tseng, T. Yamamoto, J.F. Stoddart, J.R. Heath), *ChemPhysChem* **2002**, *3*, 519–525. [487]
632. Synthetic carbohydrate dendrimers. Part 9. Large oligosaccharide-based glycodendrimers (W.B. Turnbull, S.A. Kalovidouris, J.F. Stoddart), *Chem. Eur. J.* **2002**, *8*, 2988–3000. [66]
633. Synthesis and characterization of annulene-fused pseudorotaxanes (J.J. Pak, T.J.R. Weakley, M.M. Haley, D.Y.K. Lau, J.F. Stoddart), *Synthesis* **2002**, 1256–1260. [9]
634. Starched carbon nanotubes (A. Star, D.W. Steuerman, J.R. Heath, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2002**, *41*, 2508–2512. [515]
635. Dispersion and solubilization of single-walled carbon nanotubes with a hyperbranched polymer (A. Star, J.F. Stoddart), *Macromolecules* **2002**, *35*, 7516–7520. [150]
636. Translational isomerism in a [3]catenane and a [3]rotaxane (S.-H. Chiu, A.M. Elizarov, P.T. Glink, J.F. Stoddart), *Org. Lett.* **2002**, *4*, 3561–3564. [32]
637. Self-assembly of dendrimers by slippage (A.M. Elizarov, T. Chang, S.-H. Chiu, J.F. Stoddart), *Org. Lett.* **2002**, *4*, 3565–3568. [56]
638. Glycodendrimers based on cellobiosyl-derived monomers (S.A. Kalovidouris, W.B. Turnbull, J.F. Stoddart), *Can. J. Chem.* **2002**, *80*, 983–991. [9]
639. An efficient approach towards the convergent synthesis of "fully carbohydrate" mannodendrimers (L.V. Backinowsky, P.I. Abronina, A.S. Shashkov, A.A. Grachev, N.K. Kochetkov, S.A. Nepogodiev, J.F. Stoddart), *Chem. Eur. J.* **2002**, *8*, 4412–4423. [30]
640. Post-assembly processing of [2]rotaxanes (S.-H. Chiu, S.J. Rowan, S.J. Cantrill, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **2002**, *8*, 5170–5183. [55]
641. Probing polyvalency in artificial systems exhibiting molecular recognition (D.A. Fulton, S.J. Cantrill, J.F. Stoddart), *J. Org. Chem.* **2002**, *67*, 7968–7981. [35]
642. Photoinduced electron transfer in a triad that can be assembled/disassembled by two different external inputs. Toward molecular-level electrical extension cables (R. Ballardini, V. Balzani, M. Clemente-León, A. Credi, M.T. Gandolfi, E. Ishow, J. Perkins, J.F. Stoddart, H.-R. Tseng, S. Wenger), *J. Am. Chem. Soc.* **2002**, *124*, 12786–12795. [116]
643. Molecular switches and machines using arene building blocks (H.-R. Tseng, J.F. Stoddart), in *Modern Arene Chemistry*, Ed. D. Astruc, Wiley-VCH, Weinheim, 2002, pp. 574–599.
644. Surrogate-stoppered [2]rotaxanes: A new route to larger interlocked architectures (S.J. Rowan, J.F. Stoddart), *Poly. Adv. Tech.* **2002**, *13*, 777–787. [28]

645. An acid-base switchable [2]rotaxane (A.M. Elizarov, S.-H. Chiu, J.F. Stoddart), *J. Org. Chem.* **2002**, *67*, 9175–9181. [124]
646. An hermaphroditic [c2]daisy chain (S.-H. Chiu, S.J. Rowan, S.J. Cantrill, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Commun.* **2002**, 2948–2949. [41]
647. Speed-controlled molecular shuttles (M. Belohradsky, A.M. Elizarov, J.F. Stoddart), *Collect. Czech Chem. Comm.* **2002**, *67*, 1719–1728. [27]
648. Porphyrin-containing glycodendrimers (R. Ballardini, B. Colonna, M.T. Gandolfi, S.A. Kalovidouris, L. Orzel, F.M. Raymo, J.F. Stoddart), *Eur. J. Org. Chem.* **2003**, 288–294. [32]
649. Dynamic chirality: Keen selection in the face of stereochemical diversity in mechanically bonded compounds (H.-R. Tseng, S.A. Vignon, P.C. Celestre, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **2003**, *9*, 543–556. [49]
650. Diastereospecific photochemical dimerization of stilbene-containing daisy chain monomers in solution as well as in the solid state (D.G. Amirsakis, A.M. Elizarov, M.A. Garcia-Garibay, P.T. Glink, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem.* **2003**, *115*, 1158–1164; *Angew. Chem. Int. Ed.* **2003**, *42*, 1126–1132. [69]
651. Noncovalent side-wall functionalization of single-walled carbon nanotubes (A. Star, Y. Liu, K. Grant, L. Ridvan, J.F. Stoddart, D.W. Steuerman, M.R. Diehl, A. Boukai, J.R. Heath), *Macromolecules* **2003**, *36*, 553–560. [241]
652. Nanoscale molecular-switch devices fabricated by imprint lithography (Y. Chen, D.A.A. Ohlberg, X. Li, D.R. Stewart, R.S. Williams, J.O. Jeppesen, K.A. Nielsen, J.F. Stoddart, D.L. Olynick, E. Anderson), *Appl. Phys. Lett.* **2003**, *82*, 1610–1612. [216]
653. Toward chemically controlled nanoscale molecular machinery (H.-R. Tseng, S.A. Vignon, J.F. Stoddart), *Angew. Chem.* **2003**, *115*, 1529–1533; *Angew. Chem. Int. Ed.* **2003**, *42*, 1491–1495. [197]
654. Nanoscale molecular-switch crossbar circuits (D.R. Stewart, D.A.A. Ohlberg, P. Beck, Y. Chen, R.S. Williams, J.O. Jeppesen, K.A. Nielsen, J.F. Stoddart), *Nanotechnology* **2003**, *14*, 462–468. [483]
655. Toward supramolecular daisy-chain like polymers (T. Chang, J.F. Stoddart), *Polym. Preprints* **2003**, *44*, 602–603.
656. Spontaneous resolution of a non-degenerate donor-acceptor [2]catenane (E. Alcalde, L. Pérez-García, S. Ramos, J.F. Stoddart, S.A. Vignon, A.J.P. White, D.J. Williams), *Mendeleev Comm.* **2003**, 100–102. [8]
657. *In situ* Infrared spectroscopic studies of molecular behavior in nanoelectronic devices (T.J. Huang, A. Flood, C.-W. Chu, S. Kang, T.-F. Guo, T. Yamamoto, H.-R. Tseng, B.-D. Yu, Y. Yang, J.F. Stoddart, C.-M. Ho), *IEEE-NANO* **2003**, *2*, 698–701.
658. Amphiphilic bistable rotaxanes (J.O. Jeppesen, K.A. Nielsen, J. Perkins, S.A. Vignon, A. Di Fabio, R. Ballardini, M.T. Gandolfi, M. Venturi, V. Balzani, J. Becher, J.F. Stoddart), *Chem. Eur. J.* **2003**, *9*, 2982–3007. [135]
659. Redox-induced ring shuttling and evidence for folded structures in long and flexible two-station rotaxanes (T. Yamamoto, H.-R. Tseng, J.F. Stoddart, V. Balzani, A. Credi, F. Marchioni, M. Venturi), *Coll. Czech. Chem. Commun.* **2003**, *68*, 1488–1514. [48]
660. Surface confined pseudorotaxanes with electrochemically controllable complexation properties (M.R. Bryce, G. Cooke, F.M.A. Duclairoir, P. John, D.F. Perepichka, N. Polwart, V.M. Rotello, J.F. Stoddart, H.-R. Tseng), *J. Mater. Chem.* **2003**, *13*, 2111–2117. [44]
661. Kinetic versus thermodynamic control during the formation of [2]rotaxanes by a dynamic template-directed clipping process (M. Horn, J. Ihringer, P.T. Glink, J.F. Stoddart), *Chem. Eur. J.* **2003**, *9*, 4046–4054. [74]
662. In the Twilight Zone between [2]pseudorotaxanes and [2]rotaxanes (J.O. Jeppesen, S.A. Vignon, J.F. Stoddart), *Chem. Eur. J.* **2003**, *9*, 4611–4625. [68]
663. Amplification of dynamic chiral crown ether complexes during cyclic acetal formation (B. Fuchs, A. Nelson, A. Star, J.F. Stoddart, S.B. Vidal), *Angew. Chem., Int. Ed.* **2003**, *42*, 4220–4224. [70]
664. Chemically defined sialoside scaffolds for investigation of multivalent interactions with sialic acid binding proteins (S.A. Kalovidouris, O. Blixt, A. Nelson, S. Vidal, W.B. Turnbull, J.C. Paulson, J.F. Stoddart), *J. Org. Chem.* **2003**, *68*, 8485–8493. [44]

665. Dynamic multivalent lactosides displayed on cyclodextrin beads dangling from polymer strings (A. Nelson, J.F. Stoddart), *Org. Lett.* **2003**, *5*, 3783–3786. [44]
666. Controlling multivalent interactions in triply-threaded two-component superbundles (V. Balzani, M. Clemente-León, A. Credi, J.N. Lowe, J.D. Badjić, J.F. Stoddart, D.J. Williams), *Chem. Eur. J.* **2003**, *9*, 5348–5360. [57]
667. The molecule-electrode interface in single-molecule transistors (H.B. Yu, Y. Luo, K. Beverly, J.F. Stoddart, H.-R. Tseng, J.R. Heath), *Angew. Chem., Int Ed.* **2003**, *42*, 5706–5711. [131]
668. Single-walled carbon nanotube based molecular switch tunnel junctions (M.R. Diehl, D.W. Steuerman, H.-R. Tseng, S.A. Vignone, A. Star, P.C. Celestre, J.F. Stoddart, J.R. Heath), *ChemPhysChem* **2003**, *4*, 1335–1339. [117]
669. Photochemistry of a dumbbell-shaped multicomponent system hosted inside the mesopores of Al/MCM-41 aluminosilicate. Generation of long-lived viologen radicals (M. Álvaro, B. Ferrer, H. Garcia, E.J. Palomares, V. Balzani, A. Credi, M. Venturi, J. F. Stoddart, S. Wenger), *J. Phys. Chem. B* **2003**, *107*, 14319–14325. [24]
670. Glycodendrimers: Chemical Aspects (S.A. Nepogodiev, J.F. Stoddart) in *Advances in Macromolecular Carbohydrate Research*, Ed. R. Sturgeon, Elsevier Science B. V., **2003**, Vol. 2, pp. 191–240.
671. The metastability of an electrochemically controlled nanoscale machine on gold surfaces (H.-R. Tseng, D. Wu, N.X. Fang, X. Zhang, J.F. Stoddart), *ChemPhysChem* **2004**, *5*, 111–116. [169]
672. Redox-controllable amphiphilic [2]rotaxanes (H.-R. Tseng, S.A. Vignone, P.C. Celestre, J. Perkins, J.O. Jeppesen, A. Di Fabio, R. Ballardini, M.T. Gandolfi, M. Venturi, V. Balzani, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 155–172. [150]
673. Polyvalent scaffolds. Counting the number of seats available for eosin guest molecules in viologen-based host dendrimers (F. Marchioni, M. Venturi, A. Credi, V. Balzani, M. Belohradsky, A.M. Elizarov, H.-R. Tseng, J.F. Stoddart), *J. Am. Chem. Soc.* **2004**, *126*, 568–573. [47]
674. Can multivalency be expressed kinetically? The answer is yes (J.D. Badjić, S.J. Cantrill, J.F. Stoddart), *J. Am. Chem. Soc.* **2004**, *126*, 2288–2289. [75]
675. An operational supramolecular nanovalve (R. Hernandez, H.-R. Tseng, J.W. Wong, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2004**, *126*, 3370–3371. [365]
676. A molecular elevator (J.D. Badjić, V. Balzani, A. Credi, S. Silvi, J.F. Stoddart), *Science* **2004**, *303*, 1845–1849. [786]
677. Molecule-independent electrical switching in Pt/organic monolayer/Ti devices (D.R. Stewart, D.A.A. Ohlberg, P. Beck, Y. Chen, R.S. Williams, J.O. Jeppesen, K.A. Nielsen, J.F. Stoddart), *Nano Lett.* **2004**, *4*, 133–136. [292]
678. A mechanically interlocked bundle (J.D. Badjić, V. Balzani, A. Credi, J.N. Lowe, S. Silvi, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 1926–1935. [76]
679. Helical chirality in donor-acceptor catenanes (S.A. Vignone, J. Wong, H.-R. Tseng, J.F. Stoddart), *Org. Lett.* **2004**, *6*, 1095–1098. [42]
680. Meccano on the nanoscale – A blueprint for making some of the world’s tiniest machines (A.H. Flood, R.J. Ramirez, W.-Q. Deng, R.P. Muller, W.A. Goddard III, J.F. Stoddart), *Aust. J. Chem.* **2004**, *57*, 301–322. [204]
681. Molecular shuttles based on tetrathiafulvalene units and 1,5-dioxynaphthalene ring systems (S.S. Kang, S.A. Vignone, H.-R. Tseng, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 2555–2564. [93]
682. Artificial molecular devices based on tetrathiafulvalene (J.O. Jeppesen, C.P. Collier, J.R. Heath, Y. Luo, K.A. Nielsen, J. Perkins, J.F. Stoddart, E. Wong), *J. Phys. IV France* **2004**, *114*, 511–513. [5]
683. Molecular Borromean rings (K.S. Chichak, S.J. Cantrill, A.R. Pease, S.-H. Chiu, G.W.V. Cave, J.L. Atwood, J.F. Stoddart), *Science* **2004**, *304*, 1308–1312. [512]
684. Polyvalent interactions in unnatural recognition processes (J.N. Lowe, D.A. Fulton, S.-H. Chiu, A.M. Elizarov, S.J. Cantrill, S.J. Rowan, J.F. Stoddart), *J. Org. Chem.* **2004**, *69*, 4390–4402. [24]
685. The exclusivity of multivalency in dynamic covalent processes (J.D. Badjić, S.J. Cantrill, R.H. Grubbs, E.N. Guidry, R. Orenes, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2004**, *43*, 3273–3278. [58]
686. Langmuir and Langmuir-Blodgett films of amphiphilic bistable rotaxanes (I.C. Lee, C.W. Frank, T. Yamamoto, H.-R. Tseng, A.H. Flood, J.F. Stoddart, J.O. Jeppesen), *Langmuir* **2004**, *20*, 5809–5828. [58]

687. Electronic detection of the enzymatic degradation of starch (A. Star, V. Joshi, T.-R. Han, M.V.P. Altoé, G. Grüner, J.F. Stoddart), *Org. Lett.* **2004**, *6*, 2089–2092. [50]
688. Threading/dethreading processes in pseudorotaxanes. A thermodynamic and kinetic study (M. Venturi, S. Dumas, V. Balzani, J. Cao, J.F. Stoddart), *New J. Chem.* **2004**, *28*, 1032–1037. [48]
689. Switchable neutral bistable rotaxanes (S.A. Vignon, T. Jarrosson, T. Iijima, H.-R. Tseng, J.K.M. Sanders, J.F. Stoddart), *J. Am. Chem. Soc.* **2004**, *126*, 9884–9885. [192]
690. Synthesis of lactoside glycodendrons using photoaddition and reductive amination methodologies (A. Nelson, J.F. Stoddart), *Carbohydr. Res.* **2004**, *339*, 2069–2075. [17]
691. From cyclophanes to molecular machines (A.H. Flood, Y. Liu, J.F. Stoddart), in *Modern Cyclophane Chemistry*, Eds., H. Hopf, H. Gleiter, Wiley-VCH, Weinheim, 2004, pp. 485–518.
692. A self-assembled multivalent pseudopolyrotaxane for binding galectin-1 (A. Nelson, J.M. Belitsky, S. Vidal, C.S. Joiner, L.G. Baum, J.F. Stoddart), *J. Am. Chem. Soc.* **2004**, *126*, 11914–11922. [139]
693. The influence of constitutional isomerism and change on molecular recognition processes (A.R. Williams, B.H. Northrop, K.N. Houk, J.F. Stoddart, D.J. Williams), *Chem. Eur. J.* **2004**, *10*, 5406–5421. [14]
694. Thermally and electrochemically controllable self-complexing molecular switches (Y. Liu, A.H. Flood, J.F. Stoddart), *J. Am. Chem. Soc.* **2004**, *126*, 9150–9151. [107]
695. An integrated systems-oriented approach to molecular electronics (H.-R. Tseng, P.C. Celestre, J.F. Stoddart) in *Macromolecular Nano-Structured Materials*, Eds. N. Ueyama, A. Harada, Kondansha Scientific, Japan, **2004**, pp. 2–25 and 60–61.
696. Mechanical shuttling of linear motor-molecules in condensed phases on solid substrates (T.J. Huang, H.-R. Tseng, L. Sha, W. Lu, B. Brough, A.H. Flood, B.-D. Yu, P.C. Celestre, J.P. Chang, J.F. Stoddart, C.-M. Ho), *Nano Lett.* **2004**, *4*, 2065–2071. [96]
697. A nanomechanical device based on linear molecular motors (T.J. Huang, B. Brough, C.-M. Ho, Y. Liu, A.H. Flood, P.A. Bonvallet, H.-R. Tseng, J.F. Stoddart, M. Baller, S. Magonov), *Appl. Phys. Lett.* **2004**, *85*, 5391–5393. [164]
698. Counterion-Induced translational isomerism in a bistable [2]rotaxane (B.W. Laursen, S. Nygaard, J.O. Jeppesen, J.F. Stoddart), *Org. Lett.* **2004**, *6*, 4167–4170. [77]
699. Molecular mechanical switch-based solid-state electrochromic devices (D.W. Steuerman, H.-R. Tseng, A.J. Peters, A.H. Flood, J.O. Jeppesen, K.A. Nielsen, J.F. Stoddart, J.R. Heath), *Angew. Chem., Int. Ed.* **2004**, *43*, 6486–6491. [187]
700. Complete charge pooling is prevented in viologen-based dendrimers by self-protection (F. Marchioni, M. Venturi, P. Ceroni, V. Balzani, M. Belohradsky, A.M. Elizarov, H.-R. Tseng, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 6361–6368. [36]
701. Controllable donor-acceptor neutral [2]rotaxanes (T. Iijima, S.A. Vignon, H.-R. Tseng, T. Jarrosson, J.K.M. Sanders, F. Marchioni, M. Venturi, E. Apostoli, V. Balzani, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 6375–6392. [161]
702. The role of physical environment on molecular electromechanical switching (A.H. Flood, A.J. Peters, S.A. Vignon, D.W. Steuerman, H.-R. Tseng, S. Kang, J.R. Heath, J.F. Stoddart), *Chem. Eur. J.* **2004**, *10*, 6558–6564. [145]
703. Whence molecular electronics? (A.H. Flood, J.F. Stoddart, D.W. Steuerman, J.R. Heath), *Science* **2004**, *306*, 2055–2056. [382]
704. Spontaneous resolution in a family of [2]catenanes containing proton-ionisable 1*H*-1,2,4-triazole subunits (E. Alcalde, L. Pérez-García, S. Ramos, J.F. Stoddart, A.J.P. White, D.J. Williams), *Mendeleev Comm.* **2004**, 233–235. [3]
705. Powering a supramolecular machine with a photoactive molecular triad (S. Saha, L.E. Johansson, A.H. Flood, H.-R. Tseng, J.I. Zink, J.F. Stoddart), *Small* **2005**, *1*, 87–90. [41]
706. Versatile self-complexing compounds based on covalently linked donor-acceptor cyclophanes (Y. Liu, A.H. Flood, R.M. Moskowitz, J.F. Stoddart), *Chem. Eur. J.* **2005**, *11*, 369–385. [54]
707. Nanoscale Borromean rings (S.J. Cantrill, K.S. Chichak, A.J. Peters, J.F. Stoddart), *Acc. Chem. Res.* **2005**, *38*, 1–9. [181]

708. Single-walled carbon nanotubes under the influence of dynamic coordination and supramolecular chemistry (K.S. Chichak, A. Star, M.V. Altoé, J.F. Stoddart), *Small* **2005**, *1*, 452–461. [79]
709. Structures and properties of self-assembled monolayers of bistable [2]rotaxanes on Au(111) surfaces from molecular dynamics simulations validated with experiment (S.S. Jang, Y.H. Jang, Y.-H. Kim, W.A. Goddard III, A.H. Flood, B.W. Laursen, H.-R. Tseng, J.F. Stoddart, J.O. Jeppesen, J.W. Choi, D.W. Steuerman, E. Delonno, J.R. Heath), *J. Am. Chem. Soc.* **2005**, *127*, 1563–1575. [177]
710. Honing up a genre of amphiphilic bistable [2]rotaxanes for device settings (J.O. Jeppesen, S. Nygaard, S.A. Vignon, J.F. Stoddart), *Eur. J. Org. Chem.* **2005**, 196–220. [72]
711. Evidence of strong hydration and significant tilt of amphiphilic [2]rotaxane molecules in Langmuir films studied by synchrotron X-ray reflectivity (K. Nørgaard, J.O. Jeppesen, B.W. Laursen, J.B. Simonsen, M.J. Weygard, K. Kjaer, J.F. Stoddart, T. Bjørnholm), *J. Phys. Chem.* **2005**, *109*, 1063–1066. [23]
712. Nanoelectronic devices from self-organized molecular switches (P.M. Mendes, A.H. Flood, J.F. Stoddart), *Applied Physics A* **2005**, *80*, 1197–1209. [93]
713. Template-directed dynamic synthesis of mechanically interlocked dendrimers (K.C.-F. Leung, F. Aricó, S.J. Cantrill, J.F. Stoddart), *J. Am. Chem. Soc.* **2005**, *127*, 5808–5810. [104]
714. Donor-acceptor pretzelanes and a cyclic bis[2]catenane homologue (Y. Liu, P.A. Bonvallet, S. A. Vignon, S. I. Kahn, J.F. Stoddart), *Angew. Chem., Int. Ed.* **2005**, *44*, 3050–3055. [49]
715. Magic ring catenation by olefin metathesis (E.N. Guidry, S.J. Cantrill, J.F. Stoddart, R.H. Grubbs), *Org. Lett.* **2005**, *7*, 2129–2132. [115]
716. Template-directed synthesis of multiply mechanically interlocked molecules under thermodynamic control (F. Aricó, T. Chang, S. J. Cantrill, S.I. Khan, J.F. Stoddart), *Chem. Eur. J.* **2005**, *11*, 4655–4666. [99]
717. Templated synthesis of interlocked molecules (F. Arico, J.D. Badjić, S.J. Cantrill, A.H. Flood, K.C.F. Leung, Y. Liu, J.F. Stoddart), *Top. Curr. Chem.* **2005**, *249*, 203–259. [155]
718. Dynamic nanoscale Borromean links (K.S. Chichak, S.J. Cantrill, J.F. Stoddart), *Chem. Commun.* **2005**, 3391–3393. [33]
719. Nanoscale Borromean links for real (A.J. Peters, K.S. Chichak, S.J. Cantrill, J.F. Stoddart), *Chem. Commun.* **2005**, 3394–3396. [57]
720. A reversible molecular valve (T. Nguyen, H.-R. Tseng, P.C. Celestre, A.H. Flood, Y. Liu, J.I. Zink, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2005**, *102*, 10029–10034. [374]
721. Multivalency and cooperativity in supramolecular chemistry (J.D. Badjić, A. Nelson, S.J. Cantrill, W.B. Turnbull, J.F. Stoddart), *Acc. Chem. Res.* **2005**, *38*, 723–732. [480]
722. From a meccano set to nano meccano (J.F. Stoddart), *Pure Appl. Chem.* **2005**, *77*, 1089–1106. [8]
723. Linear artificial molecular muscles (Y. Liu, A.H. Flood, P.A. Bonvallet, S.A. Vignon, H.-R. Tseng, T.J. Huang, B. Brough, M. Baller, S. Magonov, S. Solares, W.A. Goddard III, C.-M. Ho, J.F. Stoddart), *J. Am. Chem. Soc.* **2005**, *127*, 9745–9759. [525]
724. A photoactive molecular triad as a nanoscale power supply for a supramolecular machine (S. Saha, E. Johansson, A.H. Flood, H.-R. Tseng, J.I. Zink, J.F. Stoddart), *Chem. Eur. J.* **2005**, *11*, 6846–6858. [92]
725. Molecular dynamics simulation of amphiphilic bistable [2]rotaxane Langmuir monolayers at air/water interfaces (S.S. Jang, Y.H. Jang, Y.-H. Kim, W.A. Goddard III, J.W. Choi, J.R. Heath, B.W. Laursen, A.H. Flood, J.F. Stoddart, K. Nørgaard, T. Bjørnholm), *J. Am. Chem. Soc.* **2005**, *127*, 14804–14816. [76]
726. An electrochemical color-switchable RGB dye: Tristable [2]catenane (W.-Q. Deng, A.H. Flood, J.F. Stoddart, W.A. Goddard III), *J. Am. Chem. Soc.* **2005**, *127*, 15994–15995. [80]
727. Conformational diastereoisomerism in a chiral pretzelane (Y. Liu, S.A. Vignon, X. Zhang, K.N. Houk, J.F. Stoddart), *Chem. Commun.* **2005**, 3927–3929. [19]
728. Shuttling dynamics in an acid-base switchable [2]rotaxane (S. Garandeé, S. Silvi, M. Venturi, A. Credi, A.H. Flood, J.F. Stoddart), *ChemPhysChem* **2005**, *6*, 2145–2152. [76]
729. Nanoscale Borromeates (K.S. Chichak, A.J. Peters, S.J. Cantrill, J.F. Stoddart), *J. Org. Chem.* **2005**, *70*, 7956–7962. [47]

730. Template-directed olefin cross metathesis (S.J. Cantrill, K.G. Poulin-Kerstein, R.H. Grubbs, D. Lanari, K.C.-F. Leung, A. Nelson, S.P. Smidt, J.F. Stoddart, D.A. Tirrell), *Org. Lett.* **2005**, *7*, 4213–4216. [42]
731. Exploring dynamics and stereochemistry in mechanically interlocked compounds (S.A. Vignon, J.F. Stoddart), *Coll. Czech. Chem. Commun.* **2005**, *70*, 1493–1576. [40]
732. Structural evidence of mechanical shuttling in condensed monolayers of rotaxane molecules (K. Nørgaard, B.W. Laursen, S. Nygaard, K. Kjaer, H.-R. Tseng, A.H. Flood, J.F. Stoddart, T. Bjørnholm), *Angew. Chem., Int. Ed.* **2005**, *44*, 7035–7039. [50]
733. Dynamic chirality in donor-acceptor pretzelanes (Y. Liu, S.A. Vignon, X. Zhang, P.A. Bonvallet, S.I. Khan, K.N. Houk, J.F. Stoddart), *J. Org. Chem.* **2005**, *70*, 9334–9344. [22]
734. Template-directed syntheses of configurable and reconfigurable molecular switches (Y. Liu, S. Saha, S.A. Vignon, A.H. Flood, J.F. Stoddart), *Synthesis* **2005**, 3437–3445. [16]
735. Towards a rational design of molecular switches and sensors from their basic building blocks (N.N.P. Moonen, A.H. Flood, J.M. Fernández, J.F. Stoddart), *Top. Curr. Chem.* **2005**, *262*, 99–132. [88]
736. Quantifying the working stroke of tetrathiafulvalene-based electrochemically driven linear motor-molecules (S. Nygaard, B.W. Laursen, A.H. Flood, C. Hansen, J.O. Jeppesen, J.F. Stoddart), *Chem. Commun.* **2006**, 144–146. [60]
737. Ground state equilibrium thermodynamics and switching kinetics of bistable [2]rotaxane switches in solution, polymer gels, and molecular electronic devices (J.W. Choi, A.H. Flood, D.W. Steuerman, S. Nygaard, A.B. Braunschweig, N.N.P. Moonen, B.W. Laursen, Y. Luo, E. Delonno, A.J. Peters, J.O. Jeppesen, K. Xe, J.F. Stoddart, J.R. Heath), *Chem. Eur. J.* **2006**, *12*, 261–279. [173]
738. Structural control at the organic-solid interface (A.B. Braunschweig, B.H. Northrop, J.F. Stoddart), *J. Mater. Chem.* **2006**, *16*, 32–44. [65]
739. Autonomous artificial nanomotor powered by sunlight (V. Balzani, M. Clemente-León, A. Credi, B. Ferrer, M. Venturi, A.H. Flood, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2006**, *103*, 1178–1183. [358]
740. Monitoring cyclodextrin-polyviologen pseudopolyrotaxanes with the Bradford assay (J.M. Belitsky, A. Nelson, J.F. Stoddart), *Org. Biomol. Chem.* **2006**, *4*, 250–256. [15]
741. Operating molecular elevators (J.D. Badjić, C.M. Ronconi, A.H. Flood, J.F. Stoddart, S. Silvi, A. Credi, V. Balzani), *J. Am. Chem. Soc.* **2006**, *128*, 1489–1499. [230]
742. Supramolecular pseudorotaxane type complexes from pi-extended TTF dimer crown ether and C-60 (M.C. Diaz, B.M. Illescas, N. Martin, J.F. Stoddart, M.A. Canales, J. Jiménez-Barbero, G. Sarova, D.M. Guildi), *Tetrahedron* **2006**, *62*, 1998–2002. [36]
743. A soliton phenomenon in Langmuir monolayers of amphiphilic bistable rotaxanes (P.R. Mendez, W. Lu, H.-R. Tseng, S. Shinder, T. Iijima, M. Miyaji, C.M. Knobler, J.F. Stoddart), *J. Phys. Chem. B* **2006**, *110*, 3845–3848. [15]
744. Pseudorotaxanes and rotaxanes formed by viologen derivatives (A.B. Braunschweig, C.M. Ronconi, J.-Y. Han, F. Arico, S.J. Cantrill, J.F. Stoddart, S.I. Khan, A.J.P. White, D.J. Williams), *Eur. J. Org. Chem.* **2006**, 1857–1866. [49]
745. Molecular mechanics and molecular electronics (R. Beckman, K. Beverly, A. Boukai, Y. Bunimovich, J.W. Choi, E. Delonno, J. Green, E. Johnston-Halperin, Y. Luo, B. Sheriff, J.F. Stoddart, J.R. Heath) *Faraday Discuss.* **2006**, *131*, 9–22. [56]
746. A comparison of shuttling mechanisms in two constitutionally isomeric bistable rotaxane-based sunlight-powered nanomotors (V. Balzani, M. Clemente-León, A. Credi, M. Semeraro, M. Venturi, H.-R. Tseng, S. Wenger, S. Saha, J.F. Stoddart), *Aust. J. Chem.* **2006**, *59*, 193–206. [41]
747. Self-assembly with block copolymers through metal coordination of SCS Pd(II) pincer complexes and pseudorotaxane formation (C.R. Smith, M.N. Higley, K.C.-F. Leung, D. Lanari, A. Nelson, R.H. Grubbs, J.F. Stoddart, M. Weck), *Chem. Eur. J.* **2006**, *12*, 3789–3797. [46]
748. Towards organization of molecular machines at interfaces. Langmuir films and Langmuir-Blodgett multilayers of an acid-base switchable rotaxane (M. Clemente-Léon, A. Credi, M.-V. Martínez-Díaz, C. Mingotaud, J.F. Stoddart), *Adv. Mater.* **2006**, *18*, 1291–1296. [39]

749. Nano meccano (Y. Liu, A.H. Flood, J.F. Stoddart) in Nano Redox Sites, Ed. T. Hirao, Springer, **2006**, pp. 193–214.
750. Infrared spectroscopic characterization of [2]rotaxane molecular switch tunnel junction devices (E. Delonno, H.-R. Tseng, D.D. Harvey, J. F. Stoddart, J.R. Heath), *J. Phys. Chem. B.* **2006**, *110*, 7609–7612. [52]
751. Kinetically controlled self-assembly of pseudorotaxanes on crystallization (B.H. Northrop, S.I. Kahn, J.F. Stoddart), *Org. Lett.* **2006**, *8*, 2159–2162. [23]
752. Models of charge transport and transfer in molecular switch tunnel junctions of bistable catenanes and rotaxanes (A.H. Flood, E.W. Wong, J.F. Stoddart), *Chem.Phys.* **2006**, *324*, 280–290. [38]
753. Noncovalent side-chain functionalization of terpolymers (C.R. South, K.C.-F. Leung, D. Lanari, J.F. Stoddart, M. Weck), *Macromolecules* **2006**, *39*, 3738–3744. [38]
754. Locking down the electronic structure of (monopyrrolo)tetrathiafulvalene in [2]rotaxanes (A.H. Flood, S. Nygaard, B.W. Laursen, J.O. Jeppesen, J.F. Stoddart), *Org. Lett.* **2006**, *8*, 2205–2208. [37]
755. Evaluation of synthetic linear motor-molecule actuation energetics (B. Brough, B.H. Northrop, J.J. Schmidt, H.-R. Tseng, K.N. Houk, J.F. Stoddart, C.-M. Ho), *Proc. Natl. Acad. Sci. USA* **2006**, *103*, 8583–8588. [64]
756. Understanding and harnessing biomimetic molecular machines for NEMS actuation materials (T.J. Huang, A.H. Flood, B. Brough, Y. Liu, P.A. Bonvallet, S. Kang, C.-W. Chu, T.-F. Guo, W. Lu, Y. Yang, J.F. Stoddart, C.-M. Ho), *IEEE Transactions on Automation Science and Engineering.* **2006**, *3*, 254–259. [17]
757. Chiral Borromeates (C.D. Pentecost, A.J. Peters, K.S. Chichak, G.W.V. Cave, S.J. Cantrill, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2006**, *45*, 4099–4104. [53]
758. Construction of a pH-driven supramolecular nanovalve (T.D. Nguyen, K.C.-F. Leung, M. Long, C.D. Pentecost, J.F. Stoddart, J.I. Zink), *Org. Lett.* **2006**, *8*, 3363–3366. [209]
759. Emerging memory devices – Nontraditional possibilities based on nanomaterials and nanostructures (K. Galatsis, K. Wang, Y. Botros, Y. Yang, Y.H. Xie, J.F. Stoddart, R.B. Kaner, C. Ozkan, J.L. Liu, M. Ozkan, C.W. Zhou, K.W. Kim) *IEEE Circuits & Devices* **2006**, *22* (3), 12–21. [38]
760. Efficient templated synthesis of donor-acceptor rotaxanes using click chemistry (W.R. Dichtel, O.Š. Miljanić, J.M. Spruell, J.R. Heath, J.F. Stoddart), *J. Am. Chem. Soc.* **2006**, *128*, 10388–10390. [154]
761. Supramolecular self-assembly of dendronized polymers: Reversible control of the polymer architectures through acid–base reactions (K.C.-F. Leung, P.M. Mendes, S.N. Magonov, B.H. Northrop, S. Kim, K. Patel, A.H. Flood, H.-R. Tseng, J.F. Stoddart), *J. Am. Chem. Soc.* **2006**, *128*, 10707–10715. [99]
762. Template-directed synthesis of mechanically interlocked molecular bundles using dynamic covalent chemistry (B.H. Northrop, N. Tangchiavang, J.D. Badjić, J.F. Stoddart), *Org. Lett.* **2006**, *8*, 3899–3902. [68]
763. Bioinspired detection of light using a porphyrin-sensitized single-wall nanotube field effect transistor (D.S. Hecht, R.J.A. Ramirez, M. Briman, E. Artukovic, K.S. Chichak, J.F. Stoddart, G. Grüner), *Nano Lett.* **2006**, *6*, 2031–2036. [181]
764. Mechanism of enhanced rectification in unimolecular Borromeian ring devices (G.D. Scott, K.S. Chichak, A.J. Peters, S.J. Cantrill, J.F. Stoddart, H.W. Jiang), *Phys. Rev. B* **2006**, *74*, 113404-1 – 113404-4. [11]
765. Cyclobis(paraquat-*p*-phenylene)-based [2]catenanes prepared by kinetically controlled reactions involving alkynes (O.Š. Miljanić, W.R. Dichtel, S. Mortezaei, J.F. Stoddart), *Org. Lett.*, **2006**, *8*, 4835–4838. [73]
766. Template-directed one-step synthesis of cyclic trimers by ADMET (H. Hou, K.C.-F. Leung, D. Lanari, A. Nelson, J.F. Stoddart, R.H. Grubbs), *J. Am. Chem. Soc.* **2006**, *128*, 15358–15359. [41]
767. Suitanes (A.R. Williams, B.H. Northrop, T. Chang, J.F. Stoddart, A.J.P. White, D.J. Williams), *Angew. Chem. Int. Ed.* **2006**, *40*, 6665–6669. [64]
768. Supramolecular nanovalves controlled by proton abstraction and competitive binding (K.C.-F. Leung, T.D. Nguyen, J.F. Stoddart, J.I. Zink) *Chem. Mater.* **2006**, *18*, 5919–5928. [178]
769. Photoinduced electron flow in a self-assembling supramolecular extension cable (B. Ferrer, G. Rogez, A. Credi, R. Ballardini, M.T. Gandolfi, V. Balzani, Y. Liu, H.-R. Tseng, J.F. Stoddart) *Proc. Natl. Acad. Sci. USA* **2006**, *103*, 18411–18416. [55]
770. Molecular motors and muscles (S. Saha, J.F. Stoddart) in Functional Organic Materials, T.J.J. Muller, U. H.F. Bunz (Eds.), Wiley-VCH, Weinheim, Germany, **2007**, pp. 295–327. [0]

771. Photo-driven molecular devices (S. Saha, J.F. Stoddart) *Chem. Soc. Rev.* **2007**, *36*, 77–92. [441]
772. Toward electrochemically controllable tristable three-station [2]catenanes (T. Ikeda, S. Saha, I. Aprahamian, K.C-F. Leung, A. Williams, W.-Q. Deng, A.H. Flood, W.A. Goddard III, J.F. Stoddart) *Chem. Asian J.*, **2007**, *2*, 76–93. [63]
773. A molecular Solomon link (C.D. Pentecost, K.S. Chichak, A.J. Peters, G.W.V. Cave, S.J. Cantrill, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2007**, *46*, 218–222. [165]
774. Switching surface chemistry with supramolecular machines (B.C. Bunker, D.L. Huber, J.G. Kushmerick, T. Dunbar, M. Kelly, C. Matzke, J. Cao, J.O. Jeppesen, J. Perkins, A.H. Flood, J.F. Stoddart), *Langmuir* **2007**, *23*, 31–34. [33]
775. A 160-kilobit molecular electronic memory patterned at 10^{11} bits per square centimeter (J.E. Green, J.W. Choi, A. Boukai, Y. Bunimovich, E. Johnston-Halprin, E. Delonno, Y. Luo, B.A. Sheriff, K. Xu, Y.S. Shin, H.-R. Tseng, J.F. Stoddart, J.R. Heath), *Nature* **2007**, *445*, 414–417. [902]
776. Design and optimization of molecular nanovalves based on redox-switchable rotaxanes (T.D. Nguyen, I. Liu, S. Saha, K.C-F. Leung, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2007**, *129*, 626–634. [320]
777. Functionally rigid bistable [2]rotaxanes (S. Nygaard, K.C-F. Leung, I. Aprahamian, T. Ikeda, S. Saha, B.W. Laursen, S.-Y. Kim, S.W. Hansen, P.C. Stein, A.H. Flood, J.F. Stoddart, J.O. Jeppesen), *J. Am. Chem. Soc.*, **2007**, *129*, 960–970. [94]
778. Modular synthesis and dynamics of a variety of donor-acceptor interlocked compounds prepared by click chemistry (A.B. Braunschweig, W.R. Dichtel, O.Š. Miljanić, M.A. Olson, J.M. Spruell, S.I. Khan, J.R. Heath, J.F. Stoddart), *Chem. Asian J.* **2007**, *2*, 634–647. [81]
779. A clicked bistable [2]rotaxane (I. Aprahamian, W.R. Dichtel, T. Ikeda, J.R. Heath, J.F. Stoddart), *Org. Lett.* **2007**, *9*, 1287–1290. [84]
780. Designing bistable [2]rotaxanes for molecular electronic devices (W.R. Dichtel, J.R. Heath, J.F. Stoddart), *Phil. Trans. R. Soc. London Ser. A.* **2007**, *365*, 1607–1625. [68]
781. Blue-colored donor-acceptor [2]rotaxane (T. Ikeda, I. Aprahamian, J.F. Stoddart), *Org. Lett.*, **2007**, *9*, 1481–1484. [32]
782. Nanovalves (S. Saha, K.C.-F. Leung, T.D. Nguyen, J.F. Stoddart, J.I. Zink) *Adv. Funct. Mater.* **2007**, *17*, 685–693. [248]
783. A molecular plug-socket connector (G. Reyez, B.F. Ribera, A. Credi, R. Ballardini, M.T. Gandolfi, V. Balzani, Y. Liu, B.H. Northrop, J.F. Stoddart), *J. Am. Chem. Soc.*, **2007**, *129*, 4633–4642. [43]
784. Nondegenerate π -donor/ π -acceptor [2]catenanes containing proton-ionizable 1*H*-1,2,4-triazole subunits: Synthesis and spontaneous resolution (E. Alcalde, L. Pérez-García, S. Ramos, J.F. Stoddart, A.J.P. White, D.J. Williams), *Chem. Eur. J.* **2007**, *13*, 3964–3979. [19]
785. Making molecular Borromean rings. A gram-scale synthetic procedure for the undergraduate organic lab (C.D. Pentecost, N. Tangshavang, S.J. Cantrill, K.S. Chichak, A.J. Peters, J. F. Stoddart), *J. Chem. Ed.* **2007**, *84*, 855–859. [17]
786. Targeting galectin-1 with self-assembled multivalent pseudopolyrotaxanes (J.M. Belitsky, J.F. Stoddart), ACS Symposium Series on “Frontiers in Modern Carbohydrate Chemistry,” A. Demchenko (Ed.), ACS Books, **2007**, p. 356–374. [0]
787. Molecular machines (B.H. Northrop, A.B. Braunschweig, P.M. Mendes, W.R. Dichtel, J.F. Stoddart), *Handbook of Nanoscience Engineering and Technology*, Second Edition, W.A. Goddard III, D.W. Brenner, S.E. Lyshevski, G.J. Iafrate (Eds.), CRC Press, **2007**, p. 11-1 – 11-48. [0]
788. Dynamic mechanically interlocked dendrimers. Amplification in dendritic dynamic combinatorial libraries (K.C.-F. Leung, F. Aricó, S.J. Cantrill, J.F. Stoddart) *Macromolecules*, **2007**, *40*, 3951–3959. [45]
789. Efficient routes to novel molecular architectures: Template-directed synthesis of mechanically interlocked structures (B.H. Northrop, J.M. Spruell, J.F. Stoddart), *Chimica Oggi*. **2007**, *25* (3), 4–7. [4]
790. A liquid-crystalline bistable [2]rotaxane (I. Aprahamian, T. Yasuda, T. Ikeda, S. Saha, W.R. Dichtel, K. Isoda, T. Kato, J.F. Stoddart). *Angew. Chem. Int. Ed.* **2007**, *46*, 4675–4679. [135]

791. Hexafunctionalized Borromeates using olefin cross metathesis (C.R. Yates, D. Benítez, S.I. Khan, J.F. Stoddart), *Org. Lett.* **2007**, *9*, 2433–2436. [16]
792. Structural and co-conformational effects of alkyne-derived subunits in charged donor-acceptor [2]catenanes (O.Š. Miljanić, W.R. Dichtel, S.I. Khan, S. Mortezaei, J.R. Heath, J.F. Stoddart), *J. Am. Chem. Soc.* **2007**, *129*, 8236–8246. [67]
793. Dynamic donor-acceptor [2]catenanes (O.Š. Miljanić, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2007**, *104*, 12966–12970. [63]
794. Equilibrating dynamic [2]rotaxanes (P.C. Haussmann, S.I. Khan, J.F. Stoddart), *J. Org. Chem.* **2007**, *72*, 6708–6713. [42]
795. Versatile supramolecular nanovalves reconfigured for light activation (T.D. Nguyen, K.C-F. Leung, M. Liong, Y. Liu, J.F. Stoddart, J.I. Zink), *Adv. Funct. Mater.* **2007**, *17*, 2101–2110. [169]
796. Bifunctional [c2]daisy-chains and their incorporation into mechanically interlocked polymers (E.N. Guidry, J. Li, S.J. Cantrill, J.F. Stoddart, R.H. Grubbs), *J. Am. Chem. Soc.*, **2007**, *129*, 8944–8945. [74]
797. Mesostructured silica supports for functional materials and molecular machines (S. Angelos, E. Johansson, J.F. Stoddart, J.I. Zink), *Adv. Funct. Mater.* **2007**, *17*, 2261–2271. [169]
798. Template-directed synthesis employing reversible imine bond formation (C.D. Meyer, C.S. Joiner, J.F. Stoddart), *Chem. Soc. Rev.* **2007**, *36*, 1705–1723. [324]
799. A redox-driven multicomponent molecular shuttle (S. Saha, A.H. Flood, J.F. Stoddart, S. Impellizzeri, S. Silvi, A. Credi) *J. Am. Chem. Soc.* **2007**, *109*, 12159–12171. [143]
800. Clicked interlocked molecules (I. Aprahamian, O.Š. Miljanić, W.R. Dichtel, K. Isoda, T. Yasuda, T. Kato, J.F. Stoddart), *Bull. Chem. Soc. Jpn.* **2007**, *80*, 1856–1869. [104]
801. Multivalent interactions between lectins and supramolecular complexes: Galectin-1 and self-assembled pseudopolyrotaxanes (J.M. Belitsky, A. Nelson, J.D. Hernandez, L.G. Baum, J.F. Stoddart), *Chem. Biol.*, **2007**, *14*, 1140–1151. [37]
802. Efficient production of [n]rotaxanes using template-directed clipping reactions (J. Wu, K.C.-F. Leung, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2007**, *104*, 17266–17271. [80]
803. Bispyrrolotetrafulvalene-containing [2]catenanes (M.R. Tomcsi, J.F. Stoddart), *J. Org. Chem.* **2007**, *72*, 9335–9338. [13]
804. Electrochemically controllable conjugation of proteins on surfaces (P.M. Mendes, K.L. Christman, P. Parthasarathy, E. Schopf, J. Ouyang, Y. Yang, J.A. Preece, H.D. Maynard, Y. Chen, J.F. Stoddart), *Bioconjugate Chem.* **2007**, *18*, 1919–1923. [39]
805. Rotaxanes and catenanes by click chemistry (O.Š. Miljanić, W.R. Dichtel, I. Aprahamian, R.D. Rohde, H.D. Agnew, J.R. Heath, J.F. Stoddart), *QSAR & Combinatorial Science*, **2007**, *26*, 1165–1174. [58]
806. Pirouetting in chiral [2]catenanes (S. Kang, I. Aprahamian, J.F. Stoddart), *Isr. J. Chem.*, **2007**, *47*, 253–262. [1]
807. Template-directed synthesis of donor/acceptor [2]catenanes and [2]rotaxanes (K.E. Griffiths, J.F. Stoddart), *Pure Appl. Chem.* **2008**, *80*, 485–506. [128]
808. pH-Responsive supramolecular nanovalves based on cucurbit[6]uril pseudorotaxanes (S. Angelos, Y.-W. Yang, K. Patel, J.F. Stoddart, J.I. Zink), *Angew. Chem. Int. Ed.* **2008**, *47*, 2222–2226. [368]
809. Enzyme-responsive snap-top covered silica nanocontainers (K. Patel, Y.-W. Yang, J.I. Zink, J.F. Stoddart), *J. Am. Chem. Soc.* **2008**, *130*, 2382–2383. [465]
810. Light-induced charge transfer in pyrene/CdSe-SWNT hybrids (L. Hu, Y.-L. Zhao, K. Ryu, C. Zhou, J.F. Stoddart, G. Grüner), *Adv. Mater.* **2008**, *20*, 939–946. [149]
811. Iodide-catalysed self-assembly of donor-acceptor [3]catenanes (K. Patel, O.Š. Miljanić, J.F. Stoddart), *Chem. Commun.* **2008**, 1853–1855. [36]
812. Tetrathiafulvalene radical cation dimerization in a bistable tripodal [4]rotaxane (I. Aprahamian, J.C. Olsen, A. Trabolsi, J.F. Stoddart), *Chem. Eur. J.* **2008**, *14*, 3889–3895. [58]

813. Unravelling the shuttling mechanism in a photoswitchable multicomponent bistable rotaxane (P. Raiteri, G. Bussi, C.S. Cucinolta, A. Credi, J.F. Stoddart, M. Parrinello), *Angew. Chem. Int. Ed.* **2008**, *47*, 3536–3539. [49]
814. Organogel formation by a cholesterol-stoppered bistable [2]rotaxane and its dumbbell precursor (Y.L. Zhao, I. Aprahamian, A. Trabolsi, N. Erina, J.F. Stoddart), *J. Am. Chem. Soc.* **2008**, *130*, 6348–6350. [99]
815. Folding of a donor-acceptor polyrotaxane using secondary noncovalent bonding interactions (W. Zhang, W.R. Dichtel, A.Z. Steig, D. Benítez, J.K. Gimzewski, J.R. Heath, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2008**, *105*, 6514–6519. [63]
816. Pyrenecyclodextrin-decorated single-walled carbon nanotube field-effect transistors as chemical sensors (Y.-L. Zhao, L. Hu, J.F. Stoddart, G. Grüner), *Adv. Mater.* **2008**, *20*, 1910–1915. [74]
817. A one-pot synthesis of constitutionally unsymmetrical rotaxanes using sequential Cu(I)-catalyzed azide-alkyne cycloadditions (J.M. Spruell, W.R. Dichtel, J.R. Heath, J.F. Stoddart), *Chem. Eur. J.* **2008**, *14*, 4168–4177. [44]
818. Electrochromic materials using mechanically interlocked molecules (T. Ikeda, J.F. Stoddart), *Science and Technology of Advanced Materials* **2008**, *8*, 014104 (7 pp). [16]
819. A reverse donor-acceptor bistable [2]catenane (A. Coskun, S. Saha, I. Aprahamian, J.F. Stoddart), *Org. Lett.* **2008**, *10*, 3187–3190. [41]
820. A redox-switchable α -cyclodextrin-based [2]rotaxane (Y.-L. Zhao, W.R. Dichtel, A. Trabolsi, S. Saha, I. Aprahamian, J.F. Stoddart), *J. Am. Chem. Soc.* **2008**, *130*, 11294–11296. [104]
821. Big and little Meccano (J.F. Stoddart, H.M. Coloquhoun), *Tetrahedron* **2008**, *64*, 8231–8263. [104]
822. Polyviologen dendrimers as hosts and charge-storing devices (C.M. Ronconi, J.F. Stoddart, V. Balzani, M. Baroncini, P. Ceroni, C. Giansante, M. Venturi), *Chem. Eur. J.* **2008**, *14*, 8365–8373. [36]
823. An acid-base-controllable [c2]daisy chain (J. Wu., K.C.-F. Leung, D. Benítez, J.-Y. Han, S.J. Cantrill, L. Fang, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2008**, *47*, 7470–7474. [145]
824. An interdigitated functionally rigid [2]rotaxane (I. Yoon, O.Š. Miljanić, D. Benítez, S.I. Khan, J.F. Stoddart), *Chem. Commun.* **2008**, 4561–4563. [26]
825. Kinetic and thermodynamic approaches for the efficient formation of mechanical bonds (W.R. Dichtel, O.Š. Miljanić, W. Zhang, J.M. Spruell, K. Patel, I. Aprahamian, J.R. Heath, J.F. Stoddart), *Acc. Chem. Res.* **2008**, *41*, 1750–1761. [32]
826. Experimentally-based recommendations of density functionals for predicting properties in mechanically interlocked molecules (D. Benítez, E. Tkatchouk, I. Yoon, J.F. Stoddart, W.A. Goddard III), *J. Am. Chem. Soc.* **2008**, *130*, 14928–14929. [46]
827. Heterogeneous catalysis through microcontact printing (J.M. Spruell, B.A. Sheriff, D.I. Rozkiewicz, W.R. Dichtel, R.D. Rohde, D.N. Reinhoudt, J.F. Stoddart, J.R. Heath), *Angew. Chem. Int. Ed.* **2008**, *47*, 9927–9932. [40]
828. A tunable photosensor (Y.-L. Zhao, L. Hu, G. Grüner, J.F. Stoddart), *J. Am. Chem. Soc.* **2008**, *130*, 16996–17003. [49]
829. Spatially controlled assembly of nanomaterials at the nanoscale (P. Parthasarathy, P.M. Mendes, E. Schopf, J.A. Preece, J.F. Stoddart, Y. Chen), *J. Nanosci. Nanotechnol.* **2009**, *9*, 650–654. [3]
830. Facile post-polymerization and modification of RAFT polymers (J.M. Spruell, B.A. Levy, A. Sutherland, W.R. Dichtel, J. Cheng, J.F. Stoddart, A. Nelson), *J. Polym. Sci., Part A: Polym. Chem.* **2009**, *47*, 346–356. [69]
831. Complexation between methyl viologen (paraquat) bis(hexafluorophosphate) and dibenzo[24]crown-8 revisited (T.B. Gasa, J.M. Spruell, W.R. Dichtel, T.J. Sørensen, D. Philp, J.F. Stoddart, P. Kuzmić), *Chem. Eur. J.* **2009**, *15*, 106–116. [53]
832. Mesostructured silica for optical functionality, nanomachines, and drug delivery (Y. Klichko, M. Liong, E. Choi, S. Angelos, A.E. Nel, J.F. Stoddart, F. Tamaoi, J.I. Zink) *J. Am. Ceram. Soc.* **2009**, *92*, [S1] S2–S10. [77]
833. Functionally rigid and degenerate molecular shuttles (I. Yoon, D. Benítez, Y.-L. Zhao, O.Š. Miljanić, S.-Y. Kim, E. Tkatchouk, K.C.-F. Leung, S.-I. Khan, W.A. Goddard III, J.F. Stoddart), *Chem. Eur. J.* **2009**, *15*, 1115–1122. [36]

834. A bistable poly[2]catenane forms nanosuperstructures (M.A. Olson, A.B. Braunschweig, L. Fang, T. Ikeda, R. Klajn, A. Trabolsi, C.A. Mirkin, B.A. Grzybowski, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2009**, *48*, 1792–1797. [45]
835. Active molecular plasmonics: Controlling plasmon resonances with molecular switches (Y.B. Zheng, Y.-W. Yang, L. Jensen, L. Fang, B.K. Juluri, A.H. Flood, P.S. Weiss, J.F. Stoddart, T.J. Huang), *Nano Lett.* **2009**, *9*, 819–825. [174]
836. Light-operated mechanized nanoparticles (D. Ferris, Y.-L. Zhao, N.M. Khashab, H.A. Khatib, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2009**, *131*, 1686–1688. [394]
837. Redox-driven switching in pseudorotaxanes (A. Trabolsi, M. Hemaddeh, N.M. Khashab, D.C. Friedman, M.E. Belowich, N. Humbert, M. Elhabiri, H.A. Khatib, A.-M. Albrecht-Gary, J.F. Stoddart), *New J. Chem.* **2009**, *33*, 254–263. [41]
838. Proton ionizable 1H-1,2,4-triazole π -electron deficient cyclophanes (S. Ramos, E. Alcade, J.F. Stoddart, A.J.P. White, D.J. Williams, L. Pérez-García), *New J. Chem.* **2009**, *33*, 300–317. [8]
839. A light-gated STOP-GO molecular shuttle (A. Coskun, D.C. Friedman, H. Li, K. Patel, H.A. Khatib, J.F. Stoddart), *J. Am. Chem. Soc.* **2009**, *131*, 2493–2495. [99]
840. Alternate state variables for emerging nanoelectronic devices (K. Galatsis, A. Khitun, R. Ostroumov, K.L. Wang, W.R. Dichtel, E. Plummer, J.F. Stoddart, J.I. Zink, J.Y. Lee, Y.-H. Xie, K.W. Kim) *IEEE Transactions on Nanotechnology* **2009**, *8*, 66–75. [23]
841. A mechanical actuator driven electrochemically by artificial molecular muscles (B.K. Juluri, A.S. Kumar, Y. Liu, T. Ye, Y.-W. Yang, A.H. Flood, L. Fang, J.F. Stoddart, P.S. Weiss, T.J. Huang), *ACS Nano* **2009**, *3*, 291–300. [176]
842. Inclusion behavior of β -cyclodextrin with bipyridine molecules: Factors governing host-guest inclusion geometries (Y.-L. Zhao, D. Benítez, I. Yoon, J.F. Stoddart), *Chem. Asian J.* **2009**, *4*, 446–459. [16]
843. The free energy barrier of molecular motions in bistable [2]rotaxane molecular electronic devices (H. Kim, W.A. Goddard III, S.S. Jang, W.R. Dichtel, J.R. Heath, J.F. Stoddart), *J. Phys. Chem. A*, **2009**, *113*, 2136–2143. [33]
844. Thither supramolecular chemistry? (J.F. Stoddart), *Nat. Chem.* **2009**, *1*, 14–15. [97]
845. Metal nanoparticles functionalized with molecular and supramolecular switches (R. Klajn, L. Fang, A. Coskun, M.A. Olson, P.J. Wesson, J.F. Stoddart, B.A. Grzybowski), *J. Am. Chem. Soc.* **2009**, *131*, 4233–4235. [88]
846. Synthesizing interlocked molecules dynamically (P.C. Haussmann, J.F. Stoddart), *Chem. Rec.* **2009**, *9*, 136–154. [48]
847. Rigidity-stability relationship in interlocked model complexes containing phenylene-ethynylene-based disubstituted naphthalene and phenylene (I. Yoon, D. Benítez, O.Š. Miljanić, Y.-L. Zhao, E. Tkatchouk, W.A. Goddard, III, J.F. Stoddart), *Crystal Growth and Design* **2009**, *9*, 2300–2309. [4]
848. Heterogeneous catalysis of a copper-coated atomic force microscopy tip for direct-write click chemistry (W.F. Paxton, J.M. Spruell, J.F. Stoddart) *J. Am. Chem. Soc.* **2009**, *131*, 6692–6694. [63]
849. Acid-base actuation of [c2]daisy chains (L. Fang, M. Hmadeh, J. Wu, M.A. Olson, J.M. Spruell, A. Trabolsi, Y.-W. Yang, M. Elhabri, A.-M. Albrecht-Gary, J.F. Stoddart), *J. Am. Chem. Soc.* **2009**, *131*, 7126–7134. [133]
850. A layered liquid crystalline droplet (Y.-L. Zhao, N. Erina, T. Yasuda, T. Kato, J.F. Stoddart), *J. Mater. Chem.* **2009**, *19*, 3469–3474. [7]
851. The master of chemical topology (J.F. Stoddart), *Chem. Soc. Rev.* **2009**, *38*, 1521–1529. [49]
852. The chemistry of the mechanical bond (J.F. Stoddart), *Chem. Soc. Rev.* **2009**, *38*, 1802–1820. [441]
853. Redox- and pH-controlled mechanized nanoparticles (N.M. Khashab, A. Trabolsi, Y. Lau, M.W. Ambrogio, H.A. Khatib, J.I. Zink, J.F. Stoddart), *Eur. J. Org. Chem.* **2009**, 1669–1673. [80]
854. Photoconductance and inverse photoconductance in thin films of functionalized metal nanoparticles (H. Nakanishi, K.J.M. Bishop, B. Kowalezyk, A. Nitzan, E.A. Weiss, K.V. Tretyakov, M.M. Apodaca, R. Klajn, J.F. Stoddart, B.A. Grzybowski), *Nature* **2009**, *460*, 371–375. [179]
855. An azobenzene-based light-responsive hydrogel system (Y.-L. Zhao, J.F. Stoddart), *Langmuir* **2009**, *25*, 8442–8446. [208]

856. Docking in metal-organic frameworks (Q. Li, W. Zhang, O.Š. Miljanić, C.-H. Sue, C. Knobler, Y.-L. Zhao, L. Liu, J.F. Stoddart, O.M. Yaghi), *Science* **2009**, 325, 855–859. [261]
857. A bistable pretzelane (Y. Zhao, A. Trabolsi, J.F. Stoddart), *Chem. Commun.* **2009**, 4844–4846. [17]
858. Noncovalent functionalization of single-walled carbon nanotubes (Y.-L. Zhao, J.F. Stoddart) *Acc. Chem. Res.* **2009**, 42, 1161–1171. [459]
859. Dual-controlled nanoparticles exhibiting AND logic (S. Angelos, Y.-W. Yang, N.M. Khashab, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2009**, 131, 11344–11346. [240]
860. A push-button molecular switch (J.M. Spruell, W.F. Paxton, J.-C. Olsen, D. Benítez, E. Tkatchouk, C.L. Stern, A. Trabolsi, D.C. Friedman, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2009**, 131, 11571–11580. [88]
861. Mesostuctured multifunctional nanoparticles for imaging and drug delivery (M. Liong, S. Angelos, E. Choi, K. Patel, J.F. Stoddart, J.I. Zink), *J. Mater. Chem.* **2009**, 19, 6251–6257. [173]
862. pH-Responsive mechanised nanoparticles gated by semirotaxanes (N.M. Khashab, M.E. Belowich, A. Trabolsi, D.C. Friedman, C. Valente, Y. Lau, H.A. Khatib, J.I. Zink, J.F. Stoddart), *Chem. Commun.* **2009**, 5371–5373. [52]
863. Assembly of polygonal nanoparticles clusters directed by reversible noncovalent bonding interactions (M.A. Olson, A. Coskun, L. Fang, S. Dey, K. Browne, B.A. Grzybowski, J.F. Stoddart), *Nano Lett.* **2009**, 9, 3185–3190. [61]
864. pH Clock-operated mechanized nanoparticles (S. Angelos, N.M. Khashab, Y.-W. Yang, A. Trabolsi, H.A. Khatib, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2009**, 131, 12912–12914. [258]
865. Molecular, supramolecular, and macromolecular motors and artificial muscles (D. Li, W.F. Paxton, R.H. Baughman, T.J. Huang, J.F. Stoddart, P.S. Weiss), *MRS Bulletin* **2009**, 34, 671–681. [59]
866. Mechanised nanoparticles for drug delivery (K.K. Coti, M.E. Belowich, M. Liong, M.W. Ambrogio, Y. Lau, H.A. Khatib, J.I. Zink, N.M. Khashab, J.F. Stoddart), *Nanoscale* **2009**, 1, 16–39. [387]
867. Thermodynamic forecasting of mechanically interlocked switches (M.A. Olson, A.B. Braunschweig, T. Ikeda, L. Fang, A. Trabolsi, A.M.Z. Slawin, S.I. Khan, C.A. Mirkin, J.F. Stoddart), *Org. Biomol. Chem.* **2009**, 7, 4391–4405. [25]
868. Controlled access hollow mechanized silica nanoparticles (L. Du, S. Liao, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2009**, 131, 15136–15142. [255]
869. A general synthesis of macrocyclic π -electron-acceptor systems (H.M. Colquhoun, B.W. Greenland, Z. Zhu, J.S. Shaw, C.J. Cardin, S. Burattini, J.M. Elliott, S. Basu, T.B. Gasa, J.F. Stoddart), *Org. Lett.* **2009**, 11, 5238–5241. [14]
870. Dynamic hook-and-eye nanoparticle sponges (R. Klajn, M.A. Olson, P.J. Wesson, L. Fang, A. Coskun, A. Trabolsi, J.F. Stoddart, B.A. Grzybowski), *Nat. Chem.* **2009**, 1, 733–738. [75]
871. Rigid-strut-containing crown ethers and [2]catenanes for incorporation into metal-organic frameworks (Y.-L. Zhao, L. Liu, W. Zhang, C.-H. Sue, Q. Li, O.Š. Miljanić, O.M. Yaghi, J.F. Stoddart), *Chem. Eur. J.* **2009**, 13, 13356–13380. [56]
872. Towards the stepwise assembly of molecular Borromean rings. A Donor-Acceptor Ring-in-Ring Complex (R.S. Forgan, J.M. Spruell, J.-C. Olsen, C.L. Stern, J.F. Stoddart), *J. Mex. Chem. Soc.* **2009**, 53, 134–138. [14]
873. Radically enhanced molecular recognition (A. Trabolsi, N. Khashab, A.C. Fahrenbach, D.C. Friedman, M.T. Colvin, K.K. Cotí, D. Benítez, E. Tkatchouk, J.-C. Olsen, M.E. Belowich, R. Carmieli, H.A. Khatib, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *Nat. Chem.* **2010**, 2, 42–49. [164]
874. The stability of imine-containing dynamic [2]rotaxanes to hydrolysis (K.C.-F. Leung, W.-Y. Yang, F. Aricó, P.C. Haussmann, J.F. Stoddart), *Org. Biomol. Chem.* **2010**, 8, 83–89. [14]
875. Mechanically bonded macromolecules (L. Fang, M.A. Olson, J.F. Stoddart), *Chem. Soc. Rev.* **2010**, 39, 17–29. [297]
876. A metal-organic framework replete with ordered donor-acceptor catenanes (Q. Li, W. Zhang, O.Š. Miljanić, C.B. Knobler, J.F. Stoddart, O.M. Yaghi), *Chem. Commun.* **2010**, 46, 380–382. [68]
877. Improved synthesis of 1,5-dinaphtho[38]crown-10 (C.J. Bruns, S. Basu, J.F. Stoddart), *Tetrahedron Lett.* **2010**, 51, 983–986. [23]
878. A tristable [2]pseudo[2]rotaxane (A. Trabolsi, A.C. Fahrenbach, A.I. Share, D.C. Friedman, T.B. Gasa, S.K. Dey, N.M. Khashab, S. Saha, I. Aprahamian, H.A. Khatib, A.H. Flood, J.F. Stoddart), *Chem. Commun.* **2010**, 46, 871–873. [36]

879. A redox-switchable [2]rotaxane in a liquid-crystalline state (T. Yasuda, K. Tanabe, T. Tsuji, K.K. Cotí, I. Aprahamian, J.F. Stoddart, T. Kato), *Chem. Commun.* **2010**, 46, 1224–1226. [60]
880. Molecular-mechanical switching at the metal nanoparticle-solvent interface (A. Coskun, R. Klajn, L. Fang, M.A. Olson, P.J. Wesson, A. Trabolsi, B.A. Grzybowski, J.F. Stoddart), *J. Am. Chem. Soc.*, **2010**, 132, 4310–4320. [48]
881. On the thermodynamic and kinetic investigations of a [c2]daisy chain polymer (M. Hmadeh, L. Fang, A. Trabolsi, M. Elhabri, A.-M. Albrecht-Gary, J.F. Stoddart), *J. Mater. Chem.* **2010**, 20, 3422–3430. [39]
882. Polycatenation under thermodynamic control (M.A. Olson, A. Coskun, L. Fang, A.N. Basuray, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2010**, 49, 3151–3156. [22]
883. Self-assembly, stability quantification, controlled molecular switching and sensing properties of an anthracene-containing dynamic [2]rotaxane (W.-Y. Wong, K.C.-F. Leung, J.F. Stoddart), *Org. Biomol. Chem.* **2010**, 8, 2332–2334. [23]
884. Improving pore exposure in mesoporous silica films for mechanized control of the pores (Y. Klichko, N.M. Khashab, Y.-W. Yang, S. Angelos, J.F. Stoddart, J.I. Zink), *Microporous Mesoporous Mater.* **2010**, 132, 435–441. [23]
885. Nanoparticles functionalised with reversible molecular and supramolecular switches (R. Klajn, J.F. Stoddart, B.A. Grzybowski), *Chem. Soc. Rev.* **2010**, 39, 2203–2237. [365]
886. Working mechanism for a redox switchable molecular machine based on cyclodextrin: A free energy profile approach (Q. Zhang, Y. Tu, H. Tian, Y.-L. Zhao, J.F. Stoddart, H. Agren), *J. Phys. Chem. B* **2010**, 114, 6561–6566. [38]
887. Robust dynamics (H. Deng, M.A. Olson, J.F. Stoddart, O.M. Yaghi), *Nat. Chem.* **2010**, 2, 439–443. [148]
888. Metal-organic frameworks with designed chiral recognition sites (C. Valente, E. Choi, M.E. Belowich, C.J. Doonan, T.B. Gasa, Y.Y. Botros, O.M. Yaghi, J.F. Stoddart), *Chem. Commun.* **2010**, 46, 4911–4913. [56]
889. Mechanostereochemistry (M.A. Olson, Y.Y. Botros, J.F. Stoddart), *Pure Appl. Chem.* **2010**, 82, 1569–1574. [43]
890. Enabling tetracationic cyclophane production by trading templates (C.-H. Sue, S. Basu, A.C. Fahrenbach, A.K. Shveyd, S.K. Dey, Y.Y. Botros, J.F. Stoddart), *Chem. Sci.* **2010**, 1, 119–125. [56]
891. Changing stations in single bistable rotaxane molecules under electrochemical control (T. Ye, A.S. Kumar, S. Saha, T. Takami, T.J. Huang, J.F. Stoddart, P.S. Weiss), *ACS Nano* **2010**, 4, 3697–3701. [60]
892. Snap-top nanocarriers (M.W. Ambrogio, T.A. Pecorelli, K. Patel, N.M. Khashab, A. Trabolsi, H.A. Khatib, Y.Y. Botros, J.I. Zink, J.F. Stoddart), *Org. Lett.* **2010**, 12, 3304–3307. [92]
893. Noninvasive remote-controlled release of drug molecules *in vitro* using magnetic actuation with silica-encapsulated iron oxide (C.R. Thomas, D.P. Ferris, J.-H. Lee, E. Choi, M.H. Choo, E.S. Kim, J.-S. Shin, J.F. Stoddart, J. Cheon, J.I. Zink), *J. Am. Chem. Soc.* **2010**, 132, 10623–10625. [446]
894. Directed self-assembly of a ring-in-ring complex (R.S. Forgan, D.C. Friedman, C.L. Stern, C.J. Bruns, J.F. Stoddart), *Chem. Commun.* **2010**, 46, 5861–5863. [28]
895. Isolation by crystallization of translational isomers of a bistable donor-acceptor [2]catenane (C. Wang, M.A. Olson, L. Fang, D. Benítez, E. Tkatchouk, S. Basu, D. Zhang, D. Zhu, W.A. Goddard III, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2010**, 107, 13991–13996. [35]
896. Autonomous *in vitro* anticancer drug release from mesoporous silica nanoparticles by pH-sensitive nanovalves (H. Meng, M. Xue, T. Xia, Y.-L. Zhao, F. Tamanoi, J.F. Stoddart, A.E. Nel, J.I. Zink), *J. Am. Chem. Soc.* **2010**, 132, 12690–12697. [422]
897. pH-Operated nanopistons on the surfaces of mesoporous silica nanoparticles (Y.-L. Zhao, Z. Li, S. Kagehie, Y.Y. Botros, J.F. Stoddart, J.I. Zink), *J. Am. Chem. Soc.* **2010**, 132, 13016–13025. [255]
898. A catenated strut in a catenated metal-organic framework (Q. Li, C.-H. Sue, S. Basu, A.K. Shveyd, W. Zhang, G. Barin, L. Fang, A. Sarjeant, J.F. Stoddart, O.M. Yaghi), *Angew. Chem. Int. Ed.* **2010**, 49, 6751–6755. [71]
899. Template-directed synthesis of rigid oligorotaxanes under thermodynamic control (M.E. Belowich, C. Valente, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2010**, 49, 7208–7212. [43]
900. Highly stable tetrathiafulvalene radical dimers in [3]catenanes (J.M. Spruell, A. Coskun, D.C. Friedman, R.S. Forgan, A.A. Sarjeant, A. Trabolsi, A.C. Fahrenbach, G. Barin, W.F. Paxton, S.K. Dey, M.A. Olson, D. Benítez, E. Tkatchouk, M.T. Colvin, R. Carmieli, S.T. Caldwell, G.M. Rosair, S.G. Hewage, F. Duclairoir, J.L. Seymour, A.M.Z. Slawin, W.A. Goddard III, M.R. Wasielewski, G. Cooke, J.F. Stoddart), *Nat. Chem.* **2010**, 2, 870–879. [113]

901. Mechanical bond formation by radical templation (H. Li, A.C. Fahrenbach, S.V. Dey, S. Basu, A. Trabolsi, Z. Zhu, Y.Y. Botros, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2010**, *49*, 8260–8265. [63]
902. Metal-organic frameworks from edible natural products (R.A. Smaldone, R.S. Forgan, H. Furukawa, J.J. Gassensmith, A.M.Z. Slawin, O.M. Yaghi, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2010**, *49*, 8630–8634. [249]
903. The dynamic chemistry of molecular Borromean rings and Solomon knots (C.D. Meyer, R.S. Forgan, K.S. Chichak, A.J. Peters, N. Tangchaivang, G.W.V. Cave, S.I. Khan, S.J. Cantrill, J.F. Stoddart), *Chem. Eur. J.* **2010**, *16*, 12570–12581. [55]
904. Excited state distortions in a charge transfer state of a donor–acceptor [2]rotaxane (R.M. Stephenson, X. Wang, A. Coskun, J.F. Stoddart, J.I. Zink), *Phys. Chem. Chem. Phys.* **2010**, *12*, 14135–14143. [6]
905. Chromatography in a single metal–organic framework (MOF) crystal (S. Han, Y. Wei, C. Valente, I. Lagzi, J.J. Gassensmith, A. Coskun, J.F. Stoddart, B.A. Grzybowski), *J. Am. Chem. Soc.* **2010**, *132*, 16358–16361. [143]
906. A short history of the mechanical bond (J.-C. Olsen, K.E. Griffiths, J.F. Stoddart), in *From Non-Covalent Assemblies to Molecular Machines*, Eds. J.-P. Sauvage, P. Gaspard, Wiley-VCH: Weinheim, Germany, 2011, pp. 67–139. [0]
907. Solution-phase counterion effects in supramolecular and mechanostereochemical systems (T.B. Gasa, C. Valente, J.-F. Stoddart), *Chem. Soc. Rev.* **2011**, *40*, 57–78. [67]
908. A multistate switchable [3]rotacatenane (G. Barin, A. Coskun, D.C. Friedman, M.A. Olson, M.T. Colvin, R. Carmieli, S.K. Dey, O.A. Bozdemir, M.R. Wasielewski, J.F. Stoddart), *Chem. Eur. J.* **2011**, *17*, 213–222. [50]
909. Imprinting chemical and responsive micropatterns into metal–organic frameworks (S. Han, Y. Wei, C. Valente, R.S. Forgan, J.J. Gassensmith, R.A. Smaldone, H. Nakanishi, A. Coskun, J.F. Stoddart, B.A. Grzybowski), *Angew. Chem. Int. Ed.* **2011**, *50*, 276–279. [51]
910. Mechanised materials (M.M. Boyle, R.A. Smaldone, A.C. Whalley, M.W. Ambrogio, Y.Y. Botros, J.F. Stoddart), *Chem. Sci.* **2011**, *2*, 204–210. [88]
911. A solid-state switch containing an electrochemically switchable bistable poly[n]rotaxane (W. Zhang, E. Delonno, W. Dichtel, L. Fang, A. Trabolsi, J.-C. Olsen, D. Benítez, J.R. Heath, J.F. Stoddart), *J. Mater. Chem.* **2011**, *21*, 1487–1495. [36]
912. Syntheses and dynamics of donor–acceptor [2]catenanes in water (L. Fang, S. Basu, C.-H. Sue, A.C. Fahrenbach, J.F. Stoddart), *J. Am. Chem. Soc.* **2011**, *133*, 396–399. [59]
913. Arranging pseudorotaxanes octahedrally around [60]fullerene (S.K. Dey, F. Beuerle, M.A. Olson, J.F. Stoddart), *Chem. Commun.* **2011**, *47*, 1425–1427. [14]
914. Donor–acceptor oligorotaxanes made to order (S. Basu, A. Coskun, D.C. Friedman, M.A. Olson, D. Benítez, E. Tkachouk, G. Barin, J. Young, A.C. Fahrenbach, W.A. Goddard III, J.F. Stoddart), *Chem. Eur. J.*, **2011**, *17*, 2107–2119. [42]
915. Microcontact click printing for templating ultrathin films of metal–organic frameworks (J.J. Gassensmith, P.M. Erne, W.F. Paxton, C. Valente, J.F. Stoddart), *Langmuir* **2011**, *27*, 1341–1345. [26]
916. Dual stimulus switching of a [2]catenane in water (L. Fang, C. Wang, A.C. Fahrenbach, A. Trabolsi, Y.Y. Botros, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2011**, *50*, 1805–1809. [45]
917. Optical and vibrational properties of toroidal carbon nanotubes (F. Beuerle, C. Herrmann, A.C. Whalley, C. Valente, A. Gamburd, M.A. Ratner, J.F. Stoddart), *Chem. Eur. J.* **2011**, *17*, 3868–3875. [23]
918. Mechanically stabilized tetrathiafulvalene radical dimers (A. Coskun, J.M. Spruell, G. Barin, A.C. Fahrenbach, R.S. Forgan, M.T. Colvin, R. Carmieli, D. Benítez, E. Tkatchouk, D.C. Friedman, A.A. Sarjeant, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2011**, *133*, 4538–4547. [90]
919. Degenerate [2]rotaxanes with electrostatic barriers (H. Li, Y.-L. Zhao, A.C. Fahrenbach, S.-Y. Kim, W.F. Paxton, J.F. Stoddart), *Org. Biomol. Chem.* **2011**, *9*, 2240–2250. [31]
920. Solid-state structures and superstructures of two charged donor–acceptor rotaxanes (Y.-L. Zhao, A.K. Shveyd, J.F. Stoddart), *Tetrahedron Lett.* **2011**, *52*, 2044–2047. [2]
921. Monofunctionalized pillar[5]arene as a host for alkanediamines (N.L. Strutt, R.S. Forgan, J.M. Spruell, Y.Y. Botros, J.F. Stoddart), *J. Am. Chem. Soc.* **2011**, *133*, 5668–5671. [374]
922. Surface-enhanced Raman spectroelectrochemistry of TTF-modified self-assembled monolayers (W.F. Paxton, S.L. Kleinman, A.N. Basuray, J.F. Stoddart, R.P. Van Duyne), *J. Phys. Chem. Lett.* **2011**, *2*, 1145–1149. [25]

923. Electrostatic barriers in rotaxanes and pseudorotaxanes (M. Hmadeh, A.C. Fahrenbach, S. Basu, A. Trabolsi, D. Benítez, H. Li, A.-M. Albrecht-Gary, M. Elhabiri, J.F. Stoddart), *Chem. Eur. J.* **2011**, *17*, 6076–6087. [51]
924. A redox-active reverse donor–acceptor bistable [2]rotaxane (S.K. Dey, A. Coskun, A.C. Fahrenbach, G. Barin, A.N. Basuray, A. Trabolsi Y.Y. Botros, J.F. Stoddart), *Chem. Sci.* **2011**, *2*, 1046–1053. [45]
925. Mechanically interlocked mechanophores by living radical polymerization from rotaxane initiators (R.S. Stoll, D.C. Friedman, J.F. Stoddart), *Org. Lett.* **2011**, *13*, 2706–2709. [13]
926. Synthesis of biomolecule-modified mesoporous silica nanoparticles for targeted hydrophobic drug delivery to cancer cells (D.P. Ferris, J. Lu, C. Gothard, R. Yanes, C.R. Thomas, J.-C. Olsen, J.F. Stoddart, F. Tamanoi, J.I. Zink), *Small* **2011**, *7*, 1816–1826. [165]
927. A light-stimulated molecular switch driven by radical–radical interactions in water (H. Li, A.C. Fahrenbach, A. Coskun, Z. Zhu, G. Barin, Y. Zhao, Y.Y. Botros, J.-P. Sauvage, J.F. Stoddart), *Angew. Chem. Int. Ed. Engl.* **2011**, *50*, 6782–6788. [94]
928. Switchable photoconductivity of quantum dot films using cross-linking ligands with light-sensitive structures (G.D. Lilly, A.C. Whalley, S. Grunder, C. Valente, M.T. Frederick, J.F. Stoddart, E.A. Weiss), *J. Mater. Chem.* **2011**, *21*, 11492–11497. [18]
929. Chemical topology: Complex molecular knots, links, and entanglements (R.S. Forgan, J.-P. Sauvage, J.F. Stoddart), *Chem. Rev.* **2011**, *111*, 5434–5464. [433]
930. Covalent–organic frameworks with high charge carrier mobility (S. Wan, F. Gándara, A. Asano, H. Furukawa, A. Saeki, S.K. Dey, L. Liao, M.W. Ambrogio, Y.Y. Botros, X. Duan, S. Seki, J.F. Stoddart, O.M. Yaghi), *Chem. Mater.* **2011**, *23*, 4094–4097. [310]
931. Reactions under click chemistry philosophy employed in supramolecular and mechanostereochemical systems (A.C. Fahrenbach, J.F. Stoddart) *Chem. Asian. J.* **2011**, *6*, 2660–2669. [54]
932. A neutral redox-switchable [2]rotaxane (J.-C. Olsen, A.C. Fahrenbach, A. Trabolsi, D.C. Friedman, S.K. Dey, C.M. Gothard, A.K. Shveyd, T.B. Gasa, J.M. Spruell, M.A. Olson, C. Wang, H.-P. Jacquot de Rouville, Y.Y. Botros, J.F. Stoddart), *Org. Biomol. Chem.* **2011**, *9*, 7126–7133. [104]
933. Mechanized silica nanoparticles: A new frontier in theranostic nanomedicine (M.W. Ambrogio, C.R. Thomas, Y.-L. Zhao, J.I. Zink, J.F. Stoddart), *Acc. Chem. Res.* **2011**, *44*, 903–913. [455]
934. Strong and reversible binding of carbon dioxide in a green metal–organic framework (J.J. Gassensmith, H. Furukawa, R.A. Smaldone, R.S. Forgan, Y.Y. Botros, O.M. Yaghi, J.F. Stoddart), *J. Am. Chem. Soc.* **2011**, *133*, 15312–15315. [244]
935. Dynamic clicked surfaces based on functionalised pillar[5]arene (H. Zhang, N.L. Strutt, R.S. Stoll, H. Li, Z. Zhu, J.F. Stoddart), *Chem. Commun.* **2011**, *47*, 11420–11422. [81]
936. Donor–acceptor molecular figure-of-eight (M.M. Boyle, R.S. Forgan, D.C. Friedman, J.J. Gassensmith, J.F. Stoddart, J.-P. Sauvage), *Chem. Commun.* **2011**, *47*, 11870–11872. [24]
937. Measurement of the ground state distributions in bistable mechanically interlocked molecules using slow scan rate cyclic voltammetry (A.C. Fahrenbach, J.C. Barnes, H. Li, D. Benítez, A.N. Basuray, L. Fang, C.-H. Sue, G. Barin, S.K. Dey, W.A. Goddard III, J.F. Stoddart), *Proc. Natl. Acad. Sci.* **2011**, *108*, 20416–20421. [22]
938. Donor–acceptor ring-in-ring complexes (R.S. Forgan, C. Wang, D.C. Friedman, J.M. Spruell, C.L. Stern, A.A. Sarjeant, D. Cao, J.F. Stoddart), *Chem. Eur. J.* **2012**, *18*, 202–212. [23]
939. Great Expectations: Can artificial molecular machines deliver on their promise? (A. Coskun, M. Banaszak, R.D. Astumian, J.F. Stoddart, B.A. Grzybowski), *Chem. Soc. Rev.* **2012**, *41*, 19–30. [544]
940. Nanoporous carbohydrate metal–organic frameworks (R.S. Forgan, R.A. Smaldone, J.J. Gassensmith, H. Furukawa, D.B. Cordes, Q. Li, C.E. Wilmer, Y.Y. Botros, R.Q. Snurr, A.M.Z. Slawin, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 406–417. [127]
941. A self-complexing and self-assembling pillar[5]arene (N.L. Strutt, H. Zhang, M.A. Giesener, J. Lei, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 1647–1649. [164]
942. Photoinduced memory effects in a redox controllable bistable mechanical molecular switch (T. Avellini, H. Li, A. Coskun, G. Baran, A. Trabolsi, A.N. Basuray, S.K. Dey, A. Credi, S. Silvi, J.F. Stoddart, M. Venturi), *Angew. Chem. Int. Ed.* **2012**, *51*, 1–6. [90]
943. Solution-phase mechanistic study and solid-state structure of a tris(bipyridinium radical cation) inclusion complex (A.C. Fahrenbach, J.C. Barnes, D.A. Lanfranchi, H. Li, A. Coskun, J.J. Gassensmith, Z. Liu, D. Bénitez, A. Trabolsi, W.A. Goddard III, M. Elhabiri, J.F. Stoddart) *J. Am. Chem. Soc.* **2012**, *134*, 3061–3072. [86]

944. Metal–organic frameworks incorporating copper-complexed rotaxanes (A. Coskun, M. Hmadeh, G. Barin, F. Gándara, Q. Li, E. Choi, N.L. Strutt, D.B. Cordes, A.M.Z. Slawin, J.F. Stoddart, J.-P. Sauvage, O.M. Yaghi), *Angew. Chem. Int. Ed.* **2012**, *51*, 2160–2163. [61]
945. Dynamic imine chemistry (M.E. Belowich, J.F. Stoddart), *Chem. Soc. Rev.* **2012**, *41*, 2003–2024. [452]
946. The mechanical bond: A work of art (C.J. Bruns, J.F. Stoddart), *Top. Curr. Chem.* **2012**, *323*, 19–72. [39]
947. Polyporous metal-coordination frameworks (J.J. Gassensmith, R.A. Smaldone, R.S. Forgan, C.E. Wilmer, D.B. Cordes, Y.Y. Botros, A.M.Z. Slawin, R.Q. Snurr, J.F. Stoddart) *Org. Lett.* **2012**, *14*, 1460–1463. [22]
948. Mesoporous silica nanoparticles in biomedical applications (Z. Li, J.C. Barnes, A. Bosoy, J.F. Stoddart, J.I. Zink), *Chem. Soc. Rev.* **2012**, *41*, 2590–2605. [1120]
949. Positive cooperativity in the template-directed synthesis of monodisperse macromolecules (M.E. Belowich, C. Valente, R.A. Smaldone, D.C. Friedman, J. Thiel, L. Cronin, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 5243–5261. [75]
950. Mechanically interlocked molecules assembled by π – π recognition (G. Barin, A. Coskun, M.M.G. Foudah, J.F. Stoddart), *ChemPlusChem.* **2012**, *77*, 159–185. [55]
951. Giving substance to the Losanitsch series (S. Grunder, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 3158–3160. [6]
952. Large pore apertures in a series of metal–organic frameworks (H. Deng, S. Grunder, K.E. Cordova, C. Valente, H. Furukawa, M. Hmadeh, F. Gándara, A.C. Whalley, Z. Liu, S. Asahina, H. Kazumorio, M. O’Keeffe, O. Terasaki, J.F. Stoddart, O.M. Yaghi), *Science* **2012**, *336*, 1018–1023. [925]
953. A rigid donor-acceptor daisy chain (D. Cao, C. Wang, M. Giesener, Z. Liu, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 6791–6793. [11]
954. Solvent-dependent ground state distributions in a donor-acceptor redox-active bistable [2]catenane (C. Wang, D. Cao, A.C. Fahrenbach, L. Fang, M.A. Olson, D.C. Friedman, S. Basu, S.K. Dey, Y.Y. Botros, J.F. Stoddart), *J. Phys. Org. Chem.* **2012**, *25*, 544–552. [10]
955. Stimulated release of size-selected cargos in succession from mesoporous silica nanoparticles (C. Wang, Z. Li, D. Cao, Y.-L. Zhao, J.W. Gaines, O.A. Bozdemir, M.W. Ambrogio, M. Frascioni, Y.Y. Botros, J.I. Zink, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2012**, *51*, 5460–5465. [123]
956. High hopes: Can molecular electronics realise its potential? (A. Coskun, J.M. Spruell, G. Barin, W.R. Dichtel, A.H. Flood, Y.Y. Botros, J.F. Stoddart), *Chem. Soc. Rev.* **2012**, *41*, 4827–4859. [206]
957. Mechanically induced intramolecular electron transfer in a mixed-valence molecular shuttle (J.C. Barnes, A.C. Fahrenbach, S.M. Dyar, M. Frascioni, M.A. Giesener, Z. Zhu, Z. Liu, K.J. Hartlieb, R. Carmieli, M.R. Wasielewski, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2012**, *109*, 11446–11551. [39]
958. Controlling switching in bistable [2]catenanes by combining donor-acceptor and radical-radical interactions (Z. Zhu, A.C. Fahrenbach, H. Li, J.C. Barnes, Z. Liu, S.M. Dyar, H. Zhang, J. Lei, R. Carmieli, A.A. Sarjeant, C.L. Stern, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 11709–11720. [59]
959. Oligomeric pseudorotaxanes adopting infinite-chain lattice superstructures (Z. Zhu, H. Li, Z. Liu, J. Lei, H. Zhang, Y.Y. Botros, C.L. Stern, A.A. Sarjeant, J.F. Stoddart, H.M. Colquhoun), *Angew. Chem. Int. Ed.* **2012**, *51*, 7231–7235. [26]
960. Synthesis, structure, and metalation of two new highly porous metal-organic frameworks (W. Morris, B. Voloskiy, S. Demir, F. Gándara, P.L. McGrier, H. Furukawa, D. Cascio, J.F. Stoddart, O.M. Yaghi), *Inorg. Chem.* **2012**, *51*, 6443–6445. [393]
961. High-contrast photopatterning of photoluminescence within quantum dot films through degradation of a charge-transfer quencher (M. Tagliazucchi, V. Amin, S.T. Schneebei, J.F. Stoddart, E.A. Weiss), *Adv. Mater.* **2012**, *24*, 3617–3621. [13]
962. Rapid thermally assisted donor-acceptor catenation (A.C. Fahrenbach, K.J. Hartlieb, C.-H. Sue, C.J. Bruns, G. Barin, S. Basu, M.A. Olson, Y.Y. Botros, A. Bagabas, N.H. Khadry, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 9141–9143. [6]
963. The effects of conformation on the noncovalent bonding interactions in a bistable donor-acceptor [3]catenane (C. Wang, D. Cao, A.C. Fahrenbach, S. Grunder, S.K. Dey, A.A. Sarjeant, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 9245–9247. [10]
964. Stereochemistry of molecular figures-of-eight (M.M. Boyle, J.J. Gassensmith, A.C. Whalley, R.S. Forgan, R.A. Smaldone, K.J. Hartlieb, A.K. Blackburn, J.-P. Sauvage, J.F. Stoddart), *Chem. Eur. J.* **2012**, *18*, 10312–10323. [9]
965. Room temperature ferroelectricity in supramolecular networks of charge-transfer complexes (A.S. Tayi, A.K. Shveyd, A.C.-H. Sue, J.M. Szarko, B. Rolczynski, D. Cao, T.J. Kennedy, A.A. Sarjeant, C.L. Stern,

- W.F. Paxton, W. Wu, S.K. Dey, A.C. Fahrenbach, J.R. Guest, H. Mohseni, L.X. Chen, K.L. Wang, J.F. Stoddart, S.I. Stupp), *Nature* **2012**, *488*, 485–489. [266]
966. Efficient long-range stereochemical communication and cooperative effects in self-assembled Fe₄L₆ cages (N. Ousaka, S. Grunder, A.M. Castilla, A.C. Whalley, J.F. Stoddart, J.R. Nitschke), *J. Am. Chem. Soc.* **2012**, *134*, 15528–15537. [57]
967. Cooperative self-assembly: producing synthetic polymers with precise and concise primary structures (A.-J. Avestro, M.E. Belowich, J.F. Stoddart), *Chem. Soc. Rev.* **2012**, *41*, 5881–5895. [79]
968. Self-assembly of a [2]pseudorota[3]catenane in water (R.S. Forgan, J.J. Gassensmith, D.B. Cordes, M.M. Boyle, K.J. Hartlieb, D.C. Friedman, A.M.Z. Slawin, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 17007–17010. [26]
969. Ground-state thermodynamics of bistable redox-active donor-acceptor mechanically interlocked molecules (A.C. Fahrenbach, C.J. Bruns, D. Cao, J.F. Stoddart), *Acc. Chem. Res.* **2012**, *45*, 1581–1592. [80]
970. Radically enhanced molecular switches (A.C. Fahrenbach, Z. Zhu, D. Cao, W.-G. Liu, H. Li, S.K. Dey, S. Basu, A. Trabolsi, Y.Y. Botros, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 16275–16288. [164]
971. Modular synthesis of bipyridinium oligomers and corresponding donor-acceptor oligorotaxanes with crown ethers (C.M. Gothard, C.J. Bruns, N.A. Gothard, B.A. Grzybowski, J.F. Stoddart), *Org. Lett.* **2012**, *14*, 5066–5069. [14]
972. Mechanostereochemistry and the mechanical bond (G. Barin, R.S. Forgan, J.F. Stoddart), *Proc. R. Soc. A.* **2012**, *468*, 2849–2880. [37]
973. A neutral naphthalene diimide [2]rotaxane (H.-P. Jacquot de Rouville, J. Iehl, C.J. Bruns, P.L. McGrier, M. Frascioni, A.A. Sarjeant, J.F. Stoddart), *Org. Lett.* **2012**, *14*, 5188–5191. [24]
974. Dynamic covalent templated-synthesis of [c2]daisy chains (O.A. Bozdemir, G. Barin, M.E. Belowich, A.N. Basuray, F. Beuerle, J.F. Stoddart), *Chem. Commun.* **2012**, *48*, 10401–10403. [13]
975. The chameleonic nature of diazaperopyrenium recognition processes (A.N. Basuray, H.-P. Jacquot de Rouville, K.J. Hartlieb, T. Kikuchi, N.L. Strutt, C.J. Bruns, M.W. Ambrogio, A.-J. Avestro, S.T. Schneebeli, A.C. Fahrenbach, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2012**, *51*, 11872–11877. [11]
976. Incorporation of an A1/A2-difunctionalized pillar[5]arene into a metal–organic framework (N.L. Strutt, D. Fairen-Jimenez, J. Iehl, M.B. LaLonde, R.Q. Snurr, O.K. Farha, J.T. Hupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 17436–17439. [162]
977. A semiconducting organic radical cationic host–guest complex (A.C. Fahrenbach, S. Sampath, D.J. Late, J.C. Barnes, S.L. Kleinman, N. Valley, K.J. Hartlieb, Z. Liu, V.P. Dravid, G.C. Schatz, R.P. Van Duyne, J.F. Stoddart), *ACS Nano* **2012**, *6*, 9964–9971. [27]
978. Molecular gauge blocks for building on the nanoscale (S. Grunder, C. Valente, A.C. Whalley, S. Sampath, J. Portmann, Y.Y. Botros, J.F. Stoddart), *Chem. Eur. J.* **2012**, *18*, 15632–15649. [21]
979. Tetrathiafulvalene hetero radical cation dimerization in a redox-active [2]catenane (C. Wang, S.M. Dyer, D. Cao, A.C. Fahrenbach, N. Horwitz, M.T. Colvin, R. Carmieli, C.L. Stern, S.K. Dey, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2012**, *134*, 19136–19145. [18]
980. Size selective pH-operated megagates on mesoporous silica materials (M. Xue, D. Cao, J.F. Stoddart, J.I. Zink), *Nanoscale* **2012**, *4*, 7569–7574. [25]
981. Highly efficient ultrafast electron injection from the singlet MLCT excited state of Cu(I)-diimine complexes to TiO₂ nanoparticles (J. Huang, O. Buyukcakir, M.W. Mara, A. Coskun, N.M. Dimitrijevic, G. Barin, O. Kokhan, A.B. Stickrath, R. Ruppert, D.M. Tiede, J.F. Stoddart, J.-P. Sauvage, L.X. Chen) *Angew. Chem. Int. Ed.* **2012**, *51*, 12711–12715. [57]
982. From supramolecular to systems chemistry: complexity emerging out of simplicity (J.F. Stoddart), *Angew. Chem. Int. Ed.* **2012**, *51*, 12902–12903. [34]
983. Quantitative emergence of hetero[4]rotaxanes by template-directed click chemistry (C. Ke, R.A. Smaldone, T. Kikuchi, H. Li, A.P. Davis, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2013**, *52*, 381–387. [64]
984. Patterned assembly of quantum dots onto surfaces modified with click microcontact printing (J.J. Gassensmith, P.M. Erne, W.F. Paxton, M.D. Donakowski, J.F. Stoddart), *Adv. Mater.* **2013**, *2*, 223–276. [10]
985. Organic switches for surfaces and devices (A.C. Fahrenbach, S.C. Warren, J.T. Incorvati, A.-J. Avestro, J.C. Barnes, J.F. Stoddart, B.A. Grzybowski), *Adv. Mater.* **2013**, *3*, 331–348. [118]

986. ExBox: A polycyclic aromatic hydrocarbon scavenger (J.C. Barnes, M. Juriček, N.L. Strutt, M. Frasconi, S. Sampath, M.A. Giesener, P.L. McGrier, C.J. Bruns, C.L. Stern, A.A. Sarjeant, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 183–192. [156]
987. Mechanical bond-induced radical stabilization (H. Li, Z. Zhu, A.C. Fahrenbach, B.M. Savoie, C. Ke, J.C. Barnes, J. Lei, Y.-L. Zhao, L.M. Lilley, T.J. Marks, M.A. Ratner, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 456–467. [58]
988. Molecular machines muscle up (C.J. Bruns, J.F. Stoddart), *Nat. Nanotech.* **2013**, *8*, 9–10. [58]
989. A radically configurable six-state compound (J.C. Barnes, A.C. Fahrenbach, D. Cao, S.M. Dyar, M. Frasconi, M.A. Giesener, D. Benítez, E. Tkatchouk, O. Chernyashkevskyy, W.H. Shin, H. Li, C.L. Stern, A.A. Sarjeant, K.J. Hartlieb, Z. Liu, R. Carmieli, Y.Y. Botros, J.W. Choi, A.M.Z. Slawin, J.B. Ketterson, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *Science* **2013**, *339*, 429–433. [93]
990. Chameleonic binding of the dimethyldiazaperopyrenium dication by cucurbit[8]uril (K.J. Hartlieb, A.N. Basuray, C. Ke, A.A. Sarjeant, H.-P. Jacquot de Rouville, T. Kikuchi, R.S. Forgan, J.W. Kurutz, J.F. Stoddart), *Asian J. Org. Chem.* **2013**, *2*, 225–229. [6]
991. Beyond perylene diimides – diazaperopyrenium dications as chameleonic nanoscale building blocks (A.N. Basuray, H.-P. Jacquot de Rouville, K.J. Hartlieb, A.C. Fahrenbach, J.F. Stoddart), *Chem. Asian J.* **2013**, *8*, 524–532. [8]
992. π -Dimerization of viologen subunits around the core of C₆₀ from twelve to six directions (J. lehl, M. Frasconi, H.-P. Jacquot de Rouville, N. Renaud, S.M. Dyar, N.L. Strutt, R. Carmieli, M.R. Wasielewski, M.A. Ratner, J.-F. Nierengarten, J.F. Stoddart), *Chem. Sci.* **2013**, *4*, 1462–1469. [33]
993. Synthesis and solution-state dynamics of donor-acceptor oligorotaxane foldamers (Z. Zhu, C.J. Bruns, H. Li, J. Lei, C. Ke, Z. Liu, S. Shafaie, H.M. Colquhoun, J.F. Stoddart), *Chem. Sci.* **2013**, *4*, 1470–1483. [24]
994. Redox-controlled selective docking in a [2]catenane host (G. Barin, M. Frasconi, S.M. Dyar, J. lehl, O. Buyukcakir, A.A. Sarjeant, R. Carmieli, A. Coskun, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 2466–2469. [17]
995. Asararenes – A family of large aromatic macrocycles (S.T. Schneebeli, C. Cheng, K.J. Hartlieb, N.L. Strutt, A.A. Sarjeant, C.L. Stern, J.F. Stoddart), *Chem. Eur. J.* **2013**, *12*, 3860–3868. [28]
996. γ -Cyclodextrin cuprate sandwich-type complexes (A.A. Bagabas, M. Frasconi, J. lehl, B. Hauser, O. Farha, J.T. Hupp, K.J. Hartlieb, Y.Y. Botros, J.F. Stoddart), *Inorg. Chem.* **2013**, *52*, 2854–2861. [13]
997. Interlocked molecules: a molecular production line (P.R. McGonigal, J.F. Stoddart), *Nat. Chem.* **2013**, *5*, 260–262. [18]
998. Direct calorimetric measurement of enthalpy of adsorption of carbon dioxide on CD-MOF-2, a green metal-organic framework (D. Wu, J.J. Gassensmith, D. Gouvêa, S. Ushakov, J.F. Stoddart, A. Navrotsky), *J. Am. Chem. Soc.* **2013**, *135*, 6790–6793. [77]
999. Selective isolation of gold facilitated by second-sphere coordination by α -cyclodextrin (Z. Liu, M. Frasconi, J. Lei, Z.J. Brown, Z. Zhu, D. Cao, J. lehl, G. Liu, A.C. Fahrenbach, O.K. Farha, J.T. Hupp, C.A. Mirkin, Y.Y. Botros, J.F. Stoddart), *Nat. Commun.* **2013**, *4*, Article 1855. [77]
1000. Direct exfoliation of graphite to graphene in aqueous media with diazaperopyrenium dications (S. Sampath, A.N. Basuray, K.J. Hartlieb, T. Aytun, S.I. Stupp, J.F. Stoddart), *Adv. Mater.* **2013**, *25*, 2740–2745. [55]
1001. Photophysical pore control in an azobenzene-containing metal-organic framework (J.W. Brown, B.L. Henderson, M.D. Kiesz, A.C. Whalley, W. Morris, S. Grunder, H. Deng, H. Furukawa, J.I. Zink, J.F. Stoddart, O.M. Yaghi), *Chem. Sci.* **2013**, *4*, 2858–2864. [132]
1002. Electronic and optical vibrational spectroscopy of molecular tunnel junctions created by on-wire lithography (A.S. Schmucker, G. Barin, K.A. Brown, M. Rycenga, A. Coskun, O. Buyukcakir, K.D. Osberg, J.F. Stoddart, C.A. Mirkin), *Small* **2013**, *9*, 1900–1903. [7]
1003. Three-dimensional architectures incorporating stereoregular donor-acceptor stacks (D. Cao, M. Juriček, Z.J. Brown, A.C.-H. Sue, Z. Liu, J. Lei, A.K. Blackburn, S. Grunder, A.A. Sarjeant, A. Coskun, C. Wang, O.K. Farha, J.T. Hupp, J.F. Stoddart), *Chem. Eur. J.* **2013**, *19*, 8457–8465. [13]
1004. BODIPY–Thiophene copolymers as *p*-channel semiconductors for organic thin-film transistors (H. Usta, M.D. Yilmaz, A.-J. Avestro, D. Boudinet, M. Denti, W. Zhao, J.F. Stoddart, A. Facchetti), *Adv. Mater.* **2013**, *25*, 4327–4334. [53]
1005. Photo-expulsion of surface-grafted ruthenium complexes and subsequent release of cytotoxic cargos to cancer cells from mesoporous silica nanoparticles (M. Frasconi, Z. Liu, J. Lei, Y. Wu, E. Strelakova, D. Malin, M.W. Ambrogio, X. Chen, Y.Y. Botros, V.L. Cryns, J.-P. Sauvage, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 11603–11613. [85]

1006. Ex²Box: Interdependent modes of binding in a two-nanometer-long synthetic receptor (M. Juríček, J.C. Barnes, E.J. Dale, W.-G. Liu, N.L. Strutt, C.J. Bruns, N.A. Vermeulen, K. Ghooray, A.A. Sarjeant, C.L. Stern, Y.Y. Botros, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 12736–12746. [56]
1007. Mechanized silica nanoparticles based on pillar[5]arene for on-command cargo release (Y.-L. Sun, Y.-W. Yang, D.-X. Chen, G. Wang, Y. Zhou, C.-Y. Wang, J.F. Stoddart), *Small* **2013**, *9*, 3224–3229. [151]
1008. Stereochemical inversion in difunctionalised pillar[5]arenes (N.L. Strutt, S.T. Schneebeli, J.F. Stoddart), *Supramol. Chem.* **2013**, *25*, 596–608. [14]
1009. Aromatizing olefin metathesis by ligand isolation inside a metal-organic framework (N.A. Vermeulen, O. Karagiari, A.A. Sarjeant, C.L. Stern, J.T. Hupp, O.K. Fahra, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 14916–14919. [42]
1010. Interface-engineered bistable [2]rotaxane-graphene hybrids with logic capabilities (C. Jia, H. Li, J. Jiang, J. Wang, H. Chen, D. Cao, J.F. Stoddart, X. Guo), *Adv. Mater.* **2013**, *25*, 6752–6759. [27]
1011. Mechanically interlaced and interlocked donor-acceptor foldamers (C.J. Bruns, J.F. Stoddart), *Adv. Poly. Sci.* **2013**, *261*, 271–294. [9]
1012. Recognition between V- and dumbbell-shaped molecules (W.-Y. Wong, S.-F. Lee, H.-S. Chan, T.C.W. Mak, C.-H. Wong, L.-S. Huang, J.F. Stoddart, K.C.-F. Leung), *RSC Advances* **2013**, *3*, 26382–26390. [2]
1013. Electron sharing and anion- π recognition in molecular triangular prisms (S.T. Schneebeli, M. Frasconi, Z. Liu, Y. Wu, D.M. Gardner, N.L. Strutt, C. Cheng, R. Carmieli, M.R. Wasielewski, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2013**, *52*, 13100–13104. [107]
1014. Pillar[5]arene as a co-factor in templating rotaxane formation (C. Ke, N.L. Strutt, H. Li, X. Hou, K.J. Hartlieb, P.R. McGonigal, Z. Ma, J. Iehl, C.L. Stern, C. Cheng, Z. Zhu, N.A. Vermeulen, T.J. Meade, Y.Y. Botros, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 17019–17030. [76]
1015. A water-soluble pH-triggered molecular switch (S. Grunder, P.L. McGrier, A.C. Whalley, M.M. Boyle, C. Stern, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 17691–17694. [53]
1016. Relative unidirectional translation in an artificial molecular assembly fueled by light (H. Li, C. Cheng, P.R. McGonigal, A.C. Fahrenbach, M. Frasconi, W.-G. Liu, Z. Zhu, Y. Zhao, C. Ke, J. Lei, R.M. Young, S.M. Dyar, D.T. Co, Y.-W. Yang, Y.Y. Botros, W.A. Goddard III, M.R. Wasielewski, R.D. Astumian, J.F. Stoddart), *J. Am. Chem. Soc.* **2013**, *135*, 18609–18620. [60]
1017. Ultrafast conformational dynamics of electron transfer in ExBox⁴⁺-perylene (R.M. Young, S.M. Dyar, J.C. Barnes, M. Juríček, J.F. Stoddart, D.T. Co, M.R. Wasielewski), *J. Phys. Chem. A* **2013**, *117*, 12438–12448. [74]
1018. Synthesis of ExⁿBox cyclophanes (J.C. Barnes, M. Juríček, N.A. Vermeulen, E.J. Dale, J.F. Stoddart), *J. Org. Chem.* **2013**, *78*, 11962–11969. [40]
1019. Metal-organic framework thin films composed of free-standing acicular nanorods exhibiting reversible electrochromism (C.-W. Kung, T. C. Wang, J.E. Mondloch, D. Fairen-Jimenez, D. M. Gardner, W. Bury, J.M. Klingsporn, J.C. Barnes, R. Van Duyne, J.F. Stoddart, M.R. Wasielewski, O.K. Farha, J.T. Hupp), *Chem. Mater.* **2013**, *25*, 5012–5017. [115]
1020. Topological isomerism in a chiral handcuff catenane (K.J. Hartlieb, A.K. Blackburn, S.T. Schneebeli, R.S. Forgan, A.A. Sarjeant, C.L. Stern, D. Cao, J.F. Stoddart), *Chem. Sci.* **2014**, *5*, 90–100. [10]
1021. An electrochemically and thermally switchable donor-acceptor [c2]daisy chain rotaxane (C.J. Bruns, J. Li, M. Frasconi, S.T. Schneebeli, J. Iehl, H.-P. Jacquot de Rouville, S.I. Stupp, G.A. Voth, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2014**, *53*, 1953–1958. [37]
1022. Ground-state kinetics of bistable redox-active donor-acceptor mechanically interlocked molecules (A.C. Fahrenbach, C.J. Bruns, H. Li, A. Trabolsi, A. Coskun, J.F. Stoddart), *Acc. Chem. Res.* **2014**, *47*, 482–493. [66]
1023. Induced-fit catalysis of corannulene bowl-to-bowl inversion (M. Juríček, N.L. Strutt, J.C. Barnes, A.M. Butterfield, E.J. Dale, K.K. Baldrige, J.F. Stoddart, J.S. Siegel), *Nat. Chem.* **2014**, *6*, 222–228. [77]
1024. A reversible light-operated nanovalve on mesoporous silica nanoparticles (D. Tarn, D.P. Ferris, J.C. Barnes, M.W. Ambrogio, J.F. Stoddart, J.I. Zink), *Nanoscale* **2014**, *6*, 3335–3343. [74]
1025. Redox switchable daisy chain rotaxanes driven by radical-radical interactions (C.J. Bruns, M. Frasconi, J. Iehl, K.J. Hartlieb, S.T. Schneebeli, C. Cheng, S.I. Stupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 4714–4723. [67]

1026. The topological and chemical implications of introducing oriented rings to [3]catenanes (R.S. Forgan, A.K. Blackburn, M.M. Boyle, S.T. Schneebeli, J.F. Stoddart), *Supramol. Chem.* **2014**, *26*, 192–201. [2]
1027. Gated electron sharing within dynamic naphthalene diimide-based oligorotaxanes (A.-J. Avestro, D.M. Gardner, N.A. Vermeulen, E.A. Wilson, S.T. Schneebeli, A.C. Whalley, M.E. Belowich, R. Carmieli, M.R. Wasielewski, J.F. Stoddart) *Angew. Chem. Int. Ed.* **2014**, *53*, 4442–4449. [34]
1028. Fluorescence enhancement of a porphyrin-viologen dyad by pseudorotaxane formation with cucurbit[7]uril (M. Fathalla, N.L. Strutt, J.C. Barnes, C.L. Stern, C. Ke, J.F. Stoddart), *Eur. J. Org. Chem.* **2014**, *14*, 2873–2877. [8]
1029. Electron-transfer and multi-electron accumulation in ExBox⁴⁺ (S.M. Dyar, J.C. Barnes, M. Juríček, J.F. Stoddart, D.T. Co, R.M. Young, M.R. Wasielewski), *Angew. Chem. Int. Ed.* **2014**, *53*, 5371–5375. [17]
1030. Efficient synthesis of pillar[6]arene-based hetero[4]rotaxanes using a cooperative capture strategy (X. Hou, C. Ke, C. Cheng, N. Song, A.K. Blackburn, A.A. Sarjeant, Y.Y. Botros, Y.-W. Yang, J.F. Stoddart), *Chem. Commun.* **2014**, *50*, 6196–6199. [63]
1031. An ExBox [2]catenane (M. Juríček, J.C. Barnes, N.L. Strutt, N.A. Vermeulen, K.C. Ghooray, E.J. Dale, P.R. McGonigal, A.K. Blackburn, J.F. Stoddart), *Chem. Sci.* **2014**, *5*, 2724–2731. [18]
1032. Second-sphere coordination revisited (Z. Liu, S.T. Schneebeli, J.F. Stoddart), *Chimia* **2014**, *68*, 315–320. [24]
1033. A metal-organic framework-based material for electrochemical sensing of carbon dioxide (J.J. Gassensmith, J.Y. Kim, J.M. Holcroft, O.K. Farha, J.F. Stoddart, J.T. Hupp, N.C. Jeong), *J. Am. Chem. Soc.* **2014**, *136*, 8277–8282. [121]
1034. Enantiopure pillar[5]arene active domains within a homochiral metal-organic framework (N.L. Strutt, H. Zhang, J.F. Stoddart), *Chem. Commun.* **2014**, *50*, 7455–7458. [38]
1035. Rotaxane-based molecular muscles (C.J. Bruns, J.F. Stoddart), *Acc. Chem. Res.* **2014**, *47*, 2186–2199. [277]
1036. Formation of a hetero[3]rotaxane by a dynamic component-swapping strategy (E.A. Wilson, N.A. Vermeulen, P.R. McGonigal, A.-J. Avestro, A.A. Sarjeant, C.L. Stern, J.F. Stoddart), *Chem. Commun.* **2014**, *50*, 9665–9668. [19]
1037. Relative contractile motion of the rings in a switchable palindromic [3]rotaxane in water driven by radical-pairing interactions (L.S. Witus, K.J. Hartlieb, Y. Wang, A. Prokofjevs, M. Frasconi, J.C. Barnes, E.J. Dale, A.C. Fahrenbach, J.F. Stoddart), *Org. Biomol. Chem.* **2014**, *12*, 6089–6093. [15]
1038. Solid-state characterization and photoinduced intramolecular electron transfer in a nanoconfined octacationic homo[2]catenane (J.C. Barnes, M. Frasconi, R.M. Young, N.H. Khadry, W.-G. Liu, S.M. Dyar, P.R. McGonigal, I.C. Gibbs-Hall, C. Diercks, A.A. Sarjeant, C.L. Stern, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 10569–10572. [17]
1039. ExCage (E.J. Dale, N.A. Vermeulen, A.A. Thomas, J.C. Barnes, M. Juríček, A.K. Blackburn, N.L. Strutt, A.A. Sarjeant, C.L. Stern, S.E. Denmark, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 10669–10682. [54]
1040. Mechanical bonds and topological effects in radical dimer stabilization (M. Frasconi, T. Kikuchi, D. Cao, Y. Wu, S.M. Dyar, W.-G. Liu, G. Barin, A.A. Sarjeant, R. Carmieli, C. Wang, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 11011–11026. [28]
1041. Photocurrent generation from a low band-gap and green BODIPY-based electrochromic polymer (M.D. Yilmaz, T. Aytun, M. Frasconi, S.I. Stupp, J.F. Stoddart), *Synthetic Met.* **2014**, *197*, 52–57. [7]
1042. A square-planar tetracoordinate oxygen-containing Ti₄O₁₇ cluster stabilized by two 1,1'-ferrocene-dicarboxylato ligands (Z. Liu, J. Lei, M. Frasconi, X. Li, D. Cao, Z. Zhu, S.T. Schneebeli, G.C. Schatz, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2014**, *53*, 9193–9197. [24]
1043. Electron delocalization in a rigid cofacial naphthalene-1,8:4,5-bis(dicarboximide) dimer (Y. Wu, M. Frasconi, D.M. Gardner, P.R. McGonigal, S.T. Schneebeli, M.R. Wasielewski, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2014**, *53*, 9476–9481. [62]
1044. Amino-functionalized pillar[5]arene (N.L. Strutt, H. Zhang, S.T. Schneebeli, J.F. Stoddart), *Chem. Eur. J.* **2014**, *20*, 10996–11004. [28]

1045. Functionalizing pillar[*n*]arenes (N.L. Strutt, H. Zhang, S.T. Schneebeli, J.F. Stoddart), *Acc. Chem. Res.* **2014**, *47*, 2631–2642. [248]
1046. Emergent ion-gated binding of cationic host–guest complexes with cationic M_{12L24} molecular flasks (C.J. Bruns, D. Fujita, M. Hoshino, S. Sato, J.F. Stoddart, M. Fujita), *J. Am. Chem. Soc.* **2014**, *136*, 12027–12034. [0]
1047. Two-point halogen bonding between 3,6-dihalopyromellitic diimides (D. Cao, M. Hong, A.K. Blackburn, Z. Liu, J.M. Holcroft, J.F. Stoddart), *Chem. Sci.* **2014**, *5*, 4242–4248. [24]
1048. Extended metal-carbohydrate frameworks (Z. Liu, J.F. Stoddart), *Pure Appl. Chem.* **2014**, *86*, 1323–1334. [12]
1049. Putting mechanically interlocked molecules (MIMs) to work in tomorrow's world (J.F. Stoddart), *Angew. Chem. Int. Ed.* **2014**, *53*, 11102–11104. [45]
1050. Photoinduced electron transfer within a zinc porphyrin–cyclobis(paraquat-*p*-phenylene) donor–acceptor dyad (M. Fathalla, J.C. Barnes, R.M. Young, K.J. Hartlieb, S.M. Dyar, S.W. Eaton, A.A. Sarjeant, D.T. Co, M.R. Wasielewski, J.F. Stoddart), *Chem. Eur. J.* **2014**, *20*, 14690–14697. [12]
1051. Energetically demanding transport in a supramolecular assembly (C. Cheng, P.R. McGonigal, W.-G. Liu, H. Li, N.A. Vermeulen, C. Ke, M. Frascioni, C.L. Stern, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 14702–14705. [38]
1052. A hafnium-based metal-organic framework as an efficient and multifunctional catalyst for facile CO₂ fixation and regioselective and enantioselective epoxide activation (M.H. Beyzavi, R.C. Klet, S. Tussupbayev, J. Borycz, N.A. Vermeulen, C.J. Cramer, J.F. Stoddart, J.T. Hupp, O.K. Farha), *J. Am. Chem. Soc.* **2014**, *136*, 15861–15864. [269]
1053. Assembly of supramolecular nanotubes from molecular triangles and 1,2-dihalohydrocarbons (Z. Liu, G. Liu, Y. Wu, D. Cao, J. Sun, S.T. Schneebeli, M.S. Nassar, C.A. Mirkin, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 16651–16660. [51]
1054. Lock-arm supramolecular ordering: A molecular construction set for cocrystallizing organic charge transfer complexes (A.K. Blackburn, A.C.-H. Sue, A.K. Shveyd, D. Cao, A. Tayi, A. Narayanan, B.S. Rolczynski, J.M. Sarko, O.A. Bozdemir, R. Wakabayashi, J.A. Lehrman, B. Kahr, L.X. Chen, M.S. Nassar, S.I. Stupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2014**, *136*, 17224–17235. [35]
1055. Sugar and pH dual-responsive mesoporous silica nanocontainers based on competitive binding mechanisms (M.D. Yilmaz, M. Xue, M.W. Ambrogio, O. Buyukcakir, Y. Wu, M. Frascioni, X. Chen, M.S. Nassar, J.F. Stoddart, J.I. Zink), *Nanoscale* **2015**, *7*, 1067–1072. [36]
1056. Modulating the binding of polycyclic aromatic hydrocarbons inside a hexacationic cage by anion–π interactions (N. Hafezi, J.M. Holcroft, K.J. Hartlieb, E.J. Dale, N.A. Vermeulen, C.L. Stern, A.A. Sarjeant, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2015**, *54*, 456–461. [34]
1057. Formation of ring-in-ring complexes between crown ethers and rigid TVBox⁸⁺ (J. Sun, M. Frascioni, Z. Liu, J.C. Barnes, Y. Wang, D. Chen, C.L. Stern, J.F. Stoddart), *Chem. Commun.* **2015**, *51*, 1432–1435. [9]
1058. Folding of oligoviologens induced by radical–radical interactions (Y. Wang, M. Frascioni, W.-G. Liu, Z. Liu, A.A. Sarjeant, M.S. Nassar, Y.Y. Botros, W.A. Goddard, III, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 876–885. [43]
1059. Semiconducting single crystals comprising segregated arrays of complexes of C-60 (J.C. Barnes, E.J. Dale, A. Prokofjevs, A. Narayanan, I.C. Gibbs-Hall, M. Juríček, C.L. Stern, A.A. Sarjeant, Y.Y. Botros, S.I. Stupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 2392–2399. [21]
1060. Anticancer activity expressed by a library of 2,9-diazaperopyrenium dications (K.J. Hartlieb, L.S. Witus, D.P. Ferris, A.N. Basuray, M.M. Algaradah, A.A. Sarjeant, C.L. Stern, M.S. Nassar, Y.Y. Botros, J.F. Stoddart), *ACS Nano* **2015**, *9*, 1461–1470. [6]
1061. Functionalized defects through solvent-assisted linker exchange: Synthesis, characterization, and partial postsynthesis elaboration of a metal–organic framework containing free carboxylic acid moieties (O. Karagiari, N.A. Vermeulen, R.C. Klet, T.C. Wang, P.Z. Moghadam, S.S. Al-Juaid, J.F. Stoddart, J.T. Hupp, O.K. Farha), *Inorg. Chem.* **2015**, *54*, 1785–1790. [30]
1062. Ultrahigh surface area zirconium MOFs and insights into the applicability of the BET theory (T.C. Wang, W. Bury, D.A. Gómez-Gualdrón, N.A. Vermeulen, J.E. Mondloch, P. Deria, K. Zhang, P.Z. Moghadam, A.A.

- Sarjeant, R.Q. Snurr, J.F. Stoddart, J.T. Hupp, O.K. Farha), *J. Am. Chem. Soc.* **2015**, *137*, 3585–3591. [157]
1063. Complexation of polyoxometalates with cyclodextrins (Y. Wu, R. Shi, Y.-L. Wu, J.M. Holcroft, Z. Liu, M. Frascioni, M.R. Wasielewski, H. Li, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 4111–4118. [71]
1064. Esterase- and pH-responsive poly(beta-aminoester)-capped mesoporous silica nanoparticles for drug delivery (I.R. Fernando, D.P. Ferris, M. Frascioni, D. Malin, E. Strelakova, M.D. Yilmaz, M.W. Ambrogio, M.M. Algaradah, M.P. Hong, X. Chen, M.S. Nassar, Y.Y. Botros, V.L. Cryns, J.F. Stoddart), *Nanoscale* **2015**, *7*, 7178–7183. [33]
1065. Oxime ligation on the surface of mesoporous silica nanoparticles (D.P. Ferris, P.R. McGonigal, L.S. Witus, T. Kawaji, M.M. Algaradah, A.R. Alnajada, M.S. Nassar, J.F. Stoddart), *Org. Lett.* **2015**, *17*, 2146–2149. [10]
1066. Heterogeneity of functional groups in a metal-organic framework displays magic number ratios (A.C.-H. Sue, R.V. Mannige, H. Deng, D. Cao, C. Wang, F. Gándara, J.F. Stoddart, S. Whitelam, O.M. Yaghi), *Proc. Natl. Acad. Sci. USA* **2015**, *112*, 5591–5596. [20]
1067. Carbohydrate-mediated purification of petrochemicals (J.M. Holcroft, K.J. Hartlieb, P.Z. Moghadam, J.G. Bell, G. Barin, D.P. Ferris, E.D. Bloch, M.M. Algaradah, M.S. Nassar, Y.Y. Botros, K.M. Thomas, J.R. Long, R.Q. Snurr, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 5706–5719. [58]
1068. A rigid naphthalenediimide triangle for organic rechargeable lithium-ion batteries (D. Chen, A.-J. Avestro, Z. Chen, J. Sun, S. Wang, M. Xiao, Z. Erno, M.M. Algaradah, M.S. Nassar, K. Amine, Y. Meng, J.F. Stoddart), *Adv. Mater.* **2015**, *27*, 2907–2912. [58]
1069. Controlling association kinetics in the formation of donor-acceptor pseudorotaxanes (P.R. McGonigal, H. Li, C. Cheng, S.T. Schneebeli, M. Frascioni, L.S. Witus, J.F. Stoddart), *Tetrahedron Lett.* **2015**, *56*, 3591–3594. [10]
1070. Tunable solid-state fluorescent materials for supramolecular encryption (X. Hou, C. Ke, C.J. Bruns, P.R. McGonigal, R.B. Pettman, J.F. Stoddart), *Nat. Commun.* **2015**, *6*, Article 6884. [161]
1071. An artificial molecular pump (C. Cheng, P.R. McGonigal, S.T. Schneebeli, H. Li, N.A. Vermeulen, C. Ke, J.F. Stoddart), *Nat. Nanotech.* **2015**, *10*, 547–553. [179]
1072. Porphyrinic supramolecular daisy chains incorporating pillar[5]arene–viologen host–guest interactions (M. Fathalla, N.L. Strutt, S. Sampath, K. Katsiev, K.J. Hartlieb, O.M. Bakr, J.F. Stoddart), *Chem. Commun.* **2015**, *51*, 10455–10459. [36]
1073. Visible light-driven artificial molecular switch actuated by radical–radical and donor–acceptor interactions (J. Sun, Y. Wu, Z. Liu, D. Cao, Y. Wang, C. Cheng, D. Chen, M.R. Wasielewski, J.F. Stoddart), *J. Phys. Chem. A* **2015**, *119*, 6317–6325. [17]
1074. Activation-enabled syntheses of functionalized pillar[5]arene derivatives (J. Han, X. Hou, C. Ke, H. Zhang, N.L. Strutt, C.L. Stern, J.F. Stoddart), *Org. Lett.* **2015**, *17*, 3260–3263. [17]
1075. Electron injection from copper diimine sensitizers into TiO₂: Structural effects and their implications for solar energy conversion devices (M.W. Mara, D.N. Bowan, O. Buyukcakir, M.L. Shelby, K. Haldrup, J. Huang, M.R. Harpham, A.B. Stickrath, X. Zhang, J.F. Stoddart, A. Coskun, E. Jakubikova, L.X. Chen), *J. Am. Chem. Soc.* **2015**, *137*, 9670–9684. [33]
1076. A platform for change (J.F. Stoddart), *Supramol. Chem.* **2015**, *27*, 567–570. [5]
1077. Design and synthesis of nonequilibrium systems (C. Cheng, P.R. McGonigal, J.F. Stoddart, R.D. Astumian), *ACS Nano* **2015**, *9*, 8672–8688. [70]
1078. Redox control of the binding modes of an organic receptor (M. Frascioni, I.R. Fernando, Y. Wu, Z. Liu, W.-G. Liu, S.M. Dyar, G. Barin, M.R. Wasielewski, W.A. Goddard, III, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 11057–11068. [21]
1079. Electrochemically addressable triradical rotaxanes organized within a metal–organic framework (P.R. McGonigal, P. Deria, I. Hod, P.Z. Moghadam, A.-J. Avestro, N.E. Horwitz, I.C. Gibbs-Hall, A.K. Blackburn, D. Chen, Y.Y. Botros, M.R. Wasielewski, R.Q. Snurr, J.T. Hupp, O.K. Farha, J.F. Stoddart), *Proc. Natl. Acad. Sci. USA* **2015**, *112*, 11161–11168. [46]

1080. Charge and spin transport in an organic molecular square (Y. Wu, S.K.M. Nalluri, R.M. Young, M.D. Krzyaniak, E.A. Margulies, J.F. Stoddart, M.R. Wasielewski), *Angew. Chem. Int. Ed.* **2015**, *54*, 11971–11977. [26]
1081. Ultrafast photoinduced symmetry breaking charge separation and electron sharing in perylene diimide molecular triangles (Y. Wu, R.M. Young, M. Frasconi, S.T. Schneebeli, P. Spenst, D.M. Gardner, K.E. Brown, F. Würthner, J.F. Stoddart, M.R. Wasielewski), *J. Am. Chem. Soc.* **2015**, *137*, 13236–13239. [41]
1082. Allosteric modulation of substrate binding within a tetracationic receptor (J.J. Henkelis, A.K. Blackburn, E.J. Dale, N.A. Vermeulen, M.S. Nassar, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 13252–13255. [14]
1083. An electrochromic tristable molecular switch (J. Sun, Y. Wu, Y. Wang, Z. Liu, C. Cheng, K.J. Hartlieb, D. Chen, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* *137*, 13484–13487. [39]
1084. A hafnium-based metal-organic framework as a nature-inspired tandem reaction catalyst (M.H. Beyzavi, N.A. Vermeulen, A.J. Howarth, S. Tussupbayev, A.B. League, N.M. Schweitzer, J.R. Gallagher, A.E. Platero-Prats, N. Hafezi, A.A. Sarjeant, J.T. Miller, K.W. Chapman, J.F. Stoddart, C.J. Cramer, J.T. Hupp, O.K. Farha), *J. Am. Chem. Soc.* **2015**, *137*, 13624–13631. [70]
1085. Energy and electron transfer dynamics within a series of perylene diimide/cyclophane hosts (S.T.J. Ryan, R.M. Young, J.J. Henkelis, N. Hafezi, N.A. Vermeulen, A. Hennig, E.J. Dale, Y. Wu, M.D. Krzyaniak, A. Fox, W.M. Nau, M.R. Wasielewski, J.F. Stoddart, O.A. Scherman), *J. Am. Chem. Soc.* **2015**, *137*, 15299–15307. [23]
1086. Catenation through a combination of radical templation and ring-closing metathesis (I.C. Gibbs-Hall, N.A. Vermeulen, E.J. Dale, J.J. Henkelis, A.K. Blackburn, J.C. Barnes, J.F. Stoddart), *J. Am. Chem. Soc.* **2015**, *137*, 15640–15643. [14]
1087. Scalable synthesis and post-modification of a mesoporous metal-organic framework called NU-01000 (T.C. Wang, N.A. Vermeulen, I.S. Kim, A.B.F. Martinson, J.F. Stoddart, J.T. Hupp, O.K. Farha), *Nat. Protocols* **2016**, *11*, 149–162. [87]
1088. Quantum mechanical and experimental validation that cyclobis(paraquat-*p*-phenylene) forms a 1:1 inclusion complex with tetrathiafulvalene (K.J. Hartlieb, W.-G. Liu, A.C. Fahrenbach, A.K. Blackburn, M. Frasconi, N. Hafezi, S.K. Dey, A.A. Sarjeant, C.L. Stearn, W.A. Goddard III, J.F. Stoddart), *Chem. Eur. J.* **2016**, *22*, 2736–2745. [3]
1089. Supramolecular explorations: Exhibiting the extent of extended cationic cyclophanes (E.J. Dale, N.A. Vermeulen, M. Juríček, J.C. Barnes, R.M. Young, M.R. Wasielewski, J.F. Stoddart), *Acc. Chem. Res.* **2016**, *49*, 262–273. [67]
1090. CD-MOF: A versatile separation medium (K.J. Hartlieb, J.M. Holcroft, P.Z. Moghadam, N.A. Vermeulen, M.M. Algaradah, M.S. Nassar, Y.Y. Botros, R.Q. Snurr, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 2292–2301. [109]
1091. Oligorotaxane radicals under orders (Y. Wang, M. Frasconi, W.-G. Liu, J. Sun, Y. Wu, M.S. Nassar, Y.Y. Botros, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *ACS Cent. Sci.* **2016**, *2*, 89–98. [25]
1092. Non-interpenetrated metal-organic frameworks based on copper(II) paddlewheel and oligoparaxylene-isophthalate linkers: Synthesis, structure, and gas adsorption (Y. Yan, M. Juríček, F.-X. Coudert, N.A. Vermeulen, S. Grunder, A. Dailly, W. Lewis, A.J. Blake, J.F. Stoddart, M. Schröder), *J. Am. Chem. Soc.* **2016**, *138*, 3371–3381. [61]
1093. Supramolecular gelation of rigid triangular macrocycles through rings of multiple C–H...O interactions operating cooperatively (Z. Liu, J. Sun, Y. Zhou, Y. Zhang, Y. Wu, S.K.M. Nalluri, Y. Wang, A. Samanta, C.A. Mirkin, G.C. Schatz, J.F. Stoddart), *J. Org. Chem.* **2016**, *81*, 2581–2588. [16]
1094. Cooperative reactivity in an extended-viologen-based cyclophane (E.J. Dale, D.P. Ferris, N.A. Vermeulen, J.J. Henkelis, I. Popovs, M. Juríček, J.C. Barnes, S.T. Schneebeli, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 3667–3670. [7]
1095. Chiral redox-active isosceles triangles (S.K.M. Nalluri, Z. Liu, Y. Wu, K.R. Hermann, A. Samanta, D.J. Kim, M.D. Krzyaniak, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 5968–5977. [26]
1096. Ultrafast two-electron transfer in a CdS quantum dot-extended-viologen cyclophane complex (R.M. Young, S.C. Jensen, K. Edme, Y. Wu, M.D. Krzyaniak, N.A. Vermeulen, E.J. Dale, J.F. Stoddart, E.A. Weiss, M.R. Wasielewski, D.T. Co), *J. Am. Chem. Soc.* **2016**, *138*, 6163–6170. [25]

1097. Wholly synthetic molecular machines (C. Cheng, J.F. Stoddart), *ChemPhysChem* **2016**, *17*, 1780–1793. **[61]**
1098. Cooperative capture synthesis: Yet another playground for copper-free click chemistry (X. Hou, C. Ke, J.F. Stoddart), *Chem. Soc. Rev.* **2016**, *45*, 3766–3780. **[60]**
1099. A metal-organic framework immobilised iridium pincer complex (M. Rimoldi, A. Nakamura, N.A. Vermeulen, J.J. Henkelis, A.K. Blackburn, J.T. Hupp, J.F. Stoddart, O.K. Farha), *Chem. Sci.* **2016**, *7*, 4980–4984. **[32]**
1100. Influence of constitution and charge on radical pairing interactions in tris-radical tricationic complexes (C. Cheng, T. Cheng, H. Xiao, M.D. Krzyaniak, Y. Wang, P.R. McGonigal, M. Frascioni, J.C. Barnes, A.C. Fahrenbach, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 8288–8300. **[10]**
1101. Sliding-ring catenanes (I.R. Fernando, M. Frascioni, Y. Wu, W.-G. Liu, M.R. Wasielewski, W.A. Goddard III, J. F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 10214–10225. **[15]**
1102. Concurrent covalent and supramolecular polymerization (X. Hou, C. Ke, Y. Zhou, Z. Xie, A. Alngadh, D.T. Keane, M.S. Nassar, Y.Y. Botros, C.A. Mirkin, J.F. Stoddart), *Chem. Eur. J.* **2016**, *22*, 12301–12306. **[8]**
1103. Design and synthesis of a water-stable anionic uranium-based metal-organic framework (MOF) with ultra large pores (P. Li, N.A. Vermeulen, X. Gong, C.D. Malliakas, J.F. Stoddart, J.T. Hupp, O.K. Farha), *Angew. Chem. Int. Ed.* **2016**, *55*, 10358–10362. **[55]**
1104. Cation-dependent gold recovery with α -cyclodextrin facilitated by second-sphere coordination (Z. Liu, A. Samanta, J. Lei, J. Sun, Y. Wang, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 11643–11653. **[29]**
1105. Symbiotic control in mechanical bond formation (Y. Wang, J. Sun, Z. Liu, M.S. Nassar, Y.Y. Botros, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2016**, *55*, 12387–12392. **[8]**
1106. Layer-by-layer assembled films of perylene diimide- and squaraine-containing metal-organic framework-like materials: Solar energy capture and directional energy transfer (H.J. Park, M.C. So, D. Gosztola, G.P. Wiederrecht, J.D. Emery, A.B.F. Martinson, S. Er, C.E. Wilmer, N.A. Vermeulen, A. Aspuru-Guzik, J.F. Stoddart, O.K. Farha, J.T. Hupp), *ACS Appl. Mater. Interfaces* **2016**, *8*, 24983–24988. **[20]**
1107. Supramolecular double-helix formation by diastereoisomeric conformations of configurationally enantiomeric macrocycles (A. Samanta, Z. Liu, S.K.M. Nalluri, Y. Zhang, G.C. Schatz, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 14469–14480. **[20]**
1108. Flexible ferroelectric organic crystals (M. Owczarek, K.A. Hujsak, D.P. Ferris, A. Prokofjevs, I. Majerz, P. Szklarz, H. Zhang, A.A. Sarjeant, C.L. Stern, R. Jakubas, S. Hong, V.P. Dravid, J.F. Stoddart), *Nat. Commun.* **2016**, *7*, Article 13108. **[59]**
1109. In silico discovery of metal-organic frameworks for precombustion CO₂ capture using a genetic algorithm (Y.G. Chung, D.A. Gómez-Gualdrón, P. Li, K.T. Leperi, P. Deria, H. Zhang, N.A. Vermeulen, J.F. Stoddart, F. You, J.T. Hupp, O.K. Farha, R.Q. Snurr), *Sci. Adv.* **2016**, *2*, e1600909. **[53]**
1110. A redox-active bistable molecular switch mounted inside a metal-organic framework (Q. Chen, J. Sun, P. Li, I. Hod, P.Z. Moghadem, Z.S. Kean, R.Q. Snurr, J.T. Hupp, O.K. Farha, J.F. Stoddart), *J. Am. Chem. Soc.* **2016**, *138*, 14242–14245. **[48]**
1111. Optimized synthesis and crystalline stability of γ -cyclodextrin metal-organic frameworks for drug adsorption (B. Liu, H. Li, X. Xu, X. Li, N. Lv, V. Singh, J.F. Stoddart, P. York, X. Xu, R. Gref, J. Zhang), *Int. J. Pharm.* **2016**, *514*, 212–219. **[32]**
1112. Complex formation dynamics in a single-molecule electronic device (H. Wen, W. Li, J. Chen, G. He, L. Li, M.A. Olson, A.C.-H. Sue, J.F. Stoddart, X. Guo), *Sci. Adv.* **2016**, *2*, e1601113. **[24]**
1113. Postsynthetic incorporation of a singlet oxygen photosensitizer in a metal-organic framework for fast and selective oxidative detoxification of sulfur mustard (A.J. Howarth, C.T. Buru, Y. Liu, A.M. Ploskonka, K.J. Hartlieb, M. McEntee, J.J. Mahle, J.H. Buchanan, E.M. Durke, S.S. Al-Juaid, J.F. Stoddart, J.B. DeCoste, J.T. Hupp, O.K. Farha), *Chem. Eur. J.* **2017**, *23*, 214–218. **[29]**
1114. Radically promoted formation of a molecular lasso (Y. Wang, J. Sun, Z. Liu, M.S. Nassar, Y.Y. Botros, J.F. Stoddart), *Chem. Sci.* **2017**, *8*, 2562–2568. **[13]**
1115. Spin frustration in the triradical trianion of a naphthalenediimide molecular triangle (Y. Wu, M.D. Krzyaniak, J.F. Stoddart, M.R. Wasielewski), *J. Am. Chem. Soc.* **2017**, *139*, 2948–2951. **[25]**

1116. Size-matched radical multivalency (M.C. Lipke, T. Chang, Y. Wu, H. Arslan, H. Xiao, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2017**, *139*, 3986–3998. [15]
1117. Intramolecular energy and electron transfer within a diazaperopyrenium-based cyclophane (X. Gong, R.M. Young, K.J. Hartlieb, C. Miller, Y. Wu, H. Xiao, P. Li, N. Hafezi, J. Zhou, L. Ma, T. Cheng, W.A. Goddard III, O.K. Farha, J.T. Hupp, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2017**, *139*, 4107–4116. [16]
1118. Encapsulation of Ibuprofen in CD-MOF and related bioavailability studies (K.J. Hartlieb, D.P. Ferris, J.M. Holcroft, I. Kandela, C.L. Stern, M.S. Nassar, Y.Y. Botros, J.F. Stoddart), *Mol. Pharm.* **2017**, *14*, 1831–1839. [38]
1119. Redox-active macrocycles for organic rechargeable batteries (D.J. Kim, K.R. Hermann, A. Prokofjevs, M.T. Otley, C. Pezzato, M. Owczarek, J.F. Stoddart), *J. Am. Chem. Soc.* **2017**, *139*, 6635–6643. [31]
1120. Surveying macrocyclic chemistry: From flexible crown ethers to rigid cyclophanes (Z. Liu, S.K.M. Nalluri, J.F. Stoddart), *Chem. Soc. Rev.* **2017**, *46*, 2459–2478. [154]
1121. A boat-shaped tetracationic macrocycle with a semiconducting organic framework (M.T. Nguyen, M.D. Krzyaniak, M. Owczarek, D.P. Ferris, M.R. Wasielewski, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2017**, *56*, 5795–5800. [8]
1122. Mastering the non-equilibrium assembly and operation of molecular machines (C. Pezzato, C. Cheng, J. F. Stoddart, R. D. Astumian), *Chem. Soc. Rev.* **2017**, *46*, 5491–5507. [61]
1123. Composite CD-MOF nanocrystals-containing microspheres for sustained drug delivery (H. Li, N. Lv, X. Li, B. Liu, J. Feng, X. Ren, T. Guo, D. Chen, J. F. Stoddart, R. Gref, J. Zhang), *Nanoscale* **2017**, *9*, 7454–7463. [49]
1124. Functionalised cyclodextrin-based metal–organic frameworks (K. J. Hartlieb, A. W. Peters, T. C. Wang, P. Deria, O. K. Farha, J. T. Hupp, J. F. Stoddart), *Chem. Commun.* **2017**, *53*, 7561–7564. [23]
1125. Ferroelectric polarization and second harmonic generation in supramolecular co-crystals with two axes of charge-transfer (A. Narayanan, D. Cao, L. Frazer, A. S. Tayi, A. K. Blackburn, A. C.-H. Sue, J. B. Ketterson, J. F. Stoddart, S. I. Stupp), *J. Am. Chem. Soc.* **2017**, *139*, 9186–9191. [19]
1126. Molecular Borromean rings: From controlled construction to potential applications (Y. Wang, J. F. Stoddart), *Chem* **2017**, *3*, 17–18. [1]
1127. Conflicting evidence for ferroelectricity reply (A.S. Tayi, A.K. Shveyd, A.C.-H. Sue, J.M. Szarko, B.S. Rolczynski, D. Cao, T.J. Kennedy, A.A. Sarjeant, C.L. Stern, W.F. Paxton, W. Wu, S.K. Dey, A.C. Fahrenbach, J.R. Guest, H. Mohseni, L.X.Chen. K.L. Wang, J.F. Stoddart, S.I. Stupp) *Nature* **2017**, *547*, E14–E15. [2]
1128. Noninvasive substitution of K⁺ sites in cyclodextrin metal–organic frameworks by Li⁺ ions (H.A. Patel, T. Islamoglu, Z. Liu, S.K.M. Nalluri, A. Samanta, O. Anamimoghadam, C.D. Malliakas, O.K. Farha, J.F. Stoddart), *J. Am. Chem. Soc.* **2017**, *139*, 11020–11023. [21]
1129. Introducing stable radicals into molecular machines (Y. Wang, M. Frascioni, J.F. Stoddart), *ACS Cent. Sci.* **2017**, *3*, 927–935. [28]
1130. Mechanical-bond-protected, air-stable radicals (J. Sun, Z. Liu, W.-G. Liu, Y. Wu, Y. Wang, J.C. Barnes, K. R. Hermann, W. A. Goddard III, M. R. Wasielewski, J. F. Stoddart), *J. Am. Chem. Soc.* **2017**, *139*, 12704–12709. [13]
1131. Mechanically interlocked molecules (MIMs)—Molecular shuttles, switches, and machines (Nobel Lecture) (J. F. Stoddart), *Angew. Chem. Int. Ed.* **2017**, *56*, 11094–11125. [180]
1132. An efficient artificial molecular pump (C. Pezzato, M.T. Nguyen, C. Cheng, D.J. Kim, M.T. Otley, J.F. Stoddart), *Tetrahedron* **2017**, *73*, 4849–4857. [10]
1133. Probing distance dependent charge-transfer character in excimers of extended viologen cyclophanes using femtosecond vibrational spectroscopy (Y. Wu, J. Zhou, B.T. Phelan, C.M. Mauck, J.F. Stoddart, R.M. Young, M.R. Wasielewski), *J. Am. Chem. Soc.* **2017**, *139*, 14265–14276. [16]
1134. Where ion mobility and molecular dynamics meet to unravel the (un)folding mechanisms of an oligorotaxane molecular switch (E. Hanozin, B. Mignolet, D. Morsa, D. Sluysmans, A.-S. Duwez, J.F. Stoddart, F. Remacle, E.D. Pauw), *ACS Nano* **2017**, *11*, 10253–10263. [5]

1135. X-Shaped oligomeric pyromellitimide polyradicals (Y. Wu, J.-M. Han, M. Hong, M.D. Krzyaniak, A.K. Blackburn, I.R. Fernando, D.D. Cao, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 515–523. [8]
1136. Synthetic oligorotaxanes exert high forces when folding under mechanical load (D. Sluysmans, S. Hubert, C.J. Bruns, Z. Zhu, J.F. Stoddart, A.-S. Duwez), *Nat. Nanotechnol.* **2018**, *13*, 209–213. [5]
1137. Doing your own thing (J.F. Stoddart), *Nat. Nanotechnol.* **2018**, *13*, 268.
1138. Hierarchically engineered mesoporous metal-organic frameworks toward cell-free immobilized enzyme systems (P. Li, Q. Chen, T.C. Wang, N.A. Vermeulen, B.L. Mehdi, A. Dohnalkova, N.D. Browning, D. Shen, R. Anderson, D.A. Gómez-Gualdrón, F.M. Cetin, J. Jagiello, A.A. Asiri, J.F. Stoddart, O.K. Farha), *Chem* **2018**, *4*, 1022–1034. [47]
1139. Shuttling rates, electronic states, and hysteresis in a ring-in-ring rotaxane (M.C. Lipke, Y. Wu, I. Roy, Y. Wang, M.R. Wasielewski, J.F. Stoddart), *ACS Cent. Sci.* **2018**, *4*, 362–371. [5]
1140. Toward a charged homo[2]catenane employing diazapyrenium homophilic recognition (X. Gong, J. Zhou, K.J. Hartlieb, C. Miller, P. Li, O.K. Farha, J.T. Hupp, R.M. Young, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 6540–6544. [2]
1141. ExTzBox: A glowing cyclophane for live cell imaging (I. Roy, S. Bobbla, J. Zhou, M.T. Nguyen, S.K.M. Nalluri, Y. Wu, D.P. Ferris, A.E. Scott, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 7206–7212. [17]
1142. Controlling dual molecular pumps electrochemically (C. Pezzato, M.T. Nguyen, D.J. Kim, O. Anamimoghadam, L. Mosca, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2018**, *57*, 9325–9329. [9]
1143. Proton conduction in Tröger's base-linked poly(crown ether)s (H.A. Patel, J. Selberg, D. Salah, H. Chen, Y. Liao, S.K.M. Nalluri, O.K. Farha, R.Q. Snurr, M. Rolandi, J.F. Stoddart), *ACS Appl. Mater. Interfaces* **2018**, *10*, 25303–25310. [3]
1144. Mixed-valence superstructure assembled from a mixed-valence host-guest complex (Z. Liu, M. Frasconi, W.-G. Liu, Y. Zhang, S.M. Dyer, D. Shen, A.A. Sarjeant, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 9387–9391. [3]
1145. Epitaxial growth of γ -cyclodextrin metal-organic frameworks based on a host-guest chemistry (D. Shen, G. Wang, Z. Liu, P. Li, K. Cai, C. Cheng, Y. Shi, J.-M. Han, C.-W. Kung, X. Gong, Q.-H. Guo, H. Chen, A.C.-H. Sue, Y.Y. Botros, A. Facchetti, O.K. Farha, T.J. Marks, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 11402–11407. [7]
1146. The growing community of artificial molecular machines (D. Sluysmans, J.F. Stoddart), *Proc. Natl. Acad. Sci. U.S.A.* **2018**, *115*, 9359–9361. [61]
1147. Dynamic force spectroscopy of synthetic oligorotaxane foldamers (D. Sluysmans, F. Devaux, C.J. Bruns, J. F. Stoddart, A.-S. Duwez), *Proc. Natl. Acad. Sci. U.S.A.* **2018**, *115*, 9362–9366. [6]
1148. Densely charged dodecacationic [3]- and tetracosacationic radial [5]catenanes (M.T. Nguyen, D.P. Ferris, C. Pezzato, Y. Wang, J.F. Stoddart), *Chem* **2018**, *4*, 2329–2344. [6]
1149. Neighboring component effect in a tristable [2]rotaxane (Y. Wang, T. Cheng, J. Sun, Z. Liu, M. Frasconi, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 13827–13834. [3]
1150. Selective extraction of C₇₀ by a tetragonal prismatic porphyrin cage (Y. Shi, K. Cai, H. Xiao, Z. Liu, J. Zhou, D. Shen, Y. Qiu, C. Stern, M.R. Wasielewski, F. Diederich, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2018**, *140*, 13835–13842. [16]
1151. Molecular Russian dolls (K. Cai, M.C. Lipke, Z. Liu, J. Nelson, T. Cheng, Y. Shi, C. Cheng, D. Shen, J.-M. Han, S. Vemuri, Y. Feng, C.L. Stern, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *Nat. Commun.* **2018**, *9*, 5275. [3]
1152. Rechargeable aluminium organic batteries (D.J. Kim, D.-J. Yoo, M.T. Otley, A. Prokofjevs, C. Pezzato, M. Owczarek, S.J. Lee, J.W. Choi, J.F. Stoddart), *Nat. Energy* **2018**, *4*, 51–59. [9]
1153. The burgeoning of mechanically interlocked molecules in chemistry (D. Sluysmans, J.F. Stoddart), *Trends in Chemistry* **2019**, *1*, 185–197.
1154. Concepts in the design and engineering of single-molecule electronic devices (N. Xiu, J. Guan, C. Zhou, X. Chen, C. Gu, Y. Li, M.A. Ratner, A. Nitzan, J.F. Stoddart, X. Guo), *Nat. Rev. Phys.* **2019**, *1*, 211–230. [12]

1155. Discrete dimers of redox-active and fluorescent perylene diimide-based rigid isosceles triangles in the solid state (S.K.M. Nalluri, J. Zhou, T. Cheng, Z. Liu, M.T. Nguyen, T. Chen, H.A. Patel, M.D. Krzyaniak, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 1290–1303. [10]
1156. A dynamic tetracationic macrocycle exhibiting photoswitchable molecular encapsulation (H. Wu, Y. Chen, L. Zhang, O. Anamimoghadam, D. Shen, Z. Liu, K. Cai, C. Pezzato, C.L. Stern, Y. Liu, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 1280–1289. [7]
1157. Interpenetration isomerism of triptycene-based hydrogen-bonded organic frameworks (P. Li, P. Li, M.R. Ryder, Z. Liu, C.L. Stern, O.K. Farha, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2019**, *58*, 1664–1669. [12]
1158. Reticular access to highly porous acs-MOFs with rigid trigonal prismatic linkers for water sorption (Z. Chen, P. Li, X. Zhang, P. Li, M.C. Wasson, T. Islamoglu, J.F. Stoddart, O.K. Farha), *J. Am. Chem. Soc.* **2019**, *141*, 2900–2905. [10]
1159. Choosing sides: Unusual ultrafast charge transfer pathways in an asymmetric electron-accepting cyclophane that binds an electron donor (J. Zhou, Y. Wu, I. Roy, A. Samanta, J.F. Stoddart, R.M. Young, M.R. Wasielewski), *Chem. Sci.* **2019**, *10*, 4282–4292. [2]
1160. In situ photoconversion of multicolor luminescence and pure white emission based on carbon dot-supported supramolecular assembly (H. Wu, Y. Chen, X. Dai, P. Li, J.F. Stoddart, Y. Liu), *J. Am. Chem. Soc.* **2019**, *141*, 6583–6591. [11]
1161. Guest recognition enhanced by lateral interactions (T. Jiao, K. Cai, Z. Liu, C. Cheng, Y. Feng, C.L. Stern, J.F. Stoddart, H. Li), *Chem. Sci.* **2019**, *10*, 5114–5123. [1]
1162. Inversion of dispersion: Colloidal stability of calixarene-modified metal–organic framework nanoparticles in nonpolar media (U. Jeong, N.A. Dogan, M. Garai, T.S. Nguyen, J.F. Stoddart C.T. Yavuz), *J. Am. Chem. Soc.* **2019**, *141*, 12182–12186. [1]
1163. Ligand-directed reticular synthesis of catalytically active missing zirconium-based metal–organic frameworks (Z. Chen, P. Li, X. Wang, K. Otake, X. Zhang, L. Robison, A. Atilgan, T. Islamoglu, M.G. Hall, G.W. Peterson, J.F. Stoddart, O.K. Farha), *J. Am. Chem. Soc.* **2019**, *141*, 12229–12235.
1164. A supramolecular approach for modulated photoprotection, lysosomal delivery, and photodynamic activity of a photosensitizer (I. Roy, S. Bobbala, R.M. Young, Y. Beldjoudi, M.T. Nguyen, M.M. Cetin, J.A. Cooper, S. Allen, O. Anamimoghadam, E.A. Scott, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 12296–12304.
1165. Assembly of a porous supramolecular polyknot from rigid trigonal prismatic building blocks (P. Li, Z. Chen, M.R. Ryder, C.L. Stern, Q.-H. Guo, X. Wang, O.K. Farha, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 12998–13002.
1166. Cyclotris(paraquat-*p*-phenylenes) (O. Anamimoghadam, J.A. Cooper, M.T. Nguyen, Q.-H. Guo, L. Mosca, I. Roy, J. Sun, C.L. Stern, L. Redfern, O.K. Farha, J.F. Stoddart), *Angew. Chem. Int. Ed.* **2019**, *58*, 13778–13783.
1167. A hierarchical nanoporous diamandoid superstructure (Q.-H. Guo, Z. Liu, D. Shen, Y. Xu, M.R. Ryder, H. Chen, C.L. Stern, C.D. Malliakas, X. Zhang, L. Zhang, Y. Qiu, Y. Shi, R.Q. Snurr, D. Philp, O.K. Farha, J.F. Stoddart), *Chem* **2019**, *5*, 2353–2364.
1168. Artificial allomelanin nanoparticles (X. Zhou, N.C. McCallun, Z. Hu, W. Cao, K. Gnanasekaran, Y. Feng, J.F. Stoddart, Z. Wang, N.C. Gianneschi), *ACS Nano* **2019**, *13*, 10980–10990.
1169. Stabilizing the naphthalenediimide radical within a tetracationic cyclophane (T. Jiao, K. Cai, J.N. Nelson, Y. Jiao, Y. Qiu, G. Wu, J. Zhou, C. Cheng, D. Shen, Y. Feng, Z. Liu, M.R. Wasielewski, J.F. Stoddart, H. Li), *J. Am. Chem. Soc.* **2019**, *141*, 16915–16922.
1170. Conductive 2D metal-organic framework for high-performance cathodes in aqueous rechargeable zinc batteries (K.W. Nam, S.S. Park, R. dos Reis, V.P. Dravid, H. Kim, C.A. Mirkin, J.F. Stoddart), *Nat. Commun.* **2019**, *10*, 4948.
1171. Supramolecular tessellations by a rigid naphthalene diimide triangle (Y. Beldjoudi, A. Narayanan, I. Roy, T.J. Pearson, M.M. Cetin, M.T. Nguyen, M.D. Krzyaniak, F.M. Alsubaie, M.R. Wasielewski, S.I. Stupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 18308–18317.

1172. A molecular dual pump (Y. Qiu, L. Zhang, C. Pezzato, Y. Feng, W. Li, M.T. Nguyen, C. Cheng, D. Shen, Q.-H. Guo, Y. Shi, K. Cai, F.M. Alsubaie, R.D. Astumian, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 17472–17476.
1173. A redox-switchable molecular zipper (M. Dumartin, M.C. Lipke, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 18308–18317.
1174. Amphidynamic crystals key to artificial molecular machines (I. Roy, J.F. Stoddart), *Trends Chem.* **2019**, *2*, 627–629.
1175. Combining intra- and intermolecular charge transfer with polycationic cyclophanes to design 2D tessellations (M.M. Cetin, Y. Beldjoudi, I. Roy, O Anamimoghadam, Y.J. Bae, R.M. Young, M.D. Krzyaniak, C.L. Stern, D. Philp, F.M. Alsubaie, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2019**, *141*, 18727–18739.
1176. Tuning radical interactions in trisradial triationic complexes by varying host-cavity sizes (K. Cai, Y. Shi, C. Cao, S. Vemuri, B. Cui, D. Shen, H. Wu, L. Zhang, Y. Qiu, H. Chen, Y. Jiao, C.L. Stern, F.M. Alsubaie, H. Xiao, J. Li, J.F. Stoddart), *Chem. Sci.* **2020**, *11*, 107–112.
1177. Integration of enzymes and photosensitizers in a hierarchical mesoporous metal–organic framework for light-driven CO₂ reduction (Y. Chen, P. Li, J. Zhou, C.T. Baru, L. Dordević, P. Li, X. Zhang, M.M Cetin, J.F. Stoddart, S.I. Stupp, M.R. Wasielewski, O.K. Farha), *J. Am. Chem. Soc.* **2020**, *142*, 1768–1773.
1178. Organic counterion co-assembly strategy for the formation of gamma-cyclodextrin-containing hybrid frameworks (D. Shen, J.A. Cooper, P. Li, Q.-H. Guo, K. Cai, X. Wang, H. Wu, H. Chen, L. Zhang, Y. Jiao, Y. Qiu, C.L. Stern, Z. Liu, A. C.-H. Sue, Y.-W. Yang, F.M. Alsubaie, O.M. Farha, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 2042–2050.
1179. Redox-active phenanthrenequinone triangles in aqueous rechargeable batteries (K.W. Nam, H. Kim, Y. Beldjoudi, T. Kwon, D.J. Kim, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 2541–2548.
1180. XCage: A tricyclic octacationic receptor for perylene diimide with picomolar affinity in water (W. Liu, S. Bobbala, C.L. Stern, J.E. Hornick, Y. Liu, A.E. Enciso, E.A. Scott, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 3165–3173.
1181. Giant conductance enhancement of intramolecular circuits through interchannel gating (H. Chen, H. Zheng, C. Hu, K. Cai, Y. Jiao, L. Zhang, F. Jiang, I. Roy, Y. Qiu, D. Shen, Y. Feng, F.M. Alsubaie, H. Guo, W. Hong, J.F. Stoddart), *Matter* **2020**, *2*, 378–189. For a Preview see: Molecular engineering: A key route to improve the performance of molecular devices (X. Guo) *Matter* **2020**, *2*, 284–285.
1182. TetrazineBox: A structurally transformative toolbox (Q.-H. Guo, J. Zhou, H. Mao, Y. Qiu, M.T. Nguyen, Y. Feng, J. Liang, D. Shen, P. Li, Z. Liu, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 5419–5428.
1183. Single-crystal polycationic polymers obtained by single-crystal-to-single-crystal photopolymerization (Q.-H. Guo, M. Jia, Z. Liu, Y. Qiu, H. Chen, D. Shen, X. Zhang, Q. Tu, M.R. Ryder, H. Chen, P. Li, Y. Xu, P. Li, Z. Chen, G.S. Shekhawat, V.P. Dravid, R.Q. Snurr, D. Philp, A.C.-H. Sue, O.K. Farha, M. Rolandi, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 6180–6187.
1184. Highly stable organic bisradicals protected by mechanical bonds (K. Cai, H. Mao, W.-G. Liu, Y. Qiu, Y. Shi, L. Zhang, D. Shen, H. Chen, Y. Jiao, H. Wu, Z. Liu, Y. Feng, C.L. Stern, M.R. Wasielewski, W.A. Goddard III, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 7190–7197.
1185. Stitching up the belt[*n*]arenes (Y. Qiu, H. Chen, Y. Feng, M.E. Schott, J.F. Stoddart), *Chem* **2020**, *6*, 826–829.
1186. Synthesis, structures, photophysical properties, and catalytic characteristics of 2,9-dimesityl-1,10-phenanthroline (dmesp) transition metal complexes (M.M. Cetin, S. Shafiei-Haghighi, J. Chen, S. Zhang, A.C. Miller, D.K. Unruh, D.J. Casadonte, Jr., T.L. Lohr, T.J. Marks, M.F. Mayer, J.F. Stoddart, M. Findlater), *J. Polym. Sci.* **2020**, *58*, 1130–1143.
1187. Balancing volumetric and gravimetric uptake in highly porous materials for clean energy (Z. Chen, P. Li, R. Anderson, X. Wang, X. Zhang, L. Robison, L.R. Redfern, S. Moribe, T. Islamoglu, D.A. Gómez-Gualdrón, T. Yildirim, J.F. Stoddart, O.K. Farha), *Science* **2020**, *368*, 297–303.

1188. Mechanical-bond-induced exciplex fluorescence in an anthracene-based homo[2]catenane (A. Garci, Y. Beldjoudi, M.S. Kodaimati, J.E. Hornick, M.T. Nguyen, M.M. Cetin, C.L. Stern, I. Roy, E.A. Weiss, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 7956–7967.
1189. Non-equilibrium kinetics and trajectory thermodynamics of synthetic molecular pumps (R.D. Astumian, C. Pezzato, Y. Feng, Y. Qiu, P.R. McGonigal, C. Cheng, J.F. Stoddart), *Mater. Chem. Front.* **2020**, *4*, 1304–1314.
1190. Cyclophane-sustained ultrastable porphyrins (W. Liu, C. Lin, J.A. Weber, C.L. Stern, R.M. Young, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 8938–8945.
1191. Suit[4]ane (W. Liu, C.L. Stern, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 10273–10278.
1192. Molecular-pump-enabled synthesis of a daisy chain polymer (K. Cai, Y. Shi, G.-W. Zhuang, L. Zhang, Y. Qiu, D. Shen, H. Chen, Y. Jiao, H. Wu, C. Cheng, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 10308–10313.
1193. A precise polyrotaxane synthesizer (Y. Qiu, B. Song, C. Pezzato, D. Shen, W. Liu, L. Zhang, Y. Feng, Q.-H. Guo, K. Cai, W. Li, H. Chen, M.T. Nguyen, Y. Shi, C. Cheng, R.D. Astumian, X. Li, J.F. Stoddart), *Science* **2020**, *368*, 1247–1253.
1194. Electrochemical switching of a fluorescent molecular rotor embedded within a bistable rotaxane (Y. Wu, M. Frasconi, W.-G. Liu, R.M. Young, W.A. Goddard III, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 11835–11846.
1195. Precious metal recovery from electronic waste by a porous porphyrin polymer (Y. Hong, D. Thirion, S. Subramanian, M. Yoo, H. Choi, H.Y. Kim, J.F. Stoddart, C.T. Yavuz), *Proc. Natl. Acad. Sci. U. S. A.* **2020**, *117*, 16174–16180.
1196. Radical-enriched artificial melanin (W. Cao, A.J. Mantanona, H. Mao, N.C. McCallum, Y. Jiao, C. Battistella, V. Caponetti, N. Zhang, M.P. Thompson, M. Montalti, J.F. Stoddart, M.R. Wasielewski, J.D. Rinehart, N.C. Gianneschi), *Chem. Mater.* **2020**, *32*, 5759–5767.
1197. Mixed-flow design for microfluidic printing of two-phase polymer semiconductor systems (G. Wang, L.-W. Feng, W. Huang, S. Mukherjee, Y. Chen, D. Shen, B. Wang, J. Strzalka, D. Zheng, F.S. Melkonyan, J. Yan, J.F. Stoddart, S. Fabiano, D.M. DeLongchamp, M. Zhu, A. Facchetti, T.J. Marks), *Proc. Natl. Acad. Sci. U.S.A.* **2020**, *117*, 17551–17557.
1198. Reticular exploration of uranium-based metal–organic frameworks with hexacarboxylate building units (Z. Chen, P. Li, X. Zhang, M.R. Mian, X. Wang, P. Li, Z. Liu, M. O’Keeffe, J.F. Stoddart, O.K. Farha), *Nano Res.* **2020**, *13*, 298–314.
1199. Pumps through the ages (Y. Qiu, Y. Feng, Q.-H. Guo, R.D. Astumian, J.F. Stoddart), *Chem* **2020**, *6*, 1954–1979.
1200. A diverse view of science to catalyze change (C.A. Urbina-Blanco, S.Z. Jilani, I.R. Speight, M.J. Bojdy, T. Frišćić, J.F. Stoddart, T.L. Nelson, J. Mack, R.A.S. Robinson, E.A. Waddell, J.L. Lutkenhaus, M. Godfrey, M.I. Abboud, S.O. Aderinto, D. Aderohunmu, L. Bibič, J. Borges, V.M. Dong, L. Ferrins, F.M. Fung, T. John, F.P.L. Lim, S.L. Masters, D. Mambwe, P. Thordarson, M.-M. Titirici, G.D. Tormet-González, M.M. Unterlass, A. Wadle, V.W.-W. Yam, Y.-W. Yang), *Nat. Chem.* **2020**, *12*, 773–776; *J. Am. Chem. Soc.* **2020**, *142*, 14393–14396; *Angew. Chem. Int. Ed.* **2020**, *59*, 18306–18310; *Chem.Sci.* **2020**, *11*, 9043–9047; *Can. J. Chem.* **2020**, *98*, xx–yy; *Croat. Chem. Acta* **2020**, *93*, 77–81.
1201. Supramolecular porous organic nanocomposites for heterogeneous photocatalysis of a sulfur mustard simulant (Y. Beldjoudi, A. Atilgan, J.A. Weber, I. Roy, R.M. Young, J. Yu, P. Deria, A.E. Enciso, M.R. Wasielewski, J.T. Hupp, J.F. Stoddart), *Adv. Mater.* **2020**, *32*, 2001592.
1202. High-efficiency gold recovery using cucurbit[6]uril (H. Wu, L.O. Jones, Y. Wang, D. Shen, Z. Liu, L. Zhang, K. Cai, Y. Jiao, C.L. Stern, G.C. Schatz, J.F. Stoddart), *ACS Appl. Mater. Interfaces* **2020**, *12*, 38768–38777.
1203. Artificial molecular pump operating in response to electricity and light (Q.-H. Guo, Y. Qiu, X. Kuang, J. Liang, Y. Feng, L. Zhang, Y. Jiao, D. Shen, R.D. Astumian, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 14443–14449.
1204. Dawning of the age of molecular nanotopology (J.F. Stoddart), *Nano Lett.* **2020**, *20*, 5597–5600.

1205. Two-photon excited deep-red and near-infrared emissive organic co-crystals (Y. Wang, H. Wu, P. Li, S. Chen, L.O. Jones, M.A. Mosquera, L. Zhang, K. Cai, H. Chen, X.-Y. Chen, C.L. Stern, M.R. Wasielewski, M.A. Ratner, G.C. Schatz, J.F. Stoddart) *Nat. Commun.* **2020**, *11*, 4633.
1206. Host–guest complexation-mediated supramolecular photon upconversion (I. Roy, A. Garci, Y. Beldjoudi, R.M. Young, D.J. Pe, M.T. Nguyen, P.J. Das, M.R. Wasielewski, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 16600–16609.
1207. Ring-in-ring(s) complexes exhibiting tunable multicolor photoluminescence (H. Wu, Y. Wang, L.O. Jones, W. Liu, B. Song, Y. Cui, K. Cai, L. Zhang, D. Shen, X.-Y. Chen, Y. Jiao, C.L. Stern, X. Li, G.C. Schatz, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 16849–16860.
1208. Hydrogen-bonded organic frameworks: A rising class of porous molecular materials (P. Li, M.R. Ryder, J.F. Stoddart), *Acc. Mater. Res.* **2020**, *1*, 77–87.
1209. Post-synthetically elaborated BODIPY-based porous organic polymers (POPs) for the photochemical detoxification of a sulfur mustard simulant (A. Atilgan, M.M. Cetin, J. Yu, Y. Beldjoudi, J. Liu, C.L. Stern, F.M. Cetin, T. Islamoglu, O.M. Farha, P. Deria, J.F. Stoddart, J.T. Hupp), *J. Am. Chem. Soc.* **2020**, *142*, 18554–18564.
1210. Suit[3]ane (X.-Y. Chen, D. Shen, K. Cai, Y. Jiao, H. Wu, B. Song, L. Zhang, Y. Tan, Y. Wang, Y. Feng, C.L. Stern, J.F. Stoddart), *J. Am. Chem. Soc.* **2020**, *142*, 20152–20160.
1211. Viologen tweezers to probe the force of individual donor–acceptor π -interactions (D. Sluysmans, L. Zhang, X. Li, A. Garci, J.F. Stoddart, A.-S. Duwez), *J. Am. Chem. Soc.* **2020**, *142*, 21153–21159.
1212. MultiCon: A semi-supervised approach for predicting drug function from chemical structure analysis (P. Sahoo, I. Roy, Z. Wang, F. Mi, L. Yu, P. Balasubramani, L. Khan, J.F. Stoddart), *J. Chem. Inf. Model.* **2020**, *60*, 5995–6006.
1213. François N. Diederich: Pioneer of carbon allotropes and molecular recognition (K.N. Houk, J.F. Stoddart), *Proc. Natl. Acad. Sci. U.S.A.* **2020**, *117*, 32827–32829.
1214. Radical cyclic[3]daisy chains (K. Cai, B. Cui, B. Song, H. Wang, Y. Qiu, L.O. Jones, W. Liu, Y. Shi, S. Vemuri, D. Shen, T. Jiao, L. Zhang, H. Wu, H. Chen, Y. Jiao, C.J. Stern, H. Li, G.C. Schatz, X. Li, J.F. Stoddart), *Chem* **2021**, *7*, 174–189.
1215. Discrete open-shell tris(bipyridinium radical cationic) inclusion complexes in the solid state (O. Anamimoghadam, L.O. Jones, J.A. Cooper, Y. Beldjoudi, M.T. Nguyen, W. Liu, M.D. Krzyaniak, C. Pezzato, C.L. Stern, H.A. Patel, M.R. Wasielewski, G.C. Schatz, J.F. Stoddart), *J. Am. Chem. Soc.* **2021**, *143*, 163–175.
1216. Supramolecular gold stripping from activated carbon using α -cyclodextrin (W. Liu, L.O. Jones, H. Wu, C.L. Stern, R.A. Sponenburg, G.C. Schatz, J.F. Stoddart), *J. Am. Chem. Soc.* **2021**, *143*, 1984–1992.
1217. Single-molecule charge transport through positively charged electrostatic anchors (H. Chen, V. Brasiliense, J. Mo, L. Zhang, Y. Jiao, Z. Chen, L.O. Jones, G. He, Q.-H. Guo, X.-Y. Chen, B. Song, G.C. Schatz, J.F. Stoddart), *J. Am. Chem. Soc.* **2021**, *143*, 2886–2895.
1218. Cyclodextrin metal–organic frameworks and their applications (I. Roy, J.F. Stoddart), *Acc. Chem. Res.* **2021**, *54*, 1440–1453.
1219. Emergent behavior in nanoconfined molecular containers (W. Liu, J.F. Stoddart), *Chem* **2021**, *7*, 919–947.
1220. Photon upconversion in a glowing metal–organic framework (I. Roy, S. Goswani, R.M. Young, I. Schlesinger, M.R. Mian, A.E. Enciso, X. Zhang, J.E. Hornick, O.K. Farha, M.R. Wasielewski, J.T. Hupp, J.F. Stoddart), *J. Am. Chem. Soc.* **2021**, *143*, 5053–5059.

[Number of citations according to ISI Web of Science as of 2 December 2019]

BOOKS

1. Stereochemistry of Carbohydrates (J.F. Stoddart), Wiley, New York, 1971, 249 pages.
2. The Nature of the Mechanical Bond : From Molecules to Machines (C.J. Brun, J.F. Stoddart), Wiley, Oxford, November 2016, 761 pages.

EDITED BOOKS

1. Editing of Barton and Ollis's Comprehensive Organic Chemistry, Vol. 1, Pergamon Press, Oxford, 1979, 1227 pp.
2. Editing of RSC Monographs in Supramolecular Chemistry, Calixarenes (C.D. Gutsche), Cambridge, 1989, 223 pp.
3. Editing of RSC Monographs in Supramolecular Chemistry, Cyclophanes (F. Diederich), Cambridge, 1991, 313 pp.
4. Editing of RSC Monographs in Supramolecular Chemistry, Crown Ethers and Cryptands (G.W. Gokel), Cambridge, 1991, 190 pp.
5. Editing of RSC Monographs in Supramolecular Chemistry, Container Molecules and their Guests (D.J. Cram, J.M. Cram), 1994, 223 pp.
6. Editing of RSC Monographs in Supramolecular Chemistry, Membranes and Molecular Assemblies: The Synkinetic Approach (J.-H. Fuhrhop, J. Köning), 1994, 227 pp.
7. Editing of RSC Monographs in Supramolecular Chemistry, Self-Assembly in Supramolecular Systems (L.F. Lindoy, I.M. Atkinson), 2000, 223 pp.
8. Editing with F. Vögtle and M. Shibasaki: Stimulating Concepts in Chemistry, Wiley-VCH, 2000, 396 pp.

ISSUED US PATENTS

1. Metal Complexes (H.M. Colquhoun, D.F. Lewis, J.F. Stoddart).
Publication date: **1987**-05-19. Publication number: 0051946.
2. Solubilized platinum compounds (J.F. Stoddart, D.R. Alston).
Publication date: **1987**-09-29. Publication number: 4696918.
3. Cyclodextrin catenane compounds capable of forming inclusion complexes (C.P. Moore, T.J. Wear, J.F. Stoddart, D. Armspach).
Publication date: **1995**-08-01. Publication number: 5438133.
4. Preparation of [2]pseudorotaxane derivatives as analytical reagents (N.D. Tinker, J.F. Stoddart, O.A. Matthews).
Publication date: **1996**-12-12. Publication number: WO 9639402.
5. Electrically addressable volatile non-volatile molecular-based switching devices (J.R. Heath, C.P. Collier, G. Mattersteig, F.M. Raymo, J.F. Stoddart, E. Wong).
Publication date: **2001**-03-06. Publication number: 6198655.
6. Noncovalent functionalization of nanotubes (J.F. Stoddart, A. Star).
Publication date: **2005**-02-24. Publication number: 0043503.
7. Room temperature deposition of nanotube transistor networks (G. Gruner, J.F. Stoddart, K.S. Chichak).
Publication date: **2005**-12-22. Publication number: WO 2005120205.
8. Nano-devices having resealable seals for controlled release of molecules (J.I. Zink, J. Lu, F. Tamanoi, A. Nel, S. Angelos, J.F. Stoddart, Q. Chen, T. Xia, K. Patel, W. Dichtel).
Publication date: **2010**-12-09. Publication number: 0310465.
9. Chemical framework compositions and methods of use (O.M. Yaghi, Q. Li, O. Miljanić, W. Zhang, J.F. Stoddart).
Publication date: **2011**-02-18. Publication number: 046463.
10. Nanoporous carbohydrate frameworks and the sequestration and detection of molecules using the same (J.J. Gassensmith, R.A. Smaldone, R.S. Forgan, J.F. Stoddart).
Issue date: 2015-07-21. Patent number: 9,085,460.
11. Crystalline bipyridinium radical complexes and uses thereof (J.F. Stoddart, A.C. Fahrenbach, J.C. Barnes, S. Sampath, A.N. Basuray).
Issue date: 2015-09-01. Patent number: 9,120,799.

12. Tetracationic Cyclophanes and Their Use in the Sequestration of Polyaromatic Hydrocarbons by Way of Complexation (J.C. Barnes, A.N. Basuray, A.C. Fahrenbach, H. Li, S. Sampath, J.F. Stoddart)
Issue date: 2016-03-22. Patent number 9,290,495
13. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. J.F. Stoddart)
Issue date: 2016-07-26. Patent number 9,399,803
14. Supramolecular networks with electron transfer in two dimensions (A. Narayanan, A. Shveyd, J.F. Stoddart, S. Stupp, C.H. Sue, A. Tayi)
Issue date: 2016-09-13. Patent number 9,443,636
15. Modular supramolecular approach for co-crystallization of donors and acceptors into ordered networks (A. Narayanan, A. Shveyd, J.F. Stoddart, S. Stupp, C. H. Sue, A. Tayi)
Issue date: 2016-09-20. Patent number 9,449,731
16. Redox active triangular organic materials (M. Frasconi, Z. Liu, S. Schneebeli, J.F. Stoddart)
Issue date: 2017-01-17. Patent number 9,546,169
17. A homochiral metal-organic framework with enantiopure pillar[5]arene active domains (J.F. Stoddart, N.L. Strutt)
Issue date: 2017-11-14. Patent number 9,815,764
18. ExCage: Synthesis of viologen-like pyridinium-based cages for the selective capture of polycyclic aromatic hydrocarbons (J. Barnes, E. Dale, M. Juricek, J.F. Stoddart, N. Vermeulen)
Issue date: 2017-11-28. Patent number 9,828,259
19. Methods of making diazaperopyrenium dications and uses thereof (A.N. Basuray, K. Hartlieb, H.P. Jacquot, S. Sampath, J.F. Stoddart)
Issue date: 2017-11-28. Patent number 9,828,371
20. Supramolecular networks with electron transfer in two dimensions (A. Narayanan, A. Shveyd, J.F. Stoddart, S. Stupp, C.H. Sue, A. Tayi)
Issue date: 2018-06-12. Patent number 9,997,271
21. Modular supramolecular approach for co-crystallization of donors and acceptors into ordered networks (A. Narayanan, A. Shveyd, J.F. Stoddart, S. Stupp, C.H. Sue, A. Tayi)
Issue date: 2018-06-12. Patent number 9,997,272
22. Nanoporous carbohydrate frameworks and the sequestration and detection of molecules using the same (R.S. Forgan, J.J. Gassensmith, R.A. Smaldone, J.F. Stoddart)
Issue date: 2018-11-13. Patent number 10,125,016
23. Electrochemical detection of carbon dioxide using a carbohydrate based coordination polymer (O. Farha, J. Gassensmith, N. Jeong, J.F. Stoddart)
Issue date: 2019-03-12. Patent number 10,228,343
24. Carbohydrate-mediated purification of petrochemicals (K. Hartlieb, J. Holcroft, J. Stoddart)
Issue date: 2019-03-26. Patent number 10,239,044
25. Viologen-based rotaxanes (M. Frasconi, J.F. Stoddart, J. Sun, Y. Wang)
Issue date: 2019-04-16. Patent number 10,259,913

PROVISIONAL PATENT APPLICATIONS

1. **Serial No.:** 61/314,889
Inventors: J. F. Stoddart, A. M. Z. Slawin, R. S. Forgan, R. A. Smaldone
Filing Date: 2010-03-17
Title: Nanoporous carbohydrate frameworks
2. **Serial No.:** 61/351,704
Inventors: J. F. Stoddart, J. J. Gassensmith, R. S. Forgan, R. A. Smaldone
Filing Date: 2010-06-04

- Title:** Sequestration and detection of carbon dioxide by a metal organic framework
3. **Serial No.:** 61/314,897
Inventors: J. F. Stoddart, C.-H. Sue, S. Basu
Filing Date: 201-03-17
Title: A novel purification of CBPQT⁴⁺ macrocycle
 4. **Serial No.:** 61/488,605
Inventors: S. I. Stupp, J. F. Stoddart, A. K. Shveyd, A. S. Tayi, C.-H. Sue
Filing Date: 2011-05-20
Title: Lock-arm supramolecular ordering
 5. **Serial No.:** 61/498,262
Inventors: S. I. Stupp, J. F. Stoddart, A. K. Shveyd, A. S. Tayi, C.-H. Sue
Filing Date: 2011-06-17
Title: Visible pleochroism in a supramolecular material
 6. **Serial No.:** 61/498,277
Inventors: S. I. Stupp, J. F. Stoddart, A. K. Shveyd, A. S. Tayi, C.-H. Sue
Filing Date: 2011-06-17
Title: Supramolecular design for ferroelectric charge crystals
 7. **Serial No.:** 61/537,852
Inventors: J. F. Stoddart, A. C. Fahrenbach, J. C. Barnes, S. Sampath, A. N. Basuray, H. Li
Filing Date: 2011-09-22
Title: Crystalline bipyridinium radical complexes and uses thereof
 8. **Serial No.:** 61/550,748
Inventors: J. F. Stoddart, S. Grunder, A. C. Whalley, C. Valente
Filing Date: 2011-10-24
Title: Molecular gauge blocks for building on the nanoscale
 9. **Serial No.:** 61/740,958
Inventors: J. F. Stoddart, J. C. Barnes, M. Juríček
Filing Date: 2012-12-21
Title: Tetracationic cyclophanes and their use in the sequestration of polyaromatic hydrocarbons by way of complexation
 10. **Serial No.:** 61/814,066
Inventors: J. F. Stoddart, Z. Liu, M. Frasconi, D. Cao
Filing Date: 2013-04-19
Title: Compounds and methods to isolate gold
 11. **Serial No.:** 61/883,352
Inventors: J. F. Stoddart, S. Sampath, A. N. Basuray, K. J. Hartlieb, H.-P. Jaquot de Rouville
Filing Date: 2013-09-27
Title: Methods of making diazaperopyrenium dications and uses thereof
 12. **Serial No.:** 62/008,671
Inventors: K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: 2014-06-06
Title: Carbohydrate-mediated purification of petrochemicals
 13. **Serial No.:** 62/045,517
Inventors: O. K. Farha, J. J. Gassensmith, J. F. Stoddart, N. C. Jeong

- Filing Date:** 2014-09-03
Title: Electrochemical detection of carbon dioxide using a carbohydrate based coordination polymer
14. **Serial No.:** 62/045,531
Inventors: J. F. Stoddart, M. Frascioni, S. T. Schneebeli, Z. Liu
Filing Date: 2014-09-03
Title: Redox active triangular organic materials
15. **Serial No.:** 62/045,511
Inventors: J. F. Stoddart, J. C. Barnes, M. Juríček, E. J. Dale, N. A. Vermeulen
Filing Date: 2014-09-03
Title: ExCage: Synthesis of viologen-like pyridinium-based cages for the selective capture of polycyclic aromatic hydrocarbons
16. **Serial No.:** 62/045,514
Inventors: J. F. Stoddart, N. L. Strutt
Disclosure Date: 2014-09-03
Title: A homochiral metal-organic framework with enantiopure pillar[5] arene active domains
17. **Serial No.:** 62/057,059
Inventors: J. F. Stoddart, X. Hou, C. Ke
Filing Date: 2014-09-29
Title: Supramolecular encrypted fluorescent security ink compositions
18. **Serial No.:** 62/057,102
Inventors: J. F. Stoddart, X. Hou, C. Ke, R. B. Pettman
Filing Date: 2014-09-29
Title: Supramolecular encrypted fluorescent security ink compositions
19. **Serial No.:** 62/135,339
Inventors: J. F. Stoddart, D. Chen, A.-J. Avestro, J. Sun, Z. B. Erno
Filing Date: 2015-03-19
Title: Rigid naphthalenediimide triangle structures
20. **Serial No.:** 62/255,490
Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: 2015-11-15
Title: Uptake of pharmaceuticals within cyclodextrin-based porous materials
21. **Serial No.:** 62/278,200
Inventors: Z. Liu, J.F. Stoddart
Filing Date: 2016-01-13
Title: Supramolecular assembly of rigid macrocycles through cooperative hydrogen bond interactions
22. **Serial No.:** 62/288,701
Inventors: M. Frascioni, J.F. Stoddart, J. Sun, Y. Wang
Filing Date: 2016-01-29
Title: Viologen-based rotaxanes
23. **Serial No.:** 62/308,998
Inventors: Z. Liu, S. Nalluri, J.F. Stoddart
Filing Date: 2016-03-16
Title: Rigid chiral redox-active isosceles triangles
24. **Serial No.:** 62/321,290

- Inventors:** V. Dravid, D. Ferris, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2016-04-12
Title: Flexible piezoelectric and antiferroelectric haloimidazole crystals
25. **Serial No.:** 62/382,994
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2016-09-02
Title: Flexible piezoelectric and antiferroelectric haloimidazole crystals
26. **Serial No.:** 62/416,334
Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: 2016-11-02
Title: Loading and bioavailability of ibuprofen/CD-MOF formulations
27. **Serial No.:** 62/531,115
Inventors: Z. Liu, J.F. Stoddart, J. Sun
Filing Date: 2017-07-11
Title: Mechanically interlocked air-stable radicals
28. **Serial No.:** 62/535,579
Inventors: Z. Liu, S. Nalluri, H. Patel, J.F. Stoddart
Filing Date: 2017-07-21
Title: Lithiated cyclodextrin metal organic frameworks and methods of making and using the same
29. **Serial No.:** 62/580,860
Inventors: H. Patel, J.F. Stoddart
Filing Date: 2017-11-02
Title: Troger's base-linked poly(crown ether)s
30. **Serial No.:** 62/619,561
Inventors: S. Nalluri, J.F. Stoddart
Filing Date: 2018-01-19
Title: Rigid chiral photoluminescent isocetes triangular materials
31. **Serial No.:** 62/653,301
Inventors: M. Nguyen, J.F. Stoddart
Filing Date: 2018-04-05
Title: Densely charged catenanes
32. **Serial No.:** 62/658,048
Inventors: I. Roy, J.F. Stoddart
Filing Date: 2018-04-16
Title: Cyclophanes for live-cell imaging
33. **Serial No.:** 62/680,352
Inventors: Z. Liu, J.F. Stoddart
Filing Date: 2018-06-04
Title: Mixed-valence crystal superstructures
34. **Serial No.:** 62/691,923
Inventors: M. Nguyen, J.F. Stoddart
Filing Date: 2018-06-29
Title: Densely Charged Catenanes
35. **Serial No.:** 62/700,614

Inventors: J. Choi, D.J. Kim, J.F. Stoddart, D.-J. Yoo

Filing Date: 2018-07-19

Title: Rechargeable Aluminum Organic Batteries

36. **Serial No.:** 62/799,229

Inventors: I. Roy, J.F. Stoddart

Filing Date: 2019-01-31

Title: Supramolecular Photoprotection of a Photosensitizer for Safe Lysosomal Delivery and Anticancer Therapy

PENDING US PATENT APPLICATIONS

1. **Serial No.:** 13/658,973

Inventors: J. F. Stoddart, S. Grunder, A. C. Whalley, C. Valente

Filing Date: 2012-10-24

Title: Molecular gauge blocks for building on the nanoscale

2. **Serial No.:** 14/733,875

Inventors: J. F. Stoddart, K. J. Hartlieb, J. M. Holcroft

Filing Date: 2015-06-08

Title: Carbohydrate-mediated purification of petrochemicals

3. **Serial No.:** 14/867,826

Inventors: X. Hou, C. Ke, J.F. Stoddart

Filing Date: 2015-09-28

Title: Supramolecular fluorescent dyes

4. **Serial No.:** 14/867,953

Inventors: X. Hou, C. Ke, J.F. Stoddart

Filing Date: 2015-09-28

Title: Supramolecular encrypted fluorescent security ink compositions

5. **Serial No.:** 15/074,161

Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun

Filing Date: 2016-03-18

Title: Rigid naphthalenediimide triangle structures

6. **Serial No.:** 15/218,280

Inventors: D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart

Filing Date: 2016-07-25

Title: Compounds and methods to isolate gold

7. **Serial No.:** 15/350,975

Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart

Filing Date: 2016-11-14

Title: Uptake of pharmaceuticals within cyclodextrin-based porous materials

8. **Serial No.:** 16/032,212

Inventors: Z. Liu, J.F. Stoddart, J. Sun

Filing Date: 2018-07-11

Title: Mechanically interlocked air-stable radicals

9. **Serial No.:** 16/069,940

Inventors: Z. Liu, J.F. Stoddart

Filing Date: 2018-07-13

Title: Supramolecular assembly of rigid macrocycles through cooperative hydrogen bond interactions

10. **Serial No.:** 16/085,436
Inventors: Z. Liu, S. Nalluri, J.F. Stoddart
Filing Date: 2018-09-14
Title: Rigid chiral redox-active isocenes triangular materials
11. **Serial No.:** 16/093,256
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2018-10-12
Title: Flexible piezoelectric and antiferroelectric haloimidazole crystals
12. **Serial No.:** 16/269,311
Inventors: X. Hou, C. Ke, R. Pettman, J.F. Stoddart
Filing Date: 2019-02-06
Title: Supramolecular encrypted fluorescent security ink compositions

PCT APPLICATIONS

1. **Serial No.:** PCT/US2011/028866
Inventors: J. J. Gassensmith, R. A. Smaldone, R. S. Forgan, J. F. Stoddart
Filing Date: 2011-03-17
Title: Nanoporous carbohydrate frameworks and the sequestration and detection of molecules using the same
2. **Serial No.:** PCT/US2012/038896
Inventors: S. I. Stupp, J. F. Stoddart, A. K. Shveyd, A. S. Tayi, C.-H. Sue
Filing Date: 2012-05-21
Title: Modular supramolecular approach for co-crystallization of donors and acceptors into ordered networks
3. **Serial No.:** PCT/US2012/042978
Inventors: S. I. Stupp, J. F. Stoddart, A. K. Shveyd, A. S. Tayi, C.-H. Sue

Filing Date: 2012-06-18
Title: Visible pleochroism in a supramolecular material
4. **Serial No.:** PCT/US2013/077144
Inventors: J. F. Stoddart, J. C. Barnes, M. Juriček
Filing Date: 2013-12-20
Title: Tetracationic cyclophanes and their use in the sequestration of polyaromatic hydrocarbons by way of complexation
5. **Serial No.:** PCT/US2014/034697
Inventors: J. F. Stoddart, Z. Liu, M. Frasconi, D. Cao
Filing Date: 2014-04-18
Title: Compounds and methods to isolate gold
6. **Serial No.:** PCT/US2015/034754
Inventors: J. F. Stoddart, K. J. Hartlieb, J. M. Holcroft
Filing Date: 2015-06-08
Title: Carbohydrate-mediated purification of petrochemicals
7. **Serial No.:** PCT/US2015/052670
Inventors: X. Hou, C. Ke, J.F. Stoddart
Filing Date: 2015-09-28
Title: Supramolecular fluorescent dyes

8. **Serial No.:** PCT/US2015/052694
Inventors: X. Hou, C. Ke, R. Pettman, J.F. Stoddart
Filing Date: 2015-09-28
Title: Supramolecular encrypted fluorescent security ink compositions
9. **Serial No.:** PCT/US2016/023111
Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun
Filing Date: 2016-03-16
Title: Rigid naphthalenediimide triangle structures
10. **Serial No.:** PCT/US2016/061963
Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: 2016-11-15
Title: Uptake of pharmaceuticals within cyclodextrin-based porous materials
11. **Serial No.:** PCT/US2017/013301
Inventors: Z. Liu, J.F. Stoddart
Filing Date: 2017-01-13
Title: Supramolecular assembly of rigid macrocycles through cooperative hydrogen bond interactions
12. **Serial No.:** PCT/US2017/015299
Inventors: M. Frasconi, J.F. Stoddart, J. Sun, Y. Wang
Filing Date: 2017-01-27
Title: Viologen-based rotaxanes
13. **Serial No.:** PCT/US2017/022668
Inventors: Z. Liu, S. Nalluri, J.F. Stoddart
Filing Date: 2017-03-16
Title: Rigid chiral redox-active isosceles triangular materials
14. **Serial No.:** PCT/US2017/027170
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2017-04-12
Title: Flexible piezoelectric and antiferroelectric haloimidazole crystals
15. **Serial No.:** PCT/US2018/041551
Inventors: Z. Liu, J.F. Stoddart, J. Sun
Filing Date: 2018-07-11
Title: Mechanically interlocked air-stable radicals
16. **Serial No.:** PCT/US2018/043217
Inventors: Z. Liu, S. Nalluri, H. Patel, J.F. Stoddart
Filing Date: 2018-07-23
Title: Lithiated cyclodextrin metal organic frameworks and methods of making and using the same
17. **Serial No.:** PCT/US2018/059046
Inventors: H. Patel, J.F. Stoddart
Filing Date: 2018-11-02
Title: Troger's base-linked poly(crown ether)s
18. **Serial No.:** PCT/US2019/014415
Inventors: S. Nalluri, J.F. Stoddart
Filing Date: 2019-01-21
Title: Rigid chiral photoluminescent isosceles triangular materials
19. **Serial No.:** PCT/US2019/026095

Inventors: M. Nguyen, J.F. Stoddart

Filing Date: 2019-04-05

Title: Densely charged catenanes

20. **Serial No.:** PCT/US2019/027713

Inventors: I. Roy, J.F. Stoddart

Filing Date: 2019-04-16

Title: Cyclophanes for live-cell imaging

ISSUED FOREIGN PATENTS

1. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2018-10-11. Country: Australia Patent number: 2014253728.
2. Carbohydrate-Mediated Purification of Petrochemicals (K. Hartlieb, J. Holcroft, J.F. Stoddart). Issue date: 2018-11-07. Country: EPO Patent number: EP 3077104.
3. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Armenia Patent number: EUR 024977.
4. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Azerbaijan Patent number: EUR 024977.
5. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Belarus Patent number: EUR 024977.
6. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Kazakhstan Patent number: EUR 024977.
7. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Kyrgyzstan Patent number: EUR 024977.
8. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Russia Patent number: EUR 024977.
9. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Tajikistan Patent number: EUR 024977.
10. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Turkmenistan Patent number: EUR 024977.
11. Compounds and Methods to Isolate Gold (D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart). Issue date: 2019-04-03. Country: Eurasia Patent number: EUR 024977.
12. Tetracationic Cyclophanes and Their Use in the Sequestration of Polyaromatic Hydrocarbons by Way of Complexation (J. Barnes, M. Juricek, J.F. Stoddart). Issue date: 2016-08-28. Country: Saudi Arabia Patent number: SA 5024.

PENDING FOREIGN PATENT APPLICATIONS

1. **Serial No.:** EP 13866011.3
Country: EPO
Inventors: J. F. Stoddart, J. C. Barnes, M. Juriček
Filing Date: 2015-06-24
Title: Tetracationic cyclophanes and their use in the sequestration of polyaromatic hydrocarbons by way of complexation
2. **Serial No.:** CA 2,909,203
Country: Canada
Inventors: D. Cao, M. Frasconi, Z. Liu, J.F. Stoddart
Filing Date: 2015-10-08

- Title:** Compounds and Methods to Isolate Gold
3. **Serial No.:** PH 1-2015-502366
Country: Philippines
Inventors: D. Cao, M. Frascioni, Z. Liu, J.F. Stoddart
Filing Date: 2015-10-02
Title: Compounds and Methods to Isolate Gold
 4. **Serial No.:** PERU 002159-2015/DIN
Country: Peru
Inventors: D. Cao, M. Frascioni, Z. Liu, J.F. Stoddart
Filing Date: 2015-10-15
Title: Compounds and Methods to Isolate Gold
 5. **Serial No.:** CN 201480023847.X
Country: China
Inventors: D. Cao, M. Frascioni, Z. Liu, J.F. Stoddart
Filing Date: 2015-10-27
Title: Compounds and Methods to Isolate Gold
 6. **Serial No.:** EP 14785085.3
Country: EPO
Inventors: D. Cao, M. Frascioni, Z. Liu, J.F. Stoddart
Filing Date: 2015-11-04
Title: Compounds and Methods to Isolate Gold
 7. **Serial No.:** UZ IAP20150425
Country: Uzbekistan
Inventors: D. Cao, M. Frascioni, Z. Liu, J.F. Stoddart
Filing Date: 2015-11-04
Title: Compounds and Methods to Isolate Gold
 8. **Serial No.:** CN 201780025678.7
Country: China
Inventors: Z. Liu, S. Nalluri, J.F. Stoddart
Filing Date: 2017-03-16
Title: Rigid Chiral Redox-Active Isosceles Triangular Materials
 9. **Serial No.:** SA 517382329
Country: Saudi Arabia
Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun
Filing Date: 2017-09-17
Title: Rigid Naphthalenediimide Triangle Structures
 10. **Serial No.:** ARAB EMIRATES P60011
Country: Arab Emirates
Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun
Filing Date: 2017-09-19
Title: Rigid Naphthalenediimide Triangle Structures
 11. **Serial No.:** EP16765820.2
Country: EPO
Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun
Filing Date: 2017-10-27
Title: Rigid Naphthalenediimide Triangle Structures

12. **Serial No.:** CN 201680028163.8
Country: China
Inventors: A.-J. Avestro, D. Chen, Z. Erno, J.F. Stoddart, J. Sun
Filing Date: 2017-11-15
Title: Rigid Naphthalenediimide Triangle Structures
13. **Serial No.:** SA 518392119
Country: Saudi Arabia
Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: 2018-07-31
Title: Uptake of Pharmaceuticals within Cyclodextrin-based Porous Materials
14. **Serial No.:** CN 201780015076.3
Country: China
Inventors: M. Frasconi, J.F. Stoddart, J. Sun, Y. Wang
Filing Date: 2018-09-04
Title: Viologen-Based Rotaxanes
15. **Serial No.:** SA 518400208
Country: Saudi Arabia
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2018-10-10
Title: Flexible Piezoelectric and Antiferroelectric Haloimidazole Crystals
16. **Serial No.:** SA 518400208
Country: Saudi Arabia
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2018-10-10
Title: Flexible Piezoelectric and Antiferroelectric Haloimidazole Crystals
17. **Serial No.:** EP 17783042.9
Country: EPO
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2018-11-12
Title: Flexible Piezoelectric and Antiferroelectric Haloimidazole Crystals
18. **Serial No.:** CN 201780031574.7
Country: China
Inventors: V. Dravid, D. Ferris, D. Hong, K.A. Hujsak, M. Owczarek, A. Prokofjevs, J.F. Stoddart
Filing Date: 2018-11-22
Title: Flexible Piezoelectric and Antiferroelectric Haloimidazole Crystals
19. **Serial No.:** TO BE PROVIDED
Country: China
Inventors: K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: TO BE PROVIDED
Title: Carbohydrate-Mediated Purification of Petrochemicals
20. **Serial No.:** CN201680072938.1
Country: China
Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart
Filing Date: TO BE PROVIDED
Title: Uptake of Pharmaceuticals within Cyclodextrin-based Porous Materials
21. **Serial No.:** EP 16865255.0

Country: EPO

Inventors: D. Ferris, K. Hartlieb, J. Holcroft, J.F. Stoddart

Filing Date: TO BE PROVIDED

Title: Uptake of Pharmaceuticals within Cyclodextrin-based Porous Materials

22. **Serial No.:** TO BE ASSIGNED

Country: Saudi Arabia

Inventors: Z. Liu, S. Nalluri, J.F. Stoddart

Filing Date: TO BE PROVIDED

Title: Rigid Chiral Redox-Active Isosceles Triangular Materials