
Author Index Volumes 251–255

Author Index Vols. 26–50 see Vol. 50
Author Index Vols. 51–100 see Vol. 100
Author Index Vols. 101–150 see Vol. 150
Author Index Vols. 151–200 see Vol. 200
Author Index Vols. 201–250 see Vol. 250

The volume numbers are printed in italics

- Alberto R (2005) New Organometallic Technetium Complexes for Radiopharmaceutical Imaging. 252: 1–44
- Anderson CJ, see Li WP (2005) 252: 179–192
- Anslyn EV, see Houk RJT (2005) 255: 199–229
- Armitage BA (2005) Cyanine Dye–DNA Interactions: Intercalation, Groove Binding and Aggregation. 253: 55–76
- Arya DP (2005) Aminoglycoside–Nucleic Acid Interactions: The Case for Neomycin. 253: 149–178
- Bailly C, see Dias N (2005) 253: 89–108
- Barbieri CM, see Pilch DS (2005) 253: 179–204
- Bayly SR, see Beer PD (2005) 255: 125–162
- Beer PD, Bayly SR (2005) Anion Sensing by Metal-Based Receptors. 255: 125–162
- Boschi A, Duatti A, Uccelli L (2005) Development of Technetium-99m and Rhenium-188 Radiopharmaceuticals Containing a Terminal Metal–Nitrido Multiple Bond for Diagnosis and Therapy. 252: 85–115
- Braga D, D’Addario D, Giaffreda SL, Maini L, Polito M, Grepioni F (2005) Intra-Solid and Inter-Solid Reactions of Molecular Crystals: a Green Route to Crystal Engineering. 254: 71–94
- Chaires JB (2005) Structural Selectivity of Drug–Nucleic Acid Interactions Probed by Competition Dialysis. 253: 33–53
- Collyer SD, see Davis F (2005) 255: 97–124
- Correia JDG, see Santos I (2005) 252: 45–84
- D’Addario D, see Braga D (2005) 254: 71–94
- Davis F, Collyer SD, Higson SPJ (2005) The Construction and Operation of Anion Sensors: Current Status and Future Perspectives. 255: 97–124
- Dervan PB, Poulin-Kerstien AT, Fechter EJ, Edelson BS (2005) Regulation of Gene Expression by Synthetic DNA–Binding Ligands. 253: 1–31
- Dias N, Vezin H, Lansiaux A, Bailly C (2005) Topoisomerase Inhibitors of Marine Origin and Their Potential Use as Anticancer Agents. 253: 89–108
- Duatti A, see Boschi A (2005) 252: 85–115
- Edelson BS, see Dervan PB (2005) 253: 1–31
- Edwards DS, see Liu S (2005) 252: 193–216
- Escudé C, Sun J-S (2005) DNA Major Groove Binders: Triple Helix-Forming Oligonucleotides, Triple Helix-Specific DNA Ligands and Cleaving Agents. 253: 109–148
- Fechter EJ, see Dervan PB (2005) 253: 1–31
- Fujiwara S-i, Kambe N (2005) Thio-, Seleno-, and Telluro-Carboxylic Acid Esters. 251: 87–140

- Giaffreda SL, see Braga D (2005) 254: 71–94
- Grepioni F, see Braga D (2005) 254: 71–94
- Higson SPJ, see Davis F (2005) 255: 97–124
- Houk RJT, Tobey SL, Anslyn EV (2005) Abiotic Guanidinium Receptors for Anion Molecular Recognition and Sensing. 255: 199–229
- Ishii A, Nakayama J (2005) Carbodithioic Acid Esters. 251: 181–225
- Ishii A, Nakayama J (2005) Carboselenothioic and Carbodiselenoic Acid Derivatives and Related Compounds. 251: 227–246
- Jones W, see Trask AV (2005) 254: 41–70
- Kambe N, see Fujiwara S-i (2005) 251: 87–140
- Kano N, Kawashima T (2005) Dithiocarboxylic Acid Salts of Group 1–17 Elements (Except for Carbon). 251: 141–180
- Kato S, Niyomura O (2005) Group 1–17 Element (Except Carbon) Derivatives of Thio-, Seleno- and Telluro-Carboxylic Acids. 251: 19–85
- Kato S, see Niyomura O (2005) 251: 1–12
- Kaul M, see Pilch DS (2005) 253: 179–204
- Kaupp G (2005) Organic Solid-State Reactions with 100% Yield. 254: 95–183
- Kawashima T, see Kano N (2005) 251: 141–180
- Komatsu K (2005) The Mechanochemical Solid-State Reaction of Fullerenes. 254: 185–206
- Lansiaux A, see Dias N (2005) 253: 89–108
- Lhoták P (2005) Anion Receptors Based on Calixarenes. 255: 65–95
- Li WP, Meyer LA, Anderson CJ (2005) Radiopharmaceuticals for Positron Emission Tomography Imaging of Somatostatin Receptor Positive Tumors. 252: 179–192
- Liu S (2005) 6-Hydrazinonicotinamide Derivatives as Bifunctional Coupling Agents for ^{99m}Tc -Labeling of Small Biomolecules. 252: 117–153
- Liu S, Robinson SP, Edwards DS (2005) Radiolabeled Integrin $\alpha_v\beta_3$ Antagonists as Radiopharmaceuticals for Tumor Radiotherapy. 252: 193–216
- Maini L, see Braga D (2005) 254: 71–94
- Matsumoto A (2005) Reactions of 1,3-Diene Compounds in the Crystalline State. 254: 263–305
- Meyer LA, see Li WP (2005) 252: 179–192
- Murai T (2005) Thio-, Seleno-, Telluro-Amides. 251: 247–272
- Nakayama J, see Ishii A (2005) 251: 181–225
- Nakayama J, see Ishii A (2005) 251: 227–246
- Niyomura O, Kato S (2005) Chalcogenocarboxylic Acids. 251: 1–12
- Niyomura O, see Kato S (2005) 251: 19–85
- Paulo A, see Santos I (2005) 252: 45–84
- Pilch DS, Kaul M, Barbieri CM (2005) Ribosomal RNA Recognition by Aminoglycoside Antibiotics. 253: 179–204
- Piwnicza-Worms D, see Sharma V (2005) 252: 155–178
- Polito M, see Braga D (2005) 254: 71–94
- Poulin-Kerstien AT, see Dervan PB (2005) 253: 1–31
- Robinson SP, see Liu S (2005) 252: 193–216
- Sakamoto M (2005) Photochemical Aspects of Thiocarbonyl Compounds in the Solid-State. 254: 207–232
- Santos I, Paulo A, Correia JDG (2005) Rhenium and Technetium Complexes Anchored by Phosphines and Scorpionates for Radiopharmaceutical Applications. 252: 45–84
- Scheffer JR, Xia W (2005) Asymmetric Induction in Organic Photochemistry via the Solid-State Ionic Chiral Auxiliary Approach. 254: 233–262
- Schmidtchen FP (2005) Artificial Host Molecules for the Sensing of Anions. 255: 1–29

- Sharma V, Piwnica-Worms D (2005) Monitoring Multidrug Resistance P-Glycoprotein Drug Transport Activity with Single-Photon-Emission Computed Tomography and Positron Emission Tomography Radiopharmaceuticals. 252: 155–178
- Stibor I, Zlatušková P (2005) Chiral Recognition of Anions. 255: 31:63
- Suksai C, Tuntulani T (2005) Chromogenetic Anion Sensors. 255: 163–198
- Sun J-S, see Escudé C (2005) 253: 109–148
- Tobey SL, see Houk RJT (2005) 255: 199–229
- Toda F (2005) Thermal and Photochemical Reactions in the Solid-State. 254: 1–40
- Trask AV, Jones W (2005) Crystal Engineering of Organic Cocrystals by the Solid-State Grinding Approach. 254: 41–70
- Tuntulani T, see Suksai C (2005) 255: 163–198
- Uccelli L, see Boschi A (2005) 252: 85–115
- Vezin H, see Dias N (2005) 253: 89–108
- Williams LD (2005) Between Objectivity and Whim: Nucleic Acid Structural Biology. 253: 77–88
- Xia W, see Scheffer JR (2005) 254: 233–262
- Zlatušková P, see Stibor I (2005) 255: 31–63

Subject Index

- Acetate 131
Additivity principle 23
ADME 12
ADP 146
AFAT 157
Affinity 18
Ag/AgCl 100
AgBr membranes 105
Air-water interface 210, 214, 222
Allosteric effect 74, 80
Amino acids 58
– –, aspartate 219, 222
– –, *N*-acylated 219
– –, phenylalanine 218–220
 γ -Amino butyric acid (GABA)
218
Amphiphile 210, 222
Anion existence, pH window 98
Anion recognition 31, 125
Anion sensors,
chromogenic/colorimetric 163
– –, surface-bound 126
Anions, bidentate 128
Anthracene 142
Azide 143

Bathochromic shift 166–170,
187
Benzoate 131
Beverage industry 107
Bilirubin 48
Binaphthalene 46
Binding mode 14, 17, 18
Biosensors 112, 117
2,2'-Bipyridine 72
Boltzmann distribution 13
Boronic acid 136
Bromide 102, 127
Building block approach 22

Cadmium(II) 146
Calix[4]arene 66, 128
Calix[4]arene-porphyrin conjugates 83
Calix[4]diquinone 81, 136
Calix[5]arene 51, 71
Calix[6]arene 82
Calixarenes 65, 112
– –, anion receptors 65
Calixpyrrole 117, 130
Calixsugars 89
Calorimetry 25
Capsules, molecular 87
Carbon nanotubes 114
Carbonates 103, 226
– –, hydrolysis 208
Carboxyfluorescein 145
Carboxylates 128
– –, chiral 57
Cellulose membrane 112
CH-anion interactions 72, 79
Charge dipole interaction 26
Charge pairing 200
Charge transfer, complex 189, 192
– –, interactions 167, 172
CHEMFETs 97, 104
Chromophore 115
Chromoreactands 163, 192
Circular dichroism (CD) 211, 221–222
Citrate 146, 215
Cobaltocenium 67
Conducting polymers 108
Cooperativity 222, 224
– –, positive 7
Copper(II) 143
Coulomb explosion 21
Coumarine 145
Crown ethers 92, 128
Cyanide 141
Cyclic voltammetry 68, 112

- Cyclic voltametry 203
Cyclodextrins 33
Cyclophane 36
Cyclotrimeratrylene 130
- Dendrimers 126, 153
Devices, anion-sensing 153
Dihydrogenphosphate 126
Disulphide 155
Dithiocarbamate 146
DNA 211
Drinking water 99, 119
Dy(III) 149
Dye 115
-, azo- 177
-, organic- 165
-, squaraine- 193
- Electrode 97
-, coated-wire 101
-, ion-selective (ISEs) 100
-, rotating-disk 103
Electrode surfaces 155
Electron paramagnetic resonance (EPR) 224
Electron transfer 137
Electrophoresis, nonaqueous affinity capillary 214
-, PAGE 207
Enantioselectivity 218–220, 224
Energetic states diversity 17
Enthalpy-entropy compensation 12, 15
Entropy 13
-, association 5, 16
-, vibration 16
Enzyme biomimetics 65
Enzymes 113
Estuarine waters 119
EU(III) 147
- Ferricyanide 111
Ferrocene 67, 70
Ferrocene amide 92
Fertilisers 119
FETs 104
Fish 119
Flavins 223
Flexibility, structural 17, 18
Fluorimetry 203, 211, 216, 222, 226
-, anisotropy 212
- Fructose-6-phosphate 136
FT-IR 210
- Galacturonate 215
Gallate 225
Glucuronate 215–216
Glycocalixarenes 46, 88
Gold surface 155
Guanidinium 145
Guests, chromogenic 188
Gutmann acceptor number 71
- Halides 134
 α -Helices 221
Hexafluorophosphate 151
Higher-order complexes 7
HIV-1 212
Host, amide/ammonium cryptand 28
-, amine-borane 25,
-, chromogenic 177, 181, 84
-, electroneutral 24, 25
-, encapsulation 22,
-, mercuracarborand 27
-, quaternary ammonium 23
-, zwitterion 24
Hydrogel 101
Hydrogen arsenate 145
Hydrogen bonding 26
- -, interactions 176
- -, NH-based donors 163, 165
Hydrogen bonds 200–206, 213–217, 223
Hydrogen carbonate 147
Hypsochromic shift 185
- Imidazolium 130
Indicator-displacement 204, 219, 226
Induced fit 11
Iodide 102
Ion pairing 7, 21
Ion-pair carriers 91
Ion-pair complexation 89
Ion-pair receptors 132
Ion-pair sensing 137
Ion-pairing interactions 133
Iridium(III) 138
ISEs 97, 100
ISFETs 97, 104
Isothermal titration calorimetry (ITC) 203, 214–217, 222, 225

- Job plot analysis 84
- Lactones, addition to 224
- Langmuir isotherm 222
- Lanthanide(III) 147
- Lasalocid 43
- LED 116
- Lewis acids 115, 126, 177
- Ligands, metal-containing 54
- Liquid membrane 77
- Lock-and-key fit 3, 18
- , model 4, 16
- Lucigenin 116
- Luminescence 136
- Mallate 225
- Membrane, ion-selective 100
- Membrane transport 209, 218–221
- MEMFETs 97, 104
- Metal-based receptors 125
- Metallocenes 126
- Metallo-dendrimers 153
- Metalloporphyrins 107
- Methyl Red 117
- Microelectrodes 113
- Mixed-metal complexes 149
- MLTC (metal to ligand charge transfer)
205
- Molecular environment 21
- Molecular recognition 2
- Molecular switch 185
- Molecular tweezer 103
- Multivalent binding 89
- Naked-eye detector 173
- Naked-eye sensor 167, 174,
188
- Nanoparticles 126
- Naproxen 44
- Nitrate 127
- Nitrite 109, 114
- Nitronates, addition 224
- NMR, ¹H 204–205, 224
- , -, titration 202–203, 213–218
- , ³¹P 206
- Nuclear Overhauser Effect
(NOE/NOESY) 209, 212, 222
- Nucleotide, AMP 208–211
- , ATP 210–211
- , cAMP 208–209
- , GTP 211
- , UMP 210
- Optical sensors 114
- Optrode 97
- Os(II) 138
- Oxaazamacrocycles 37
- Partition function 13
- Pattern recognition 20
- Pd(II) 151
- Peptidocalixarenes 88
- Perchlorate 141
- Perrhenate 145
- pH titration 202
- Phosphate 131, 136
- , inorganic 201–203, 211
- , organic 203, 205
- , pyrophosphate 202–203
- , transesterification 206
- Phosphodiester, hydrolytic cleavage 201,
205
- , phosphorylation 206
- Photodiode 114
- Photoinduced electron transfer (PET)
218
- Pinched cone 69
- Plasma deposition 110
- Polyacrylate 111
- Polyaniline 108
- Polyelectrolyte 113
- Polymer films 156
- Polypyrrole 106, 108
- Polyurethane 106
- Poly(vinyl alcohol) 101
- Population distribution 13
- Porphyrins 52, 102, 127
- Pr(III) 149
- Preorganization 22
- Pt microdiscs 114
- PVC 100, 109
- Pyrocatechol violet 145
- Pyrophosphate 146
- Quinoxaline 138
- Receptors, biomimetic 88
- , ditopic 90
- , ferrocene-based 129
- , guanidinium-based 39

- Receptors
-, ion-pair 132
-, organometallic 125
-, synthetic 31
Recognition, anion 31, 125
-, enantioselective 31
Redox response 126
REFET 110, 111
Reporter group 126
Rhenium(I), bipyridine complex 72
Rhenium(I) tricarbonyl chloride 140
RNA, binding 212
-, cleavage 207–208
Rotating Overhauser Effect (ROE) 222
Ru(II) 138
-, bipyridine complex 72
Ru(bpy)₃ 134

Sapphyrins 52
Scaffold, molecular 65, 90
Selectivity 2, 9, 10, 18
Sensors, anions 32
-, colorimetric 117
-, electrochemical 125
-, fibre-optic 114
-, naked-eye 167, 174, 188
-, nanoparticle-based 157
-, optical 125
-, selective 99
Shrimp 119
Silicone 106
SiO₂ 104
Sol-gel 111
Spirobifluorene 46
Squarates 225
Square-wave voltammetry 70
 π -Stacking 218, 220

Stepwise protonation constants 85
Steroids 44
Structure-energy correlation 14
Styrene-butadiene 103
Sulphate 131
Sulphide 109, 114
Surface sensing amplification 156
Surface-bound anion sensors 126

Tartrate 225
Tb(III) 147
Tetrafluoroborate 151
Tetrahelicene 33
Tetrathiofulvalene 118
Thermodynamics, effect of counterion 216
-, enthalpy-entropy compensation 217, 222
-, of binding 214
-, solvation energy 217, 225
Thiacalixarenes 66
Thiocyanate 143
Tin 151
Transducer 99
Tubocurarine 36

Ultrafiltration 211
Uracil 40
Urea 132
U-tube 41
UV/Vis 203, 219

Water, drinking 99, 119
-, estuarine 119

Yb(III) 149

Zinc(II) 142