

SUBJECT INDEX – VOLUME 78 (2004)

Inorganic and Physical Chemistry

- ab initio* calculations, 279, 1945
- activation parameters, 437, 457
- adduct, 1777
- adhesion, 1823
- adsorption, 287, 1087, 1135, 1149, 1583, 2197
- adsorption isotherms, 2149
- alloys, 463, 1121, 1379
- amalgam, 1327, 1733
- angular overlap model, 673, 681
- antimicrobial activity, 645, 2005
- batteries, 1279, 1357, 1413
- Belousov-Zhabotinsky reaction, 575, 1269
- biological activity, 323, 2037, 2055
- biosensors, 1679
- bond length, 343, 623, 753, 779, 869, 911, 997, 1969, 2013, 2185
- capillary electrophoresis, 1635, 1691
- catalysis: heterogeneous, 19, 163, 287, 299, 553, 861, 873, 1379, 1961, 2205, 2235
 - homogeneous, 1611
- carbon electrode, 1575
- ceramic carbon electrode, 1449
- charge transfer, 1979
- charge trapping, 1183
- chemisorption, 163
- chronocoulometry, 1165
- clay, 1997
- clusters, 1103, 2205
- co-adsorption, 1087
- coatings, 1823, 1833
- complexes, 1, 9, 19, 27, 109, 159, 187, 309, 343, 447, 457, 515, 521, 529, 595, 645, 653, 663, 761, 795, 911, 927, 987, 1843, 1979, 1987, 2005, 2023, 2037, 2055, 2219
- composite, 349, 1279, 1305, 1457
- computational electrochemistry, 1195
- conductivity, 109, 521, 653, 1413, 1987
- conducting polymers, 349, 1431, 1477, 1493, 1509, 1533
- conversion of methane, 2225
- corrosion, 1261, 1823
- corrosion protection, 1183
- corrosion modelling, 1795
- crystal structure, 27, 343, 623, 753, 779, 973, 997, 1935, 1943, 1969, 2013
- crystallization, 195
- cyclic voltammetry, 139, 451, 583, 711, 1319, 1339, 1371, 1391, 1423, 1431, 1449, 1493, 1509, 1533, 1575, 1597, 1605, 1611
- dehydrogenation, 149, 861
- deposition copper, 117, 553

- deposition Pb, 1391
desorption, 2197
dielectric relaxation, 1765
diffusion, 349, 1413
diffusion-reaction systems, 1795
digital simulation, 1195
dipole moment, 973
double layer, 561, 1221, 1235
electrical conductivity, 463, 607
electrochemical kinetics, 1195, 1523
electrochemical noise, 1261
electrochemical power source, 1357
electrode processes, 139, 561, 711, 1149
electrogravimetry, 711
electronic spectra, 139, 187, 457, 635, 645, 653, 673, 681, 761, 779, 903, 1943, 1987, 2055
electronic structure, 1907, 1979, 2163
electrooxidation, 583, 1509, 1523, 1567, 1575
electropolymerization, 1423, 1431, 1509
electroreduction, 139, 1597
electrosorption, 1121
energy conversion solar, 1925
equilibrium constants, 109
equivalent circuit, 1121, 1235, 1811
ESR spectra, 653, 779, 1987, 2005, 2047
excited states, 745, 2163
Fenton reagent, 1611
ferromagnetism, 9, 2047
fluorescence, 125, 595, 745, 961, 2163
fluorination, 1777
FTIR spectroscopy, 1165, 1509, 1997
fullerene, 1431
helical flow, 1753
high pressure, 463
hydrides, 463, 607
hydrogen bond, 745, 779, 1103, 1719, 2013
hydrogen evolution, 1457
hydrothermal reaction, 1969
impedance, 561, 1135, 1235, 1245, 1255, 1423, 1457, 1811, 1823, 1833
inhibition, 1087, 1149
intercalation, 1139, 1413
interfacial area, 1753
intermolecular interactions, 1765
ionic selective electrode, 1619
ionic liquids, 539, 1371
ion transfer across interface, 1449
IR spectra, 27, 187, 299, 303, 451, 515, 521, 623, 635, 653, 663, 903, 919, 1509, 1935, 1987, 2023, 2037, 2047, 2055
isotope effect, 591
kinetics, 261, 287, 437, 457, 851, 961, 987
Langmuir monolayers, 973, 2149
lattice parameters, 273, 303, 2231
luminescence, 447, 1885
macrocycles, 1785
magnetic properties, 1, 159, 187, 343, 463, 635, 653, 761, 911, 997, 1969, 1987, 2055

mass spectra, 173, 927, 2055
mechanical stress, 1833
membrane potential, 1543
method: ZINDO, 1907
migration, 1553
mixed solvents, 1583
mixture, 591
molecular structure, 673, 681, 753, 1719, 1785, 2219
molten salts, 561, 1235
monolayer, 1655
nano systems, 1327, 1345
neutron spectroscopy, 1165
NMR, 27, 299, 521, 529, 623, 1979, 2055
non-linear effects, 733, 1121
non-linear optics, 779
nucleophilic fluorination, 1777
oscillation chemical, 575, 1121, 1269
oxidation, 261, 437, 1906, 2235
oxide, 279, 1391
passive layer, 1811
patterns, 733
permeability of ions, 1523
permittivity, 1765
phase diagram, 195, 1733
phase equilibria, 771, 789, 1733
photochemical reactions, 741, 851
photoelectrochemistry, 1925
photophysics, 2163
polymer electrolyte, 1371
polymeric systems, 173, 1279
porous electrode, 1457
potential energy barrier surface, 279, 961, 2185
proton transfer, 279
quantum chemical calculations, 1907
radiometry, 1135
Raman spectra, 919
rare earth, 195, 447, 521, 595, 601, 1885
reconstruction, 583
refractory material, 273
scanning tunnelling microscopy, 1165
Schiff base ligands, 515, 601, 663, 903, 2005
self-assembly, 173
semiconductor, 553
single crystal, 583
sol-gel, 1391, 1449, 1679
solid state electrochemistry, 1655
solid state synthesis, 35
solubility, 173, 591, 1733, 1987
solutions solid, 35
solvent effect, 1765, 2163
spectral data, 961
spontaneous discharge, 1477
spectroelectrochemistry, 1533
spectral studies, 521, 2023

square-wave voltammetry, 1635
stability, 1245
stability constants, 109, 309, 529, 795, 1691, 1785, 2023
stereoselectivity, 611
stripping voltammetry, 1627, 1667, 1703
substituent effect, 437
supercapacitor, 1345, 1371
surface functionalization, 1319
surface potential, 973, 2149
surface pressure, 973, 2149
surface tension, 1087
surfactants, 1493, 1703, 2175
synthesis: complexes, 1, 9, 19, 27, 159, 187, 303, 521, 601, 635, 645, 653, 753, 903, 919, 997
 inorganic compounds, 163, 173, 451, 595, 623, 779, 1997, 2037, 2047
tensile stress, 1811
ternary compounds, 529, 771, 789
theory: density functional, 1935
thermal analysis, 195, 273, 451, 515, 521, 601, 623, 663, 771, 789, 919, 1987
thermal decomposition, 173, 287, 2037, 2185
thermodesorption, 1953
thermodynamics, 1979, 2231
thermodynamics properties, 109, 1935, 1943
thermodynamics of complex formation, 1605
thin films, 711, 1165, 1183, 1319, 1391, 1423
transition metal compounds, 451, 645, 1413, 1843
voltammetry, 903, 1121, 1183, 1327, 1553, 1635, 2175
X-ray diffraction measurements, 273, 623, 911, 1785, 2037
X-ray photoelectron spectroscopy XPS, 861, 1305
zeolite, 149

Organic Chemistry

Biologically active compounds

Amphotericin, 1057
Antimicrobials, 687
Antitumor activity, 1019
Cecropin A, 1073
Combretastatin, 323
Creatinine, in water, 239
DNA adducts, 319
Endomorphin-2, 951
Guaianolides, 2075
Guanidines, sulfonyl, antitumor activity, 369
Imidazole derivatives, 547
Morphiceptin, 951
Piperazine derivatives, 1027
Schiff bases, complexes, 303
Systemine, 1073
Tanshinone II-A, 53
Virucides, 687

Complexes, Organic Ligands of

Azacrown compounds, 109, 795, 927
Crown ethers, 457, 699, 795, 927, 2117
Kojic acid, oxovanadium complexes, 2219

Compounds (synthesis, reactions, and properties of)**Amines**

Amines, N-Boc, 2127
Choline derivatives, 539
Guanidines, sulfonyl, 369

Aminoacids and peptides

Aminoacids in body fluids, determination, 1877
Cysteines, α -alkyl, 831
Isoserinates, 89
Muramyl peptides, 409
Proctoline analogues, 423
Peptides, modifications of, 315
Tyrosine, 1081

Aromatics

Aromaticity, 2213
Combretastatin, 323
Biphenyls, 2141
Naphthalenes, 231, 361

Carboxylic acids and derivatives

Aryloxyacetic acids, 249
Butyrolactones, 315
Kojic acid, complexes, 2219
Lactones, β -, 831

Heterocycles

Azoles, 83
Benzofurans, 249, 1865
Chromenes, 943
Creatinine, 239
Imidazoles, 417, 547
Imidazolium salts, 2141
Naphthoquinolines, 1019
Pyrazinoindoles, 837
Pyrazoloquinolines, 843
Pyridinium salts, 2131
Pyridothiazines, 815
Pyrimidines, 385, 2105
Pyrroledicarboxylates, 1871
Pyrrolidinedicarboxylates, 71
Pyrroloindoles, 837
Quinazolinones, 2101
Schiff bases, complexes, 303
Tanshinone II-A, 53
Thiadiazoles, 2089
Thiobarbiturates, 2105
Thiazines, 1,2-, 815
Triazabicyclo[3.3.0]octanes, 4,6,8-, 45

Macrocycles

Azacrown compounds, 109, 795, 927
Crown ethers, 223, 457, 699, 795, 927, 2117
Porphyrins, 2081
Cyclododecanes, tetraaza, 75

Nitro compounds

Nitrones, 217

Organophosphorus, Organosulfur, Organoselenium, and Organosilicon Compounds

Allyltin sugars, 881
Cyclophosphamide, 431
Diselenides, 687, 2117
Cromene phosphonates, 943
Silyl triflates, 205
Stannylovinyl compounds, 63
Thiobarbiturates, 2105
Thiocarbonyl compounds, 2089

Sugars

Allyltin sugars, 881
Glucofuranosides, 803
Cyclodextrins, 53
Flavonoid glycosides, 1851
Maltol complexes, 2219
Muramyl peptides, 409
Sugars, allyltin derivatives, 881

Terpenes

Adipetatol, 389
Cholesteryl derivatives, 2081
Davallene, 389
Guaianolides, 2075
Lactarorufin, 255
sesquiterpene lactones, 89, 169, 2075

Organic Spectroscopy**Mass spectrometry of**

Crown ethers, complexes, 699, 927

NMR studies of

Aminoacids in body fluids, ¹⁹F, 1877
Creatinine, in water, 239
Guaianolides, 2075
Terpenes, 389

Reactions and Processes

Acylation, 217
Addition, conjugate, diastereoselective, 205
Biginelli reaction, 385
Cyclization of aryloxyacetic acids, 249
[3+2] dipolar cycloaddition, 83, 2089
Electron transfer, 1039

Ketonization, 299
Oxidation of naphthalenes, 231
Oxidation of aldehydes, 437
Phagocytosis inhibition, 1073
Phosphonylation, 943
Radical reactions, 611
Suzuki reaction, 2141
Stereoselection, 611

Reviews

Carbocyclic compounds from sugars, 881
Combretastatin, 323
Radical reactions, 611