

Subject index

- 1,2-Propanediol, 1169
1,3,4-Oxadizoles, 131, 781
1,5-Benzodiazepines, 937
2-(2-chloroethoxy)ethanol, 385
2,2'-Bipyridine, as ligand, 233
2-Octylaminopyridine, as extractant, 435
2-Thiophenecarboxaldehyde, 415
4-Aminoantipyrine, 1063
4-Aminoquinolines, 1021
8-Hydroxyquinoline, 29
12-Molybdophosphoric acid, 199
12-Tungstosilicic acid, 199
 α -NiS, oxidation of, 213
Acid rain, 405
Activated titanium anodes, 1083
Agave attenuate, 1123
Alkaline permanganate degradation, 463
Alkylation, 945
Alumina, adsorption onto, 825
Aluminum, pitting corrosion of, 561
Ambrosia artemisiifolia L., 1039
Amides, 945
Aminopeptidase M, 771
Amoxycillin, spectrometric determination of, 569
Amphetamine, illegally produced, 691
Analgesics, 781
Anode stability, 1083
Anthracene, 1187
Antibacterial activity, 415, 967, 1153
Antifungal activity, 961
Antithrombotic activity, 261
Anti-inflammatory agents, 87, 781
determination of, 87
Antioxidants, 1051, 531
Anti-TNT-antibodies, 139
Antimicrobial activity, 597, 683, 703, 815, 1039, 1063, 1073, 531
Anti-oxidant activity, 597
Arsenic(III), 1113
Artesovine, 1039
Artificial neural network, 87
Aspartate residues, 393
Aspergillus niger, 157
Attractor, 221
Atrazine, 951
Austempered ductile iron, fracture of, 113
influence of cooling conditions, 113
Aza-derivatives of acenes, 547
B3LYP/6-31G(d) method, 1187
Benzaldehyde, 1063
Benzenoid hydrocarbons, 989
Benzimidazole derivatives, 967, 1153
Benzoic acid, 1235
Benzophenone, derivatives of, 261
N-Benzyloxycarbonyl-L-alanine, 815
Bicyclic molecular graphs, 431
Bile acids, 127
Bioavailability, 1169
Biodiesel, production of, 147
optimization, 147
Biological screening, 727
Biomass carbon, 951
Biomimetic synthesis, 745
Bioremediation, 577
Brachytheciastrum velutinum, 1161
Bryophytes, 1161
Budimka apple, pectin derived from, 157
Calix[4]arene compound, 1181
Candida rugosa lipase, 1139
Carbon nanotubes, 891
Carbon support, 641

- Carbonitrile, 683
Carotenes, 15
Carotenoids, 15, 1051
 bleaching rates of, 15
 stability of, toward UV-irradiation, 15
Catalase, 609
Cell membrane incubation, lectin induced, 793
Cellular SiC, 745
r-Centroid, 555
Cetraria islandica (L.) Ach., 405
Cd(II) extraction, 341
Chalcones,
 cycliyation of, 131
 as ligands, 1073
Charge percolation mechanism, 97
Chemical shift, 1187
Chemometrics, 1011
Chlorophylls, bleaching of, 271
Chlorpromazine, 233
Chromium active centers, distribution of, 97
Ciprofloxacin, spectrometric determination of, 569
¹³C-NMR chemical shifts, 513
Coating morphology, 1083
Cobalt(II), 1153
Conducting polymer, 1187
Conductometry, 1113
Copper,
 determination of trace of, in water, 249
 electrodeposition of, 753
 honeycomb-like structure of, 753
Corrosion, 221
Cotton chelator, 249
Coulometry, 655
Cretaceous – Paleogene boundary, 453
Crown ethers, synergistic agents in the solvent extraction, 29
Current oscillations, 221
Cyanine dyes, 1011
Cyclam, 761
p-Cymene, 307, 619
Cytotoxic activity, 619

Dehydroacetic acid, 1073
Dehydrogenase, 951
Designer drugs, 1223
Desulfurization, 213

Determination of Al, 673
Deuterium labeling, 1223
Dicinnamoylmethane, 423
Diclofenac sodium, spectrometric determination of, 569
 β -Diketonato ligands, 761
 β -Diketones/ β -ketoesters, 937
Dimensionally stable electrodes, 661
N,N-Dimethylformamide, 385
Dimethyl sulfoxide + 1,4-dimethylbenzene system, 73
 excess properties of, 73
 physical properties of, 73
 vapor–liquid equilibrium data, 73
Dithiocarbamato ligands, 761
Dodecanedioic acid, 321
Doxycycline hyclate, 665
DPPH test, 1051
Dynamic behavior, 221

Eggshell, 609
Electrocatalytic properties, 1083, 1197
Electrochemical impedance spectroscopy, 1211
 π -Electron content of ring, 547
Elution efficiency, 333
Elution profile, 333
Entamoeba histolytica, 7
Essential oil, 283, 299, 307, 703
 antibacterial activity of, 299
Esterification, 1139
Ethyl acetate extract, 283
Ethylene polymerization, 97
S,S-Ethylenediamine-*N,N'*-di-*S,S*-propionate, as ligand, 541
Extraction of metals, 1181
 from lichen, 405

Fabaceae, 525
Factorial design, 1139
Factorial and orthogonal central composite design methods, 487
FactSage software and database, 499
Far-infrared spectroscopy, 369
Fish Clay, 453
Flame atomic absorption spectrometry, 249
Flavonoids, 525
Flavor esters, 1139

- Flocculation, 825
Fluoranthene, 989
Fluorides of Ge and Si, 555
Formic acid, oxidation of, 1197
Fractal dimension, 805
Franck–Condon factors, 65, 555
Gas phase molecules SbO and SbP,
 molecular parameters of, 65
General polarization curve equation, 227
Genotoxicity, 1039
Gewald reaction, 683
Glassy carbon, 845
L-Glutamic acid, 1169
Glutaraldehyde, 609
Graph energy, 431
Graphene, 891
Gyration, radius of, 805
Halide extractants, 341
Hall rule, 989
Health risk assessment, 923
Heavy metals, 923
Hieracium pilosella L., extracts of, 531
High performance liquid chromatography, 665,
 531
HIV reverse transcriptase, 259
Holography, 561
Hosoya polynomial, 311
Houseleek, 597
Human control serum, 879
Human placenta, 793
Hydrogen intercalation, 1197
Hydrogen–palladium electrode, 871
Hydrotalcites, 321, 835
Ibuprofen, 879
Induced coupled plasma, 609
In–Sb–Pb system, phase equilibria of, 377
Insulin, growth factor receptors of, 793
In vitro studies, 1153
Iron powder, deposition of, 861
Isatin-3-thiosemicarbazone complexes, 7
 anti-amoebic activity, 7
 antifungal activity, 7
 antimicrobial activity, 7
iso-Butane, oxidation of, 55
iso-Butene, 55
Isobutanol conversion, 997
Itaconic acid, 825
Kinetics, solvent effect on, 735
Keggin structure, 199
Kekulé structures, 989
Kerogen, 453
 type III, 463
Kindbergia praelonga, 1161
 ω -Lactams, 771
Lanthanides, 479
 extraction of, 15
Layered double hydroxides, modification of, 321
Leaching, 585
Lead, 453
 extraction of, 585
Lead–silver cake, in metallurgy, 585
Lecithin, 1051
Leuckart synthesis, 691
Lipids, 1051
Lipophilicity, 967
Liquid chromatography, 1027
Liquid–liquid extraction, 435
Lipids, peroxidation of, 781
Lithium ferrite, magnetic properties of, 979
Lotus-effect, 1123
Low-barrier hydrogen bond, 393
Ln-123 superconductors, 479
Lunularia cruciata, 1161
Malaria, 1021
Markaracter tables, 189
Metal complexes, 415, 423, 727, 761, 1063,
 1073, 1169
Metal deposition, 227
Methanol, extract, 299
 oxidation of, 845, 1197
Methionine, 735
N-Methylpiperazine, 619
MgO, leaching of, 487
Microwave irradiation, 945
Molar volumes, apparent, 1235
Molecular dynamics simulations, 41
Molecular absorption coefficients, 713
Mott–Schottky plot, 351
Microwave irradiation, 131
Mueller-Hinton broth dilution, 1039

- N*(1)-(4-substituted phenyl)-3-cyano-4,6-dimethyl-2-pyridones, 513
N-(2-Thienylmethylene)methanamine, 415
Nano-imprinting, 1123
Nb₂O₅, 351
Nepeta rtanjensis, essential oil of, 961
Neutral saccharides, 157
Nickel(II) amino acid dithiocarbamates, characterization of, 169
Nicotinic acid, 1235
Non-aqueous solvents, 871
O-Donor ligands, 179
Oil refinery, 577
Oil type pollutants, 577
Olefinic linkages, 423
Onobrychis scardica, 525
Organotin(IV) carboxylates, 179
Organotin(IV) complexes, 179
Oxalic acid, 1113
Oxide sols, 661, 1083, 1211
Oxygen reduction reaction, temperature dependence of, 641
Partitioning of π -electrons in rings, 547
Passive film, 351
PbMnTe and PbTeS alloys, vibration properties of, 369
Pectin, degradation of, 157
 oligogalacturonic fractions of, 157
 enzymatic hydrolysis of, 157
Pentyl 2-methylpropanoate, 1139
Phase stability diagrams, 213
Phenethylamine, 1223
Phenol red, 631
Phenolics, 1161
Phenothiazine drugs, 233
Phenoxyacetic acids, 771
Phenylacetamides, 945
o-Phenylenediamine, 1063
Phillips CrO_x/SiO₂ catalyst, 97
Photocatalytic degradation, 631
Photodynamic therapy, sensitizers for, 713
Photoelectrochemical activity, 1211
Phosphate, sorption of, 835
Pichia pastoris, 139
 pK_A , 655
Plasmodium falciparum, 1021
Plasmon – two phonon interaction, 369
Platinum catalyst, 641, 1197
 electrochemical deposition of, 845
Pollen, 1039
Polygalacturonase, 157
Polymethine, 1011
Poly(methyl methacrylate), 915
Porous electrodes, 661
Porous ceramics, 745
Porphyrins, asymmetric, 713
 Zn(II) complexes of, 713
Porphyrin–Schiff bases, spectral data, 5
 synthesis and characterization of, 1
Potential energy function, 555
Potentiometric titration, 87
Preconcentration, 249
 of copper, 249
Promethazine, 233
Propylene carbonate, 655
Protein, backbone of, 805
Pseudogley soils, 673
Pyrazole, substituted, 937
Pyrazolines, 131
Pyrazolo[3',4':4,5]thieno[2,3-*d*]pyrimidin-8-ones, 683
Q-Conjugacy character, 189
Quetiapine, 385
Quinolinium fluorochromate, 735
RAFT polymerisation, 915
Rare earth elements, 453
Reactive sputtering, 121
Recombinant expression, 139
Redlich–Kister equation, 73
Relative acidity scale, 871
Replica moulding, 1123
Resonance theory, 547
Response surface methodology, 147
Retained austenite, 113
trans/cis-Resveratrol, 1027
r-Centroids, 65
Rhenium, concentration of, 333
Rhizomucor miehei, 147
Ribofuranose, 1021
rRNA, 41

- ligand binding to, 41
 - small structural motifs in, 41
- Ruthenium(II) complexes, 619
- Ruthenium(III) complexes, 541
- Rutherford backscattering spectrometry, 121
- Rydberg–Klein–Rees potential, 555
- Satureja horvatii*, 703
- Schiff bases, 415, 423, 1063
 - condensation of, 1
- Self-assembled monolayers, 1123
- Semicarbazone, 727
- Semimagnetic semiconductors, 369
- Sempervivum marmoreum* L., 597
- Serine proteases, 393
- Shinsaku Fujita, 189
- Silica (SiO₂), 97, 121
 - thin films, deposition of, 121
- Silver, extraction of, 585
- Smectite, acid activation of, 487
- Soil,
 - pollution by oil, 577
 - pollution, in Belgrade, 923
 - chernozem, 951
- Sol–gel synthesis, 479, 661, 1211
- Solute–solvent interactions, 1235
- Speciation, chemical, 1169
- Stability constants, 1181
- Statistical analysis, 1139
- Statistical scaling laws, 805
- Stevia rebaudiana* Bertoni, leaf extracts of, 283
- Succinate media, 435
- Supercapacitors, 661
- Superhydrophobic surfaces, 1123
- Surface morphology, 845, 861
- Surfactants, 321
- Suspension, 825
- Sydnone, 131
- Synergistic extraction, 29
- Tetra-amine platinum(II), 189
- Tetrabutylammonium bromide, 385
- Tetraoxanes, 1021
- Teucrium montanum*, 299
- Thallium(III), 435
- Thermodynamic calculations, 499
- Thermogravimetry, 915, 979
- Thiazepine, preparation of, 385
- Thiocyanate, sorption of, 835
- Thiosemicarbazone, 727
 - K₃-, 619
- Thioureide, 169
- Thymol, 307
- Thymus vulgaris*, 307
- Ti–Al–Mn ternary system, 499
- Titanium oxide, 1211
- p*-Toluenesulfonic acid, 937
- Total π -electron energy, 431, 989
- Trimipramine, 233
- Triphenylphosphine, as ligand, 169
- Trypsin, 393
- Tungsten carbide, 1197
- Tyrolean shale, 463
- Ulcerogenics, 781
- Urine, 1223
- UV-light, 1051, 1211
- Vibrational transition probabilities, 65
- Viscosity, B-coefficients, 1235
- V–Mo–O mixed oxide catalysts, 55
 - catalytic activity of, 55
 - characterisation of, 55
- Xanthophylls, 15
- Ziegler–Natta polymerizations, 97
- Zigzag polyhex nanotorus, 311
- Zinc, 221, 453, 585
- Zinc oxide, 997
- Water–nitrobenzene system, 1181
- Wentzel–Kramer–Brillouin method, 555
- Wiener index, 311
- Wine, 1027