

## Keyword index

### A

- acrylic copolymers containing 2-hydroxyethyl methacrylate groups ..... 1411
- adsorption from binary mixtures ..... 1393
- agglomeration ..... 1403
- aggregates ..... 83
- aggregation ..... 903
- alginate ..... 147
- alkali metal ..... 457
- alkanes ..... 163
- alkyl hydroperoxides ..... 163
- 2-alkyl-4-oxo-4H-benzo[1,3]dioxin-2-yl oates ..... 265
- 2-alkylidene-benzo[1,3]dioxin-4-ones ..... 265
- alkyne polycyclotrimerization ..... 833
- allenylidene ..... 209
- allylic amines ..... 451
- allylic substitution ..... 1061
- allyltitanation ..... 547
- amides ..... 631
- $\alpha$  aminoacid ..... 451
- aminophosphine phosphinite ..... 179
- aminotriazoles ..... 445
- ammonium ..... 189
- anionic complexes ..... 301
- anionic dendrimer ..... 1193
- anthraquinone ..... 919
- antibacterial activity ..... 473
- antiferromagnetic ..... 353
- application ..... 821
- arene ..... 581
- arenes ..... 163
- arenetricarbonylchromium complexes ..... 581
- arenetricarbonylmanganese complexes ..... 581
- aryl halide ..... 185
- arylboronic acids ..... 185
- arylboronic esters ..... 185
- assembly ..... 919
- associative thickeners ..... 1411
- asymmetric catalysis ..... 199, 507
- asymmetric epoxidation ..... 603
- asymmetric synthesis ..... 695
- azobenzenes ..... 873

### B

- band-gap materials ..... 1425
- basket ..... 87

- BEDT–TTF ..... 301, 367
- BEDT–TTF salts ..... 395
- binding capacity ..... 1275
- bioencapsulation ..... 147
- biology ..... 791
- biomimetics ..... 163, 767
- biomolecules ..... 17
- bistability ..... 329
- block copolymers ..... 1403
- boranes ..... 3
- bromo(amino)cyclosiloxanes ..... 117
- butyl acrylate ..... 1295

### C

- cage compounds ..... 241
- calcium carbonate ..... 1193
- calix ..... 565
- capping agents ..... 1035
- carbene ..... 209
- carbocyclisation ..... 67
- carbohydrate mimetics ..... 635
- carbometalation ..... 67
- carbon-rich ..... 353
- carbosilane ..... 803
- carboxylates ..... 241
- cast-solvent ..... 493
- catalysis ..... 695, 791, 1049, 1105, 1117
- catalyst ..... 501
- catalyst recycling ..... 1079
- catch and release ..... 607
- cationic lipids ..... 589, 613
- cationic liposomes ..... 617
- cations complexation ..... 193
- $^{13}\text{C}$  CP MAS and ESR spectroscopy ..... 259
- cellulose ..... 607
- characterization ..... 821
- charge ordering ..... 395
- charge transfer ..... 283, 457
- chelating ligand ..... 231
- Chemical Vapour Synthesis (CVS) ..... 273
- chemoselective ligation ..... 635
- chiral auxiliaries ..... 199
- chirality ..... 189, 337, 623
- chloro(amino)cyclosiloxanes ..... 117
- chromium ..... 309, 581
- chromium (III) ..... 291

- clusters ..... 273, 1009
- co-precipitation ..... 125
- cobalt ..... 241
- cobalt complex ..... 377
- colloidal crystalline arrays ..... 1425
- colloids ..... 1009, 1035
- comb polymers ..... 843
- compartmentalization ..... 1343
- complexation ..... 83, 87
- computational chemistry ..... 17
- concentration ..... 431
- conductivity ..... 291
- conversion rate ..... 431
- cooperativity ..... 779
- coordination compounds ..... 755
- coordination polymers ..... 405
- copper complex ..... 725
- copper hyperfine ..... 39
- copper(II) complexes ..... 645
- core-shell latexes ..... 1233
- correlation ..... 135
- cosurfactant effects ..... 1267
- cross coupling ..... 755
- crosslinker ..... 1417
- crown ether ..... 193
- crystal field ..... 135
- crystal growth ..... 405
- crystal structure ..... 377, 405, 657
- curtius re-arrangement ..... 517
- cyanides ..... 283
- cyanometalate ..... 377
- cyclam ..... 1275
- cyclic ketenes acetals ..... 265
- cyclic voltammetry ..... 99
- cyclodextrin ..... 87
- cyclopentanes ..... 67
- cyclosiloxanes ..... 117
- cyclotrimeratrylene ..... 725

## D

- D-glucal ..... 553
- DC-Chol ..... 613
- degree of branching ..... 821
- dendrimers 695, 715, 725, 735, 755, 767, 779, 791, 803, 867, 873, 883, 903, 935, 947, 1049, 1061, 1105, 1117, 1185
- dendritic effect ..... 735
- dendromesogens ..... 947
- dendron-box ..... 989
- dendrons ..... 779, 789, 791, 843
- deposition ..... 919
- diamide ..... 231, 1295
- diastereoisomers ..... 91
- diazatetraoxa macrocycle ..... 573
- dicarbaboranes ..... 3
- dichlorodimethylsilane ..... 1385
- dielectric constant ..... 1175
- diffusion ..... 99
- directed evolution ..... 501
- discodermolide ..... 547
- dispersion copolymerization ..... 1329

- diversity ..... 767
- DPASV ..... 689
- dynamic mechanical measurements ..... 1285

## E

- early-late ..... 47
- electrical conductivity ..... 301, 367
- electroactive receptors ..... 573
- electroactive units ..... 935
- electrochemical behaviour ..... 573
- electrochemistry ..... 657
- electron hopping ..... 99
- electron transfer ..... 99, 343, 873, 883
- electronic structure ..... 135
- electro spray ..... 623
- electrosynthesis ..... 185, 485
- emulsifier concentration ..... 1245
- emulsion ..... 1351, 1375
- emulsion copolymerization ..... 1329
- emulsion polymerization ..... 1233, 1285, 1295, 1313
- enamnone ..... 607
- enantiomer ..... 529
- enantioselective hydrogenation ..... 179
- enantioselectivity ..... 547
- encapsulation ..... 767
- energy transfer ..... 867, 873, 883
- enolates ..... 67
- enzyme ..... 501
- EPR ..... 39
- exchange ..... 135
- exchange interaction ..... 39

## F

- Ferrier rearrangement ..... 553
- ferrimagnetic chain ..... 309
- ferrimagnetism ..... 301
- ferrocene ..... 919, 935, 959
- fervanite ..... 125
- filamentous bacteriophage ..... 501
- film properties ..... 1285
- films ..... 1233
- flavour ..... 529
- fluorinated dioxiranes ..... 603
- folding ..... 779
- fragrance ..... 529
- free carbene ..... 33
- fullerenes ..... 597, 725
- functional dendrimer ..... 735
- functionalization ..... 597, 767
- functionalized bis(ethylenedithio)tetrathiafulvalene ..... 657

## G

- $\beta$ -galactosidase ..... 147
- gas separation ..... 493
- gene therapy ..... 617
- Glaser reaction ..... 553
- glioma ..... 617
- glycinyl radical ..... 451

- glycopyranes ..... 553
- goethite ..... 437
- graphite ..... 457
- green chemistry ..... 1117

**H**

- H<sub>2</sub>@C<sub>60</sub> ..... 467
- heavy atom derivative ..... 249
- heavy metals ..... 689
- heterometallic chain complexes ..... 59
- heteronuclear ..... 47
- high pressure ..... 467
- high-frequency EPR spectroscopy ..... 645
- homogeneous catalysis ..... 33, 1079
- host-guest ..... 715
- host-guest systems ..... 867
- hot-pressing ..... 367
- hybrid ..... 1285
- hybrid materials ..... 1153
- hybrid organic-inorganic ..... 1131
- hydration ..... 79
- hydride ..... 581
- hydrocarbons ..... 163
- hydroformylation ..... 47, 1061
- hydrogen abstraction ..... 451
- hydrogen peroxide ..... 163
- hydrogenated C<sub>60</sub> ..... 467
- hydrogenation ..... 1049
- hyperbranched ..... 715
- hyperbranched polyarylenes ..... 833
- hyperbranched polymers ..... 821
- hysteresis loop ..... 329, 1175

**I**

- imidazolium salts ..... 33
- iminium ..... 451
- immobilization ..... 695, 1061
- impregnation ..... 231
- in situ polymerisation ..... 259
- in-line monitoring ..... 1343
- incubation time ..... 1245
- Infrared and Raman Spectroscopies ..... 395
- infrared spectroscopy ..... 1343
- inorganic ..... 1285
- inorganic solids ..... 385
- intercalation ..... 457
- ion pairing ..... 33
- ionic liquids ..... 33
- ionic surfactants ..... 1295
- *ipso* nucleophilic aromatic substitution ..... 223
- iridium ..... 47, 179
- iron ..... 59, 209, 283, 353, 1105
- iron oxy-hydroxides ..... 437
- iron vanadates ..... 125
- iron-carbon bonding ..... 209, 353
- irone ..... 529
- irreversible processes ..... 677
- ising model ..... 385
- isoimide ..... 1295

- isoquinoline ..... 309

**K**

- kazakhstanite ..... 125
- ketones ..... 179

**L**

- labile ..... 689
- Langmuir-Blodgett ..... 683
- lanthanide ..... 405
- laser excitation ..... 467
- lateral diffusion ..... 1393
- latex arrays ..... 1425
- latexes ..... 1217, 1285, 1403, 1411
- layered double hydroxide ..... 259
- lepidocrocite ..... 437
- libraries ..... 631
- ligand ..... 565, 989
- ligand accessibility ..... 1275
- light emission ..... 833
- lipase ..... 529
- liposomes ..... 589
- liquid crystals ..... 947, 959
- living ..... 1375
- living radical polymerization ..... 1351
- luminescence ..... 867, 883

**M**

- macrocyclic cyclam derivative ..... 573
- macrocyclic receptors ..... 573
- macrocyclization ..... 553
- macromonomers ..... 843
- magnetic field ..... 329, 1175
- magnetic films ..... 683
- magnetic properties ..... 39, 377, 645
- magnetism ..... 231, 283, 291, 353
- malaria ..... 153
- manganese ..... 581, 1105
- marine environment ..... 689
- mass spectrometry ..... 623
- materials ..... 791
- mechanical properties ..... 1233
- membrane ..... 493
- mercuric acetate ..... 79
- mercury ..... 59
- mesoporous materials ..... 1131
- mesoporous silica ..... 147
- mesostructure, hierarchical structures ..... 1131
- metal carbene complexes ..... 33
- metal clusters ..... 803
- metal complexes ..... 163
- metal particles ..... 231
- metal-binding nanoparticles ..... 1275
- metal-containing materials ..... 755
- metal-insulator transitions ..... 135
- metallaboranes ..... 3
- metallasiloxanes ..... 645
- metalloligands ..... 59

• metallomesogens .....	959
• metalloporphyrins .....	1105
• metathesis .....	87, 547
• methanofullerene .....	83
• methyl(amino)cyclosiloxanes .....	117
• methyl(chloro)cyclosiloxanes .....	117
• methylmethacrylate .....	1319
• microemulsion polymerization .....	1245, 1267, 1275
• mineralization .....	1193
• mini-emulsion polymerization .....	1319, 1337, 1343
• miniemulsion .....	1351
• mixed valence .....	283
• Mn <sub>12</sub> clusters .....	683
• molecular magnetism .....	337, 683
• molecular magnets .....	189
• molecular materials .....	683
• molecular oxygen .....	163
• molecular packing .....	779
• molecular recognition .....	1117
• molecular rulers .....	1049
• molecular spectroscopy .....	17
• molecular switching .....	385
• molybdenum complex .....	377
• monolayers .....	1009
• monovalent and bivalent salt .....	431
• morphology .....	1217, 1233
• Mössbauer .....	209, 353
• MPCs .....	1009
• multicentred bonding .....	3
• multicomponent reaction .....	517
• multiproperties .....	301

## N

• <i>N</i> -bromo succinimide .....	451
• <i>N</i> -ethylmethacrylamide .....	1417
• <i>N</i> -ligands .....	241
• <i>N</i> <sup>1</sup> -tosylhydrazones .....	445
• nano particles .....	273
• nanobuilding blocks .....	1131
• nanocapsules .....	715
• nanocrystal .....	989
• nanofiltration .....	431
• nanomaterials .....	1131
• nanoparticles .....	919, 989, 1009, 1035, 1117, 1185
• nanostructures .....	1049
• nanotubes .....	597
• neat reaction .....	631
• neoglycoconjugates .....	635
• nickel .....	231
• nitroxyde .....	1351
• non-ionic surfactants .....	1295
• nucleation .....	1375
• nucleation and growth .....	1217
• nucleophilic aromatic substitutions .....	755
• numerical model .....	1217

## O

• odour properties .....	529
• oleanolic acid .....	473

• optical limiting .....	833
• optimal feeding profile .....	1313
• organic .....	1285
• organic $\pi$ donors .....	291
• organic conducting composites .....	367
• organic dye photovoltaics .....	417
• organic supports .....	1079
• organic thin films .....	1185
• organic-inorganic hybrid materials .....	1193
• organoiron .....	209, 353
• organometallic polymers .....	833
• orthoesters .....	265
• osmium complexes .....	883
• oxalate .....	189, 337, 405
• oxidation .....	163, 1105
• oxygenation .....	163

## P

• palladium .....	91
• particle nucleation .....	1245
• particle size .....	1245, 1337
• particle size control .....	1329
• particles .....	1217, 1393
• passifloricin A .....	547
• patterns .....	1185
• PDMS microemulsions .....	1385
• PEO macromonomers .....	1329
• <i>Periploca laevigata</i> .....	473
• permeation .....	1185
• permethylcyclodextrin .....	83
• peroxy acids .....	163
• pH sensitivity .....	873
• pH-dependent lipids .....	617
• phase separation .....	1217
• 1,10-phenanthroline .....	755
• phosphetanes .....	507
• phosphine .....	91
• phosphine ligands .....	803
• phosphine oxide .....	59
• phosphine sulfide .....	59
• phosphonate .....	91, 1153
• phosphonic acid .....	1153
• phosphorus .....	791
• photochemistry .....	163
• photoelectrochemical cell .....	417
• photoluminescence .....	833
• photomagnetism .....	343
• photonic crystals .....	1425
• photooxidation .....	989
• phthalocyanine .....	903
• pinacolborane .....	185
• piperidines .....	67
• poly(amidoamine) dendrimers .....	1193
• poly(ethylene oxide) .....	903, 1403
• polycondensation .....	1385
• polydispersity .....	1337
• polyhedral clusters .....	3
• polyimide .....	493
• polymer .....	1217
• polymerase .....	501

• polymerizable surfactants .....	1295, 1319
• polymerization .....	1375
• polymerization kinetics .....	1233
• polymerization rates .....	1245
• polystyrene .....	1403
• porous framework .....	377
• post-functionalisation .....	1275
• precursor chemistry .....	273
• precursors .....	1035
• pressure .....	329, 431, 1175
• protein .....	249
• protein X-ray crystallography .....	249
• proton transport .....	301
• Prussian blue analogues .....	343
• PVC .....	1403
• <i>p</i> -vinylphenylalkyl end-groups .....	1329
• pyrazole/isoxazole .....	607
• pyridine .....	565
• pyrrolidines .....	67

**R**

• radical polymerisation .....	843
• radicals .....	291, 1375
• reactions .....	1009
• reactive nanoparticles .....	1275
• recycling .....	1049, 1061
• redox .....	919
• redox dendrimers .....	99
• Reformatsky reagents .....	67
• resolution .....	529
• retention .....	431
• reversible adsorption .....	1393
• review .....	821
• rhodium .....	47, 179, 193, 507
• ring-opening polymerization .....	1385
• [Ru(bpy) <sub>3</sub> ] <sup>2+</sup> complex .....	935
• ruthenium .....	179, 507, 1105
• ruthenium complexes .....	883

**S**

• sacrificial anode .....	185
• scaffold .....	631
• secondary structure .....	779
• seeded emulsion polymerization .....	1305
• selective and covalent labelling .....	249
• self-assembled monolayers .....	99, 683
• self-assembly .....	597, 1131
• sensors .....	867, 1117
• sequence .....	767
• shielding effect .....	725
• siloxanes .....	117
• site isolation .....	873
• sol-gel .....	1131, 1153
• sol-gel process .....	1285
• solid phase synthesis .....	607
• solid support .....	607
• solubility diagram .....	125
• solubility in water .....	83
• solubilization .....	597

• speciation .....	231
• spectroscopic properties .....	417
• spin crossover .....	329, 385, 1175
• spin-frustration .....	39
• spin-state phase diagrams .....	135
• stabilised carbanion .....	91
• stability .....	989
• stabilizers .....	1035
• staurosporine .....	547
• stereochemistry effects .....	623
• sterols .....	79
• Stille reaction .....	223
• structural analogous .....	473
• structure .....	457, 565
• styrene .....	1295, 1329, 1375
• sulfonate groups .....	1305
• supported catalysts .....	199
• supramolecular .....	597, 715
• supramolecular chemistry .....	193, 645
• supramolecular material .....	377
• supramolecular organisations .....	947
• surface charge density .....	1305
• surface energy .....	677
• surface modification .....	1153
• surface plasmon .....	919
• surface stress .....	677
• surfactant .....	903
• surfactant complexes .....	1403
• surfmer .....	1313
• synthesis .....	821, 843
• synthesis route .....	457
• synthetic vaccines .....	635

**T**

• tecton .....	565
• TEM .....	1217
• tetrahydro-β-carboline .....	517
• tetrathiafulvalene .....	573
• tetrathiapentalene .....	309
• thermal stability .....	833
• thermally-sensitive latex .....	1417
• thermoelectric power .....	367
• thiacalix .....	565
• thiadiazaphospholines .....	445
• thickening .....	1411
• thiocyanato complex .....	309
• thiolate anion .....	485
• thiophenes .....	223
• thioxylopyranosyl bromide .....	485
• thioxyloside .....	485
• titanium .....	47
• topotactic reactions .....	437
• transfection .....	617
• transfer agent .....	1305
• transition metal oxides .....	135
• transition metals .....	803
• transition organometallic complex .....	249
• transition-metal catalysts .....	1061
• transition-metal clusters .....	645
• transurf .....	1305

- trialkyl borate ..... 185
- tricarbonylchromium arenes ..... 223
- trimer ..... 39
- trimolecular condensation ..... 517
- 1,2,4-trioxane ..... 153
- trioxaquine ..... 153
- triterpenes ..... 79
- tryptamine ..... 517
- tryptophan ..... 517

**U**

- ultrafast voltammetry ..... 99
- ultramicroelectrodes ..... 99
- unimolecular micelle ..... 715

**V**

- vanadates ..... 125
- vaterite ..... 1193
- vinylidene ..... 209

- viologen ..... 935
- viscoelasticity ..... 1411
- volume-phase-transition temperature ..... 1417

**W**

- weak ferromagnet ..... 309

**X**

- X-ray diffraction ..... 343, 573, 1165
- X-ray structure analyses ..... 117
- xanthates ..... 1035
- XMCD ..... 337
- X-ray absorption spectroscopy ..... 1165

**Z**

- zero-field splitting ..... 39
- zinc oxide ..... 273
- zirconium ..... 47