

## Subject Index of Volume 195

### Absorption cross-section

The near UV absorption cross-sections and the rate coefficients for the ozonolysis of a series of styrene-like compounds, 54

### Acidity constant

Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368

### Acriflavine

Sensitization of TiO<sub>2</sub> and ZnO nanocrystalline films with acriflavine, 364

### Acrylate

Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378

### Air pollution

Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81

### Alkylpyridinium chlorides

Interaction of alkylpyridinium chlorides with human serum albumin studied by fluorescence techniques, 295

### AM1-SCI

Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368

### Anatase

Assessment of photocatalytic activity of Solaronix™ nanostructured anatase, 99

### Anthracene

Effects of proton and metal cations on the fluorescence properties of anthracene bearing macrocyclic polyether and polyamine receptors, 267

### Aqueous solution

Photochemical behaviour of poly(ethylene oxide) (PEO) in aqueous solution: Influence of iron salts, 167

### Aromatic sulphides

Oxidation of phenyl trifluoromethyl sulphide: A pulse radiolysis and theoretical study, 277

### Aromatics

The near UV absorption cross-sections and the rate coefficients for the ozonolysis of a series of styrene-like compounds, 54

### Aryl halides

Photodissociation of bromochlorobenzenes, 242

### Azacrown ether

Effects of proton and metal cations on the fluorescence properties of anthracene bearing macrocyclic polyether and polyamine receptors, 267

### Benzil

Synthesis, photoperoxidation and crosslinking of styrene copolymer with pendant benzil moieties, 191

### Benzyl dimethyl ketal

Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378

### Benzylidene cyclopentanone

Novel benzylidene cyclopentanone dyes for two-photon photopolymerization, 261

### Betalains

Betalain pigments for dye-sensitized solar cells, 72

### Biphenyl

Time resolved resonance Raman, transient diffuse reflectance and kinetic studies of species generated by UV laser photolysis of biphenyl occluded within dehydrated Y-faujasite zeolites, 156

### Cadmium phthalocyanine

Synthesis and solvent effects on the photophysical properties of novel cadmium phenoxy phthalocyanines, 183

### Cadmium sulfide

Preparation and photoelectric performance of ITO/TiO<sub>2</sub>/CdS composite thin films, 357

### Calixarene

Collective proton motion in the intramolecular hydrogen bonding network and the consequent enhancement in the acidity of hydroxycalixarenes, 116

### Carbon disulfide

Photodissociation dynamics of OCS and CS<sub>2</sub> adsorbed on water ice films at 193 nm, 330

### Carbonyl sulfide

Photodissociation dynamics of OCS and CS<sub>2</sub> adsorbed on water ice films at 193 nm, 330

### Cerium chloride

*In situ* synthesis of photoluminescent films of PVC, doped with Ce<sup>3+</sup> ion, 215

### Cerium doping

Plus green emission of ZnO nanorods induced by Ce<sup>3+</sup> doping and concentration, 151

### Chemical sintering

Chemical sintering of graded TiO<sub>2</sub> film at low-temperature for flexible dye-sensitized solar cells, 247

### Chlorophyll

Commercial and natural dyes as photosensitizers for a water-based dye-sensitized solar cell loaded with gold nanoparticles, 307

### *cis-trans* photoisomerization

*cis-trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30

### Collective proton motion

Collective proton motion in the intramolecular hydrogen bonding network and the consequent enhancement in the acidity of hydroxycalixarenes, 116

### Color transition

Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378

### Concentration

Plus green emission of ZnO nanorods induced by Ce<sup>3+</sup> doping and concentration, 151

### Conformational transition

Structural effects on the conformational transition of transferrin induced by binding of flavonoids with different numbers and positions of hydroxyl groups, 127

### Copolymers

New polyacrylates with photosensitive triazene groups designed for laser ablation. Synthesis, structure and properties, 337

- Coumarin  
Novel benzylidene cyclopentanone dyes for two-photon photopolymerization, 261
- Crosslinking of polystyrene  
Synthesis, photoperoxidation and crosslinking of styrene copolymer with pendant benzil moieties, 191
- Cyclen  
Effects of proton and metal cations on the fluorescence properties of anthracene bearing macrocyclic polyether and polyamine receptors, 267
- Cyclodextrins  
Supramolecular carriers of singlet oxygen: Photosensitized formation and thermal decomposition of endoperoxides in the presence of cyclodextrins, 1
- Dansyl derivatives  
Interaction of alkylpyridinium chlorides with human serum albumin studied by fluorescence techniques, 295
- 3-(4'-Dimethylaminophenyl)-1-(2-pyridinyl)prop-2-en-1-one  
Photophysical properties, excitation energy transfer and laser activity of 3-(4'-dimethylaminophenyl)-1-(2-pyridinyl) prop-2-en-1-one (DMAPP). A new potential laser dye, 89
- Dimethylarsine radical  
Photochemical reaction of dimethylarsinous iodide in aerated methanol: A contribution to arsenic radical chemistry, 175
- Dimethylarsinous iodide  
Photochemical reaction of dimethylarsinous iodide in aerated methanol: A contribution to arsenic radical chemistry, 175
- Dip-coating  
Assessment of photocatalytic activity of Solaronix™ nanostructured anatase, 99
- Diphenylanthracene  
Supramolecular carriers of singlet oxygen: Photosensitized formation and thermal decomposition of endoperoxides in the presence of cyclodextrins, 1
- 1,2-Distyrylbenzene  
Photoisomerization mechanism of the *cis* isomers of 1,2-distyrylbenzene and two hetero-analogues, 301
- Doctor-blade  
Chemical sintering of graded TiO<sub>2</sub> film at low-temperature for flexible dye-sensitized solar cells, 247
- Dyeing photoinitiators  
Studies on an argon laser-induced photopolymerization employing both mono- and bischromophoric hemicyanine dye–borate complex as a photoinitiator, 105
- Dye-sensitized  
Dye-sensitized nanostructured TiO<sub>2</sub> film based photoconductor, 352
- Dye-sensitized solar cell (DSSC)  
Betalain pigments for dye-sensitized solar cells, 72  
Enhanced energy conversion efficiency of TiO<sub>2</sub> electrode modified with WO<sub>3</sub> in dye-sensitized solar cells, 144  
Dye-sensitized solar cells employing non-volatile electrolytes based on oligomer solvent, 198  
Commercial and natural dyes as photosensitizers for a water-based dye-sensitized solar cell loaded with gold nanoparticles, 307
- (*E,E*)-{1,4-Bis(2-dimethylphenylsilyl)ethenyl}benzene  
*cis*–*trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30
- Effect of solvents  
Photophysical properties, excitation energy transfer and laser activity of 3-(4'-dimethylaminophenyl)-1-(2-pyridinyl) prop-2-en-1-one (DMAPP). A new potential laser dye, 89
- Electrodeposition  
Preparation and photoelectric performance of ITO/TiO<sub>2</sub>/CdS composite thin films, 357
- Electron transfer  
Oxygen uptake after electron transfer from donors to the triplet state of nitronaphthalenes and dinitroaromatic compounds, 235  
Quenching dynamics promoted by silver nanoparticles, 254
- Electron transport  
Dye-sensitized solar cells employing non-volatile electrolytes based on oligomer solvent, 198
- Endoperoxides  
Supramolecular carriers of singlet oxygen: Photosensitized formation and thermal decomposition of endoperoxides in the presence of cyclodextrins, 1
- Energy transfer  
A comparative study of energy transfer in dye mixtures in monomer and polymer matrices under pulsed laser excitation, 135
- Exciplex  
Collective proton motion in the intramolecular hydrogen bonding network and the consequent enhancement in the acidity of hydroxycalixarenes, 116
- Excited singlet states  
Quenching of MgTPP and ZnTPP fluorescence by molecular oxygen, 223
- F-doping  
Direct growth of F-doped TiO<sub>2</sub> particulate thin films with high photocatalytic activity for environmental applications, 47
- Film  
*In situ* synthesis of photoluminescent films of PVC, doped with Ce<sup>3+</sup> ion, 215
- Flavonoid  
Structural effects on the conformational transition of transferrin induced by binding of flavonoids with different numbers and positions of hydroxyl groups, 127
- Fluorescence  
Synthesis and spectral characteristics of di-substituted 1,8-naphthalimides: Bi-radical formation, 64  
A comparative study of energy transfer in dye mixtures in monomer and polymer matrices under pulsed laser excitation, 135  
Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368
- Fluorescence quantum yield and photoreactivity in chloromethane solvents  
Photophysical properties, excitation energy transfer and laser activity of 3-(4'-dimethylaminophenyl)-1-(2-pyridinyl) prop-2-en-1-one (DMAPP). A new potential laser dye, 89
- Fluorescence quantum yields  
Synthesis and solvent effects on the photophysicochemical properties of novel cadmium phenoxy phthalocyanines, 183
- Fluorescence quenching  
Quenching of MgTPP and ZnTPP fluorescence by molecular oxygen, 223
- Fluorescent chemosensor  
Effects of proton and metal cations on the fluorescence properties of anthracene bearing macrocyclic polyether and polyamine receptors, 267
- Fluorinated indolylfulgide  
Improving the stability of photochromic fluorinated indolylfulgides, 228
- Gold nanoparticle (Au NP)  
Commercial and natural dyes as photosensitizers for a water-based dye-sensitized solar cell loaded with gold nanoparticles, 307
- Graded structure  
Chemical sintering of graded TiO<sub>2</sub> film at low-temperature for flexible dye-sensitized solar cells, 247
- Green emission  
Plus green emission of ZnO nanorods induced by Ce<sup>3+</sup> doping and concentration, 151
- Heterogeneous reaction  
Photodissociation dynamics of OCS and CS<sub>2</sub> adsorbed on water ice films at 193 nm, 330
- Host–guest complexes  
Supramolecular carriers of singlet oxygen: Photosensitized formation and thermal decomposition of endoperoxides in the presence of cyclodextrins, 1

- Human serum albumin  
Interaction of alkylpyridinium chlorides with human serum albumin studied by fluorescence techniques, 295
- Hydrogen bonding  
Collective proton motion in the intramolecular hydrogen bonding network and the consequent enhancement in the acidity of hydroxycalixarenes, 116  
Structural effects on the conformational transition of transferrin induced by binding of flavonoids with different numbers and positions of hydroxyl groups, 127
- Ice surface  
Photodissociation dynamics of OCS and CS<sub>2</sub> adsorbed on water ice films at 193 nm, 330
- Immobilised Biomass Reactor  
Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes, 205
- Inorganic salts  
Factors influencing the photocatalytic degradation of Rhodamine B by TiO<sub>2</sub>-coated non-woven paper, 346
- Ion transport  
Dye-sensitized solar cells employing non-volatile electrolytes based on oligomer solvent, 198
- Iron  
Photochemical behaviour of poly(ethylene oxide) (PEO) in aqueous solution: Influence of iron salts, 167
- ITO/PEN  
Chemical sintering of graded TiO<sub>2</sub> film at low-temperature for flexible dye-sensitized solar cells, 247
- Kinetic  
The near UV absorption cross-sections and the rate coefficients for the ozonolysis of a series of styrene-like compounds, 54
- Laser dye  
Photophysical properties, excitation energy transfer and laser activity of 3-(4'-dimethylaminophenyl)-1-(2-pyridinyl) prop-2-en-1-one (DMAPP). A new potential laser dye, 89
- Laser photolysis  
Photochemical reaction of dimethylarsinous iodide in aerated methanol: A contribution to arsenic radical chemistry, 175
- Laser-induced fluorescence  
A directly-dissociative stepwise reaction mechanism for gas-phase peroxyacetic acid, 10
- Low-temperature film preparation  
Chemical sintering of graded TiO<sub>2</sub> film at low-temperature for flexible dye-sensitized solar cells, 247
- Marcus theory  
Studies on an argon laser-induced photopolymerization employing both mono- and bischromophoric hemicyanine dye-borate complex as a photoinitiator, 105
- Mechanism  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Metalloporphyrins  
Quenching of MgTPP and ZnTPP fluorescence by molecular oxygen, 223
- Methyl methacrylate  
A comparative study of energy transfer in dye mixtures in monomer and polymer matrices under pulsed laser excitation, 135
- Methyl radical  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- Methylene blue  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Microspheres  
Novel core-shell structured mesoporous titania microspheres: Preparation, characterization and excellent photocatalytic activity in phenol abatement, 284
- Mineralisation  
Photochemical behaviour of poly(ethylene oxide) (PEO) in aqueous solution: Influence of iron salts, 167
- MO diagram  
Oxidation of phenyl trifluoromethyl sulphide: A pulse radiolysis and theoretical study, 277
- Modified  $\beta$ -diketone bridges directly covalently bonded mesoporous host  
Two photoactive lanthanide (Eu<sup>3+</sup>, Tb<sup>3+</sup>) hybrid materials of modified  $\beta$ -diketone bridge directly covalently bonded mesoporous host (MCM-41), 314
- Molecular beam  
Photodissociation of bromochlorobenzenes, 242
- Molecular hybrids  
Two photoactive lanthanide (Eu<sup>3+</sup>, Tb<sup>3+</sup>) hybrid materials of modified  $\beta$ -diketone bridge directly covalently bonded mesoporous host (MCM-41), 314
- Nanocrystals  
IV-VI Nanocrystal-polymer solar cells, 39
- Nanoparticles  
Assessment of photocatalytic activity of Solaronix™ nanostructured anatase, 99  
Quenching dynamics promoted by silver nanoparticles, 254
- Nanostructured TiO<sub>2</sub> film  
Dye-sensitized nanostructured TiO<sub>2</sub> film based photoconductor, 352
- 1,8-Naphthylimine-sterically hindered amines  
Synthesis and spectral characteristics of di-substituted 1,8-naphthalimides: Bi-radical formation, 64
- Near-infrared  
IV-VI Nanocrystal-polymer solar cells, 39
- Nitroaromates  
Oxygen uptake after electron transfer from donors to the triplet state of nitronaphthalenes and dinitroaromatic compounds, 235
- NMR  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- 1/f noise  
Sensitization of TiO<sub>2</sub> and ZnO nanocrystalline films with acriflavine, 364
- Non-volatile solvent  
Dye-sensitized solar cells employing non-volatile electrolytes based on oligomer solvent, 198
- Non-woven paper  
Factors influencing the photocatalytic degradation of Rhodamine B by TiO<sub>2</sub>-coated non-woven paper, 346
- NO<sub>x</sub> removal  
Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81
- Optical fibre preform  
A comparative study of energy transfer in dye mixtures in monomer and polymer matrices under pulsed laser excitation, 135
- Oxygen  
Quenching of MgTPP and ZnTPP fluorescence by molecular oxygen, 223
- Ozonolysis  
The near UV absorption cross-sections and the rate coefficients for the ozonolysis of a series of styrene-like compounds, 54
- PbS  
IV-VI Nanocrystal-polymer solar cells, 39
- Pd(II) 2-aminothiazole  
Synthesis and characterization of TiO<sub>2</sub> chemically modified by Pd(II) 2-aminothiazole complex for the photocatalytic degradation of phenol, 23

- Peracids  
A directly-dissociative stepwise reaction mechanism for gas-phase peroxyacetic acid, 10
- Peroxy acids  
A directly-dissociative stepwise reaction mechanism for gas-phase peroxyacetic acid, 10
- pH effect  
Oxidation of phenyl trifluoromethyl sulphide: A pulse radiolysis and theoretical study, 277
- Phenol  
Novel core-shell structured mesoporous titania microspheres: Preparation, characterization and excellent photocatalytic activity in phenol abatement, 284
- Phenol photodegradation  
Synthesis and characterization of TiO<sub>2</sub> chemically modified by Pd(II) 2-aminothiazole complex for the photocatalytic degradation of phenol, 23
- Photocatalysis  
Direct growth of F-doped TiO<sub>2</sub> particulate thin films with high photocatalytic activity for environmental applications, 47  
Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81
- Photocatalytic degradation  
Factors influencing the photocatalytic degradation of Rhodamine B by TiO<sub>2</sub>-coated non-woven paper, 346
- Photochemical stability  
Improving the stability of photochromic fluorinated indolylfulgides, 228
- Photochromism  
Improving the stability of photochromic fluorinated indolylfulgides, 228
- Photoconductor  
Dye-sensitized nanostructured TiO<sub>2</sub> film based photoconductor, 352
- Photocurrent response  
Preparation and photoelectric performance of ITO/TiO<sub>2</sub>/CdS composite thin films, 357
- Photodegradation  
*cis-trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30  
Photochemical behaviour of poly(ethylene oxide) (PEO) in aqueous solution: Influence of iron salts, 167  
Synthesis and solvent effects on the photophysical properties of novel cadmium phenoxy phthalocyanines, 183  
Novel core-shell structured mesoporous titania microspheres: Preparation, characterization and excellent photocatalytic activity in phenol abatement, 284
- Photodissociation  
A directly-dissociative stepwise reaction mechanism for gas-phase peroxyacetic acid, 10  
Photodissociation of bromochlorobenzenes, 242
- Photodissociation dynamics  
Photodissociation dynamics of OCS and CS<sub>2</sub> adsorbed on water ice films at 193 nm, 330
- Photo-Fenton  
Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes, 205
- Photo-Kolbe reaction  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- Photoluminescence  
*In situ* synthesis of photoluminescent films of PVC, doped with Ce<sup>3+</sup> ion, 215  
Commercial and natural dyes as photosensitizers for a water-based dye-sensitized solar cell loaded with gold nanoparticles, 307
- Photolysis  
Time resolved resonance Raman, transient diffuse reflectance and kinetic studies of species generated by UV laser photolysis of biphenyl occluded within dehydrated Y-faujasite zeolites, 156
- Photooxidation  
Oxygen uptake after electron transfer from donors to the triplet state of nitronaphthalenes and dinitroaromatic compounds, 235
- Photopatterning  
*In situ* synthesis of photoluminescent films of PVC, doped with Ce<sup>3+</sup> ion, 215
- Photoperoxidation  
Synthesis, photoperoxidation and crosslinking of styrene copolymer with pendant benzil moieties, 191
- Photophysical properties  
Two photoactive lanthanide (Eu<sup>3+</sup>, Tb<sup>3+</sup>) hybrid materials of modified β-diketone bridge directly covalently bonded mesoporous host (MCM-41), 314
- Photopolymerization  
Novel benzylidene cyclopentanone dyes for two-photon photopolymerization, 261  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- Photoreaction mechanism  
Photoisomerization mechanism of the *cis* isomers of 1,2-distyrylbenzene and two hetero-analogues, 301
- Photoreduction  
Oxygen uptake after electron transfer from donors to the triplet state of nitronaphthalenes and dinitroaromatic compounds, 235  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Photosensitive  
New polyacrylates with photosensitive triazene groups designed for laser ablation. Synthesis, structure and properties, 337
- Photosensitization  
Synthesis and characterization of TiO<sub>2</sub> chemically modified by Pd(II) 2-aminothiazole complex for the photocatalytic degradation of phenol, 23
- Photosensitizer  
Novel benzylidene cyclopentanone dyes for two-photon photopolymerization, 261
- Photostationary state  
*cis-trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30
- Phototransistor  
Dye-sensitized nanostructured TiO<sub>2</sub> film based photoconductor, 352
- Photovoltaic devices  
IV-VI Nanocrystal-polymer solar cells, 39
- Photovoltaic performance  
Enhanced energy conversion efficiency of TiO<sub>2</sub> electrode modified with WO<sub>3</sub> in dye-sensitized solar cells, 144
- Pilot plant  
Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes, 205
- Plant pigments  
Betalain pigments for dye-sensitized solar cells, 72
- Polarity  
Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368
- Polyacrylates  
New polyacrylates with photosensitive triazene groups designed for laser ablation. Synthesis, structure and properties, 337
- Poly[dimethylsilylene-*p*-phenylene-dimethylsilylene-(*E*)-vinylene-*p*-phenylene-(*E*)-vinylene]  
*cis-trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30
- Poly(ethylene oxide) (PEO)  
Photochemical behaviour of poly(ethylene oxide) (PEO) in aqueous solution: Influence of iron salts, 167
- Proton acceptors  
Collective proton motion in the intramolecular hydrogen bonding network and the consequent enhancement in the acidity of hydroxycalixarenes, 116

- Pulse radiolysis  
Oxidation of phenyl trifluoromethyl sulphide: A pulse radiolysis and theoretical study, 277
- Pump-probe spectroscopy  
Photodissociation of bromochlorobenzenes, 242
- PVC  
*In situ* synthesis of photoluminescent films of PVC, doped with Ce<sup>3+</sup> ion, 215
- Quenching  
Synthesis and spectral characteristics of di-substituted 1,8-naphthalimides: Bi-radical formation, 64
- Radical polymerization  
Studies on an argon laser-induced photopolymerization employing both mono- and bischromophoric hemicyanine dye–borate complex as a photoinitiator, 105
- Radicals  
Oxygen uptake after electron transfer from donors to the triplet state of nitronaphthalenes and dinitroaromatic compounds, 235  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Reactive dyes  
Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes, 205
- Red-ox  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Reverse saturable absorption  
Quenching dynamics promoted by silver nanoparticles, 254
- Rhodamine B  
Factors influencing the photocatalytic degradation of Rhodamine B by TiO<sub>2</sub>-coated non-woven paper, 346
- Schottky barrier  
Commercial and natural dyes as photosensitizers for a water-based dye-sensitized solar cell loaded with gold nanoparticles, 307
- Semiconductor nanoparticles  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- Sensor  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Silylene-vinylene-*p*-phenylene polymers  
*cis-trans* photoisomerization of silylene-vinylene-*p*-phenylene polymers and their model compounds, 30
- Singlet oxygen  
Supramolecular carriers of singlet oxygen: Photosensitized formation and thermal decomposition of endoperoxides in the presence of cyclodextrins, 1
- Singlet oxygen quantum yields  
Synthesis and solvent effects on the photophysicochemical properties of novel cadmium phenoxy phthalocyanines, 183
- Solar cells  
IV–VI Nanocrystal–polymer solar cells, 39
- Sol–gel process  
Two photoactive lanthanide (Eu<sup>3+</sup>, Tb<sup>3+</sup>) hybrid materials of modified β-diketone bridge directly covalently bonded mesoporous host (MCM-41), 314
- Solvent effects  
Synthesis and solvent effects on the photophysicochemical properties of novel cadmium phenoxy phthalocyanines, 183
- Solvothermal  
Plus green emission of ZnO nanorods induced by Ce<sup>3+</sup> doping and concentration, 151
- Sphere-of-action  
Quenching dynamics promoted by silver nanoparticles, 254
- Splitting of water  
Direct growth of F-doped TiO<sub>2</sub> particulate thin films with high photocatalytic activity for environmental applications, 47
- Stable nitroxyl bi-radical  
Synthesis and spectral characteristics of di-substituted 1,8-naphthalimides: Bi-radical formation, 64
- Styrene  
The near UV absorption cross-sections and the rate coefficients for the ozonolysis of a series of styrene-like compounds, 54
- Styrylbenzothiazole  
Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368
- Substituent effects  
Photodissociation of bromochlorobenzenes, 242
- Sulphur radical cation  
Oxidation of phenyl trifluoromethyl sulphide: A pulse radiolysis and theoretical study, 277
- Sunlight  
Pilot plant scale reactive dyes degradation by solar photo-Fenton and biological processes, 205
- Surface modification  
Enhanced energy conversion efficiency of TiO<sub>2</sub> electrode modified with WO<sub>3</sub> in dye-sensitized solar cells, 144
- Suspension  
Assessment of photocatalytic activity of Solaronix™ nanostructured anatase, 99
- Thermal stability  
Improving the stability of photochromic fluorinated indolylfulgides, 228
- Thiazine dyes  
Reversible photoreduction of methylene blue in acrylate media containing benzyl dimethyl ketal, 378
- Thio-1,2-distyrylbenzenes  
Photoisomerization mechanism of the *cis* isomers of 1,2-distyrylbenzene and two hetero-analogues, 301
- Time resolved resonance Raman (TR<sup>3</sup>) spectroscopy  
Time resolved resonance Raman, transient diffuse reflectance and kinetic studies of species generated by UV laser photolysis of biphenyl occluded within dehydrated Y-faujasite zeolites, 156
- TiO<sub>2</sub>  
Synthesis and characterization of TiO<sub>2</sub> chemically modified by Pd(II) 2-aminothiazole complex for the photocatalytic degradation of phenol, 23  
Factors influencing the photocatalytic degradation of Rhodamine B by TiO<sub>2</sub>-coated non-woven paper, 346  
Sensitization of TiO<sub>2</sub> and ZnO nanocrystalline films with acriflavine, 364
- TiO<sub>2</sub> thin film  
Direct growth of F-doped TiO<sub>2</sub> particulate thin films with high photocatalytic activity for environmental applications, 47
- Titania  
Enhanced energy conversion efficiency of TiO<sub>2</sub> electrode modified with WO<sub>3</sub> in dye-sensitized solar cells, 144
- Titanium dioxide  
Assessment of photocatalytic activity of Solaronix™ nanostructured anatase, 99  
Novel core-shell structured mesoporous titania microspheres: Preparation, characterization and excellent photocatalytic activity in phenol abatement, 284  
Preparation and photoelectric performance of ITO/TiO<sub>2</sub>/CdS composite thin films, 357
- Titanium tetrachloride  
Novel core-shell structured mesoporous titania microspheres: Preparation, characterization and excellent photocatalytic activity in phenol abatement, 284

- Transfer efficiency  
A comparative study of energy transfer in dye mixtures in monomer and polymer matrices under pulsed laser excitation, 135
- Transferrin  
Structural effects on the conformational transition of transferrin induced by binding of flavonoids with different numbers and positions of hydroxyl groups, 127
- Transient diffuse reflectance UV-vis absorption (TDRUV)  
Time resolved resonance Raman, transient diffuse reflectance and kinetic studies of species generated by UV laser photolysis of biphenyl occluded within dehydrated Y-faujasite zeolites, 156
- Triazene  
New polyacrylates with photosensitive triazene groups designed for laser ablation. Synthesis, structure and properties, 337
- Triplet lifetimes  
Synthesis and solvent effects on the photophysicochemical properties of novel cadmium phenoxy phthalocyanines, 183
- Twisted intramolecular charge transfer  
Photophysical characterization and effect of pH on the twisted intramolecular charge transfer fluorescence of *trans*-2-[4-(dimethylamino)styryl]benzothiazole, 368
- Two-photon absorption  
Novel benzylidene cyclopentanone dyes for two-photon photopolymerization, 261
- UV irradiation  
Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81
- UV/laser ablation  
New polyacrylates with photosensitive triazene groups designed for laser ablation. Synthesis, structure and properties, 337
- UV-vis spectroscopy  
Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81
- Vinyl acetate  
The observation of photo-Kolbe reaction as a novel pathway to initiate photocatalytic polymerization over oxide semiconductor nanoparticles, 323
- Wastewater treatment  
Direct growth of F-doped TiO<sub>2</sub> particulate thin films with high photocatalytic activity for environmental applications, 47
- XAFS  
Enhancement effect of TiO<sub>2</sub> dispersion over alumina on the photocatalytic removal of NO<sub>x</sub> admixtures from O<sub>2</sub>-N<sub>2</sub> flow, 81
- Y zeolite  
Time resolved resonance Raman, transient diffuse reflectance and kinetic studies of species generated by UV laser photolysis of biphenyl occluded within dehydrated Y-faujasite zeolites, 156
- Zinc oxide  
Plus green emission of ZnO nanorods induced by Ce<sup>3+</sup> doping and concentration, 151
- ZnO  
Sensitization of TiO<sub>2</sub> and ZnO nanocrystalline films with acriflavine, 364