

## Subject Index of Volume 179

### Absorption spectrum

A butterfly like motion as a clue to the photophysics of thioxanthone, 298

### Acid treatment

Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20

### Aggregation

The effects of molecular aggregation and isomerization on the fluorescence of “push-pull” hyperpolarizable chromophores, 237

### Anion dope

Visible-light induced photocatalytic activity of TiO<sub>2-x</sub>A<sub>y</sub> (A = N, S) prepared by precipitation route, 105

### Anionic emission

Effect of pH in the photophysics of 2-hydroxy 1-naphthaldehyde in micellar systems, 95

### Aqueous media

Photosensitized degradation of cyclohexanol by Fe(III) species in alkaline aqueous media, 193

### 1-Aza-1,2,4,6-cycloheptatetraene

Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243

### 8-Azapurines

Fluorescence emission properties of 8-azaxanthine and its *N*-alkyl derivatives: Excited-state proton transfer, and potential applications in enzymology, 276

### 8-Azaxanthine

Fluorescence emission properties of 8-azaxanthine and its *N*-alkyl derivatives: Excited-state proton transfer, and potential applications in enzymology, 276

### Azide

Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243

### Benzoxazole

Fluorescence detection of conversion of phenolic Schiff bases to benzoxazoles, 320

### Binaphthyl

Chirochromic triggers: 3,3'-Disubstituted-2,2'-binaphthalene-1,1'-diols and 2-methylindoline derived phosphoramidates, 66

### Bisphenol A

Enhanced TiO<sub>2</sub> photocatalytic degradation of bisphenol A by  $\beta$ -cyclodextrin in suspended solutions, 49

### Bovine serum albumin

Spectroscopic studies on the interaction between methylene blue and bovine serum albumin, 324

### Cadmium selenide

Photodeposition of CdSe using Se-TiO<sub>2</sub> suspensions as photocatalysts, 57

### Carbon disulfide

Photochemical synthesis of ultrafine organosilicon particles from trimethyl(2-propynyloxy)silane and carbon disulfide, 142

### Carbon-coated TiO<sub>2</sub>

Mechanism of phenol decomposition on Fe-C-TiO<sub>2</sub> and Fe-TiO<sub>2</sub> photocatalysts via photo-Fenton process, 224

### CASPT2

A butterfly like motion as a clue to the photophysics of thioxanthone, 298

### CdSe quantum dots (Qdots)

Synthesis of size-controlled CdSe quantum dots and characterization of CdSe-conjugated polymer blends for hybrid solar cells, 135

### Channel reactor

Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263

### Charge recombination

Investigations of bimolecular photoinduced electron transfer reactions in polar solvents using ultrafast spectroscopy, 1

### Chemical vapour deposition

The role of nitrogen doping on the development of visible light-induced photocatalytic activity in thin TiO<sub>2</sub> films grown on glass by chemical vapour deposition, 213

### Chemically cross-linked gel

Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42

### Circular dichroism

Photoinduced changes of absorption and circular dichroism in a chiral nematic phase containing a photochromic fulgide, 35

### Circular dichroism spectroscopy

Spectroscopic study on the interaction of cyclodextrins with naphthyl groups attached to poly(acrylamide) backbone, 13

### Conformation

Possibility of conformation control of Micheler's ketone encapsulated into sol-gel matrices, 156

### Conjugated polymer

Synthesis of size-controlled CdSe quantum dots and characterization of CdSe-conjugated polymer blends for hybrid solar cells, 135

### Conversion

Fluorescence detection of conversion of phenolic Schiff bases to benzoxazoles, 320

### Conversion efficiency

Enhanced photoelectrochemical performance of ZnO electrodes sensitized with N-719, 81

### Crosslinking

Photochemical formation of ammonium/thiolate complexes from quaternary ammonium thiocyanates and its use in crosslinking of polymers, 87

### Cuprous(I) bis-phenanthroline

A density functional investigation of charge transfer and structural distortions of cuprous(I) bis-phenanthroline under photo-induced excitation, 149

### $\beta$ -Cyclodextrin

Enhanced TiO<sub>2</sub> photocatalytic degradation of bisphenol A by  $\beta$ -cyclodextrin in suspended solutions, 49

### Cyclodextrin

Spectroscopic study on the interaction of cyclodextrins with naphthyl groups attached to poly(acrylamide) backbone, 13

### Cyclohexanol

Photosensitized degradation of cyclohexanol by Fe(III) species in alkaline aqueous media, 193

### Deactivation of photo-activity

Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200

- Degradation  
 Study of kinetic parameters related to the degradation of an industrial effluent using Fenton-like reactions, 269
- Degradation pathways and mechanisms  
 Kinetics of photocatalytic degradation of phenols with multiple substituent groups, 256
- Dendrimers  
 Sensors for detecting metal ions and protons based on new green fluorescent poly(amidoamine) dendrimers peripherally modified with 1,8-naphthalimides, 28
- Density functional theory  
 A density functional investigation of charge transfer and structural distortions of cuprous(I) bis-phenanthroline under photo-induced excitation, 149
- Deprotonation  
 Effect of pH in the photophysics of 2-hydroxy 1-naphthaldehyde in micellar systems, 95
- Detection  
 Fluorescence detection of conversion of phenolic Schiff bases to benzoxazoles, 320
- DFT/B3LYP  
 Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Diarylethenes  
 Photobehaviour of some 1-heteroaryl-2-(1-methylpyridinium-2-yl)ethene iodides (free and complexed with DNA), 314
- Diffusion coefficient  
 Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Donor-acceptor complexes  
 Investigations of bimolecular photoinduced electron transfer reactions in polar solvents using ultrafast spectroscopy, 1
- Doxepin hydrochloride  
 Study of the interaction between doxepin and human serum albumin by spectroscopic methods, 161
- Dppz  
 On the parallel formation of long-lived excited states of dipyrilidil[3,2-a:2'3'-c]phenazine, dppz. A contrast between the electrochemically and photochemically induced reduction of dppz, 289
- Dye-doped titania gel  
 Photocurrent observed in dye-doped titania gel, 125
- Dye-sensitized solar cells  
 Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42  
 Enhanced photoelectrochemical performance of ZnO electrodes sensitized with N-719, 81  
 The use of binary  $\text{TiO}_2$ - $\text{GeO}_2$  oxide electrodes to enhanced efficiency of dye-sensitized solar cells, 130
- EDTA photodegradation  
 Photochemistry of the Fe(III)-EDTA complexes. A mechanistic study, 176
- Electrodeless discharge lamp  
 Microwave photochemistry IV: Preparation of the electrodeless discharge lamps for photochemical applications, 229
- Electrolyte  
 Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Enhancement  
 Enhanced  $\text{TiO}_2$  photocatalytic degradation of bisphenol A by  $\beta$ -cyclodextrin in suspended solutions, 49
- Environmental  
 Sensors for detecting metal ions and protons based on new green fluorescent poly(amidoamine) dendrimers peripherally modified with 1,8-naphthalimides, 28
- Excited state  
 A density functional investigation of charge transfer and structural distortions of cuprous(I) bis-phenanthroline under photo-induced excitation, 149
- $\text{FeC}_2\text{O}_4$   
 Mechanism of phenol decomposition on Fe-C-TiO<sub>2</sub> and Fe-TiO<sub>2</sub> photocatalysts via photo-Fenton process, 224
- Fe(III) water complexes  
 Photosensitized degradation of cyclohexanol by Fe(III) species in alkaline aqueous media, 193
- Fe(III)EDTA  
 Photochemistry of the Fe(III)-EDTA complexes. A mechanistic study, 176
- Fenton's reactions  
 Study of kinetic parameters related to the degradation of an industrial effluent using Fenton-like reactions, 269
- Fluorescein  
 Photocurrent observed in dye-doped titania gel, 125
- Fluorescence  
 The effects of molecular aggregation and isomerization on the fluorescence of "push-pull" hyperpolarizable chromophores, 237  
 Fluorescence emission properties of 8-azaxanthine and its *N*-alkyl derivatives: Excited-state proton transfer, and potential applications in enzymology, 276  
 Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes ( $\text{C}_6$ - $\text{C}_{16}$ ) and quenching of Safranine-T in these systems, 283  
 Fluorescence detection of conversion of phenolic Schiff bases to benzoxazoles, 320
- Fluorescence quenching  
 Study of the interaction between doxepin and human serum albumin by spectroscopic methods, 161  
 Spectroscopic studies on the interaction between methylene blue and bovine serum albumin, 324
- Fluorescence resonance energy transfer  
 Study of the interaction between doxepin and human serum albumin by spectroscopic methods, 161  
 Spectroscopic studies on the interaction between methylene blue and bovine serum albumin, 324
- Formaldehyde  
 Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow, 330
- FT-IR  
 Probing of photocatalytic surface sites on  $\text{SO}_4^{2-}/\text{TiO}_2$  solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339
- Fulgides  
 Photoinduced changes of absorption and circular dichroism in a chiral nematic phase containing a photochromic fulgide, 35
- 6-311++G(d,p) calculations  
 Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Gel electrolytes  
 Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Germanium oxide  
 The use of binary  $\text{TiO}_2$ - $\text{GeO}_2$  oxide electrodes to enhanced efficiency of dye-sensitized solar cells, 130
- Ground state structure  
 A butterfly like motion as a clue to the photophysics of thioxanthone, 298
- Human cells  
 Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200
- Human serum albumin  
 Study of the interaction between doxepin and human serum albumin by spectroscopic methods, 161
- Hybrid solar cells  
 Synthesis of size-controlled CdSe quantum dots and characterization of CdSe-conjugated polymer blends for hybrid solar cells, 135
- Hydrogen peroxide  
 Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow, 330

- Hydrothermal treatment  
Photoelectrochemical characterisation of TiO<sub>2</sub> thin films derived from microwave hydrothermally processed nanocrystalline colloids, 305
- Hydroxyl groups  
Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339
- Hyperpolarizability  
The effects of molecular aggregation and isomerization on the fluorescence of “push-pull” hyperpolarizable chromophores, 237
- In situ  
Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339
- Industrial effluent  
Study of kinetic parameters related to the degradation of an industrial effluent using Fenton-like reactions, 269
- Interactions with DNA  
Photobehaviour of some 1-heteroaryl-2-(1-methylpyridinium-2-yl)ethene iodides (free and complexed with DNA), 314
- Iron ion doping  
Microporous SiO<sub>2</sub>-TiO<sub>2</sub> nanosols pillared montmorillonite for photocatalytic decomposition of methyl orange, 75
- Isocyanic acid  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Liquid crystals  
Photoinduced changes of absorption and circular dichroism in a chiral nematic phase containing a photochromic fulgide, 35  
Chirochromic triggers: 3,3'-Disubstituted-2,2'-binaphthalene-1,1'-diols and 2-methylindoline derived phosphoramidates, 66
- LMCT photoreduction  
Photochemistry of the Fe(III)-EDTA complexes. A mechanistic study, 176
- Magnetic field  
Improved photoreceptor decay characteristics of vanadyl-phthalocyanine films annealed under magnetic field, 348
- Matrix isolation IR spectroscopy  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Mechanism  
Photodeposition of CdSe using Se-TiO<sub>2</sub> suspensions as photocatalysts, 57
- Memories and data storage  
Photoinduced changes of absorption and circular dichroism in a chiral nematic phase containing a photochromic fulgide, 35
- Merocyanine  
The effects of molecular aggregation and isomerization on the fluorescence of “push-pull” hyperpolarizable chromophores, 237
- Methyl orange  
Microporous SiO<sub>2</sub>-TiO<sub>2</sub> nanosols pillared montmorillonite for photocatalytic decomposition of methyl orange, 75
- Methylene blue  
Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263  
Spectroscopic studies on the interaction between methylene blue and bovine serum albumin, 324
- Micelles  
Effect of pH in the photophysics of 2-hydroxy 1-naphthaldehyde in micellar systems, 95
- Michler's ketone  
Possibility of conformation control of Michler's ketone encapsulated into sol-gel matrices, 156
- Microemulsion  
Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes (C<sub>6</sub>-C<sub>16</sub>) and quenching of Safranine-T in these systems, 283
- Microreactor  
Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263
- Microstructure  
Enhanced photoelectrochemical performance of ZnO electrodes sensitized with N-719, 81
- Microwave  
Photoelectrochemical characterisation of TiO<sub>2</sub> thin films derived from microwave hydrothermally processed nanocrystalline colloids, 305
- Microwave photochemistry  
Microwave photochemistry IV: Preparation of the electrodeless discharge lamps for photochemical applications, 229
- Molecular orientation  
Improved photoreceptor decay characteristics of vanadyl-phthalocyanine films annealed under magnetic field, 348
- Morphology  
Photodeposition of CdSe using Se-TiO<sub>2</sub> suspensions as photocatalysts, 57
- N-719  
Enhanced photoelectrochemical performance of ZnO electrodes sensitized with N-719, 81
- Nano  
Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Nano-particle  
Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- 1,8-Naphthalimides  
Sensors for detecting metal ions and protons based on new green fluorescent poly(amidoamine) dendrimers peripherally modified with 1,8-naphthalimides, 28
- Naphthyl group  
Spectroscopic study on the interaction of cyclodextrins with naphthyl groups attached to poly(acrylamide) backbone, 13
- Nd<sup>3+</sup>:YAG laser photolysis  
Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115
- N-doping  
The role of nitrogen doping on the development of visible light-induced photocatalytic activity in thin TiO<sub>2</sub> films grown on glass by chemical vapour deposition, 213
- Nitrate  
Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow, 330
- Nitroaromatic  
Impact of photo-oxidation technology on the aqueous solutions of nitrobenzene: Degradation efficiency and biodegradability enhancement, 184
- Non-equilibrium dynamics  
Investigations of bimolecular photoinduced electron transfer reactions in polar solvents using ultrafast spectroscopy, 1
- Nonlinear optics  
The effects of molecular aggregation and isomerization on the fluorescence of “push-pull” hyperpolarizable chromophores, 237
- Organic matter  
Study of kinetic parameters related to the degradation of an industrial effluent using Fenton-like reactions, 269
- Oxidations  
Impact of photo-oxidation technology on the aqueous solutions of nitrobenzene: Degradation efficiency and biodegradability enhancement, 184
- Oxidative alkylation  
Intramolecular cyclizations via photostimulated tethered free radical reaction towards  $\alpha$ -tetralones and their analogues, 167
- Oxygen vacancies  
Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20

- Padimate-O  
Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200
- PAMAM  
Sensors for detecting metal ions and protons based on new green fluorescent poly(amidoamine) dendrimers peripherally modified with 1,8-naphthalimides, 28
- Parsol 1789  
Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200
- pH variation  
Effect of pH in the photophysics of 2-hydroxy 1-naphthaldehyde in micellar systems, 95
- Phase-segregation  
Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Phase-separation  
Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42
- Phenol decomposition  
Mechanism of phenol decomposition on Fe-C-TiO<sub>2</sub> and Fe-TiO<sub>2</sub> photocatalysts via photo-Fenton process, 224
- Phenol oxidation  
Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20
- Phenolic Schiff base  
Fluorescence detection of conversion of phenolic Schiff bases to benzoxazoles, 320
- Phenols  
Kinetics of photocatalytic degradation of phenols with multiple substituent groups, 256
- 1-Phenyl-1,2-dihydro-1,2,4-triazole  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- 1-Phenyl-tetrazolone  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Phenylazide  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Phenyldiazene  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Phenylisocyanate  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Photoactivity  
The role of nitrogen doping on the development of visible light-induced photocatalytic activity in thin TiO<sub>2</sub> films grown on glass by chemical vapour deposition, 213
- Photobase generator  
Photochemical formation of ammonium/thiolate complexes from quaternary ammonium thiocyanates and its use in crosslinking of polymers, 87
- Photocatalysis  
Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20  
Microporous SiO<sub>2</sub>-TiO<sub>2</sub> nanosols pillared montmorillonite for photocatalytic decomposition of methyl orange, 75  
Photosensitized degradation of cyclohexanol by Fe(III) species in alkaline aqueous media, 193
- Photocatalyst  
Visible-light induced photocatalytic activity of TiO<sub>2-x</sub>A<sub>y</sub> (A = N, S) prepared by precipitation route, 105  
Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263  
Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339
- Photocatalytic degradation  
Enhanced TiO<sub>2</sub> photocatalytic degradation of bisphenol A by  $\beta$ -cyclodextrin in suspended solutions, 49
- Photocatalytic reduction  
Photodeposition of CdSe using Se-TiO<sub>2</sub> suspensions as photocatalysts, 57
- Photochemical fragmentation  
Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243
- Photochemical reactions  
Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow, 330
- Photochemical techniques  
On the parallel formation of long-lived excited states of dipyrilid[3,2-a:2'3'-c]phenazine, dppz. A contrast between the electrochemically and photochemically induced reduction of dppz, 289
- Photochromic  
Chirochromic triggers: 3,3'-Disubstituted-2,2'-binaphthalene-1,1'-diols and 2-methylindoline derived phosphoramidates, 66
- Photochromism  
Photoinduced changes of absorption and circular dichroism in a chiral nematic phase containing a photochromic fulgide, 35
- Photocurrent  
Photocurrent observed in dye-doped titania gel, 125
- Photodegradation  
Photosensitized degradation of cyclohexanol by Fe(III) species in alkaline aqueous media, 193  
Kinetics of photocatalytic degradation of phenols with multiple substituent groups, 256
- Photoelectrochemical  
The use of binary TiO<sub>2</sub>-GeO<sub>2</sub> oxide electrodes to enhanced efficiency of dye-sensitized solar cells, 130
- Photoelectrochemical oxidation  
Photoelectrochemical characterisation of TiO<sub>2</sub> thin films derived from microwave hydrothermally processed nanocrystalline colloids, 305
- Photo-Fenton reaction  
Mechanism of phenol decomposition on Fe-C-TiO<sub>2</sub> and Fe-TiO<sub>2</sub> photocatalysts via photo-Fenton process, 224
- Photoinduced electron transfer  
Investigations of bimolecular photoinduced electron transfer reactions in polar solvents using ultrafast spectroscopy, 1  
Photochemistry of the Fe(III)-EDTA complexes. A mechanistic study, 176
- Photo-induced excitation  
A density functional investigation of charge transfer and structural distortions of cuprous(I) bis-phenanthroline under photo-induced excitation, 149
- Photoisomerization  
Chirochromic triggers: 3,3'-Disubstituted-2,2'-binaphthalene-1,1'-diols and 2-methylindoline derived phosphoramidates, 66  
Photobehaviour of some 1-heteroaryl-2-(1-methylpyridinium-2-yl)ethene iodides (free and complexed with DNA), 314
- Photolysis  
Intramolecular cyclizations via photostimulated tethered free radical reaction towards  $\alpha$ -tetralones and their analogues, 167
- Photo-polymerization  
Photochemical synthesis of ultrafine organosilicon particles from trimethyl(2-propynyloxy)silane and carbon disulfide, 142
- Photoreceptor  
Improved photoreceptor decay characteristics of vanadyl-phthalocyanine films annealed under magnetic field, 348
- Phototautomerism  
Fluorescence emission properties of 8-azaxanthine and its *N*-alkyl derivatives: Excited-state proton transfer, and potential applications in enzymology, 276
- Phototrigger  
Chirochromic triggers: 3,3'-Disubstituted-2,2'-binaphthalene-1,1'-diols and 2-methylindoline derived phosphoramidates, 66
- Phthalocyanine  
Improved photoreceptor decay characteristics of vanadyl-phthalocyanine films annealed under magnetic field, 348
- Pillared clay  
Microporous SiO<sub>2</sub>-TiO<sub>2</sub> nanosols pillared montmorillonite for photocatalytic decomposition of methyl orange, 75

## Plasmid DNA

Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200

## Poly(acrylamide)

Spectroscopic study on the interaction of cyclodextrins with naphthyl groups attached to poly(acrylamide) backbone, 13

## Polyvinylpyridine

Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42

## Porous ceramics

Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263

## Post-irradiation effect

Photochemistry of the Fe(III)-EDTA complexes. A mechanistic study, 176

## Precipitation route

Visible-light induced photocatalytic activity of TiO<sub>2-x</sub>A<sub>y</sub> (A = N, S) prepared by precipitation route, 105

## Property of the singlet excited state

Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115

## Protein/ligand interactions

Fluorescence emission properties of 8-azaxanthine and its *N*-alkyl derivatives: Excited-state proton transfer, and potential applications in enzymology, 276

## Push-pull compounds

Photobehaviour of some 1-heteroaryl-2-(1-methylpyridinium-2-yl)ethene iodides (free and complexed with DNA), 314

## Quasi-solid

Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42

## Quaternary ammonium salt

Photochemical formation of ammonium/thiolate complexes from quaternary ammonium thiocyanates and its use in crosslinking of polymers, 87

## Quenching

Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes (C<sub>6</sub>-C<sub>16</sub>) and quenching of Safranin-T in these systems, 283

## Radical anion

Intramolecular cyclizations via photostimulated tethered free radical reaction towards  $\alpha$ -tetralones and their analogues, 167

## Radical cation

Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115

## Reagent concentrations

Impact of photo-oxidation technology on the aqueous solutions of nitrobenzene: Degradation efficiency and biodegradability enhancement, 184

## Resonant two-photon ionization

Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115

## Reverse micelle

Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes (C<sub>6</sub>-C<sub>16</sub>) and quenching of Safranin-T in these systems, 283

## Rutile-anatase

Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20

## Safranin-T

Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes (C<sub>6</sub>-C<sub>16</sub>) and quenching of Safranin-T in these systems, 283

## Sensors

Sensors for detecting metal ions and protons based on new green fluorescent poly(amidoamine) dendrimers peripherally modified with 1,8-naphthalimides, 28

## Silica: photo-conversion

Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42

## Snow

Investigation of the photochemical decomposition of nitrate, hydrogen peroxide, and formaldehyde in artificial snow, 330

## Sol-gel method

Photocurrent observed in dye-doped titania gel, 125

## Sol-gel reaction

Possibility of conformation control of Micheler's ketone encapsulated into sol-gel matrices, 156

## Steady-state fluorescence spectroscopy

Spectroscopic study on the interaction of cyclodextrins with naphthyl groups attached to poly(acrylamide) backbone, 13

## Steam-treatment

Photocurrent observed in dye-doped titania gel, 125

## Stilbene

Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115

## Structural distortion

A density functional investigation of charge transfer and structural distortions of cuprous(I) bis-phenanthroline under photo-induced excitation, 149

## Substituent effect

Important factors for the formation of radical cation of stilbene and substituted stilbenes during resonant two-photon ionization with a 266- or 355-nm laser, 115

## Substituted phenols

Kinetics of photocatalytic degradation of phenols with multiple substituent groups, 256

## Superacids

Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339

## Surface acidity

Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339

## Surfactant

Fluorescence probing of aerosol OT based reverse micelles and microemulsions in *n*-alkanes (C<sub>6</sub>-C<sub>16</sub>) and quenching of Safranin-T in these systems, 283

## Surfactant-assisted method

The use of binary TiO<sub>2</sub>-GeO<sub>2</sub> oxide electrodes to enhanced efficiency of dye-sensitized solar cells, 130

## Tertiary amine

Photochemical formation of ammonium/thiolate complexes from quaternary ammonium thiocyanates and its use in crosslinking of polymers, 87

 $\alpha$ -Tetralones and their analogues

Intramolecular cyclizations via photostimulated tethered free radical reaction towards  $\alpha$ -tetralones and their analogues, 167

## Tetrazole-ring cleavage

Photochemistry of 1-phenyl-tetrazolone isolated in solid argon, 243

## Thermodynamic parameters

Study of the interaction between doxepin and human serum albumin by spectroscopic methods, 161

Spectroscopic studies on the interaction between methylene blue and bovine serum albumin, 324

## Thiocyanate anion

Photochemical formation of ammonium/thiolate complexes from quaternary ammonium thiocyanates and its use in crosslinking of polymers, 87

## Thioxanthone

A butterfly like motion as a clue to the photophysics of thioxanthone, 298

## TICT and ICT

Possibility of conformation control of Micheler's ketone encapsulated into sol-gel matrices, 156

TiO<sub>2</sub>

Effect of TiO<sub>2</sub> acidic pre-treatment on the photocatalytic properties for phenol degradation, 20

Latent gel electrolyte precursors for quasi-solid dye sensitized solar cells. The comparison of nano-particle cross-linkers with polymer cross-linkers, 42

Visible-light induced photocatalytic activity of TiO<sub>2-x</sub>A<sub>y</sub> (A = N, S) prepared by precipitation route, 105

Design and evaluation of photocatalytic micro-channel reactors using TiO<sub>2</sub>-coated porous ceramics, 263

TiO<sub>2</sub> electrode

Photoelectrochemical characterisation of TiO<sub>2</sub> thin films derived from microwave hydrothermally processed nanocrystalline colloids, 305

## Titania

Microporous SiO<sub>2</sub>-TiO<sub>2</sub> nanosols pillared montmorillonite for photocatalytic decomposition of methyl orange, 75

The role of nitrogen doping on the development of visible light-induced photocatalytic activity in thin TiO<sub>2</sub> films grown on glass by chemical vapour deposition, 213

Probing of photocatalytic surface sites on SO<sub>4</sub><sup>2-</sup>/TiO<sub>2</sub> solid acids by in situ FT-IR spectroscopy and pyridine adsorption, 339

## Titanium dioxide

Photodeposition of CdSe using Se-TiO<sub>2</sub> suspensions as photocatalysts, 57

Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200

## Titanium oxide

The use of binary TiO<sub>2</sub>-GeO<sub>2</sub> oxide electrodes to enhanced efficiency of dye-sensitized solar cells, 130

## Toxicity

Impact of photo-oxidation technology on the aqueous solutions of nitrobenzene: Degradation efficiency and biodegradability enhancement, 184

## Trimethyl(2-propynyloxy)silane

Photochemical synthesis of ultrafine organosilicon particles from trimethyl(2-propynyloxy)silane and carbon disulfide, 142

## Ultrafast spectroscopy

Investigations of bimolecular photoinduced electron transfer reactions in polar solvents using ultrafast spectroscopy, 1

## Ultrafine particles

Photochemical synthesis of ultrafine organosilicon particles from trimethyl(2-propynyloxy)silane and carbon disulfide, 142

## UV physical filter

Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200

## UV/vis source

Microwave photochemistry IV: Preparation of the electrodeless discharge lamps for photochemical applications, 229

## UV-vis spectrum

On the parallel formation of long-lived excited states of dipyrilidil[3,2-a:2'3'-c]phenazine, dppz. A contrast between the electrochemically and photochemically induced reduction of dppz, 289

## Visible-light induced

Visible-light induced photocatalytic activity of TiO<sub>2-x</sub>A<sub>y</sub> (A = N, S) prepared by precipitation route, 105

## Yeast cells

Beneficial effects of photo-inactive titanium dioxide specimens on plasmid DNA, human cells and yeast cells exposed to UVA/UVB simulated sunlight, 200

## Zinc oxide

Enhanced photoelectrochemical performance of ZnO electrodes sensitized with N-719, 81