

Subject Index of Volume 170

- Absorption
Spectroscopy and photophysics of flavin-related compounds: 3-ethyl-lumiflavin, 267
- Absorption spectrum
Spectral characteristics of methyl 2-aminonicotinate: effect of solvents and acid–base concentrations, 203
- Adsorption
Photocatalytic reduction of hexavalent chromium in aqueous solution over sulphate modified titania, 189
- Ag
Photocatalytic decolorization of methyl orange in aqueous medium of TiO₂ and Ag–TiO₂ immobilized on γ -Al₂O₃, 7
- γ -Al₂O₃
Photocatalytic decolorization of methyl orange in aqueous medium of TiO₂ and Ag–TiO₂ immobilized on γ -Al₂O₃, 7
- Amino acid
Solvatochromism of 3-[2-(aryl)benzoxazol-5-yl]alanine derivatives, 215
- Anion band
Prototropism in 2-acetyl benzimidazole and 2-benzoyl benzimidazole, 131
- AOPs
Comparison of different advanced oxidation processes for the degradation of room temperature ionic liquids, 45
- Aquacomplex
Degradation of carbofuran in aqueous solution by Fe(III) aquacomplexes as effective photocatalysts, 239
- Association constant
Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Axial ligands
Synthesis and spectroscopic analysis of tetraphenylporphyrinatoantimony(V) complexes linked to boron-dipyrin chromophore on axial ligands, 287
- Benzene
Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- Benzosultine
Photochemistry and photodissociation of benzosultine and naphthosultine: electronic relaxation of sultines and kinetics and theoretical studies of fragment o-quinodimethanes, 69
- Benzoxazole
Solvatochromism of 3-[2-(aryl)benzoxazol-5-yl]alanine derivatives, 215
- Benzo[*b*]thiophene derivatives
New fluorescent benzo[*b*]thienyl amino acid derivatives based on sulfanylphenyl benzo[*b*]thiophenes, 181
- Bimolecular quenching rate constant
Fluorescence quenching of fluorescein with molecular oxygen in solution, 105
- Bond cleavage
A new-type photoreaction of a carbonyl compound. Part 2. Photoinduced ω -bond dissociation in *p*-halomethylbenzophenone studied by time-resolved EPR technique and laser flash photolysis, 253
- Boron-dipyrin chromophore
Synthesis and spectroscopic analysis of tetraphenylporphyrinatoantimony(V) complexes linked to boron-dipyrin chromophore on axial ligands, 287
- Branched carboxylic acids
Photocatalyzed oxidation and mineralization of branched and oxidized C4 and C5 aliphatic acids in UV-irradiated aqueous titania dispersions, 51
- p*-Bromomethylbenzophenone
A new-type photoreaction of a carbonyl compound. Part 2. Photoinduced ω -bond dissociation in *p*-halomethylbenzophenone studied by time-resolved EPR technique and laser flash photolysis, 253
- Cadmium sulfide
Photoinduced halophenol formation in the presence of iron(III) species or cadmium sulfide, 61
- Calcination effect
Photoluminescence and photoactivity of titania particles prepared by the sol–gel technique: effect of calcination temperature, 247
- Carbofuran
Degradation of carbofuran in aqueous solution by Fe(III) aquacomplexes as effective photocatalysts, 239
- Charge transfer
Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
The role of n–p junction electrodes in minimizing the charge recombination and enhancement of photocurrent and photovoltage in dye sensitized solar cells, 273
- Chloride sensor
The effect of ionic strength and surfactant on the dynamic quenching of 6-methoxyquinoline by halides, 21
- p*-Chloromethylbenzophenone
A new-type photoreaction of a carbonyl compound. Part 2. Photoinduced ω -bond dissociation in *p*-halomethylbenzophenone studied by time-resolved EPR technique and laser flash photolysis, 253
- CIDEP
A new-type photoreaction of a carbonyl compound. Part 2. Photoinduced ω -bond dissociation in *p*-halomethylbenzophenone studied by time-resolved EPR technique and laser flash photolysis, 253
- Cyanine dye
Evaluation of sensitizing ability of barbiturate-functionalized non-ionic cyanine dyes; application for photoinduced radical generation system initiated by near IR light, 123
- Cyclopentaannulated compound
Synthesis and photochromic properties of phenanthropyran derivative substituted with styryl group, 169
- Degradation
The effect of lanthanide on the degradation of RB in nanocrystalline Ln/TiO₂ aqueous solution, 279
- Dipole moment
Study on photophysical properties of intramolecular charge transfer (ICT) compound: 4-(diphenylamino)biphenyl-4'-boronic acid, 15

- Solvatochromism of 3-[2-(aryl)benzoxazol-5-yl]alanine derivatives, 215
- Dipole–dipole interactions
- Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Donor–acceptor
- Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Dye sensitization
- The role of n–p junction electrodes in minimizing the charge recombination and enhancement of photocurrent and photovoltage in dye sensitized solar cells, 273
- Dyes
- Excited states quenching of phenosafranine dye by electron donors, 261
- Dynamic quenching
- Fluorescence quenching of fluorescein with molecular oxygen in solution, 105
- Electron transfer
- Excited states quenching of phenosafranine dye by electron donors, 261
- 3-Ethyl-lumiflavin
- Spectroscopy and photophysics of flavin-related compounds: 3-ethyl-lumiflavin, 267
- Excited state
- Quantum study on photophysical and photochemical process of a new photosensitizer: hypomycin B, 37
- Excited state intramolecular proton transfer
- Spectral characteristics of methyl 2-aminonicotinate: effect of solvents and acid–base concentrations, 203
- Fe(III)
- Degradation of carbofuran in aqueous solution by Fe(III) aquacomplexes as effective photocatalysts, 239
- Fenton process
- Degradation of nitrophenols by Fenton and photo-Fenton processes, 83
- Fluorescein
- Fluorescence quenching of fluorescein with molecular oxygen in solution, 105
- Fluorescence
- Study on photophysical properties of intramolecular charge transfer (ICT) compound: 4-(diphenylamino)biphenyl-4'-boronic acid, 15
 - The effect of ionic strength and surfactant on the dynamic quenching of 6-methoxyquinoline by halides, 21
 - Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
 - Solvatochromism of 3-[2-(aryl)benzoxazol-5-yl]alanine derivatives, 215
- Fluorescence quenching
- Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Fluorescence spectrum
- Spectral characteristics of methyl 2-aminonicotinate: effect of solvents and acid–base concentrations, 203
- Fluorescent amino acids
- New fluorescent benzo[*b*]thienyl amino acid derivatives based on sulfanylphenyl benzo[*b*]thiophenes, 181
- Halophenols
- Photoinduced halophenol formation in the presence of iron(III) species or cadmium sulfide, 61
- Hammett constants
- Degradation of nitrophenols by Fenton and photo-Fenton processes, 83
- Herbicide
- Study of the phototransformation of imazaquin in aqueous solution: a kinetic approach, 27
- Heterogeneous photocatalysis
- Comparison of different advanced oxidation processes for the degradation of room temperature ionic liquids, 45
- Hexavalent chromium
- Photocatalytic reduction of hexavalent chromium in aqueous solution over sulphate modified titania, 189
- HMB
- Quantum study on photophysical and photochemical process of a new photosensitizer: hypomycin B, 37
- Humidity
- Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- Hydrogen abstraction
- Prototropism in 2-acetyl benzimidazole and 2-benzoyl benzimidazole, 131
- Hydrogen atom abstraction
- Photochemical reaction dynamics of 9,10-phenanthrenequinone and 1,2-naphthoquinone with hydrogen donors in solution, 161
- Imazaquin
- Study of the phototransformation of imazaquin in aqueous solution: a kinetic approach, 27
- Inorganic anions
- Photodegradation of a textile dye catalyzed by sol–gel derived nanocrystalline TiO₂ via ultrasonic irradiation, 225
- Intermediates
- Degradation of nitrophenols by Fenton and photo-Fenton processes, 83
- Intramolecular charge transfer
- Study on photophysical properties of intramolecular charge transfer (ICT) compound: 4-(diphenylamino)biphenyl-4'-boronic acid, 15
 - New fluorescent benzo[*b*]thienyl amino acid derivatives based on sulfanylphenyl benzo[*b*]thiophenes, 181
- Intramolecular energy transfer
- Synthesis and spectroscopic analysis of tetraphenylporphyrinatoantimony(V) complexes linked to boron-dipyrin chromophore on axial ligands, 287
- Intramolecular proton transfer
- Quantum study on photophysical and photochemical process of a new photosensitizer: hypomycin B, 37
- Ionic conductivity
- A novel polymer quaternary ammonium iodide and application in quasi-solid-state dye-sensitized solar cells, 1
- Ionic liquids
- Comparison of different advanced oxidation processes for the degradation of room temperature ionic liquids, 45
- Iron(III)
- Photoinduced halophenol formation in the presence of iron(III) species or cadmium sulfide, 61
- Iron oxide
- Photoinduced halophenol formation in the presence of iron(III) species or cadmium sulfide, 61
- Iron(II) photooxidation
- Inhibition of photooxidation of iron(II) by some semiconductors, 233
- Iron(III) photoreduction
- Inhibition of photooxidation of iron(II) by some semiconductors, 233
- Ketyl radical
- Photochemical reaction dynamics of 9,10-phenanthrenequinone and 1,2-naphthoquinone with hydrogen donors in solution, 161
- Laser flash photolysis
- Study of the phototransformation of imazaquin in aqueous solution: a kinetic approach, 27
 - Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,6,6-tetramethylpiperidine; triplet route of deactivation, 151

- A new-type photoreaction of a carbonyl compound. Part 2. Photoinduced ω -bond dissociation in *p*-halomethylbenzophenone studied by time-resolved EPR technique and laser flash photolysis, 253
- Excited states quenching of phenosafranine dye by electron donors, 261
- Ln/TiO_2
The effect of lanthanide on the degradation of RB in nanocrystalline Ln/TiO_2 aqueous solution, 279
- Methyl 2-aminonicotinate (2-MAN)
Spectral characteristics of methyl 2-aminonicotinate: effect of solvents and acid–base concentrations, 203
- Methyl orange
Photocatalytic decolorization of methyl orange in aqueous medium of TiO_2 and Ag-TiO_2 immobilized on $\gamma\text{-Al}_2\text{O}_3$, 7
- Methylene blue-photodegradation
Photodegradation of a textile dye catalyzed by sol–gel derived nanocrystalline TiO_2 via ultrasonic irradiation, 225
- Mineralization
Degradation of carbofuran in aqueous solution by Fe(III) aquacomplexes as effective photocatalysts, 239
- Model
Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- Molecular modeling
Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Molecular oxygen
Fluorescence quenching of fluorescein with molecular oxygen in solution, 105
- Nanocrystalline TiO_2
Photodegradation of a textile dye catalyzed by sol–gel derived nanocrystalline TiO_2 via ultrasonic irradiation, 225
- 1,8-Naphthalic anhydrides
Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,6,6-tetramethylpiperidine; triplet route of deactivation, 151
- Naphthosultine
Photochemistry and photodissociation of benzosultine and naphthosultine: electronic relaxation of sultines and kinetics and theoretical studies of fragment o-quinodimethanes, 69
- 1,2-Naphthoquinone
Photochemical reaction dynamics of 9,10-phenanthrenequinone and 1,2-naphthoquinone with hydrogen donors in solution, 161
- Near IR
Evaluation of sensitizing ability of barbiturate-functionalized non-ionic cyanine dyes; application for photoinduced radical generation system initiated by near IR light, 123
- NiO
The role of n–p junction electrodes in minimizing the charge recombination and enhancement of photocurrent and photovoltage in dye sensitized solar cells, 273
- Nitrogen doping
Visible-light active N-doped TiO_2 prepared by heating of titanium hydroxide and urea, 177
- Nitrophenols (NPs)
Degradation of nitrophenols by Fenton and photo-Fenton processes, 83
- n–p Junction
The role of n–p junction electrodes in minimizing the charge recombination and enhancement of photocurrent and photovoltage in dye sensitized solar cells, 273
- Organized assemblies
The effect of ionic strength and surfactant on the dynamic quenching of 6-methoxyquinoline by halides, 21
- Oxidized carboxylic acids
Photocatalyzed oxidation and mineralization of branched and oxidized C4 and C5 aliphatic acids in UV-irradiated aqueous titania dispersions, 51
- pH
Photocatalytic reduction of hexavalent chromium in aqueous solution over sulphate modified titania, 189
- 9,10-Phenanthrenequinone
Photochemical reaction dynamics of 9,10-phenanthrenequinone and 1,2-naphthoquinone with hydrogen donors in solution, 161
- Phenanthropyran
Synthesis and photochromic properties of phenanthropyran derivative substituted with styryl group, 169
- Phenol photo-oxidation
Supported photosensitizers for the visible light activation of phenols towards oxygen, 143
- Phenosafranine
Excited states quenching of phenosafranine dye by electron donors, 261
- Photocatalysis
Photoluminescence and photoactivity of titania particles prepared by the sol–gel technique: effect of calcination temperature, 247
Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- Photocatalytic
Photocatalytic decolorization of methyl orange in aqueous medium of TiO_2 and Ag-TiO_2 immobilized on $\gamma\text{-Al}_2\text{O}_3$, 7
- Photocatalytic reduction
Photocatalytic reduction of hexavalent chromium in aqueous solution over sulphate modified titania, 189
- Photochemical degradation
Study of the phototransformation of imazaquin in aqueous solution: a kinetic approach, 27
- Photochemistry
Photochemistry and photodissociation of benzosultine and naphthosultine: electronic relaxation of sultines and kinetics and theoretical studies of fragment o-quinodimethanes, 69
- Photochromism
Synthesis and photochromic properties of phenanthropyran derivative substituted with styryl group, 169
- Photodegradation
Comparison of different advanced oxidation processes for the degradation of room temperature ionic liquids, 45
Photocatalyzed oxidation and mineralization of branched and oxidized C4 and C5 aliphatic acids in UV-irradiated aqueous titania dispersions, 51
Photoinduced halophenol formation in the presence of iron(III) species or cadmium sulfide, 61
Degradation of carbofuran in aqueous solution by Fe(III) aquacomplexes as effective photocatalysts, 239
- Photo-Fenton processes
Degradation of nitrophenols by Fenton and photo-Fenton processes, 83
- Photoinduced electron transfer
Evaluation of sensitizing ability of barbiturate-functionalized non-ionic cyanine dyes; application for photoinduced radical generation system initiated by near IR light, 123
- Photoinitiators
Polymerization initiation and transient spectrometric studies of water-soluble and -insoluble *tert*-butyl acrylate/benzoates, 195
- Photoisomerization
Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
- Photoluminescence
Photoluminescence and photoactivity of titania particles prepared by the sol–gel technique: effect of calcination temperature, 247

- Photomineralization
 Photocatalyzed oxidation and mineralization of branched and oxidized C4 and C5 aliphatic acids in UV-irradiated aqueous titania dispersions, 51
- Photophysical and photochemical process
 Quantum study on photophysical and photochemical process of a new photosensitizer: hypomycin B, 37
- Photopolymerization
 Evaluation of sensitizing ability of barbiturate-functionalized non-ionic cyanine dyes; application for photoinduced radical generation system initiated by near IR light, 123
- Phthalocyanines
 Supported photosensitizers for the visible light activation of phenols towards oxygen, 143
- Polyacrylonitrile
 A novel polymer quaternary ammonium iodide and application in quasi-solid-state dye-sensitized solar cells, 1
- Polymer electrolyte
 A novel polymer quaternary ammonium iodide and application in quasi-solid-state dye-sensitized solar cells, 1
- Polymer quaternary ammonium iodide
 A novel polymer quaternary ammonium iodide and application in quasi-solid-state dye-sensitized solar cells, 1
- Polymerization
 Polymerization initiation and transient spectrometric studies of water-soluble and -insoluble *tert*-butyl arylperbenzoates, 195
- Porphyrins
 Supported photosensitizers for the visible light activation of phenols towards oxygen, 143
- Proton transfer
 Prototropism in 2-acetyl benzimidazole and 2-benzoyl benzimidazole, 131
- Protonation
 Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
- Prototropic equilibria
 Spectral characteristics of methyl 2-aminonicotinate: effect of solvents and acid–base concentrations, 203
- Quasi-solid-state dye-sensitized solar cells
 A novel polymer quaternary ammonium iodide and application in quasi-solid-state dye-sensitized solar cells, 1
- Quenching
 Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,6,6-tetramethylpiperidine; triplet route of deactivation, 151
- Quenching process
 Excited states quenching of phenosafranin dye by electron donors, 261
- o*-Quinodimethane
 Photochemistry and photodissociation of benzosultine and naphthosultine: electronic relaxation of sultines and kinetics and theoretical studies of fragment *o*-quinodimethanes, 69
- o*-Quinone
 Photochemical reaction dynamics of 9,10-phenanthrenequinone and 1,2-naphthoquinone with hydrogen donors in solution, 161
- Rhodamine B
 The effect of lanthanide on the degradation of RB in nanocrystalline Ln/TiO₂ aqueous solution, 279
- Semiconductors
 Inhibition of photooxidation of iron(II) by some semiconductors, 233
- Semireduced dye
 Excited states quenching of phenosafranin dye by electron donors, 261
- Sol–gel
 Photoluminescence and photoactivity of titania particles prepared by the sol–gel technique: effect of calcination temperature, 247
- Solid emission
 Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
- Solvatochromism
 Solvatochromism of 3-[2-(aryl)benzoxazol-5-yl]alanine derivatives, 215
- Solvent effects
 Complexation studies of chlorophyll a with trinitro substituted fluorene derivatives, 113
- Styryl substituent
 Synthesis and photochromic properties of phenanthropyran derivative substituted with styryl group, 169
- Styrylbenzoxazole
 Excited state properties and acid–base equilibria of *trans*-2-styrylbenzoxazoles, 91
- Sulphated TiO₂
 Photocatalytic reduction of hexavalent chromium in aqueous solution over sulphate modified titania, 189
- Supported photosensitizers
 Supported photosensitizers for the visible light activation of phenols towards oxygen, 143
- TD-DFT
 Spectroscopy and photophysics of flavin-related compounds: 3-ethyl-lumiflavin, 267
- Temperature
 Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- tert*-Butyl arylperbenzoates
 Polymerization initiation and transient spectrometric studies of water-soluble and -insoluble *tert*-butyl arylperbenzoates, 195
- 2,2,6,6-Tetramethylpiperidine
 Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,6,6-tetramethylpiperidine; triplet route of deactivation, 151
- Tetraphenylporphyrinatoantimony(V) complex
 Synthesis and spectroscopic analysis of tetraphenylporphyrinatoantimony(V) complexes linked to boron-dipyrin chromophore on axial ligands, 287
- Time-resolved emission
 Prototropism in 2-acetyl benzimidazole and 2-benzoyl benzimidazole, 131
- TiO₂
 Photocatalytic decolorization of methyl orange in aqueous medium of TiO₂ and Ag–TiO₂ immobilized on γ -Al₂O₃, 7
 The role of n–p junction electrodes in minimizing the charge recombination and enhancement of photocurrent and photovoltage in dye sensitized solar cells, 273
 Kinetic modeling of promotion and inhibition of temperature on photocatalytic degradation of benzene vapor, 299
- Titania
 Photoluminescence and photoactivity of titania particles prepared by the sol–gel technique: effect of calcination temperature, 247
- Titanium dioxide
 Comparison of different advanced oxidation processes for the degradation of room temperature ionic liquids, 45
 Visible-light active N-doped TiO₂ prepared by heating of titanium hydroxide and urea, 177
- Titanium hydroxide
 Visible-light active N-doped TiO₂ prepared by heating of titanium hydroxide and urea, 177
- Transient absorption spectra
 Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,

- 6,6-tetramethylpiperidine; triplet route of deactivation, 151
- Transient spectrometry
- Polymerization initiation and transient spectrometric studies of water-soluble and -insoluble *tert*-butyl aroylperbenzoates, 195
- Triplet
- Synthesis and transient absorption spectra of derivatives of 1,8-naphthalic anhydrides and naphthalimides containing 2,2,6,6-tetramethylpiperidine; triplet route of deactivation, 151
- Tryptophan analogues
- New fluorescent benzo[*b*]thienyl amino acid derivatives based on sulfanylphenyl benzo[*b*]thiophenes, 181
- Ultrasonication
- Photodegradation of a textile dye catalyzed by sol-gel derived nanocrystalline TiO₂ via ultrasonic irradiation, 225
- Urea
- Visible-light active N-doped TiO₂ prepared by heating of titanium hydroxide and urea, 177
- Visible-light response
- Visible-light active N-doped TiO₂ prepared by heating of titanium hydroxide and urea, 177
- Zwitterions
- Prototropism in 2-acetyl benzimidazole and 2-benzoyl benzimidazole, 131