

Subject Index of Volume 115

- Absorption and emission spectra at 293 K and 77 K
steady-state luminescence studies of some α and β derivatives of naphthylidene at 293 K and 77 K, 27
- Acridone
radiochemiluminescence of acridones and alkyl acridines, 137
- Adenosine triphosphate
transient free radicals are formed during photolysis of the 1-(2-nitrophenyl)ethyl ester of adenosine triphosphate (caged ATP), 49
- Aggregation
the influence of rigid matrices on the processes of deactivation of excited bacteriochlorophyll *c*, 151
- Alkyl sulfates
the effect of tetraalkylammonium and alkyl sulfate salts on the fluorescence bands of quantum-sized CdS, 163
- All-*trans*-retinoic acid
photophysics of all-*trans*-retinoic acid (ATRA) chemisorbed to nanoparticulate TiO₂: evidence for TiO₂* to ATRA energy transfer and reverse electron transfer sensitisation, 231
- Anthracenes
electron transfer singlet quenching and exciplexes in the photoreaction of substituted anthracenes with indole derivatives, 43
- 2-APBI
excited state intramolecular proton transfer in 2-(2'-aminophenyl)benzimidazole in micelles, 249
- Aqueous solution
photodecomposition of 4-Amino-1,2,4-triazin-3,5-diones and -thiones in oxygenated aqueous solutions, 191
- Bacteriochlorophyll *c*
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
the influence of rigid matrices on the processes of deactivation of excited bacteriochlorophyll *c*, 151
- Bacteriopheophytin *c*
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Benzene–DANS
electronic energy transfer in solution in naphthalene–anthracene, naphthalene–acridine and benzene–DANS bichromophoric compounds, 99
- 9-Benzylacridine
radiochemiluminescence of acridones and alkyl acridines, 137
- Bisazo
synthesis and photoconductivity study of new bisazos containing hydrazone groups, 207
- Bleaching
photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- C-13 LIS
intensity and pressure effects in CO₂ laser induced carbon-13 enrichment with temporally modified pulses, 1
- C₆₀
inclusion complex of calix[8]arene–C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- C₇₀
intersystem-crossing and excited-state absorption of C₇₀ studied by picosecond pump and probe absorption and fluorescence measurements, 89
- Calix[8]arene
inclusion complex of calix[8]arene–C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Carbon dioxide
photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO₂ nanocrystal photocatalyst embedded in SiO₂ matrices, 227
- Cellulosic pulp
photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- Charge-transporting
synthesis and photoconductivity study of new bisazos containing hydrazone groups, 207
- Chemiluminescence
radiochemiluminescence of acridones and alkyl acridines, 137
- Chlorosome
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- p*-Chlorotoluene
excited state dynamics of *p*-chlorotoluene in rigid glass matrices, 243
- Chromene
spectrokinetic study of 2,2-diphenyl-5,6-benzo(2H)chromene: a thermoreversible and photoreversible photochromic system, 123
- Cinnamoylated polyvinylamine
photoreactivity of *N*-*iso*-propylcinnamamide, a model for cinnamoylated polyvinylamine, 143
- Complex
inclusion complex of calix[8]arene–C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Cu²⁺
a fluorescent sensor for Cu²⁺ at the sub-ppm level, 157
- Current–voltage characteristic
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Cysteine-substituted hypocrellin B
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV–Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- 2,6-Dimethylphenol
the aqueous photochemistry of 2,6-dimethylphenol. Evidence for the fragmentation of the α C–C bond, 117

- Dual phosphorescence
excited state dynamics of *p*-chlorotoluene in rigid glass matrices, 243
- E–h pairs
synthesis and photoconductivity study of new bisazos containing hydrazone groups, 207
- Electrochemical cell
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Electron transfer
electron transfer singlet quenching and exciplexes in the photoreaction of substituted anthracenes with indole derivatives, 43
- Energy conversion
4-phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO₂ electrodes, 239
- ESR spectra
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV–Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- Ethylene
photo-oxidation reactions of ethylene in supercritical CO₂, 7
- Europium(III)
solvent quenching of the ⁵D₀ → ⁷F₂ emission of Eu(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionate)₃, 185
- Exciplexes
electron transfer singlet quenching and exciplexes in the photoreaction of substituted anthracenes with indole derivatives, 43
- Excited-state absorption
intersystem-crossing and excited-state absorption of C₇₀ studied by picosecond pump and probe absorption and fluorescence measurements, 89
- Excited state dynamics
excited state dynamics of *p*-chlorotoluene in rigid glass matrices, 243
- Fluorescence
photophysical studies of functionalised polyionene complexes in solutions and in the solid state, 129
- Fluorescent sensor
a fluorescent sensor for Cu²⁺ at the sub-ppm level, 157
- Four-wave mixing
four-wave mixing studies of UV curable resins for microstereolithography, 81
- Fullerene
inclusion complex of calix[8]arene–C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Garlon
photocatalytic decomposition of triclopypyr over aqueous semiconductor suspensions, 175
- Heats of formation
heats of formation of intermediate radicals in solution, 109
- High pressure carbon dioxide
photocatalytic reduction of high pressure carbon dioxide using TiO₂ powders with a positive hole scavenger, 223
- Hydrazone group
synthesis and photoconductivity study of new bisazos containing hydrazone groups, 207
- Hydrogen peroxide
photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- Hydrogen tunneling
role of tunneling of hydrogen in the Norrish type II processes in a thione and a ketone, 35
- Hydrophobically modified polymers
photophysical studies of functionalised polyionene complexes in solutions and in the solid state, 129
- Hydroquinone
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV–Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- Indole
electron transfer singlet quenching and exciplexes in the photoreaction of substituted anthracenes with indole derivatives, 43
- Intermediate radicals
heats of formation of intermediate radicals in solution, 109
- Intersystem-crossing
intersystem-crossing and excited-state absorption of C₇₀ studied by picosecond pump and probe absorption and fluorescence measurements, 89
excited state dynamics of *p*-chlorotoluene in rigid glass matrices, 243
- Intramolecular energy transfer
sensitized luminescence of Eu³⁺/Gd³⁺/cinnamic acid mixed complex, 21
- Ketone
role of tunneling of hydrogen in the Norrish type II processes in a thione and a ketone, 35
- Light gradient effect
photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Lignin
photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- Luminescence quenching
solvent quenching of the ⁵D₀ → ⁷F₂ emission of Eu(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionate)₃, 185
- Metal ions
a fluorescent sensor for Cu²⁺ at the sub-ppm level, 157
- Methane
photocatalytic reduction of high pressure carbon dioxide using TiO₂ powders with a positive hole scavenger, 223
- Methyl- α -arylcinnamates
photochemistry of substituted methyl- α -arylcinnamates: *ortho*- and *para*-substitution, 57
- Micelles
excited state intramolecular proton transfer in 2-(2'-aminophenyl) benzimidazole in micelles, 249
- Microstereolithography
four-wave mixing studies of UV curable resins for microstereolithography, 81
- Multiphoton dissociation
intensity and pressure effects in CO₂ laser induced carbon-13 enrichment with temporally modified pulses, 1
- N*-iso-propylcinnamamide
photoreactivity of *N*-iso-propylcinnamamide, a model for cinnamoylated polyvinylamine, 143
- Nanoparticulate TiO₂
photophysics of all-*trans*-retinoic acid (ATRA) chemisorbed to nanoparticulate TiO₂: evidence for TiO₂* to ATRA energy transfer and reverse electron transfer sensitisation, 231
- Naphthalene–anthracene
electronic energy transfer in solution in naphthalene–anthracene, naphthalene–acridine and benzene–DANS bichromophoric compounds, 99

- Naphthalene–acridine**
 electronic energy transfer in solution in naphthalene–anthracene, naphthalene–acridine and benzene–DANS bichromophoric compounds, 99
- Naphthanilides**
 steady-state luminescence studies of some α and β derivatives of naphthanilide at 293 K and 77 K, 27
- Nitrate**
 photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO₂ nanocrystal photocatalyst embedded in SiO₂ matrices, 227
- Normal emission**
 excited state intramolecular proton transfer in 2-(2'-aminophenyl) benzimidazole in micelles, 249
- Oligomer**
 photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Ortho- and para-substitution**
 photochemistry of substituted methyl- α -arylcinnamates: *ortho*- and *para*-substitution, 57
- Oxidation of sulfides**
 oxidation of aryl methyl sulfides and sulfoxides on irradiated TiO₂, 169
- Oxygen**
 photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- Phenol**
 quenching of tris(2,2'-bipyridine)chromium(III) and tris(1,10-phenanthroline)chromium(III) excited states by phenols: temperature and pH effect, 199
- Photobleaching**
 photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
- Photocatalysis**
 photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
 photocatalytic decomposition of triclopyr over aqueous semiconductor suspensions, 175
- Photocatalytic reduction**
 photocatalytic reduction of high pressure carbon dioxide using TiO₂ powders with a positive hole scavenger, 223
 photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO₂ nanocrystal photocatalyst embedded in SiO₂ matrices, 227
- Photochemical degradation**
 sensitized luminescence of Eu³⁺/Gd³⁺/cinnamic acid mixed complex, 21
- Photochemical reactions**
 ultrasound effects on photochemical reactions. 2. A study of ultrasound effects on some monomolecular and bimolecular photochemical reactions, 13
- Photochemistry**
 photochemistry of substituted methyl- α -arylcinnamates: *ortho*- and *para*-substitution, 57
- Photochromism**
 spectrokinetic study of 2,2-diphenyl-5,6-benzo(2H)chromene: a thermoreversible and photoreversible photochromic system, 123
- Photoconductivity**
 synthesis and photoconductivity study of new bisazos containing hydrazone groups, 207
- Photodegradation**
 photodecomposition of 4-Amino-1,2,4-triazin-3,5-diones and -thiones in oxygenated aqueous solutions, 191
- Photoisomerization**
 ultrasound effects on photochemical reactions. 2. A study of ultrasound effects on some monomolecular and bimolecular photochemical reactions, 13
- Photolysis**
 transient free radicals are formed during photolysis of the 1-(2-nitrophenyl)ethyl ester of adenosine triphosphate (caged ATP), 49
- Photo-oxidation**
 photo-oxidation reactions of ethylene in supercritical CO₂, 7
 the aqueous photochemistry of 2,6-dimethylphenol. Evidence for the fragmentation of the α C–C bond, 117
 photocatalytic decomposition of triclopyr over aqueous semiconductor suspensions, 175
- Photophysics**
 photophysics of all-*trans*-retinoic acid (ATRA) chemisorbed to nanoparticulate TiO₂: evidence for TiO₂* to ATRA energy transfer and reverse electron transfer sensitisation, 231
- Photopolymers**
 four-wave mixing studies of UV curable resins for microstereolithography, 81
- Photopotential action spectrum**
 photoelectrical properties of green bacteria cells and cell fragments located in electrochemical cell, 63
- Photoreactivity**
 photoreactivity of *N*-*iso*-propylcinnamamide, a model for cinnamoylated polyvinylamine, 143
- Photoscission reaction**
 the aqueous photochemistry of 2,6-dimethylphenol. Evidence for the fragmentation of the α C–C bond, 117
- Photosensitization**
 4-phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO₂ electrodes, 239
- Plasma switch**
 intensity and pressure effects in CO₂ laser induced carbon-13 enrichment with temporally modified pulses, 1
- Polyionenes**
 photophysical studies of functionalised polyionene complexes in solutions and in the solid state, 129
- Polymethylmethacrylate (PMMA)**
 the influence of rigid matrices on the processes of deactivation of excited bacteriochlorophyll *c*, 151
- Positive hole scavenger**
 photocatalytic reduction of high pressure carbon dioxide using TiO₂ powders with a positive hole scavenger, 223
- Pyrene derivatives**
 photophysical studies of functionalised polyionene complexes in solutions and in the solid state, 129
- Q-CdS clusters**
 the effect of tetraalkylammonium and alkyl sulfate salts on the fluorescence bands of quantum-sized CdS, 163
- Quenching**
 quenching of tris(2,2'-bipyridine)chromium(III) and tris(1,10-phenanthroline)chromium(III) excited states by phenols: temperature and pH effect, 199
- Radiochemiluminescence**
 radiochemiluminescence of acridones and alkyl acridines, 137
- Rapid prototyping**
 four-wave mixing studies of UV curable resins for microstereolithography, 81
- Rapid tooling**
 four-wave mixing studies of UV curable resins for microstereolithography, 81
- Rigid glass matrix**
 excited state dynamics of *p*-chlorotoluene in rigid glass matrices, 243

- Ru-dye sensitized TiO₂**
4-phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO₂ electrodes, 239
- Salts**
the effect of tetraalkylammonium and alkyl sulfate salts on the fluorescence bands of quantum-sized CdS, 163
- Semiquinone anion radical**
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV-Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- Sensitized luminescence of Eu³⁺**
sensitized luminescence of Eu³⁺/Gd³⁺/cinnamic acid mixed complex, 21
- Silica glass**
the influence of rigid matrices on the processes of deactivation of excited bacteriochlorophyll *c*, 151
- Singlet oxygen sensitiser**
inclusion complex of calix[8]arene-C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Solar cell**
4-phenylpyridine as ancillary ligand in ruthenium(II) polypyridyl complexes for sensitization of n-type TiO₂ electrodes, 239
- Solid state**
inclusion complex of calix[8]arene-C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Solvation mechanism**
heats of formation of intermediate radicals in solution, 109
- Solvent effect**
photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO₂ nanocrystal photocatalyst embedded in SiO₂ matrices, 227
- Solvent effects**
solvent quenching of the ⁵D₀ → ⁷F₂ emission of Eu(6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedionate)₃, 185
- Spectrophotometric measurements**
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV-Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- Spin counteraction**
photodynamic action of a water-soluble hypocrellin derivative with enhanced absorptivity in the phototherapeutic window. I: ESR and UV-Vis studies on the photogeneration of the semiquinone anion radical and hydroquinone, 213
- Sulfoxides**
oxidation of aryl methyl sulfides and sulfoxides on irradiated TiO₂, 169
- Supercritical CO₂**
photo-oxidation reactions of ethylene in supercritical CO₂, 7
- Thione**
role of tunneling of hydrogen in the Norrish type II processes in a thione and a ketone, 35
- Time-resolved luminescence**
sensitized luminescence of Eu³⁺/Gd³⁺/cinnamic acid mixed complex, 21
- TiO₂**
photocatalytic decomposition of triclopyr over aqueous semiconductor suspensions, 175
- TiO₂ photocatalysis**
oxidation of aryl methyl sulfides and sulfoxides on irradiated TiO₂, 169
- Titanium dioxide**
photochemical bleaching of chemical pulps catalyzed by titanium dioxide, 73
photocatalytic reduction of high pressure carbon dioxide using TiO₂ powders with a positive hole scavenger, 223
- Transient behaviour**
inclusion complex of calix[8]arene-C₆₀: photophysical properties and its behaviour as singlet molecular oxygen sensitiser in the solid state, 69
- Transient free radicals**
transient free radicals are formed during photolysis of the 1-(2-nitrophenyl)ethyl ester of adenosine triphosphate (caged ATP), 49
- 1,2,4-Triazinones**
photodecomposition of 4-Amino-1,2,4-triazin-3,5-diones and -thiones in oxygenated aqueous solutions, 191
- Triclopyr**
photocatalytic decomposition of triclopyr over aqueous semiconductor suspensions, 175
- Tris(1,10-phenanthroline)chromium(III)**
quenching of tris(2,2'-bipyridine)chromium(III) and tris(1,10-phenanthroline)chromium(III) excited states by phenols: temperature and pH effect, 199
- Tris(2,2'-bipyridine)chromium(III)**
quenching of tris(2,2'-bipyridine)chromium(III) and tris(1,10-phenanthroline)chromium(III) excited states by phenols: temperature and pH effect, 199
- Ultrasound effects**
ultrasound effects on photochemical reactions. 2. A study of ultrasound effects on some monomolecular and bimolecular photochemical reactions, 13
- Urea**
photocatalytic reduction of carbon dioxide in the presence of nitrate using TiO₂ nanocrystal photocatalyst embedded in SiO₂ matrices, 227
- UV curing**
four-wave mixing studies of UV curable resins for microstereolithography, 81