

Subject Index of Volume 143

- Ab initio calculation
Photophysics of arylsubstituted tropylium ions, 109
- Absorption
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Absorption spectra
Photoredox reaction of chloromercurioferrocene induced by metal-to-metal charge transfer excitation, 209
- Acetone
Two photon dissociation of acetone, acetaldehyde, and acetic acid at 243 nm: translational energy releases in the H atom channel, 11
- Alternate assembly
Excitation energy transfer between J-aggregates in layer-by-layer alternate assemblies, 161
- Atmospheric remote-sensing
The temperature dependence (203–293 K) of the absorption cross sections of O₃ in the 230–850 nm region measured by Fourier-transform spectroscopy, 1
- Azo-dyes
Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state, 31
- Benzoquinone mono-imine
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- Binding constant
Luminescence-based assessment of thermodynamic constants for electrostatic binding of non-luminescent dyes and atomic ions to colloidal semiconductor surfaces, 251
- Biradicaloid structure
Photophysics of arylsubstituted tropylium ions, 109
- Bombyx mori* silk
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Boronic acid
Wavelength-ratiometric probes for saccharides based on donor–acceptor diphenylpolyenes, 39
- n*-Butanal
Pressure dependence of the photooxidation of selected carbonyl compounds in air: *n*-butanal and *n*-pentanal, 169
- Carbene
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- Catalysis
Efficient catalysis of the photoisomerization of stilbene derivatives by zinc porphyrin complexation, 201
- Charge transfer
Wavelength-ratiometric probes for saccharides based on donor–acceptor diphenylpolyenes, 39
Photoredox reaction of chloromercurioferrocene induced by metal-to-metal charge transfer excitation, 209
- Chemiluminescence
Photo-, radio- and sonostoragechemiluminescence of buckminsterfullerene C₆₀, 93
- 4-Chlorophenol
An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- cis*–*trans* isomerization
Efficient catalysis of the photoisomerization of stilbene derivatives by zinc porphyrin complexation, 201
- Complexation
Efficient catalysis of the photoisomerization of stilbene derivatives by zinc porphyrin complexation, 201
- Covalent linkage
Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state, 31
- Cyanine dye
Excitation energy transfer between J-aggregates in layer-by-layer alternate assemblies, 161
- Demethoxylation
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- N,N*-dibenzylhydroxylamines
2,4,6-Triphenylpyrylium ion-mediated photooxidation of *N,N*-dibenzylhydroxylamine and its derivatives, 23
- Dichroism
Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state, 31
- 1,2-Diethyl phthalate
Titanium dioxide mediated photocatalytic degradation of 1,2-diethyl phthalate, 213
- 2,5-Diphenyl-thiazolo[5,4-*d*]thiazole
Photophysical properties of 2,5-diphenyl-thiazolo[5,4-*d*]thiazole, 119
- Dissociation constants
Wavelength-ratiometric probes for saccharides based on donor–acceptor diphenylpolyenes, 39
- Electrodeless discharge lamp
Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Electron transfer
Photophysics of arylsubstituted tropylium ions, 109
- Electronic absorption
Photophysical properties of 2,5-diphenyl-thiazolo[5,4-*d*]thiazole, 119
- Electrostatic binding
Luminescence-based assessment of thermodynamic constants for electrostatic binding of non-luminescent dyes and atomic ions to colloidal semiconductor surfaces, 251
- Emission
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59

- Energy transfer
Excitation energy transfer between J-aggregates in layer-by-layer alternate assemblies, 161
- Escherichia coli*
Disinfection of *E. coli* by the Ag-TiO₂/UV system: lipidperoxidation, 241
- Excitonic interaction
Solution and supersonic jet studies of the intramolecular exciplex of dinaphthyl propanes, 245
- Experimental data
Kinetic studies on the collisional quenching of CCl₂(\tilde{A}^1B_1 and \tilde{a}^3B_1) by ketones, 129
- Ferrocene
Photoredox reaction of chloromercurioferrocene induced by metal-to-metal charge transfer excitation, 209
- Fluorescence
Wavelength-ratiometric probes for saccharides based on donor-acceptor diphenylpolyenes, 39
Photophysics of arylsubstituted tropylium ions, 109
Photophysical properties of 2,5-diphenyl-thiazolo[5,4-*d*]thiazole, 119
Solution and supersonic jet studies of the intramolecular exciplex of dinaphthyl propanes, 245
- Fluorescence quenching
Influence of a substituent on amide nitrogen atom on fluorescence efficiency quenching of Tyr(Me) by amide group, 135
- Fluorescence signal
Kinetic studies on the collisional quenching of CCl₂(\tilde{A}^1B_1 and \tilde{a}^3B_1) by ketones, 129
- Fullerene
Photo-, radio- and sonostoragechemiluminescence of buckminsterfullerene C₆₀, 93
- Fullerene C₆₀
Interaction of triplet state of crystal violet with fullerene C₆₀, 17
- Furazan derivatives
Study of radiation chemical reactions of oxidising and reducing radicals with furazan derivatives, 181
- Glucose
Wavelength-ratiometric probes for saccharides based on donor-acceptor diphenylpolyenes, 39
- Halogenophenylurea
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- Heavy atom effect
2,4,6-Triphenylpyrylium ion-mediated photooxidation of *N,N*-dibenzylhydroxylamine and its derivatives, 23
- Heterocyclic chromophore
Photophysical properties of 2,5-diphenyl-thiazolo[5,4-*d*]thiazole, 119
- Hindered amine stabilisers
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Intramolecular fluorescence quenching
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- J-aggregate
Excitation energy transfer between J-aggregates in layer-by-layer alternate assemblies, 161
- Ketone molecules
Kinetic studies on the collisional quenching of CCl₂(\tilde{A}^1B_1 and \tilde{a}^3B_1) by ketones, 129
- Langmuir-Hinshelwood model
Variation in the chemistry of the TiO₂-mediated degradation of hydroxy- and methoxybenzenes: electron transfer and HO_{ads}[•] initiated chemistry, 69
- Leuco crystal violet
Photoinduced hydride transfer reaction between methylene blue and leuco crystal violet, 153
- Lifetime
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Lipidperoxidation
Disinfection of *E. coli* by the Ag-TiO₂/UV system: lipidperoxidation, 241
- Luminescence
Excitation energy transfer between J-aggregates in layer-by-layer alternate assemblies, 161
- Mercaptosuccinate
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
- Mercury(II)
Photoredox reaction of chloromercurioferrocene induced by metal-to-metal charge transfer excitation, 209
- Methylene blue
Photoinduced hydride transfer reaction between methylene blue and leuco crystal violet, 153
An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- O*-methyl-tyrosine
Influence of a substituent on amide nitrogen atom on fluorescence efficiency quenching of Tyr(Me) by amide group, 135
- Metobromuron
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- Microenvironment
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Microwave
Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Nanocrystalline
An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- Nitroprusside
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
- S*-nitrosothiol
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
- Oxidising and reducing radicals
Study of radiation chemical reactions of oxidising and reducing radicals with furazan derivatives, 181
- Ozone
The temperature dependence (203–293 K) of the absorption cross sections of O₃ in the 230–850 nm region measured by Fourier-transform spectroscopy, 1
- PbS
Photocurrent instability of PbS-sensitized TiO₂ electrodes in S²⁻ and SO₃²⁻ solution, 87

- PbSO₄
Photocurrent instability of PbS-sensitized TiO₂ electrodes in S²⁻ and SO₃²⁻ solution, 87
- n*-Pentanal
Pressure dependence of the photooxidation of selected carbonyl compounds in air: *n*-butanal and *n*-pentanal, 169
- Phosphorescence
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Photocatalysis
Variation in the chemistry of the TiO₂-mediated degradation of hydroxy- and methoxybenzenes: electron transfer and HO_{ads}[•] initiated chemistry, 69
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
Titanium dioxide mediated photocatalytic degradation of 1,2-diethyl phthalate, 213
Solid-phase photocatalytic degradation of PVC-TiO₂ polymer composites, 221
- Photocatalytic degradation
Disinfection of *E. coli* by the Ag-TiO₂/UV system: lipidperoxidation, 241
- Photocatalytic degradation pathway
Titanium dioxide mediated photocatalytic degradation of 1,2-diethyl phthalate, 213
- Photochemical modelling
The temperature dependence (203–293 K) of the absorption cross sections of O₃ in the 230–850 nm region measured by Fourier-transform spectroscopy, 1
- Photochemical thermometer
Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Photochemistry
Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Photocurrent instability
Photocurrent instability of PbS-sensitized TiO₂ electrodes in S²⁻ and SO₃²⁻ solution, 87
- Photodegradation
Variation in the chemistry of the TiO₂-mediated degradation of hydroxy- and methoxybenzenes: electron transfer and HO_{ads}[•] initiated chemistry, 69
An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- Photodissociation
Two photon dissociation of acetone, acetaldehyde, and acetic acid at 243 nm: translational energy releases in the H atom channel, 11
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
- Photoinduced hydride transfer
Photoinduced hydride transfer reaction between methylene blue and leuco crystal violet, 153
- Photoinduced reorientation
Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state, 31
- Photoluminescent probe
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Photolysis
Photo-, radio- and sonostoragechemiluminescence of buckminsterfullerene C₆₀, 93
Pressure dependence of the photooxidation of selected carbonyl compounds in air: *n*-butanal and *n*-pentanal, 169
- Photooxidation
2,4,6-Triphenylpyrylium ion-mediated photooxidation of *N,N*-dibenzylhydroxylamine and its derivatives, 23
Pressure dependence of the photooxidation of selected carbonyl compounds in air: *n*-butanal and *n*-pentanal, 169
- Photooxidation–substitution
Photochemistry of the [Fe(CN)₅N(O)SR]³⁻ complex. A mechanistic study, 99
- Phototransformation
Main pathways in the photochemical transformation of 3-(4-bromophenyl)-1-methoxy-1-methylurea (metobromuron) in aqueous solution, 191
- Polymer matrices
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Polymer–TiO₂ composite
Solid-phase photocatalytic degradation of PVC–TiO₂ polymer composites, 221
- Polystyrene
Photoinduced reorientation of azo-dyes covalently linked to a styrene copolymer in bulk state, 31
- Probes
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Pulse radiolysis
Interaction of triplet state of crystal violet with fullerene C₆₀, 17
Study of radiation chemical reactions of oxidising and reducing radicals with furazan derivatives, 181
- PVC photodegradation
Solid-phase photocatalytic degradation of PVC–TiO₂ polymer composites, 221
- Pyrene
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Quantum yield
Pressure dependence of the photooxidation of selected carbonyl compounds in air: *n*-butanal and *n*-pentanal, 169
- Radiolysis
Photo-, radio- and sonostoragechemiluminescence of buckminsterfullerene C₆₀, 93
- Ruthenium complexes
Characteristics of photoluminescence from ruthenium polypyridyl complexes incorporated into silk, 147
- Saccharides
Wavelength-ratiometric probes for saccharides based on donor-acceptor diphenylpolyenes, 39
- Semiconductor surface
Luminescence-based assessment of thermodynamic constants for electrostatic binding of non-luminescent dyes and atomic ions to colloidal semiconductor surfaces, 251
- Silver loading
Disinfection of *E. coli* by the Ag-TiO₂/UV system: lipidperoxidation, 241
- Solid-phase photocatalytic reaction
Solid-phase photocatalytic degradation of PVC–TiO₂ polymer composites, 221
- Solvent effect
Spectral characteristics of fluorescence probes based on pyrene in solution and in polymer matrix, 59
- Sonolysis
Photo-, radio- and sonostoragechemiluminescence of buckminsterfullerene C₆₀, 93
- Spectral simulation
Photophysical properties of 2,5-diphenyl-thiazolo[5,4-*d*]thiazole, 119

- Steady-illumination photolysis
 Photoinduced hydride transfer reaction between methylene blue and leuco crystal violet, 153
- Stearic acid
 An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- Stepwise transfer mechanism
 Photoinduced hydride transfer reaction between methylene blue and leuco crystal violet, 153
- Substituent effect
 2,4,6-Triphenylpyrylium ion-mediated photooxidation of *N,N*-dibenzylhydroxylamine and its derivatives, 23
- Superheating
 Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Thermal Effects
 Molecular photochemical thermometers: investigation of microwave superheating effects by temperature dependent photochemical processes, 49
- Time-resolved fluorescence
 Influence of a substituent on amide nitrogen atom on fluorescence efficiency quenching of Tyr(Me) by amide group, 135
- TiO₂
 Photocurrent instability of PbS-sensitized TiO₂ electrodes in S²⁻ and SO₃²⁻ solution, 87
 An active, robust and transparent nanocrystalline anatase TiO₂ thin film — preparation, characterisation and the kinetics of photodegradation of model pollutants, 229
- TiO₂/UV
 Disinfection of *E. coli* by the Ag-TiO₂/UV system: lipidperoxidation, 241
- Titanium dioxide
 Variation in the chemistry of the TiO₂-mediated degradation of hydroxy- and methoxybenzenes: electron transfer and HO_{ads}[•] initiated chemistry, 69
 Titanium dioxide mediated photocatalytic degradation of 1,2-diethyl phthalate, 213
 Solid-phase photocatalytic degradation of PVC-TiO₂ polymer composites, 221
- Total organic carbon
 Titanium dioxide mediated photocatalytic degradation of 1,2-diethyl phthalate, 213
- Transient absorption spectra
 Study of radiation chemical reactions of oxidising and reducing radicals with furazan derivatives, 181
- Translational energy
 Two photon dissociation of acetone, acetaldehyde, and acetic acid at 243 nm: translational energy releases in the H atom channel, 11
- Triphenyl methane dye
 Interaction of triplet state of crystal violet with fullerene C₆₀, 17
- 2,4,6-Triphenylpyrylium salt
 2,4,6-Triphenylpyrylium ion-mediated photooxidation of *N,N*-dibenzylhydroxylamine and its derivatives, 23
- Tropylium ions
 Photophysics of arylsubstituted tropylium ions, 109
- Tyrosine derivatives
 Influence of a substituent on amide nitrogen atom on fluorescence efficiency quenching of Tyr(Me) by amide group, 135
- Wavelength-ratiometric probes
 Wavelength-ratiometric probes for saccharides based on donor-acceptor diphenylpolyenes, 39