

Subject Index of Volume 91

- Absorption**
photochemistry and photoinitiator properties of 2-substituted anthraquinones. 1. Absorption and luminescence characteristics, 73
applications of the photochemical reaction of iodoheterocyclic derivatives with aromatic compounds in the synthesis of new singlet oxygen sensitizers, 187
- Absorption cross section**
IR multiphoton absorption in Si₂F₆, 173
- Acceleration**
effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Acrylamide**
polymerization of acrylamide photoinitiated by Co(NH₃)₅N₃²⁺ with long wavelength visible light in aqueous solution, 163
- Activation energy**
fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Antenna rhodamines**
the influence on the triplet state in antenna rhodamine dyes of intramolecular energy transfer and charge transfer, 123
- Anthraquinones**
photochemistry and photoinitiator properties of 2-substituted anthraquinones. 1. Absorption and luminescence characteristics, 73
- Aromatic compounds**
applications of the photochemical reaction of iodoheterocyclic derivatives with aromatic compounds in the synthesis of new singlet oxygen sensitizers, 187
- Bacterial luminescence**
chemiluminescence of flavins in the presence of Fe(II), 115
- Benzophenone**
type II polymeric photoinitiators (polyetherimides) with built-in amine synergist, 151
- 1,4-Bis[β-(2-benzoxazolyl)vinyl]benzene**
emission characteristics and photostability of 1,4-bis[β-(2-benzoxazolyl)vinyl]benzene (BBVB) laser dye, 199
- Built-in amine synergist**
type II polymeric photoinitiators (polyetherimides) with built-in amine synergist, 151
- C₆₀**
excited-state charge-transfer complexes formed between C₆₀ and substituted naphthalenes, 21
- Carbazole**
photosensitized dechlorination of polychlorinated phenols. 1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
- Carotenoids**
β-Carotene triplet state absorption in the near-IR range, 109
- CdS**
cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide, 63
- Charge transfer**
pulse radiolysis study of charge transfer processes in polyethylene film containing two solutes, 241
- Charge-transfer complex**
excited-state charge-transfer complexes formed between C₆₀ and substituted naphthalenes, 21
- Chemiluminescence**
chemiluminescence of flavins in the presence of Fe(II), 115
chemiluminescence monitoring of hemolysis by lysophospholipids, 119
- 2-Chloronaphthalene**
the room-temperature phosphorescence of 2-chloronaphthalene induced by inclusion complexation with 6-iodo-6-deoxy-β-cyclodextrin and the excimer fluorescence of a β-cyclodextrin-2-chloronaphthalene inclusion complex in aqueous solution, 217
- Chlorophyll-sensitized film**
chlorophyll-sensitized microporous cuprous iodide photocathode, 59
- Cobalt complex**
polymerization of acrylamide photoinitiated by Co(NH₃)₅N₃²⁺ with long wavelength visible light in aqueous solution, 163
- Coupling reactions**
applications of the photochemical reaction of iodoheterocyclic derivatives with aromatic compounds in the synthesis of new singlet oxygen sensitizers, 187
- Cuprous iodide**
chlorophyll-sensitized microporous cuprous iodide photocathode, 59
- Cycloalkanes**
laser-induced selective nitration of three cycloalkanes, 33
- DBPI**
fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Dechlorination**
photosensitized dechlorination of polychlorinated phenols. 1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
- Diffusion coefficient**
fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Diffusion-controlled reaction**
fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103

- Dimethyldiphenyl**
pulse radiolysis study of charge transfer processes in polyethylene film containing two solutes, 241
- Diode array spectrometer**
UV absorption cross-section data for the hypochlorites ROCl ($R \equiv H, CH_3, C_2H_5, i-C_3H_7, tert-C_4H_9$), 1
- Electron transfer**
medium effects on the photochemical reaction between pyrene and indole. A laser flash photolysis study, 13
photosensitized dechlorination of polychlorinated phenols.
1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
- Energetics of electron transfer**
determination of the free ion yield in photoinduced electron transfer processes using transient thermal phase grating spectroscopy, 7
- Energy transfer**
 β -Carotene triplet state absorption in the near-IR range, 109
emission characteristics and photostability of 1,4-bis[β -(2-benzoxazolyl)vinyl]benzene (BBVB) laser dye, 199
- Excimer fluorescence**
the room-temperature phosphorescence of 2-chloronaphthalene induced by inclusion complexation with 6-iodo-6-deoxy- β -cyclodextrin and the excimer fluorescence of a β -cyclodextrin-2-chloronaphthalene inclusion complex in aqueous solution, 217
- Exciplex intermediate**
oxidation of an electron-rich olefin induced by singlet oxygen: mechanism for tetraphenylethylene, 179
- Excited state**
photophysical and photochemical deactivation behaviour of streptopolymethines, 53
- Excited states**
effect of substituents on the photochromism of a spiro[indoline-naphthoxazine] under laser excitation, 129
- Fe(II)**
chemiluminescence of flavins in the presence of Fe(II), 115
- Flavins**
chemiluminescence of flavins in the presence of Fe(II), 115
- Fluence dependence**
IR multiphoton absorption in Si₂F₆, 173
- Fluorescence**
photophysical and photochemical deactivation behaviour of streptopolymethines, 53
- Fluorescence enhancement**
fluorescence enhancement of guests by the formation of inclusion complexes with *p*-tert-butylcalix[8]arene bearing polyoxyethylene chains in aqueous solution, 211
- Fluorescence quenching**
photosensitized dechlorination of polychlorinated phenols.
1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Frequency dependence**
IR multiphoton absorption in Si₂F₆, 173
- Guest-host complexes**
phase transition pattern of 2,5-diphenyloxazole/ γ -cyclodextrin (PPO/ γ -CD) self-assembly aggregates, 205
- Guests**
fluorescence enhancement of guests by the formation of inclusion complexes with *p*-tert-butylcalix[8]arene bearing polyoxyethylene chains in aqueous solution, 211
- Hemolysis**
chemiluminescence monitoring of hemolysis by lysophospholipids, 119
- Hexafluorodisilane**
IR multiphoton absorption in Si₂F₆, 173
- Host-guest complexes**
fluorescence enhancement of guests by the formation of inclusion complexes with *p*-tert-butylcalix[8]arene bearing polyoxyethylene chains in aqueous solution, 211
- Hydroxyl radical**
the reactivity of phenol in irradiated aqueous suspensions of TiO₂. Mechanistic changes as a function of solution pH, 67
- Hypochlorites**
UV absorption cross-section data for the hypochlorites ROCl ($R \equiv H, CH_3, C_2H_5, i-C_3H_7, tert-C_4H_9$), 1
- Immobilization**
on the "immobilization" of titanium dioxide in the photocatalytic oxidation of spent waters, 135
- Inclusion complexes**
the room-temperature phosphorescence of 2-chloronaphthalene induced by inclusion complexation with 6-iodo-6-deoxy- β -cyclodextrin and the excimer fluorescence of a β -cyclodextrin-2-chloronaphthalene inclusion complex in aqueous solution, 217
- Indole**
medium effects on the photochemical reaction between pyrene and indole. A laser flash photolysis study, 13
- Infrared**
laser-induced selective nitration of three cycloalkanes, 33
- Infrared multiphoton absorption**
IR multiphoton absorption in Si₂F₆, 173
- Interconversion**
 β -Carotene triplet state absorption in the near-IR range, 109
- Iodoheterocyclic derivatives**
applications of the photochemical reaction of iodoheterocyclic derivatives with aromatic compounds in the synthesis of new singlet oxygen sensitizers, 187
- Iridium sulfides**
cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide, 63
- Irradiation**
the reaction of phloroglucinol in the presence of acid with lignin-containing materials, 87
- Isoluminol**
chemiluminescence monitoring of hemolysis by lysophospholipids, 119
- δ -keto- β,γ -enones**
photoreactivity in δ -keto- β,γ -enones: oxa-di- π -methane (ODPM) rearrangements from states other than T₁(π, π^*), 27
- Kinetics**
effect of substituents on the photochromism of a spiro[indoline-naphthoxazine] under laser excitation, 129
- Laser**
laser-induced selective nitration of three cycloalkanes, 33
effect of substituents on the photochromism of a spiro[indoline-naphthoxazine] under laser excitation, 129

- Laser dyes**
 emission characteristics and photostability of 1,4-bis[β -(2-benzoxazolyl)vinyl]benzene (BBVB) laser dye, 199
- Laser flash photolysis**
 medium effects on the photochemical reaction between pyrene and indole. A laser flash photolysis study, 13
- Lifetimes**
 emission characteristics and photostability of 1,4-bis[β -(2-benzoxazolyl)vinyl]benzene (BBVB) laser dye, 199
- Luminescence**
 photochemistry and photoinitiator properties of 2-substituted anthraquinones. 1. Absorption and luminescence characteristics, 73
- Lysophospholipids**
 chemiluminescence monitoring of hemolysis by lysophospholipids, 119
- Medium effect**
 emission characteristics and photostability of 1,4-bis[β -(2-benzoxazolyl)vinyl]benzene (BBVB) laser dye, 199
- Microporous film**
 chlorophyll-sensitized microporous cuprous iodide photocathode, 59
- Naphthalocyanine**
 a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Nitration**
 laser-induced selective nitration of three cycloalkanes, 33
- Non-aqueous solvent**
 photoelectrochemical investigations on particulate ZnO thin film electrodes in non-aqueous solvents, 233
- Non-radiative transitions**
 determination of the free ion yield in photoinduced electron transfer processes using transient thermal phase grating spectroscopy, 7
- Oxa-di- π -methane rearrangement**
 photoreactivity in δ -keto- β,γ -enones: oxa-di- π -methane (ODPM) rearrangements from states other than $T_1(\pi, \pi^*)$, 27
- Oxidation**
 on the "immobilization" of titanium dioxide in the photocatalytic oxidation of spent waters, 135
 oxidation of an electron-rich olefin induced by singlet oxygen: mechanism for tetraphenylethylene, 179
 effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Oxide radical anion**
 the reactivity of phenol in irradiated aqueous suspensions of TiO_2 . Mechanistic changes as a function of solution pH, 67
- Oxygen**
 fluorescence quenching of N,N' -bis(2,5-di-tert-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Particulate films**
 photoelectrochemical investigations on particulate ZnO thin film electrodes in non-aqueous solvents, 233
- PEC cell**
 photoelectrochemical investigations on particulate ZnO thin film electrodes in non-aqueous solvents, 233
- Pentachlorophenol**
 photosensitized dechlorination of polychlorinated phenols.
 1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
- Peroxide**
 chemiluminescence of flavins in the presence of Fe(II), 115
- Phase transition patterns**
 phase transition pattern of 2,5-diphenyloxazole/ γ -cyclodextrin (PPO/ γ -CD) self-assembly aggregates, 205
- Phloroglucinol**
 the reaction of phloroglucinol in the presence of acid with lignin-containing materials, 87
- Phosphorescence**
 β -Carotene triplet state absorption in the near-IR range, 109
- Phosphorus complex**
 complexation of phosphorus(III) with a novel tetrapyrrolic phthalocyanine-like macrocyclic compound, 97
- Photobleaching**
 a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Photocatalysis**
 cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide, 63
 the reactivity of phenol in irradiated aqueous suspensions of TiO_2 . Mechanistic changes as a function of solution pH, 67
 on the "immobilization" of titanium dioxide in the photocatalytic oxidation of spent waters, 135
- Photocatalyst**
 photodegradation of surfactants. XIV. Formation of NH_4^+ and NO_3^- ions for the photocatalyzed mineralization of nitrogen-containing cationic, non-ionic and amphoteric surfactants, 143
- Photochemical reaction**
 photosensitized dechlorination of polychlorinated phenols.
 1. Carbazole-photosensitized dechlorination of pentachlorophenol, 81
- Photochromic compounds**
 effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Photochromism**
 effect of substituents on the photochromism of a spiro[indoline-naphthoxazine] under laser excitation, 129
- Photodegradation**
 photodegradation of surfactants. XIV. Formation of NH_4^+ and NO_3^- ions for the photocatalyzed mineralization of nitrogen-containing cationic, non-ionic and amphoteric surfactants, 143
 effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Photodynamic therapy**
 a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Photoelectrochemistry**
 cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide, 63
- Photoinitiation**
 polymerization of acrylamide photoinitiated by $Co(NH_3)_5N_3^{2+}$ with long wavelength visible light in aqueous solution, 163

- Photoinitiators**
photochemistry and photoinitiator properties of 2-substituted anthraquinones. 1. Absorption and luminescence characteristics, 73
- Photoisomerization**
photophysical and photochemical deactivation behaviour of streptopolymethines, 53
- Photomercyanines**
effect of substituents on the photochromism of a spiro-[indoline-naphthoxazine] under laser excitation, 129
- Photooxidation**
the reactivity of phenol in irradiated aqueous suspensions of TiO_2 . Mechanistic changes as a function of solution pH, 67
photodegradation of surfactants. XIV. Formation of NH_4^+ and NO_3^- ions for the photocatalyzed mineralization of nitrogen-containing cationic, non-ionic and amphoteric surfactants, 143
- Photoreactivity**
photoreactivity in δ -keto- β,γ -enones: oxa-di- π -methane (ODPM) rearrangements from states other than $T_1(\pi, \pi^*)$, 27
- Photosensitization**
a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Photothermal spectroscopy**
determination of the free ion yield in photoinduced electron transfer processes using transient thermal phase grating spectroscopy, 7
- Phthalocyanine**
complexation of phosphorus(III) with a novel tetrapyrrolic phthalocyanine-like macrocyclic compound, 97
a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Platinum sulfides**
cadmium sulfide with iridium sulfide and platinum sulfide deposits as a photocatalyst for the decomposition of aqueous sulfide, 63
- Polyethylene**
pulse radiolysis study of charge transfer processes in polyethylene film containing two solutes, 241
- Polymeric photoinitiators**
type II polymeric photoinitiators (polyetherimides) with built-in amine synergist, 151
- Polymerization**
polymerization of acrylamide photoinitiated by $\text{Co}(\text{NH}_3)_5\text{N}_3^{2+}$ with long wavelength visible light in aqueous solution, 163
- Polymethine dye**
photophysical and photochemical deactivation behaviour of streptopolymethines, 53
- PPO/ γ -CD self-assembly aggregates**
phase transition pattern of 2,5-diphenyloxazole/ γ -cyclodextrin (PPO/ γ -CD) self-assembly aggregates, 205
- Pressure effect**
fluorescence quenching of N,N' -bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103
- Protonation**
effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Pulse radiolysis**
pulse radiolysis study of charge transfer processes in polyethylene film containing two solutes, 241
- Pyrene**
medium effects on the photochemical reaction between pyrene and indole. A laser flash photolysis study, 13
pulse radiolysis study of charge transfer processes in polyethylene film containing two solutes, 241
- Quantum chemical calculation**
photophysical and photochemical deactivation behaviour of streptopolymethines, 53
- Quenching**
photoreactivity in δ -keto- β,γ -enones: oxa-di- π -methane (ODPM) rearrangements from states other than $T_1(\pi, \pi^*)$, 27
- Retinoids**
 β -Carotene triplet state absorption in the near-IR range, 109
- Rhodamine dyes**
the influence on the triplet state in antenna rhodamine dyes of intramolecular energy transfer and charge transfer, 123
- Room temperature phosphorescence**
the room-temperature phosphorescence of 2-chloronaphthalene induced by inclusion complexation with 6-iodo-6-deoxy- β -cyclodextrin and the excimer fluorescence of a β -cyclodextrin-2-chloronaphthalene inclusion complex in aqueous solution, 217
- Singlet oxygen**
oxidation of an electron-rich olefin induced by singlet oxygen: mechanism for tetraphenylethylene, 179
a comparison of the photoproperties of zinc phthalocyanine and zinc naphthalocyanine tetrasulfonates: model sensitizers for the photodynamic therapy of tumors, 193
- Spent waters**
on the "immobilization" of titanium dioxide in the photocatalytic oxidation of spent waters, 135
- Spirooxazines**
effect of substituents on the photochromism of a spiro-[indoline-naphthoxazine] under laser excitation, 129
- Surfactant**
photodegradation of surfactants. XIV. Formation of NH_4^+ and NO_3^- ions for the photocatalyzed mineralization of nitrogen-containing cationic, non-ionic and amphoteric surfactants, 143
- Tetrabenzotriazacorrole**
complexation of phosphorus(III) with a novel tetrapyrrolic phthalocyanine-like macrocyclic compound, 97
- Thermal bleaching rate constant**
effect of photodegradation on the thermal bleaching rate constant of photochromic compounds in spiro[indoline-pyran] and spiro[indoline-oxazine] series, 223
- Titanium dioxide**
on the "immobilization" of titanium dioxide in the photocatalytic oxidation of spent waters, 135
photodegradation of surfactants. XIV. Formation of NH_4^+ and NO_3^- ions for the photocatalyzed mineralization of nitrogen-containing cationic, non-ionic and amphoteric surfactants, 143
- Titanium dioxide (TiO_2)**
the reactivity of phenol in irradiated aqueous suspensions of TiO_2 . Mechanistic changes as a function of solution pH, 67
- Transient absorption**
 β -Carotene triplet state absorption in the near-IR range, 109
- Triplet state**
the influence on the triplet state in antenna rhodamine dyes of intramolecular energy transfer and charge transfer, 123

Triplet yield

determination of the free ion yield in photoinduced electron transfer processes using transient thermal phase grating spectroscopy, 7

Type II photoinitiators

type II polymeric photoinitiators (polyetherimides) with built-in amine synergist, 151

UV Absorption

UV absorption cross-section data for the hypochlorites ROCl ($R \equiv H, CH_3, C_2H_5, i-C_3H_7, tert-C_4H_9$), 1

UV-Vis spectra

complexation of phosphorus(III) with a novel tetrapyrrolic phthalocyanine-like macrocyclic compound, 97

Viscosity dependence

fluorescence quenching of *N,N'*-bis(2,5-di-*tert*-butylphenyl)-3,4:9,10-perylenebis(dicarboximide) (DBPI) by molecular oxygen, 103

ZnO electrode

photoelectrochemical investigations on particulate ZnO thin film electrodes in non-aqueous solvents, 233