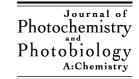


Journal of Photochemistry and Photobiology A: Chemistry 147 (2002) 249-252



www.elsevier.com/locate/jphotochem

# Subject Index of Volume 147

### Absolute asymmetric synthesis

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

### Adsorption

Radical-mediated photoreduction of manganese(II) species in UV-irradiated titania suspensions, 199

### Aggregation number

Characterization of non-ionic surfactant aggregates by fluorometric techniques, 45

#### Alkaline-earth

Synthesis and photochemical properties of new coumarin-derived ionophores and their alkaline-earth and lanthanide complexes, 113

#### Amides

Ground and singlet excited state hydrogen-bonding interactions between 1-azacarbazole and amides, 103

# Amino acids

Fading modelling of a hair oxidation dye: aminoindamine, 233 Aminoindamine

Photochemical and thermal modifications of permanent hair dyes, 225 Fading modelling of a hair oxidation dye: aminoindamine, 233

# Aminoindoaniline

Photochemical and thermal modifications of permanent hair dyes, 225 Amorphous materials

The photochemistry of thin films of titanium diacetylacetonate diisopropoxide on silicon surfaces, 127

# Anions

Decolourising textile wastewater with modified titania: the effects of inorganic anions on the photocatalysis, 77

# Anisotropy factor

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

# Antimony(V) tetraphenylporphyrin complex

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

# Axial ligands

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

# 1-Azacarbazole

Ground and singlet excited state hydrogen-bonding interactions between 1-azacarbazole and amides, 103

# Borohydrides

Charge transfer interaction between bis(triphenylphosphine)copper(I) borohydride and 9,10-phenanthrenequinone.. Absorption spectrum and photoreactivity of the donor–acceptor adduct, 149

# Carbazole

Photopolymerization of neopentyl glycol diglycidylether and its compositions with 9-(2-oxiranylmethyl) carbazole, 55

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

### Carbonyl index

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR data, 213

# Charge transfer

Charge transfer interaction between bis(triphenylphosphine)copper(I) borohydride and 9,10-phenanthrenequinone. Absorption spectrum and photoreactivity of the donor–acceptor adduct, 149

### Chelate

Synthesis and photochemical properties of new coumarin-derived ionophores and their alkaline-earth and lanthanide complexes, 113

# Chemiluminescence

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR data, 213

# Chiroptical property

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion. 1

# Circular dichroism

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

# Conformational transition

Conformational transition of poly[2-methoxy-5-(2'-ethylhexoxy)-p-phenylene vinylene] in solutions: solvent-induced emitter change, 15

# Copper complexes

Charge transfer interaction between bis(triphenylphosphine)copper(I) borohydride and 9,10-phenanthrenequinone.. Absorption spectrum and photoreactivity of the donor-acceptor adduct, 149

# Cr(VI)

Simultaneous photocatalytic Cr(VI) reduction and dye oxidation in a  $TiO_2$  slurry reactor, 71

# Crude oi

Photocatalytic decomposition of seawater-soluble crude-oil fractions using high surface area colloid nanoparticles of  ${\rm TiO_2,\,205}$ 

# Crude water

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

# Cyclobutane derivatives

Synthesis and photolysis of r-1,c-2,t-3,t-4-1,3-di(4-R-phenyl)-2,4-bis[2-(5-phenyloxazolyl)]cyclobutane, 25

# Cyclopropane

Photochemistry of 1,1-dicyano-1-alkenes. General aspects, 157 Photochemistry of 1,1-dicyano-1-alkenes. The olefin-to-cyclopropane rearrangement, 177

# 3D optical storage

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

# Degradation

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR data, 213

Elsevier Science B.V. PII: S1010-6030(02)00126-0 250 Subject Index

Diels-Alder reaction

Photocyclization of an isopentafulvene-benzoquinone adduct: a vinylogous Norrish-Yang reaction, 109

Disinfection

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

Dye

Simultaneous photocatalytic Cr(VI) reduction and dye oxidation in a  $TiO_2$  slurry reactor, 71

Electron-deficient olefin

Photochemistry of 1,1-dicyano-1-alkenes. General aspects, 157

Photochemistry of 1,1-dicyano-1-alkenes. The olefin-to-cyclopropane rearrangement, 177

Electronic spectra

Charge transfer interaction between bis(triphenylphosphine)copper(I) borohydride and 9,10-phenanthrenequinone.. Absorption spectrum and photoreactivity of the donor-acceptor adduct, 149

Emission

Conformational transition of poly[2-methoxy-5-(2'-ethylhexoxy)-pphenylene vinylene] in solutions: solvent-induced emitter change, 15

Epoxide

Photopolymerization of neopentyl glycol diglycidylether and its compositions with 9-(2-oxiranylmethyl) carbazole, 55

Escherichia coli

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

Excimer laser

Mechanism of  $SO_2$  photoionization at 193 and 308 nm in a supersonic jet, 85

Excited singlet state

Photochemistry of 1,1-dicyano-1-alkenes. General aspects, 157

Photochemistry of 1,1-dicyano-1-alkenes. The olefin-to-cyclopropane rearrangement, 177

Excited state

Ground and singlet excited state hydrogen-bonding interactions between 1-azacarbazole and amides, 103

Fluorescence

Synthesis and photochemical properties of new coumarin-derived ionophores and their alkaline-earth and lanthanide complexes, 113

Fluorescence quenching

Characterization of non-ionic surfactant aggregates by fluorometric techniques, 45

Fluorination

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

Fulgide

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

Gaussian functions

Mechanism of SO<sub>2</sub> photoionization at 193 and 308 nm in a supersonic jet, 85

Gelatin

Fading modelling of a hair oxidation dye: aminoindamine, 233

Ground state

Ground and singlet excited state hydrogen-bonding interactions between 1-azacarbazole and amides, 103

Hair dye

Photochemical and thermal modifications of permanent hair dyes, 225

Heterogeneous photocatalysis

Radical-mediated photoreduction of manganese(II) species in UV-irradiated titania suspensions, 199

Photocatalytic decomposition of seawater-soluble crude-oil fractions using high surface area colloid nanoparticles of  ${\rm TiO_2},\,205$ 

Humic substances

Photochemical degradation study of irgarol 1051 in natural waters: influence of humic and fulvic substances on the reaction, 135

Hydrogen transfer

Photocyclization of an isopentafulvene-benzoquinone adduct: a vinylogous Norrish-Yang reaction, 109

Hydrogen-bonding

Ground and singlet excited state hydrogen-bonding interactions between 1-azacarbazole and amides, 103

Intramolecular electron transfer

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

Intramolecular energy transfer

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

Iodonium salt

Photopolymerization of neopentyl glycol diglycidylether and its compositions with 9-(2-oxiranylmethyl) carbazole, 55

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

Irgarol 1051

Photochemical degradation study of irgarol 1051 in natural waters: influence of humic and fulvic substances on the reaction, 135

Iron arene complex

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

Keratin

Part B—Fading modelling of a hair oxidation dye: aminoindamine, 233

Lanthanide

Synthesis and photochemical properties of new coumarin-derived ionophores and their alkaline-earth and lanthanide complexes, 113

Lignin

Singlet oxygen-mediated degradation of lignin. Isolation of oxidation products from steam-exploded lignin from straw, 153

MEH-PPV

Conformational transition of poly[2-methoxy-5-(2'-ethylhexoxy)-p-phenylene vinylene] in solutions: solvent-induced emitter change, 15

Microtox<sup>®</sup>

Photocatalytic decomposition of seawater-soluble crude-oil fractions using high surface area colloid nanoparticles of  ${\rm TiO_2},\,205$ 

Modelling

Fading modelling of a hair oxidation dye: aminoindamine, 233

Naphthoxy polyoxalkoxy

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

Norbornadiene

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

Optical switches

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

Organic co-additives

Radical-mediated photoreduction of manganese(II) species in UV-irradiated titania suspensions, 199

Oxazole

 $Synthesis and photolysis of r-1, c-2, t-3, t-4-1, 3-di (4-R-phenyl)-2, 4-bis [2-(5-phenyloxazolyl)] cyclobutane, \ 25$ 

Subject Index 251

#### Oxidation

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR

### Oxidation dye

Photochemical and thermal modifications of permanent hair dyes, 225

Fading modelling of a hair oxidation dye: aminoindamine, 233 Oxidative stress

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

### Permanent dye

Photochemical and thermal modifications of permanent hair dyes, 225 Phenothiazine

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

# 4-Phenylpyridine

Time-resolved experiments in dye-sensitized solar cells using  $[(dcbH_2)_2Ru(ppy)_2](ClO_4)_2$  as a nanocrystalline  $TiO_2$  sensitizer, 143 Photocatalysis

Simultaneous photocatalytic Cr(VI) reduction and dye oxidation in a  $TiO_2$  slurry reactor, 71

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

### Photocatalytic oxidation

Decolourising textile wastewater with modified titania: the effects of inorganic anions on the photocatalysis, 77

#### Photochemical and thermal degradation

Fading modelling of a hair oxidation dye: aminoindamine, 233

Photochemical and thermal transformation

Photochemical and thermal modifications of permanent hair dyes, 225

# Photochemistry

Singlet oxygen-mediated degradation of lignin. Isolation of oxidation products from steam-exploded lignin from straw, 153

# Photochromism

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

# Photocrosslinking

Photopolymerization of neopentyl glycol diglycidylether and its compositions with 9-(2-oxiranylmethyl) carbazole, 55

# Photodegradation

Photochemical degradation study of irgarol 1051 in natural waters: influence of humic and fulvic substances on the reaction,

# Photodeposition

The photochemistry of thin films of titanium diacetylacetonate diisopropoxide on silicon surfaces, 127

# Photodimerization

Synthesis and photolysis of r-1,c-2,t-3,t-4-1,3-di(4-R-phenyl)-2,4-bis[2-(5-phenyloxazolyl)]cyclobutane, 25

# Photoionization

Mechanism of SO<sub>2</sub> photoionization at 193 and 308 nm in a supersonic jet, 85

# Photoisomerization

Photocyclization of an isopentafulvene-benzoquinone adduct: a vinylogous Norrish-Yang reaction, 109

Photochemistry of 1,1-dicyano-1-alkenes. General aspects, 157

Photochemistry of 1,1-dicyano-1-alkenes. The olefin-to-cyclopropane rearrangement, 177

# Photolysis

Synthesis and photolysis of r-1,c-2,t-3,t-4-1,3-di(4-R-phenyl)-2,4-bis[2-(5-phenyloxazolyl)]cyclobutane, 25

# Photooxidation

Simultaneous photocatalytic Cr(VI) reduction and dye oxidation in a  $TiO_2$  slurry reactor, 71

# Photophysics

Nonlinear dependence of solvent polarity effects on twisted intramolecular charge-transfer states and linear relation for electronic spectra in a stilbazolium-like dye, 93

### Photopolymerization

Photopolymerization of neopentyl glycol diglycidylether and its compositions with 9-(2-oxiranylmethyl) carbazole, 55

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

### Photoreduction

Simultaneous photocatalytic Cr(VI) reduction and dye oxidation in a TiO<sub>2</sub> slurry reactor, 71

### Poly(vinyl alcohol)

Fading modelling of a hair oxidation dye: aminoindamine, 233 Polyethylene

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR data, 213

### Pyrene

Characterization of non-ionic surfactant aggregates by fluorometric techniques, 45

### Quadricyclane

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

#### Quinones

Charge transfer interaction between bis(triphenylphosphine)copper(I) borohydride and 9,10-phenanthrenequinone. Absorption spectrum and photoreactivity of the donor-acceptor adduct, 149

# 1,2-Shift

Photochemistry of 1,1-dicyano-1-alkenes. General aspects, 157 Photochemistry of 1,1-dicyano-1-alkenes. The olefin-to-cyclopropane rearrangement, 177

# Silver-loaded TiO2

Decolourising textile wastewater with modified titania: the effects of inorganic anions on the photocatalysis, 77

# Singlet oxygen

Singlet oxygen-mediated degradation of lignin. Isolation of oxidation products from steam-exploded lignin from straw, 153

# Size-dependent property

Characterization of the size-dependent optical properties of p-terphenyl nanocrystals, 31

# Solar

Evaluation of photocatalytic disinfection of crude water for drinkingwater production, 241

# Solvent effect

Synthesis and fluorescence study of a (2-naphthoxy)polyoxalkoxyantimony(V) tetraphenylporphyrin complex, 191

# Specific rotation

Novel chiral norbornadiene-quadricyclane systems: substituent effect on chiroptical properties and stereochemical consequence of photochemical interconversion, 1

# Stability

Optical and thermal properties of photochromic fluorinated adamantylidene indolylfulgides, 39

# Stilbazolium-like dye

Nonlinear dependence of solvent polarity effects on twisted intramolecular charge-transfer states and linear relation for electronic spectra in a stilbazolium-like dye, 93

# Stokes' shifts

Synthesis and photochemical properties of new coumarin-derived ionophores and their alkaline-earth and lanthanide complexes, 113

# Sulfonium salt

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

252 Subject Index

p-Terphenyl nanocrystals

Characterization of the size-dependent optical properties of *p*-terphenyl nanocrystals, 31

Textile dyes

Decolourising textile wastewater with modified titania: the effects of inorganic anions on the photocatalysis, 77

Thermal analysis

Photooxidative and thermal degradation of polyethylenes: interrelationship by chemiluminescence, thermal gravimetric analysis and FTIR data, 213

Thiirane

Cationic photopolymerization of carbazolyl- and phenothiazinyl-containing thiiranes, 63

Thin films

The photochemistry of thin films of titanium diacetylacetonate diisopropoxide on silicon surfaces, 127

 $TiO_2$ 

Photocatalytic decomposition of seawater-soluble crude oil fractions using high surface area colloid nanoparticles of TiO<sub>2</sub>, 205

TiO<sub>2</sub> sensitization

Time-resolved experiments in dye-sensitized solar cells using  $[(dcbH_2)_2Ru(ppy)_2](CIO_4)_2$  as a nanocrystalline  $TiO_2$  sensitizer, 143

Transient absorption spectra

Time-resolved experiments in dye-sensitized solar cells using  $[(dcbH_2)_2Ru(ppy)_2](ClO_4)_2$  as a nanocrystalline  $TiO_2$  sensitizer, 143

Tritons micelles

Characterization of non-ionic surfactant aggregates by fluorometric techniques, 45

Twisted intramolecular charge-transfer state

Nonlinear dependence of solvent polarity effects on twisted intramolecular charge-transfer states and linear relation for electronic spectra in a stilbazolium-like dye, 93

Water

Photochemical degradation study of irgarol 1051 in natural waters: influence of humic and fulvic substances on the reaction, 135 Water-soluble fraction (WSF)

Photocatalytic decomposition of seawater-soluble crude-oil fractions using high surface area colloid nanoparticles of TiO<sub>2</sub>, 205

Yang reaction

Photocyclization of an isopentafulvene-benzoquinone adduct: a viny-logous Norrish-Yang reaction, 109