1. Record Nr. UNISA996384345503316

Autore	Parker Henry <1604-1652.>
Titolo	Memoriall [[electronic resource]] : That in regard Mr. John Abbot register of the Prerogative Office had deserted his trust, and left Londou [sic], .
Pubbl/distr/stampa	[London, : s.n., 1648]
Descrizione fisica	1 sheet ([1] p.)
Soggetti	Great Britain Politics and government 1642-1649 Early works to 1800 London (England) History 17th century Early works to 1800 London (England) Charters, grants, privileges Early works to 1800
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Imprint from Wing. Annotation on Thomason copy: "January 1646". Reproduction of the original in the British Library.
Sommario/riassunto	eebo-0018

2. Record Nr. UNINA9910962135103321

Titolo	Photochemistry : UV/VIS spectroscopy, photochemical reactions and photosynthesis / / Karen J. Maes and Jaime M. Willems, editors
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2011
ISBN	1-62081-996-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (399 p.)
Collana	Chemical engineering methods and technology
Altri autori (Persone)	MaesKaren J WillemsJaime M
Disciplina	541/.35
Soggetti	Photochemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- PHOTOCHEMISTRY: UV/VIS SPECTROSCOPY, PHOTOCHEMICAL REACTIONS AND PHOTOSYNTHESIS -- PHOTOCHEMISTRY: UV/VIS SPECTROSCOPY, PHOTOCHEMICAL REACTIONS AND PHOTOSYNTHESIS -- CONTENTS -- PREFACE -- THE PHOTOCHEMISTRY OF NOVEL ELECTRON-TRANSFER THREE-COMPONENT VISIBLE LIGHT PHOTOINITIATING SYSTEMS -- ABSTRACT -- ABBREVIATIONS -- INTRODUCTION -- THREE-COMPONENT PHOTOINITIATING SYSTEMS -- THREE-COMPONENT PHOTOINITIATING SYSTEMS. REVIEW -- RESULTS AND DISCUSSION -- Polymethine Dyes as Sensitizers in the Three-Component Photoinitiating Systems -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/N-Alkoxypyridinium Salt -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/N,N'-Dialkoxy-2,2'-Bipyridilium Salt -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/1,3,5-Triazine Derivatives -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/N-Methylpicolinium Esters -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/Cyclic Acetals -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/n-Butyltriphenylborate/Thiol -- Three-Component Photoinitiating Systems Composed of Polymethine Dye/Trichloromethyl-1,3,5-

Triazine/Heteroaromatic Thiol -- Excited State Processes in the Excited Singlet State of Sensitizer in the Three-Component Photoinitiating Systems -- Thermodynamic of Free Radicals Formation and the Application of Marcus Theory for Kinetics Study of Free Radical Polymerization of Multifunctional Acrylates -- CONCLUSION -- ACKNOWLEDGMENT -- REFERENCES -- PHOTOREACTIONS OF BENZOPHENONE IN SOLID MEDIA: RECENT DEVELOPMENTS AND APPLICATIONS -- ABSTRACT -- 1. INTRODUCTION -- 2. PHOTOPHYSICS AND PHOTOCHEMISTRY OF BENZOPHENONE. 2.1. Photophysical Processes of Benzophenone -- 2.2. The Main Photoreactions Induced by Benzophenone in Organic Media -- 2.2.1. Hydrogen Atom Abstraction -- 2.2.2. Peculiar aspects in Photoreduction of Benzophenone in a Solid Matrix -- 2.2.3. Photoreactions of Benzophenone with Olefinic or Acetylenic Compounds. -- 2.2.4. Photochemical Reactions of Benzophenones in the Presence of Amine Derivatives -- 3. PHOTOCROSSLINKING OF POLYMERS -- 3.1. Photoreactions in Saturated Hydrocarbon Polymers -- 3.2. Photoinitiated Crosslinking of Diene Polymers -- 3.3. Photocrosslinking of Inorganic Polymers - Polydimethylsiloxanes -- 4. SURFACE PHOTOGRAFTING -- 5. PHOTOPHYSICS AND PHOTOCHEMISTRY OF BENZOPHENONE ADSORBED ON VARIOUS SUBSTRATES -- 6. CONCLUSIONS -- REFERENCES -- PHOTO-CHEMICAL METHODS AS AN ALTERNATIVE METHODOLOGY IN THE DEPOSITION OF MATERIALS WITH CHEMICAL SENSOR PROPERTIES AND PHOTO-LUMINESCENT CHARACTERISTIC -- ABSTRACT -- 1. INTRODUCTION -- 1.1. Some Methods of Photodeposition -- 1.2. Photo-Reactivity of the Complex Precursors -- 2. SOME MATERIALS PHOTO-DEPOSITED PROPOSED -- 2.1. Zno Thin Films and Their use as Gas Sensor -- 2.2. Evaluation of Characteristics Luminescence of HfO2-Ln Thin Films (where: Ln = Er or Eu) -- 3. EXPERIMENTAL DETAILS -- 3.1. General Procedure -- 3.2. Preparation of Amorphous Thin Films -- 3.2.1. Preparation of the Precursors -Dikentonate Complexes -- 3.2.2. Photolysis of Complexes as Films on Si (100) Surfaces -- 3.3. Evaluation of Gas-Sensing Properties of ZnO-M (where M= Pd or Pt) -- 3.4. Evaluation of the Characteristics Luminescent of the HfO2-Ln Films (where Ln= Er or Eu) -- 4. RESULTS AND DISCUSSION -- 4.1. Characterization of ZnO-Pd and ZnO-Pt Thins Films -- 4.2. Preliminary Evaluation of the Gas Sensitivity of the ZnO and ZnO-Pt Thin Films. 4.3. Characterization of HfO2-Ln Photodeposited Thin Films (where Ln = Eu or Er) -- 4.4. Photoluminescence Study of HfO2-Ln Thin Films -- 4.5. Proposed Photoluminescence Mechanism -- CONCLUSIONS -- ACKNOWLEDGMENTS -- REFERENCES -- PHOTOLABILE MOLECULES AS LIGHT-ACTIVATED SWITCHES TO CONTROL BIOMOLECULAR AND BIOMATERIAL PROPERTIES -- ABSTRACT -- 1. INTRODUCTION -- 2. CAGING OF BIOLOGICAL MOLECULES -- 2.1. Small Biologically Relevant Molecules -- 2.2. Peptides and Proteins -- 2.3. Nucleotides and Nucleic Acids -- 2.4. Drugs -- 3. PHOTOLABILE MOLECULES IN BIOLOGICAL DEVICES AND BIOMATERIALS -- 3.1. Patterning Biomolecules and Cells on Solid Surfaces -- 3.2. Biomaterials for Controlled Release -- 3.3. Controlling Biomaterial Physical Properties -- 3.4. Controlling Biomaterial Chemical Properties: Patterning Biomolecules and Cells -- CONCLUSION -- REFERENCES -- PHOTOSYSTEM AT HIGH TEMPERATURE: MECHANISMS OF ADAPTATION AND DAMAGE -- ABSTRACT -- 1. GENERAL INTRODUCTION -- 2. STRUCTURE AND FUNCTION OF PHOTOSYSTEMS WITH TYPE-II REACTION CENTER -- 2.1. Purple Bacteria -- 2.2. Cyanobacteria -- 2.3. Higher Plants -- THERMAL STABILITY OF TYPE-II REACTION CENTERS -- 3.1. Purple Bacteria -- 3.2. Cyanobacteria -- 3.3. Higher Plants -- 4. HEAT-DERIVED DAMAGE

OF PHOTOSYSTEMS IN HIGHER PLANT -- 4.1. Light-Mediated Damage of Photosystem in Heat-Stressed Higher Plants -- 4.2. Light-Independent Mechanisms of Damage of Photosystems in Heat-Stressed Higher Plants -- 5. ADAPTATION MECHANISM OF PHOTOSYNTHESIS AGAINST HEAT STRESS -- 6. IMPROVEMENT OF HEAT TOLERANCE BY GENETIC ENGINEERING -- 7. INDUCTION OF HEAT TOLERANCE BY ARTIFICIAL TREATMENTS OF CHEMICALS -- 7.1. Ca2+ -- 7.2. H2O2 -- 7.3. Phytohormone -- 7.4. Environmental Elicitor -- CONCLUSION -- ACKNOWLEDGMENT -- REFERENCES.
THE LITTLE-KNOWN WAVELENGTH EFFECT IN PROVITAMIN D PHOTOCHEMISTRY: THE AMBIGUOUS ROLE OF THE WEAK IRREVERSIBLE CHANNEL -- ABSTRACT -- INTRODUCTION -- 1. COMMONLY ACCEPTED INTERPRETATION OF PROVITAMIN D PHOTOISOMERIZATION -- 2. SPECIFIC FEATURES OF PROVITAMIN D PHOTOISOMERIZATION UNDER XECL LASER EXCITATION AT = 308 NM -- 2.1. Influence of Two-Photon Processes -- 2.2. Influence of the Radiation Wavelength -- 2.3. Simplified Model of Reversible Photoconversions with a Weak Irreversible Channel -- 3. SPECTROPHOTOMETRIC ANALYSIS OF THE MULTICOMPONENT PHOTOISOMERIC MIXTURE -- 4. IRRADIATION WITH KRF AND XECL EXCIMER LASERS -- 4.1. The Provitamin D Photoisomerization upon Excitation with Krf Laser at the Wavelength = 248 Nm -- 4.2. Concentration Kinetics under Irradiation with the Xecl Laser At 308 Nm -- 5. THE PROBLEM OF THE PHOTOCHEMICAL STAGE OPTIMIZATION IN THE INDUSTRIAL PRODUCTION OF VITAMIN D -- 5.1. The Method of Two-Stage Irradiation -- 5.2. The Role of the Irreversible Channel Under Optically Dense Layer Conditions -- 6. BIOLOGICAL DOSIMETRY OF SOLAR UV RADIATION IN SITU USING AN IN VITRO MODEL OF VITAMIN D SYNTHESIS -- 6.1. Duality of Solar UV-B Radiation: Vitamin D Synthesis versus Skin Erythema -- 6.2. Spectral Selectivity of the 'D-Dosimeter' -- 6.3. Measurement of the Vitamin D Action Spectrum in Vitro -- 6.4. Inter-Relation between the in Vivo and in Vitro Action Spectra of Vitamin D Synthesis -- CONCLUSIONS -- REFERENCES -- EXPLORING ORGANIC PHOTOCHEMISTRY WITH COMPUTATIONAL METHODS: AN INTRODUCTION -- 1. ABSTRACT -- 2. INTRODUCTION -- 3. THEORETICAL BACKGROUND -- 3.1. The CASSCF Method -- 3.2. The CASPT2 Method -- 3.3. The TD-DFT Methods -- 3.4. The Choice of a Method -- 4. COMPUTING THE PHOTOCHEMICAL REACTION PATH -- 5. PRACTICAL CONSIDERATIONS -- 5.1. Choice of the Chemical Structure -- 5.2. Choice of the Active Space.
5.3. Computing a Photochemical Reaction -- 5.4. Software -- 6. CASE STUDY: PHOTOCYCLOADDITION OF IMINES TO ALKENES -- CONCLUSION -- ACKNOWLEDGMENT -- REFERENCES -- RECENT PROGRESS IN CHIRALITY RESEARCH USING CIRCULARLY POLARIZED LIGHT -- ABSTRACT -- 1. INTRODUCTION -- 1.1. Astrobiology -- 1.2. Habitability and Originability -- 1.3. Enantiomer and Homochirality of the Terrestrial Life -- 1.4. Early Earth and Early Life -- 1.5. The Birth Place of Our Solar System -- 1.6. Linear and Circular Imaging Polarimetry in Astronomy -- 2. ORGANIC MATERIALS AND WATER IN SPACE -- 2.1. Extraterrestrial Organic Matter, Amino Acid, Amino Acid Precursor, and Sugar -- 2.2. Extraterrestrial Water -- 3. ENANTIOMERIC EXCESS AND ASYMMETRIC PHOTOCHEMISTRY -- 3.1. Enantiomeric Excess in Meteorites and the Late Heavy Bombardment -- 3.2. Amino Acid and Amino Acid Precursor by Photochemistry -- 3.3. Enantiomeric Excess by Asymmetric Photochemistry -- 3.4. Asymmetric Amplification of Tiny Enantiomeric Excess for Amimo Acid and Sugar -- 4. CIRCULARLY POLARIZED LIGHT SOURCE IN SPACE -- 4.1. Possible Sources of Circular Polarization -- 4.2. Wide Extension of Linear and Circular Polarization in the Orion Nebula -- CONCLUSION --

Sommario/riassunto

This book presents current research in the study of photochemistry, including novel electron-transfer three-component visible light photoinitiating systems; photolabile molecules as light-activated switches to control biomolecular and biomaterial properties; organic photochemistry with computational methods; photoinduced transformation processes in surface waters and photochemical processes in needles of over-wintering evergreen conifers.