

Photobiology

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Photobiology is the scientific study of the interactions of light and living organisms. The field includes the study of photosynthesis, photomorphogenesis, visual processing, circadian rhythms, bioluminescence, and ultraviolet radiation effects. The major professional photobiology societies are the

[<http://www.photobiology.org> American Society for Photobiology], whose official journal is

[[http://www.aspjjournal.com/Photochemistry and Photobiology](http://www.aspjjournal.com/Photochemistry%20and%20Photobiology)], and the [<http://www.esp-photobiology.it>

European Society for Photobiology], whose official journal is

[<http://www.rsc.org/publishing/journals/PP/Index.asp> *Photochemical and Photobiological Sciences*]. ([From the Wikipedia article Photobiology](#).)



Recent Publications on Photobiology:

- [Does ultraviolet radiation affect the xanthophyll cycle in marine phytoplankton?](#)
This Perspective summarizes the state of knowledge of the impact of... 16th October, 2009
Department of Ocean Ecosystems, Energy and Sustainability Research- Photochem Photobiol Sci. 2009 Sep;8(9):1295-301. Epub 2009 Aug 11. ([DOI Direct Link](#))
- [Effects of solar ultraviolet radiation on coral reef organisms.](#)
Organisms living in shallow-water tropical coral reef environments are... 16th October, 2009
Unidad Academica Puerto Morelos, Instituto de Ciencias del Mar y- Photochem Photobiol Sci. 2009 Sep;8(9):1276-94. Epub 2009 Jun 23. ([DOI Direct Link](#))
- [Ustilago maydis accumulates beta-carotene at levels determined by a retinal-forming carotenoid oxygenase.](#)
The basidiomycete Ustilago maydis, the causative agent of corn smut... 10th October, 2009
Department of Genetics, Faculty of Biology, University of Seville,- Fungal Genet Biol. 2009 Oct;46(10):803-13. Epub 2009 Jul 5. ([DOI Direct Link](#))
- [Do different ethnic groups need different sun protection?](#)
BACKGROUND: In the present study, the transmission of sunlight through the... 9th October, 2009
Department of Dermatology and Photobiology, Sygros Hospital, University of- Skin Res Technol. 2009 Aug;15(3):323-9. ([DOI Direct Link](#))
- [Themed issue dedicated to Ester Oliveros on her 60th Birthday.. European Photochemistry Association and the European Society for Photobiology](#)
The basidiomycete Ustilago maydis, the causative agent of corn smut... 6th October, 2009
- Photochem Photobiol Sci. 2009 Jul;8(7):901-1071. Epub 2009 Jul 1. ([DOI Direct Link](#))
- [Solar capillaritis as a cause of solar purpura.](#)
Summary Appearance of purpura acutely after sun exposure is rare. We... 2nd October, 2009
Photobiology Unit and Department of Dermatology, Ninewells Hospital and- Clin Exp Dermatol. 2009 Sep 28. ([DOI Direct Link](#))

- [A time course investigation of the fluorescence induced by topical application of 5-aminolevulinic acid and methyl aminolevulinate on normal human skin.](#)
*BACKGROUND: Treatment of non-melanoma skin cancers (NMSC) with topical...*30th September, 2009
 Department of Photobiology, Ninewells Hospital, Dundee, UK.- Photodermatol Photoimmunol Photomed. 2009 Aug;25(4):191-5. ([DOI Direct Link](#))
- [Photoreduction of the folate cofactor in members of the photolyase family.](#)
*Cryptochromes and DNA photolyases are related flavoproteins with flavin...*29th September, 2009
 Faculty of Biology, Department of Plant Physiology and Photobiology,- J Biol Chem. 2009 Aug 7;284(32):21670-83. Epub 2009 Jun 16. ([DOI Direct Link](#))
- [Use of 660-nm Diode Laser in the Prevention and Treatment of Human Oral Mucositis Induced by Radiotherapy and Chemotherapy.](#)
*Abstract Objective: The aim of this multidisciplinary study was to...*22nd September, 2009
 1 Photobiology and Lasertherapy Center, Vale do Paraiba University , Sao- Photomed Laser Surg. 2009 Sep 21. ([DOI Direct Link](#))
- [A review of current research in light-based technologies for treatment of podiatric infectious disease states.](#)
*Recently, there has been a resurgence of interest in potential...*18th September, 2009
 Nomir Medical Technologies, Inc, 307 Waverley Oaks Road, Suite 109,- J Am Podiatr Med Assoc. 2009 Jul-Aug;99(4):348-52.
- [Contrasting ability to take up leucine and thymidine among freshwater bacterial groups: implications for bacterial production measurements.](#)
*Summary We examined the ability of different freshwater bacterial groups...*4th September, 2009
 Laboratory of Aquatic Photobiology and Plankton Ecology, Institute of- Environ Microbiol. 2009 Aug 27. ([DOI Direct Link](#))
- [Responses of Aspergillus oryzae to stimuli from near-UV light irradiation in the presence or absence of titanium dioxide.](#)
*The responses of Aspergillus oryzae to the stimuli from near-UV...*1st August, 2009
 Division of Chemical Engineering, Department of Materials Engineering- Biocontrol Sci. 2009 Jun;14(2):61-4.
- [Assessment of the optical radiation hazard from a home-use intense pulsed light \(IPL\) source.](#)
*BACKGROUND AND OBJECTIVES: Intense pulsed light (IPL) systems have evolved...*30th July, 2009
 Photobiology Unit, Ninewells Hospital and Medical School, University of- Lasers Surg Med. 2009 Sep;41(7):534-9. ([DOI Direct Link](#))
- [Doxycycline-dependent photoactivated gene expression in eukaryotic systems.](#)
*High spatial and temporal resolution of conditional gene expression is...*14th July, 2009
 Max Planck Institute of Neurobiology, Munich-Martinsried, Germany.- Nat Methods. 2009 Jul;6(7):527-31. Epub 2009 Jun 7. ([DOI Direct Link](#))
- [The sunburn response in human skin is characterized by sequential eicosanoid profiles that may mediate its early and late phases.](#)
*Sunburn is a commonly occurring acute inflammatory process, with dermal...*9th July, 2009
 Photobiology Unit, Dermatological Sciences, University of Manchester,- FASEB J. 2009 Nov;23(11):3947-56. Epub 2009 Jul 7. ([DOI Direct Link](#))

Photobiology Clinical Trials:



- [Placebo-Controlled Assessment of the Effect of a Food Supplement on Skin Protection After Exposure](#)



Photobiology Patents:

- 7550265- [Process for removal of homopolymeric sequence portion from analyte\(s\) and library of analytes](#)
- 7566537- [Labelled nucleotides](#)
- 7569130- [Fluorescent detection of proteins in polyacrylamide gels](#)
- 7570412- [Reversible recording material and displaying element](#)
- 7572629- [Multiple gene transcription activity assay system](#)
- 7572888- [Methods of assaying receptor activity and constructs useful in such methods](#)
- 7575589- [Light-emitting device and method for providing phototherapy to the brain](#)
- 7582276- [Nanoscale rutile or anatase oxide and method for producing same](#)
- 7582653- [Mercaptophenyl naphthyl methane compounds and synthesis thereof](#)
- 7582807- [Regulation of gene expression using chromatin remodelling factors](#)
- 7585514- [Administration of agents mimicking DOPAchrome tautomerase \(TRP-2\) activity for protecting hair follicle melanocytes](#)
- 7566444- [Versatile hydrophilic dyes](#)
- 7563819- [Esters of 5-aminolevulinic acid as photosensitizing agents in photochemotherapy](#)
- 7550609- [Cytotoxic agents comprising taxanes and their therapeutic use](#)
- 7553624- [Method of analyzing physiological function of target substance](#)
- 7553667- [Regulation of gene expression using chromatin remodelling factors](#)
- 7553959- [Fluorescent dye composition and target labeled therewith](#)
- 7556843- [Photosensitive resin composition](#)
- 7557068- [Evolving new molecular function](#)
- 7558416- [Apparatus and method for measuring photodamage to skin](#)
- 7560574- [Halogenated rhodamine derivatives and applications thereof](#)
- 7563615- [Apparatus and method for automated monitoring of airborne bacterial spores](#)
- 7563621- [Absorbing organic reagents into diagnostic test devices by formation of amine salt complexes](#)
- 7585857- [Cytotoxic agents comprising taxanes and their therapeutic use](#)
- 7586604- [Optical apparatus](#)
- 7586618- [Distinguishing non-resonant four-wave-mixing noise in coherent stokes and anti-stokes Raman scattering](#)
- 7598086- [Photoelectrochemical determination of chemical oxygen demand](#)
- 7598088- [Optical imaging method and system for characterization and mapping of tissue lesions](#)
- 7598390- [Fluorescent chemical compounds having high selectivity for double stranded DNA, and methods for their use](#)
- 7599732- [Method and system for near-infrared fluorescence contrast-enhanced imaging with area illumination and area detection](#)
- 7601298- [Method for processing and treating a biological fluid with light](#)
- 7601805- [Photoprotein with improved bioluminescence](#)
- 7606274- [Mid-IR instrument for analyzing a gaseous sample and method for using the same](#)
- 7608419- [Method and apparatus for detecting and quantifying bacterial spores on a surface](#)

- 7608557- [Highly active photocatalyst and process for producing the same](#)
- 7608642- [Wound and skin care compositions](#)
- 7597825- [Method of quenching electronic excitation of chromophore-containing organic molecules in photoactive compositions](#)
- 7595375- [Fluorescent protein](#)
- 7588702- [Method of quenching electronic excitation of chromophore-containing organic molecules in photoactive compositions](#)
- 7588767- [Microorganisms for therapy](#)
- 7588771- [Microorganisms for therapy](#)
- 7588777- [Surface cross-linked superabsorbent polymer particles and methods of making them](#)
- 7588880- [Incorporable photoinitiator](#)
- 7592435- [Modified nucleosides and nucleotides and uses thereof](#)
- 7592449- [Structural carotenoid analogs for the inhibition and amelioration of disease](#)
- 7592539- [Solid state photosensitive devices which employ isolated photosynthetic complexes](#)
- 7593763- [Non-invasive in vivo measurement of macular carotenoids](#)
- 7595162- [Methods of labeling polynucleotides with energy transfer dyes](#)
- 7608715- [Fluorescent brighteners, methods of preparation thereof, fluorescent brightener compositions, and methods of preparation and uses thereof](#)

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