

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:

- [The stromal chloroplast Deg7 protease participates in the repair of PSII after photoinhibition in Arabidopsis.](#)
*Light is the ultimate source of energy for photosynthesis; however,...*22nd January, 2010
Photosynthesis Research Center, Key Laboratory of Photobiology, Institute- Plant Physiol. 2010 Jan 20. ([DOI Direct Link](#))
- [The thylakoid protease Deg1 is involved in photosystem II assembly in Arabidopsis thaliana.](#)
*Summary DegP proteases have been shown to possess both chaperone and...*22nd January, 2010
Photosynthesis Research Center, Key Laboratory of Photobiology, Institute- Plant J. 2010 Jan 18. ([DOI Direct Link](#))
- [Locked chromophore analogs reveal that photoactive yellow protein regulates biofilm formation in the deep sea bacterium *Idiomarina loihiensis*.](#)
*Idiomarina loihiensis is a heterotrophic deep sea bacterium with no known...*22nd January, 2010
Department of Molecular Microbial Physiology, Swammerdam Institute for- J Am Chem Soc. 2009 Dec 2;131(47):17443-51. ([DOI Direct Link](#))
- [Some light on the photobiology of vitamin D.](#)
*In this issue, Bogh et al. report a study that begins to address the...*19th January, 2010
Division of Genetics and Molecular Medicine, St John's Institute of- J Invest Dermatol. 2010 Feb;130(2):346-8. ([DOI Direct Link](#))
- [Role of the pigma* State in Molecular Photophysics.](#)
*Photosynthesis, which depends on light-driven energy and electron transfer...*19th January, 2010
Steacie Institute for Molecular Science, National Research Council of- Acc Chem Res. 2010 Jan 15. ([DOI Direct Link](#))
- [Recommended Summer Sunlight Exposure Levels Can Produce Sufficient \(\$\geq 20\$ ng ml⁻¹\) but Not the Proposed Optimal \(\$\geq 32\$ ng ml⁻¹\) 25\(OH\)D Levels at UK Latitudes.](#)
*Recommendations on limitation of summer sunlight exposure to prevent skin...*15th January, 2010

- Photobiology Unit, Dermatological Sciences, School of Translational- J Invest Dermatol. 2010 Jan 14. ([DOI Direct Link](#))
- [Which light source should be used for the investigation of clinical phototoxicity: monochromator or solar simulator?](#)
Recommendations on limitation of summer sunlight exposure to prevent skin... 15th January, 2010
 Photobiology Unit, Department of Dermatology, Ninewells Hospital, Dundee,- Photodermatol Photoimmunol Photomed. 2010 Feb;26(1):3-6. ([DOI Direct Link](#))
 - [Photocytotoxic trans-Diam\(m\)ine Platinum\(IV\) Diazido Complexes More Potent than Their cis Isomers.](#)
The photocytotoxicity of a series of anticancer trans-dihydroxido... 10th December, 2009
 Department of Chemistry, University of Warwick, Gibbet Hill Road,- Chem Res Toxicol. 2009 Dec 8. ([DOI Direct Link](#))
 - [The photobiology of microbial pathogenesis.](#)
The photocytotoxicity of a series of anticancer trans-dihydroxido... 4th December, 2009
 Division of Cell Biology and Biophysics, School of Biological Sciences,- PLoS Pathog. 2009 Nov;5(11):e1000470. Epub 2009 Nov 26. ([DOI Direct Link](#))
 - [EPPM-2 conference report: The 2nd Conference of the European Platform for Photodynamic Medicine \(EPPM\) in conjunction with the 13th Bi Annual Congress of the European Society for Photobiology \(ESP\), 5th-10th September 2009, Wroclaw.](#)
The photocytotoxicity of a series of anticancer trans-dihydroxido... 26th November, 2009
 - Photodiagnosis Photodyn Ther. 2009 Sep-Dec;6(3-4):240-2. Epub 2009 Nov 7. ([DOI Direct Link](#))
 - [Conversion and conservation of light energy in a photosynthetic microbial mat ecosystem.](#)
Here we present, to the best of our knowledge, the first balanced light... 13th November, 2009
 Max-Planck Institute for Marine Microbiology, Celsiusstrasse, Bremen,- ISME J. 2009 Nov 12. ([DOI Direct Link](#))
 - [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](#))
 - [Solar capillaritis as a cause of solar purpura.](#)
Appearance of purpura acutely after sun exposure is rare. We report a... 2nd October, 2009
 Photobiology Unit and Department of Dermatology, Ninewells Hospital and- Clin Exp Dermatol. 2009 Dec;34(8):e821-4. Epub 2009 Sep 28. ([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](#))
 - [Contrasting ability to take up leucine and thymidine among freshwater bacterial groups: implications for bacterial production measurements.](#)
We examined the ability of different freshwater bacterial groups to take... 4th September, 2009
 Laboratory of Aquatic Photobiology and Plankton Ecology, Institute of- Environ Microbiol. 2010 Jan;12(1):74-82. Epub 2009 Aug 27. ([DOI Direct Link](#))

BioNews Results for Photobiology

- [Enzyme Research: Scientists at University of Bath target enzyme research](#)
NewsRX: Jan 27 2010 5:11AM Matching: photobiology
- [Some Light on the Photobiology of Vitamin D](#)
Journal of Investigative Dermatology: Jan 13 2010 10:58PM Matching: photobiology
- [Life Sciences: Studies from P.J. Safarik University, Institute of Biology in the area of life sciences](#)

[published](#)

NewsRX: Jan 13 2010 5:48AM Matching: photobiology



Photobiology Clinical Trials:

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



Photobiology Patents:

- 7588767- [Microorganisms for therapy](#)
- 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](#)
- 7608715- [Fluorescent brighteners, methods of preparation thereof, fluorescent brightener compositions, and methods of preparation and uses thereof](#)
- 7611737- [Antiwrinkle agent and skin cosmetic composition](#)
- 7611862- [Method and apparatus for detecting and quantifying bacterial spores on a surface](#)
- 7598390- [Fluorescent chemical compounds having high selectivity for double stranded DNA, and methods for their use](#)
- 7598088- [Optical imaging method and system for characterization and mapping of tissue lesions](#)
- 7598086- [Photoelectrochemical determination of chemical oxygen demand](#)
- 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](#)
- 7595375- [Fluorescent protein](#)
- 7597825- [Method of quenching electronic excitation of chromophore-containing organic molecules in](#)

[photoactive compositions](#)

- 7611909- [Near infrared chemiluminescent acridinium compounds and uses thereof](#)
- 7621745- [Use of secondary optical emission as a novel biofilm targeting technology](#)
- 7648695- [Medicaments for chemotherapeutic treatment of disease](#)
- 7648699- [Preventing transfusion related complications in a recipient of a blood transfusion](#)
- 7648738- [Oxime ester photoinitiators with heteroaromatic groups](#)
- 7648755- [Non-white construction surface](#)
- 7649153- [Method for minimizing sample damage during the ablation of material using a focused ultrashort pulsed laser beam](#)
- 7651660- [Apparatus for irradiating liquids](#)
- 7655129- [Binding acceleration techniques for the detection of analytes](#)
- 7655392- [Quenching methods for red blood cell inactivation process](#)
- 7655409- [Cyanine dye compounds](#)
- 7655660- [Prodrugs of CC-1065 analogs](#)
- 7645595- [Method of production of artificial skin](#)
- 7645525- [Organic light emitting devices](#)
- 7643869- [Apparatus for non-invasive cancerous tissue diagnosis and tomography using terahertz imaging](#)
- 7622274- [Method for determining a product secretion profile of cells](#)
- 7623908- [Nonlinear interferometric vibrational imaging](#)
- 7625351- [System, method and apparatus for purifying biological fluids such as blood and constituents thereof](#)
- 7625557- [Method for inducing selectively suppressed immune response to transplanted tissue or cells](#)
- 7625738- [Nucleic acid molecules encoding a ferrochelatase enzyme or fragment thereof](#)
- 7629113- [Multiple sexed embryo production system for bovine mammals](#)
- 7632514- [Universal carrier for targeting molecules to Gb3 receptor expressing cells](#)
- 7633007- [Self-assembled photosynthesis-inspired light harvesting material and solar cells containing the same](#)
- 7638073- [Photochromic material comprising a proteorhodopsin apoprotein and a retinal analog](#)
- 7642344- [Methods and compositions for determining the sequence of nucleic acid molecules](#)
- 7655661- [Prodrugs of CC-1065 analogs](#)

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