

New Advances in Photobiochemistry and Photobiophysics (Special Issue) Guest Editors: Maria M. Borisova-Mubarakshina, Alexey Yu. Semenov, and Vladimir S. Sukhov

13 articles in this issue

Preface to the Special Issue "New Advances in Photobiochemistry and Photobiophysics"

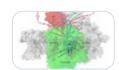
**EDITORIAL NOTES** | 31 July 2025 | Pages: 829 - 829

Study of Electron Transfer in Photosystem I Using High-Frequency EPR Spectroscopy. In Memory of Professor Klaus Möbius (1936-2024)



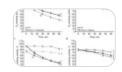
**REVIEW** | 31 July 2025 | Pages: 830 - 839

#### Photosynthetic Control and Its Role in Protection of Photosystem I against Photoinhibition



**REVIEW** 31 July 2025 | Pages: 840 - 859

Protective Effect of  $\alpha$ -Carbonic Anhydrase CAH3 Against Photoinhibition and Thermal Inactivation of Photosystem II in Membrane Preparations as Compared with  $\alpha$ -Carbonic Anhydrase CA4



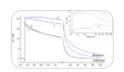
OriginalPaper | 31 July 2025 | Pages: 860 - 872

An Attempt to Increase Thermostability of the Mutant Photosynthetic Reaction Center of Cereibacter sphaeroides Using Disulfide Bonds



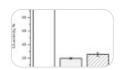
OriginalPaper | 31 July 2025 | Pages: 873 - 881

Cationic Antiseptics Disrupt the Functioning of the Electron-Transport Chain at the Acceptor Side in the Photosynthetic Reaction Centres of the Purple Bacterium Cereibacter sphaeroides



OriginalPaper | 31 July 2025 | Pages: 882 - 893

### Features of Photosynthesis in *Arabidopsis thaliana* Plants with Knocked out Genes Encoding Chloroplast Carbonic Anhydrases αCA1 and βCA1



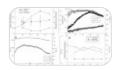
OriginalPaper | 31 July 2025 | Pages: 894 - 910

#### Effect of Cultivation Conditions on the Expression of the *Exiguobacterium* sibiricum Proteorhodopsin Gene



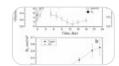
OriginalPaper | 31 July 2025 | Pages: 911 - 920

## Relationship between the Photosystem II Regulation Mechanisms and Hydrogen Production in *Chlamydomonas reinhardtii* under Nitrogen or Sulfur Deprivation



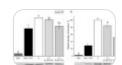
OriginalPaper | 31 July 2025 | Pages: 921 - 933

## Short-Term Photoinhibition Induces Long-Term Hydrogen Photoproduction in a Phototrophic Culture of *Chlorella sorokiniana* on Complete Medium



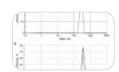
**OriginalPaper** | 31 July 2025 | Pages: 934 - 942

### The Effect of Hydrogen Peroxide on the Redistribution of Antenna Complexes Between Photosystems in Higher Plants



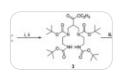
OriginalPaper 31 July 2025 Pages: 943 - 955

#### <u>Protective Role of Plastoquinone in the Early Stages of Second-Degree Thermal Skin Burn</u>



OriginalPaper | 31 July 2025 | Pages: 956 - 974

# Novel Branched Polyamine-Modified Chlorin with a Photoinduced Antimicrobial Activity



OriginalPaper | Open access | 31 July 2025 | Pages: 975 - 983