# Taras Antal

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7032702/publications.pdf

Version: 2024-02-01

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|---|---|---|---|
| 58 papers | 1,565 citations | 257450 24 h-index | 315739 38 g-index |
| 61 all docs | 61 docs citations | 61 times ranked | 1541 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The dependence of algal H2 production on Photosystem II and O2 consumption activities in sulfur-deprived Chlamydomonas reinhardtii cells. Biochimica Et Biophysica Acta - Bioenergetics, 2003, 1607, 153-160. | 1.0 | 166 |
| 2 | Production of H2 by sulphur-deprived cells of the unicellular cyanobacteria Gloeocapsa alpicola and Synechocystis sp. PCC 6803 during dark incubation with methane or at various extracellular pH. Journal of Applied Microbiology, 2005, 98, 114-120. | 3.1 | 128 |
| 3 | Acclimation of green algae to sulfur deficiency: underlying mechanisms and application for hydrogen production. Applied Microbiology and Biotechnology, 2011, 89, 3-15. | 3.6 | 90 |
| 4 | Relationships between H2 photoproduction and different electron transport pathways in sulfur-deprived Chlamydomonas reinhardtii. International Journal of Hydrogen Energy, 2009, 34, 9087-9094. | 7.1 | 68 |
| 5 | Acclimation of photosynthesis to nitrogen deficiency in Phaseolus vulgaris. Planta, 2010, 232, 887-898. | 3.2 | 58 |
| 6 | Photosynthesis-related quantities for education and modeling. Photosynthesis Research, 2013, 117, 1-30. | 2.9 | 57 |
| 7 | Roles of Group 2 Sigma Factors in Acclimation of the CyanobacteriumSynechocystissp. PCC 6803 to Nitrogen Deficiency. Plant and Cell Physiology, 2016, 57, 1309-1318. | 3.1 | 49 |
| 8 | Oxidative stress and photoinhibition can be separated in the cyanobacterium Synechocystis sp. PCC 6803. Biochimica Et Biophysica Acta - Bioenergetics, 2014, 1837, 217-225. | 1.0 | 47 |
| 9 | Cultivation of Nannochloropsis for eicosapentaenoic acid production in wastewaters of pulp and paper industry. Bioresource Technology, 2015, 193, 469-476. | 9.6 | 44 |
| 10 | The bidirectional hydrogenase in the cyanobacterium Synechocystis sp. strain PCC 6803. International Journal of Hydrogen Energy, 2006, 31, 1439-1444. | 7.1 | 42 |
| 11 | Multiple regulatory mechanisms in the chloroplast of green algae: relation to hydrogen production. Photosynthesis Research, 2015, 125, 357-381. | 2.9 | 42 |
| 12 | In vivo analysis of chlorophyll a fluorescence induction. Photosynthesis Research, 2008, 96, 217-226. | 2.9 | 41 |
| 13 | Hydrogen production by photoautotrophic sulfur-deprivedChlamydomonas reinhardtiipre-grown and incubated under high light. Biotechnology and Bioengineering, 2009, 102, 1055-1061. | 3.3 | 41 |
| 14 | Potential of carbon nanotubes in algal biotechnology. Photosynthesis Research, 2015, 125, 451-471. | 2.9 | 39 |
| 15 | Probing of photosynthetic reactions in four phytoplanktonic algae with a PEA fluorometer. Photosynthesis Research, 2009, 102, 67-76. | 2.9 | 36 |
| 16 | Study of photosystem 2 heterogeneity in the sulfur-deficient green alga Chlamydomonas reinhardtii. Photosynthesis Research, 2007, 94, 13-22. | 2.9 | 30 |
| 17 | Effects of sulfur limitation on photosystem II functioning in Chlamydomonas reinhardtii as probed by chlorophyll a fluorescence. Physiologia Plantarum, 2006, 128, 360-367. | 5.2 | 29 |
| 18 | Examination of chlorophyll fluorescence decay kinetics in sulfur deprived algae Chlamydomonas reinhardtii. Biochimica Et Biophysica Acta - Bioenergetics, 2007, 1767, 559-564. | 1.0 | 29 |

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|---|---|---|---|
| 19 | Group 2 Sigma Factor Mutant Î”sigCDE of the Cyanobacterium Synechocystis sp. PCC 6803 Reveals Functionality of Both Carotenoids and Flavodiiron Proteins in Photoprotection of Photosystem II. Plant and Cell Physiology, 2013, 54, 1780-1790. | 3.1 | 29 |
| 20 | Chlorophyll fluorescence induction and relaxation system for the continuous monitoring of photosynthetic capacity in photobioreactors. Physiologia Plantarum, 2019, 165, 476-486. | 5.2 | 28 |
| 21 | The relationship between the photosystem 2 activity and hydrogen production in sulfur deprived Chlamydomonas reinhardtii cells. Doklady Biochemistry and Biophysics, 2001, 381, 371-374. | 0.9 | 27 |
| 22 | Comparative analyses of <scp>H<sub>2</sub></scp> photoproduction in magnesiumâ€•and sulfurâ€starved Chlamydomonas reinhardtii cultures. Physiologia Plantarum, 2017, 161, 124-137. | 5.2 | 26 |
| 23 | Membrane potential is involved in regulation of photosynthetic reactions in the marine diatom Thalassiosira weissflogii. Journal of Photochemistry and Photobiology B: Biology, 2011, 102, 169-173. | 3.8 | 25 |
| 24 | Use of near-infrared radiation for oxygenic photosynthesis via photon up-conversion. International Journal of Hydrogen Energy, 2012, 37, 8859-8863. | 7.1 | 24 |
| 25 | Study of the effect of reducing conditions on the initial chlorophyll fluorescence rise in the green microalgae Chlamydomonas reinhardtii. Photosynthesis Research, 2013, 114, 143-154. | 2.9 | 24 |
| 26 | Hydrogen photoproduction by immobilized S-deprived Chlamydomonas reinhardtii : Effect of light intensity and spectrum, and initial medium pH. Algal Research, 2016, 17, 38-45. | 4.6 | 24 |
| 27 | The Mechanisms and Role of Photosynthetic Hydrogen Production by Green Microalgae. Microbiology, 2020, 89, 251-265. | 1.2 | 24 |
| 28 | Chromium effects on photosynthetic electron transport in pea (Pisum sativum L.). Planta, 2020, 251, 11. | 3.2 | 23 |
| 29 | Pathways of hydrogen photoproduction by immobilized Chlamydomonas reinhardtii cells deprived of sulfur. International Journal of Hydrogen Energy, 2014, 39, 18194-18203. | 7.1 | 22 |
| 30 | Photosynthetic hydrogen production as acclimation mechanism in nutrient-deprived Chlamydomonas. Algal Research, 2020, 49, 101951. | 4.6 | 21 |
| 31 | Comparative analysis of plastocyaninâ€“cytochromefcomplex formation in higher plants, green algae and cyanobacteria. Physiologia Plantarum, 2019, 166, 320-335. | 5.2 | 19 |
| 32 | Illumination with Ultraviolet or Visible Light Induces Chemical Changes in the Waterâ€soluble Manganese Complex, [Mn<sub>4</sub>O<sub>6</sub>(bpea)<sub>4</sub>]Br<sub>4</sub>. Photochemistry and Photobiology, 2009, 85, 663-668. | 2.5 | 17 |
| 33 | Multiparticle Brownian dynamics simulation of experimental kinetics of cytochrome bf oxidation and photosystem I reduction by plastocyanin. Physiologia Plantarum, 2017, 161, 88-96. | 5.2 | 17 |
| 34 | Action spectrum of the redox state of the plastoquinone pool defines its function in plant acclimation. Plant Journal, 2020, 104, 1088-1104. | 5.7 | 16 |
| 35 | Acclimation to High CO<sub>2</sub> Requires the Ï‰ Subunit of the RNA Polymerase in Synechocystis. Plant Physiology, 2017, 174, 172-184. | 4.8 | 14 |
| 36 | Two-Electron Reactions S2QB â†’S0QB and S3QB â†’S1QB are Involved in Deactivation of Higher S States of the Oxygen-Evolving Complex of Photosystem II. Biophysical Journal, 2009, 96, 4672-4680. | 0.5 | 13 |

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|---|---|---|---|
| 37 | Antimycin A effect on the electron transport in chloroplasts of two Chlamydomonas reinhardtii strains. Planta, 2013, 237, 1241-1250. | 3.2 | 13 |
| 38 | Group 2 Sigma Factors are Central Regulators of Oxidative Stress Acclimation in Cyanobacteria. Plant and Cell Physiology, 2019, 60, 436-447. | 3.1 | 13 |
| 39 | Mapping Single Walled Carbon Nanotubes in Photosynthetic Algae by Single-Cell Confocal Raman Microscopy. Materials, 2020, 13, 5121. | 2.9 | 12 |
| 40 | Modeling of primary photosynthetic processes using the kinetic Monte Carlo method. Biophysics (Russian Federation), 2016, 61, 387-399. | 0.7 | 11 |
| 41 | Simulation of chlorophyll fluorescence rise and decay kinetics, and P700-related absorbance changes by using a rule-based kinetic Monte-Carlo method. Photosynthesis Research, 2018, 138, 191-206. | 2.9 | 11 |
| 42 | Assessment of the effects of methylmercury and copper ions on primary processes of photosynthesis in green microalga Chlamydomonas moewusii by analysis of the kinetic curves of variable chlorophyll fluorescence. Biophysics (Russian Federation), 2009, 54, 481-485. | 0.7 | 8 |
| 43 | Multiple inÂvivo Effects of Cadmium on Photosynthetic Electron Transport in Pea Plants. Photochemistry and Photobiology, 2021, 97, 1516-1526. | 2.5 | 8 |
| 44 | Approaches to rapid screening of pharmaceutical xenobiotic effects on microalgae via monitoring of photosynthetic apparatus condition. Journal of Applied Phycology, 2022, 34, 353-361. | 2.8 | 8 |
| 45 | State of the phycobilisome determines effective absorption cross-section of Photosystem II in Synechocystis sp. PCC 6803. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148494. | 1.0 | 7 |
| 46 | Generation of high-value products by photosynthetic microorganisms: from sunlight to biofuels. Photosynthesis Research, 2015, 125, 355-356. | 2.9 | 6 |
| 47 | Seasonal Changes in Primary Photosynthetic Events during Low Temperature Adaptation of Pinus sylvestris in Central Yakutia. Russian Journal of Plant Physiology, 2018, 65, 658-666. | 1.1 | 6 |
| 48 | Examination of chlorophyll fluorescence in sulfur-deprived cells of Chlamydomonas reinhardtii. Biophysics (Russian Federation), 2006, 51, 251-257. | 0.7 | 5 |
| 49 | Evaluation of diatomea algae Thalassiosira weissflogii sensitivity to chloride mercury and methylmercury by chlorophyll fluorescence analysis. European Physical Journal Special Topics, 2003, 107, 569-572. | 0.2 | 4 |
| 50 | Effect of dibromothymoquinone on Chlorophyll a Fluorescence in Chlamydomonas reinhardtii cells incubated in complete or sulfur-depleted medium. Biophysics (Russian Federation), 2008, 53, 378-385. | 0.7 | 4 |
| 51 | Photoprotective mechanisms in photosystem II of Ephedra monosperma during development of frost tolerance. Russian Journal of Plant Physiology, 2014, 61, 751-759. | 1.1 | 4 |
| 52 | Models of Photosynthetic Electron Transport. Biophysics (Russian Federation), 2020, 65, 754-768. | 0.7 | 3 |
| 53 | Cadmium- and chromium-induced damage and acclimation mechanisms in Scenedesmus quadricauda and Chlorella sorokiniana. Journal of Applied Phycology, 2022, 34, 1435-1446. | 2.8 | 3 |
| 54 | CHAPTER 10. The Metabolic Acclimation of Chlamydomonas reinhardtii to Depletion of Essential Nutrients: Application for Hydrogen Production. Comprehensive Series in Photochemical and Photobiological Sciences, 2018, , 235-264. | 0.3 | 2 |

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|---|---|---|---|
| 55 | Influence of Fermentation Reactions on Continuous Hydrogen Photoproduction by Microalga Chlamydomonas reinhardtii under Sulfur Deficiency. Moscow University Biological Sciences Bulletin, 2022, 77, 25-31. | 0.7 | 2 |
| 56 | Oxidative Processes in Photosystem I of Thermophilic Cyanobacteria at High Temperatures. Russian Journal of Plant Physiology, 2001, 48, 638-644. | 1.1 | 1 |
| 57 | Heavy metal toxicity detection in phytoplankton by using neural network analysis of chlorophyll fluorescence induction. , 2021, , 134-141. | | 1 |
| 58 | Photophysical processes of energy conversion in thylakoid membranes of Chlamydomonas reinhardtii mutants D1-R323H, D1-R323D, and D1-R323L. Biochemistry (Moscow) Supplement Series A: Membrane and Cell Biology, 2010, 4, 134-142. | 0.6 | 0 |