

# Kateřina Biřovř;

## List of Publications by Year in descending order

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Version: 2024-02-01

62  
papers

4,780  
citations

236925

25  
h-index

144013

57  
g-index

68  
all docs

68  
docs citations

68  
times ranked

6022  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | The <i>Chlamydomonas</i> Genome Reveals the Evolution of Key Animal and Plant Functions. <i>Science</i> , 2007, 318, 245-250.   | 12.6 | 2,354     |
| 2  | Microalgae "novel highly efficient starch producers. <i>Biotechnology and Bioengineering</i> , 2011, 108, 766-776.  | 3.3  | 380       |
| 3  | Accumulation of energy reserves in algae: From cell cycles to biotechnological applications. <i>Biotechnology Advances</i> , 2015, 33, 1204-1218.   | 11.7 | 190       |
| 4  | Cell-cycle regulation in green algae dividing by multiple fission. <i>Journal of Experimental Botany</i> , 2014, 65, 2585-2602.   | 4.8  | 139       |
| 5  | Genome-Wide Annotation and Expression Profiling of Cell Cycle Regulatory Genes in <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology</i> , 2005, 137, 475-491.  | 4.8  | 131       |
| 6  | Relationship between starch and lipid accumulation induced by nutrient depletion and replenishment in the microalga <i>Parachlorella kessleri</i> . <i>Bioresource Technology</i> , 2013, 144, 268-274.       | 9.6  | 114       |
| 7  | Improving microalgae for biotechnology " From genetics to synthetic biology. <i>Biotechnology Advances</i> , 2015, 33, 1194-1203.   | 11.7 | 106       |
| 8  | The microalga <i>Parachlorella kessleri</i> "A novel highly efficient lipid producer. <i>Biotechnology and Bioengineering</i> , 2013, 110, 97-107.  | 3.3  | 102       |
| 9  | Bioaccumulation and toxicity of selenium compounds in the green alga <i>Scenedesmus quadricauda</i> . <i>BMC Plant Biology</i> , 2009, 9, 58.   | 3.6  | 83        |
| 10 | The Plant-Specific Kinase CDKF;1 Is Involved in Activating Phosphorylation of Cyclin-Dependent Kinase-Activating Kinases in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2004, 16, 2954-2966.                     | 6.6  | 70        |
| 11 | Regulation of the <i>Chlamydomonas</i> Cell Cycle by a Stable, Chromatin-Associated Retinoblastoma Tumor Suppressor Complex. <i>Plant Cell</i> , 2010, 22, 3331-3347.   | 6.6  | 67        |
| 12 | <i>Chlamydomonas reinhardtii</i> : duration of its cell cycle and phases at growth rates affected by light intensity. <i>Planta</i> , 2011, 233, 75-86.   | 3.2  | 65        |
| 13 | Glutathione peroxidase activity in the selenium-treated alga <i>Scenedesmus quadricauda</i> . <i>Aquatic Toxicology</i> , 2011, 102, 87-94.   | 4.0  | 63        |
| 14 | <i>Chlamydomonas reinhardtii</i> : duration of its cell cycle and phases at growth rates affected by temperature. <i>Planta</i> , 2011, 234, 599-608.   | 3.2  | 59        |
| 15 | Use of lanthanides to alleviate the effects of metal ion-deficiency in <i>Desmodesmus quadricauda</i> ( <i>Sphaeropleales</i> , <i>Chlorophyta</i> ). <i>Frontiers in Microbiology</i> , 2015, 6, 2.          | 3.5  | 59        |
| 16 | Highly efficient lipid production in the green alga <i>Parachlorella kessleri</i> : draft genome and transcriptome endorsed by whole-cell 3D ultrastructure. <i>Biotechnology for Biofuels</i> , 2016, 9, 13. | 6.2  | 56        |
| 17 | Diverse phosphoregulatory mechanisms controlling cyclin-dependent kinase-activating kinases in <i>Arabidopsis</i> . <i>Plant Journal</i> , 2006, 47, 701-710x.  | 5.7  | 54        |
| 18 | Deciphering the relationship among phosphate dynamics, electron-dense body and lipid accumulation in the green alga <i>Parachlorella kessleri</i> . <i>Scientific Reports</i> , 2016, 6, 25731.               | 3.3  | 53        |

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|----|---|------|-----------|
| 19 | Effect of red and blue light on the timing of cyclin-dependent kinase activity and the timing of cell division in <i>Chlamydomonas reinhardtii</i> . <i>Plant Physiology and Biochemistry</i> , 2004, 42, 341-348.  | 5.8  | 41        |
| 20 | Stable isotope compounds - production, detection, and application. <i>Biotechnology Advances</i> , 2018, 36, 784-797.   | 11.7 | 41        |
| 21 | Variety of cell cycle patterns in the alga <i>Scenedesmus quadricauda</i> (Chlorophyta) as revealed by application of illumination regimes and inhibitors. <i>European Journal of Phycology</i> , 2002, 37, 361-371.                                      | 2.0  | 37        |
| 22 | The effect of lanthanides on photosynthesis, growth, and chlorophyll profile of the green alga <i>Desmodesmus quadricauda</i> . <i>Photosynthesis Research</i> , 2016, 130, 335-346.  | 2.9  | 32        |
| 23 | Exploring Mycosporine-Like Amino Acids (MAAs) as Safe and Natural Protective Agents against UV-Induced Skin Damage. <i>Antioxidants</i> , 2021, 10, 683.  | 5.1  | 29        |
| 24 | Comparison of lipid productivity of <i>Parachlorella kessleri</i> heavy-ion beam irradiation mutant PK4 in laboratory and 150-L mass bioreactor, identification and characterization of its genetic variation. <i>Algal Research</i> , 2018, 35, 416-426. | 4.6  | 27        |
| 25 | CYCP2;1 integrates genetic and nutritional information to promote meristem cell division in <i>Arabidopsis</i> . <i>Developmental Biology</i> , 2014, 393, 160-170.   | 2.0  | 25        |
| 26 | Cell growth and division processes are differentially sensitive to cadmium in <i>Scenedesmus quadricauda</i> . <i>Folia Microbiologica</i> , 2003, 48, 805-816.   | 2.3  | 24        |
| 27 | Bio-mining of Lanthanides from Red Mud by Green Microalgae. <i>Molecules</i> , 2019, 24, 1356.  | 3.8  | 24        |
| 28 | Deuterium and its impact on living organisms. <i>Folia Microbiologica</i> , 2019, 64, 673-681.  | 2.3  | 23        |
| 29 | Cell Cycle Arrest by Supraoptimal Temperature in the Alga <i>Chlamydomonas reinhardtii</i> . <i>Cells</i> , 2019, 8, 1237.  | 4.1  | 23        |
| 30 | Response of the Green Alga <i>Chlamydomonas reinhardtii</i> to the DNA Damaging Agent Zeocin. <i>Cells</i> , 2019, 8, 735.  | 4.1  | 22        |
| 31 | The activity of total histone H1 kinases is related to growth and commitment points while the p13suc1-bound kinase activity relates to mitoses in the alga <i>Scenedesmus quadricauda</i> . <i>Plant Physiology and Biochemistry</i> , 2000, 38, 755-764. | 5.8  | 20        |
| 32 | Improving microalgae for biotechnology – From genetics to synthetic biology – Moving forward but not there yet. <i>Biotechnology Advances</i> , 2022, 58, 107885.   | 11.7 | 20        |
| 33 | The Effect of Variable Light Source and Light Intensity on the Growth of Three Algal Species. <i>Cells</i> , 2022, 11, 1293.  | 4.1  | 20        |
| 34 | The Cell Cycle of Microalgae. , 2016, , 3-46.   |      | 19        |
| 35 | Effects of cyclin-dependent kinase activity on the coordination of growth and the cell cycle in green algae at different temperatures. <i>Journal of Experimental Botany</i> , 2019, 70, 845-858.   | 4.8  | 18        |
| 36 | Synchronization of Green Algae by Light and Dark Regimes for Cell Cycle and Cell Division Studies. <i>Methods in Molecular Biology</i> , 2016, 1370, 3-16.  | 0.9  | 18        |

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|----|---|-----|-----------|
| 37 | DNA Damage during G2 Phase Does Not Affect Cell Cycle Progression of the Green Alga <i>Scenedesmus quadricauda</i> . PLoS ONE, 2011, 6, e19626.   | 2.5 | 16        |
| 38 | Starch Production in <i>Chlamydomonas reinhardtii</i> through Supraoptimal Temperature in a Pilot-Scale Photobioreactor. Cells, 2021, 10, 1084.   | 4.1 | 15        |
| 39 | CDKA and CDKB kinases from <i>Chlamydomonas reinhardtii</i> are able to complement <i>cdc28</i> temperature-sensitive mutants of <i>Saccharomyces cerevisiae</i> . Protoplasma, 2008, 232, 183-191.   | 2.1 | 12        |
| 40 | Evidences of oxidative stress during hydrogen photoproduction in sulfur-deprived cultures of <i>Chlamydomonas reinhardtii</i> . International Journal of Hydrogen Energy, 2015, 40, 10410-10417.  | 7.1 | 11        |
| 41 | Growth and the cell cycle in green algae dividing by multiple fission. Folia Microbiologica, 2019, 64, 663-672.   | 2.3 | 11        |
| 42 | Comparing Biochemical and Raman Microscopy Analyses of Starch, Lipids, Polyphosphate, and Guanine Pools during the Cell Cycle of <i>Desmodesmus quadricauda</i> . Cells, 2021, 10, 62.  | 4.1 | 11        |
| 43 | The alga <i>Chlamydomonas reinhardtii</i> UVS11 gene is responsible for cell division delay and temporal decrease in histone H1 kinase activity caused by UV irradiation. DNA Repair, 2003, 2, 737-750.   | 2.8 | 10        |
| 44 | Accumulation, Activity and Localization of Cell Cycle Regulatory Proteins and the Chloroplast Division Protein FtsZ in the Alga <i>Scenedesmus quadricauda</i> under Inhibition of Nuclear DNA Replication. Plant and Cell Physiology, 2008, 49, 1805-1817. | 3.1 | 10        |
| 45 | Early Evolution of the Mitogen-Activated Protein Kinase Family in the Plant Kingdom. Scientific Reports, 2019, 9, 4094.   | 3.3 | 10        |
| 46 | Characterization of Growth and Cell Cycle Events Affected by Light Intensity in the Green Alga <i>Parachlorella kessleri</i> : A New Model for Cell Cycle Research. Biomolecules, 2021, 11, 891.  | 4.0 | 10        |
| 47 | Growth under Different Trophic Regimes and Synchronization of the Red Microalga <i>Galdieria sulphuraria</i> . Biomolecules, 2021, 11, 939.   | 4.0 | 9         |
| 48 | Supra-Optimal Temperature: An Efficient Approach for Overaccumulation of Starch in the Green Alga <i>Parachlorella kessleri</i> . Cells, 2021, 10, 1806.  | 4.1 | 9         |
| 49 | Completion of cell division is associated with maximum telomerase activity in naturally synchronized cultures of the green alga <i>Desmodesmus quadricauda</i> . FEBS Letters, 2013, 587, 743-748.  | 2.8 | 8         |
| 50 | The <i>Parachlorella</i> Genome and Transcriptome Endorse Active RWP-RK, Meiosis and Flagellar Genes in Trebouxiophycean Algae. Cytologia, 2019, 84, 323-330.   | 0.6 | 6         |
| 51 | Selective bioaccumulation of rubidium by microalgae from industrial wastewater containing rubidium and lithium. Journal of Applied Phycology, 2018, 30, 461-467.  | 2.8 | 5         |
| 52 | Diclofenac Alters the Cell Cycle Progression of the Green Alga <i>Chlamydomonas reinhardtii</i> . Cells, 2021, 10, 1936.  | 4.1 | 4         |
| 53 | The biosynthesis of phospholipids is linked to the cell cycle in a model eukaryote. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2021, 1866, 158965.   | 2.4 | 4         |
| 54 | Beneficial or Toxic Effects of Selenium on Green Algae and Their Application as Nutrient Supplements or Bio-remediators. , 2015, , 315-338.   |     | 3         |

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|----|---|-----|-----------|
| 55 | Factors affecting the mating competence in the unicellular green alga <i>Chlamydomonas eugametos</i> (Volvocales). <i>Folia Microbiologica</i> , 2002, 47, 69-72.                 | 2.3 | 2         |
| 56 | To Divide or Not to Divide? How Deuterium Affects Growth and Division of <i>Chlamydomonas reinhardtii</i> . <i>Biomolecules</i> , 2021, 11, 861.                                  | 4.0 | 2         |
| 57 | Analysis of Commitment Point Attainment in Algae Dividing by Multiple Fission. <i>Methods in Molecular Biology</i> , 2022, 2382, 89-101.  | 0.9 | 2         |
| 58 | Plectin-like proteins are present in cells of <i>Chlamydomonas eugametos</i> (Volvocales). <i>Folia Microbiologica</i> , 2002, 47, 535-539.                                       | 2.3 | 1         |
| 59 | Assaying Cyclin-Dependent Kinase Activity in Synchronized Algal Cultures. <i>Methods in Molecular Biology</i> , 2022, 2382, 73-88.  | 0.9 | 1         |
| 60 | Cell Growth Control in an Algal Model. , 2008, , 351-373.   |     | 0         |
| 61 | A tribute to VilĀm Zachleder (1944Ā2020). <i>Journal of Experimental Botany</i> , 2021, 72, 2273-2274.  | 4.8 | 0         |
| 62 | Distribution of cycle threshold values in RT-qPCR tests during the autumn 2020 peak of the COVID-19 pandemic in the Czech Republic. <i>Access Microbiology</i> , 2021, 3, 000263. | 0.5 | 0         |