

Nobuyuki Uozumi

List of Publications by Year in descending order

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| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Enhanced salt tolerance mediated by AtHKT1 transporter-induced Na ⁺ unloading from xylem vessels to xylem parenchyma cells. <i>Plant Journal</i> , 2005, 44, 928-938. | 5.7 | 572 |
| 2 | Functional analysis of AtHKT1 in <i>Arabidopsis</i> shows that Na ⁺ recirculation by the phloem is crucial for salt tolerance. <i>EMBO Journal</i> , 2003, 22, 2004-2014. | 7.8 | 512 |
| 3 | Phytosiderophore Efflux Transporters Are Crucial for Iron Acquisition in Graminaceous Plants. <i>Journal of Biological Chemistry</i> , 2011, 286, 5446-5454. | 3.4 | 473 |
| 4 | The <i>Arabidopsis</i> HKT1 Gene Homolog Mediates Inward Na ⁺ Currents in <i>Xenopus laevis</i> Oocytes and Na ⁺ Uptake in <i>Saccharomyces cerevisiae</i> . <i>Plant Physiology</i> , 2000, 122, 1249-1260. | 4.8 | 445 |
| 5 | Altered shoot/root Na ⁺ distribution and bifurcating salt sensitivity in <i>Arabidopsis</i> by genetic disruption of the Na ⁺ transporter AtHKT1. <i>FEBS Letters</i> , 2002, 531, 157-161. | 2.8 | 336 |
| 6 | Nomenclature for HKT transporters, key determinants of plant salinity tolerance. <i>Trends in Plant Science</i> , 2006, 11, 372-374. | 8.8 | 329 |
| 7 | Threonine at position 306 of the KAT1 potassium channel is essential for channel activity and is a target site for ABA-activated SnRK2/OST1/SnRK2.6 protein kinase. <i>Biochemical Journal</i> , 2009, 424, 439-448. | 3.7 | 316 |
| 8 | AtKUP1: An <i>Arabidopsis</i> Gene Encoding High-Affinity Potassium Transport Activity. <i>Plant Cell</i> , 1998, 10, 51-62. | 6.6 | 314 |
| 9 | Glycine residues in potassium channel-like selectivity filters determine potassium selectivity in four-loop-per-subunit HKT transporters from plants. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 6428-6433. | 7.1 | 257 |
| 10 | Potassium channels in plant cells. <i>FEBS Journal</i> , 2011, 278, 4293-4303. | 4.7 | 232 |
| 11 | Salicylic Acid Induces Extracellular Superoxide Generation Followed by an Increase in Cytosolic Calcium Ion in Tobacco Suspension Culture: The Earliest Events in Salicylic Acid Signal Transduction. <i>Plant and Cell Physiology</i> , 1998, 39, 721-730. | 3.1 | 200 |
| 12 | HKT transporters mediate salt stress resistance in plants: from structure and function to the field. <i>Current Opinion in Biotechnology</i> , 2015, 32, 113-120. | 6.6 | 195 |
| 13 | Sodium transport system in plant cells. <i>Frontiers in Plant Science</i> , 2013, 4, 410. | 3.6 | 173 |
| 14 | KtrAB and KtrCD: Two K ⁺ Uptake Systems in <i>Bacillus subtilis</i> and Their Role in Adaptation to Hypertonicity. <i>Journal of Bacteriology</i> , 2003, 185, 1289-1298. | 2.2 | 167 |
| 15 | A Rice Phenolic Efflux Transporter Is Essential for Solubilizing Precipitated Apoplasmic Iron in the Plant Stele. <i>Journal of Biological Chemistry</i> , 2011, 286, 24649-24655. | 3.4 | 156 |
| 16 | The jasmonate-responsive GTR1 transporter is required for gibberellin-mediated stamen development in <i>Arabidopsis</i> . <i>Nature Communications</i> , 2015, 6, 6095. | 12.8 | 151 |
| 17 | Pollen Tubes Lacking a Pair of K ⁺ Transporters Fail to Target Ovules in <i>Arabidopsis</i> . <i>Plant Cell</i> , 2011, 23, 81-93. | 6.6 | 148 |
| 18 | Multiple Genes, Tissue Specificity, and Expression-Dependent Modulation Contribute to the Functional Diversity of Potassium Channels in <i>Arabidopsis thaliana</i> . <i>Plant Physiology</i> , 1995, 109, 1093-1106. | 4.8 | 145 |

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|----|--|-----|-----------|
| 19 | Evidence in support of a four transmembrane-pore-transmembrane topology model for the Arabidopsis thaliana Na ⁺ /K ⁺ translocating AtHKT1 protein, a member of the superfamily of K ⁺ transporters. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 6488-6493. | 7.1 | 131 |
| 20 | Identification of Strong Modifications in Cation Selectivity in an Arabidopsis Inward Rectifying Potassium Channel by Mutant Selection in Yeast. Journal of Biological Chemistry, 1995, 270, 24276-24281. | 3.4 | 102 |
| 21 | Properties of Shaker-type Potassium Channels in Higher Plants. Journal of Membrane Biology, 2006, 210, 1-19. | 2.1 | 98 |
| 22 | Changes in physiology and protein abundance in salt-stressed wheat chloroplasts. Molecular Biology Reports, 2012, 39, 9059-9074. | 2.3 | 93 |
| 23 | Contribution of salicylic acid glucosyltransferase, OsSGT1, to chemically induced disease resistance in rice plants. Plant Journal, 2009, 57, 463-472. | 5.7 | 90 |
| 24 | Rice phenolics efflux transporter 2 (PEZ2) plays an important role in solubilizing apoplasmic iron. Soil Science and Plant Nutrition, 2011, 57, 803-812. | 1.9 | 85 |
| 25 | The Phytosiderophore Efflux Transporter TOM2 Is Involved in Metal Transport in Rice. Journal of Biological Chemistry, 2015, 290, 27688-27699. | 3.4 | 83 |
| 26 | Na ⁺ -dependent K ⁺ Uptake Ktr System from the Cyanobacterium Synechocystis sp. PCC 6803 and Its Role in the Early Phases of Cell Adaptation to Hyperosmotic Shock. Journal of Biological Chemistry, 2004, 279, 54952-54962. | 3.4 | 81 |
| 27 | 12-Hydroxyjasmonic Acid Glucoside Is a COI1-JAZ-Independent Activator of Leaf-Closing Movement in <i>Samanea saman</i> . Plant Physiology, 2011, 155, 1226-1236. | 4.8 | 75 |
| 28 | Plant-Specific Cation/H ⁺ Exchanger 17 and Its Homologs Are Endomembrane K ⁺ Transporters with Roles in Protein Sorting. Journal of Biological Chemistry, 2011, 286, 33931-33941. | 3.4 | 74 |
| 29 | Characterization of a Tobacco TPK-type K ⁺ Channel as a Novel Tonoplast K ⁺ Channel Using Yeast Tonoplasts. Journal of Biological Chemistry, 2008, 283, 1911-1920. | 3.4 | 72 |
| 30 | All Four Putative Selectivity Filter Glycine Residues in KtrB Are Essential for High Affinity and Selective K ⁺ Uptake by the KtrAB System from <i>Vibrio alginolyticus</i> . Journal of Biological Chemistry, 2005, 280, 41146-41154. | 3.4 | 71 |
| 31 | Identification and Characterization of the Na ⁺ /H ⁺ Antiporter NhaS3 from the Thylakoid Membrane of <i>Synechocystis</i> sp. PCC 6803. Journal of Biological Chemistry, 2009, 284, 16513-16521. | 3.4 | 67 |
| 32 | Contribution of hydrophobic and electrostatic interactions to the membrane integration of the Shaker K ⁺ channel voltage sensor domain. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 8263-8268. | 7.1 | 64 |
| 33 | Thylakoid potassium channel is required for efficient photosynthesis in cyanobacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11043-11048. | 7.1 | 64 |
| 34 | The phosphoinositide PI(3,5)P2 mediates activation of mammalian but not plant TPC proteins: functional expression of endolysosomal channels in yeast and plant cells. Cellular and Molecular Life Sciences, 2014, 71, 4275-4283. | 5.4 | 63 |
| 35 | N-myristoylation and S-acylation are common modifications of Ca ²⁺ -regulated Arabidopsis kinases and are required for activation of the SLAC1 anion channel. New Phytologist, 2018, 218, 1504-1521. | 7.3 | 59 |
| 36 | Calcium-Regulated Phosphorylation Systems Controlling Uptake and Balance of Plant Nutrients. Frontiers in Plant Science, 2020, 11, 44. | 3.6 | 58 |

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|----|--|-----|-----------|
| 37 | Ion Channels in Plant Bioenergetic Organelles, Chloroplasts and Mitochondria: From Molecular Identification to Function. <i>Molecular Plant</i> , 2016, 9, 371-395. | 8.3 | 57 |
| 38 | Integration of Shaker-type K ⁺ channel, KAT1, into the endoplasmic reticulum membrane: Synergistic insertion of voltage-sensing segments, S3-S4, and independent insertion of pore-forming segments, S5-P-S6. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2002, 99, 60-65. | 7.1 | 56 |
| 39 | Synchrony between flower opening and petal-color change from red to blue in morning glory, <i>Ipomoea tricolor</i> cv. Heavenly Blue. <i>Proceedings of the Japan Academy Series B: Physical and Biological Sciences</i> , 2009, 85, 187-197. | 3.8 | 51 |
| 40 | Guard Cell Membrane Anion Transport Systems and Their Regulatory Components: An Elaborate Mechanism Controlling Stress-Induced Stomatal Closure. <i>Plants</i> , 2019, 8, 9. | 3.5 | 51 |
| 41 | Phosphorylation of the Inward-Rectifying Potassium Channel KAT1 by ABR Kinase in <i>Vicia</i> Guard Cells. <i>Plant and Cell Physiology</i> , 2000, 41, 850-856. | 3.1 | 48 |
| 42 | Phenylethylamine-Induced Generation of Reactive Oxygen Species and Ascorbate Free Radicals in Tobacco Suspension Culture: Mechanism for Oxidative Burst Mediating Ca ²⁺ Influx. <i>Plant and Cell Physiology</i> , 2000, 41, 1259-1266. | 3.1 | 45 |
| 43 | Role of Positively Charged Amino Acids in the M2 _D Transmembrane Helix of Ktr/Trk/HKT Type Cation Transporters. <i>Channels</i> , 2007, 1, 161-171. | 2.8 | 44 |
| 44 | Fed-batch culture of hairy root using fructose as a carbon source. <i>Journal of Bioscience and Bioengineering</i> , 1991, 72, 457-460. | 0.9 | 43 |
| 45 | Aromatic Monoamine-Induced Immediate Oxidative Burst Leading to an Increase in Cytosolic Ca ²⁺ Concentration in Tobacco Suspension Culture. <i>Plant and Cell Physiology</i> , 2000, 41, 1251-1258. | 3.1 | 43 |
| 46 | AtKUP/HAK/KT9, a K ⁺ Transporter from <i>Arabidopsis thaliana</i> , Mediates Cs ⁺ Uptake in <i>Escherichia coli</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2010, 74, 203-205. | 1.3 | 42 |
| 47 | Evidence for potassium transport activity of <i>Arabidopsis</i> KEA1-KEA6. <i>Scientific Reports</i> , 2019, 9, 10040. | 3.3 | 42 |
| 48 | Application of image analysis with neural network for plant somatic embryo culture. <i>Journal of Bioscience and Bioengineering</i> , 1993, 76, 505-509. | 0.9 | 41 |
| 49 | <i>Escherichia coli</i> as an expression system for K ⁺ transport systems from plants. <i>American Journal of Physiology - Cell Physiology</i> , 2001, 281, C733-C739. | 4.6 | 41 |
| 50 | Comparative Analysis of <i>kdp</i> and <i>ktr</i> Mutants Reveals Distinct Roles of the Potassium Transporters in the Model Cyanobacterium <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2015, 197, 676-687. | 2.2 | 39 |
| 51 | Iron deficiency regulated OsOPT7 is essential for iron homeostasis in rice. <i>Plant Molecular Biology</i> , 2015, 88, 165-176. | 3.9 | 39 |
| 52 | Defining membrane spanning domains and crucial membrane-localized acidic amino acid residues for K ⁺ transport of a Kup/HAK/KT-type <i>Escherichia coli</i> potassium transporter. <i>Journal of Biochemistry</i> , 2014, 155, 315-323. | 1.7 | 37 |
| 53 | Production of artificial seed from horseradish hairy root. <i>Journal of Bioscience and Bioengineering</i> , 1992, 74, 21-26. | 0.9 | 36 |
| 54 | Identification and Characterization of Compounds that Affect Stomatal Movements. <i>Plant and Cell Physiology</i> , 2018, 59, 1568-1580. | 3.1 | 34 |

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|----|---|-----|-----------|
| 55 | Production of plantlets for use as artificial seeds from horseradish hairy roots fragmented in a blender. <i>Journal of Bioscience and Bioengineering</i> , 1995, 79, 458-464. | 0.9 | 33 |
| 56 | The wheat chloroplastic proteome. <i>Journal of Proteomics</i> , 2013, 93, 326-342. | 2.4 | 33 |
| 57 | Molecular Dissection of the Contribution of Negatively and Positively Charged Residues in S2, S3, and S4 to the Final Membrane Topology of the Voltage Sensor in the K ⁺ Channel, KAT1. <i>Journal of Biological Chemistry</i> , 2003, 278, 13227-13234. | 3.4 | 32 |
| 58 | Mechanosensitivity of GIRK Channels Is Mediated by Protein Kinase C-dependent Channel-Phosphatidylinositol 4,5-Bisphosphate Interaction. <i>Journal of Biological Chemistry</i> , 2004, 279, 7037-7047. | 3.4 | 31 |
| 59 | The consensus motif for N ^ε -myristoylation of plant proteins in a wheat germ cell-free translation system. <i>FEBS Journal</i> , 2010, 277, 3596-3607. | 4.7 | 31 |
| 60 | GTR1 is a jasmonic acid and jasmonoyl-isoleucine transporter in <i>Arabidopsis thaliana</i> . <i>Bioscience, Biotechnology and Biochemistry</i> , 2017, 81, 249-255. | 1.3 | 31 |
| 61 | The Implication of YggT of <i>Escherichia coli</i> in Osmotic Regulation. <i>Bioscience, Biotechnology and Biochemistry</i> , 2009, 73, 2698-2704. | 1.3 | 30 |
| 62 | Measurement of the mechanical properties of single <i>Synechocystis</i> sp. strain PCC6803 cells in different osmotic concentrations using a robot-integrated microfluidic chip. <i>Lab on A Chip</i> , 2018, 18, 1241-1249. | 6.0 | 28 |
| 63 | Cesium Inhibits Plant Growth Primarily Through Reduction of Potassium Influx and Accumulation in <i>Arabidopsis</i> . <i>Plant and Cell Physiology</i> , 2019, 60, 63-76. | 3.1 | 28 |
| 64 | Structural and functional roles of cysteine residues of bacillus polymyxa .beta.-amylase. <i>Biochemistry</i> , 1991, 30, 4594-4599. | 2.5 | 27 |
| 65 | Excretion of peroxidase from horseradish hairy root in combination with ion supplementation. <i>Applied Microbiology and Biotechnology</i> , 1992, 37, 560. | 3.6 | 27 |
| 66 | Growth and kinetic parameters of ajuga hairy root in fed-batch culture on monosaccharide medium. <i>Journal of Chemical Technology and Biotechnology</i> , 1993, 57, 155-161. | 3.2 | 26 |
| 67 | Organelle-localized potassium transport systems in plants. <i>Journal of Plant Physiology</i> , 2014, 171, 743-747. | 3.5 | 26 |
| 68 | Modulation of the Arabidopsis KAT1 channel by an activator of protein kinase C in <i>Xenopus laevis</i> oocytes. <i>FEBS Journal</i> , 2010, 277, 2318-2328. | 4.7 | 25 |
| 69 | 20-Hydroxyecdysone production in Ajuga hairy root controlling intracellular phosphate content based on kinetic model. <i>Journal of Bioscience and Bioengineering</i> , 1995, 80, 362-368. | 0.9 | 24 |
| 70 | Optimal expression of GUS gene from methyl jasmonate-inducible promoter in high density culture of transformed tobacco cell line BY-2. <i>Journal of Bioscience and Bioengineering</i> , 1996, 82, 51-55. | 0.9 | 24 |
| 71 | Aquaporin AqpZ Is Involved in Cell Volume Regulation and Sensitivity to Osmotic Stress in <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2012, 194, 6828-6836. | 2.2 | 24 |
| 72 | Towards an understanding of wheat chloroplasts: a methodical investigation of thylakoid proteome. <i>Molecular Biology Reports</i> , 2012, 39, 5069-5083. | 2.3 | 24 |

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|----|--|-----|-----------|
| 73 | Reduction of Spermidine Content Resulting from Inactivation of Two Arginine Decarboxylases Increases Biofilm Formation in <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2018, 200, . | 2.2 | 24 |
| 74 | Efficient regeneration from GUS-transformed <i>Ajuga</i> hairy root. <i>Journal of Bioscience and Bioengineering</i> , 1996, 81, 374-378. | 0.9 | 23 |
| 75 | Ktr-Mediated Potassium Transport, a Major Pathway for Potassium Uptake, Is Coupled to a Proton Gradient Across the Membrane in <i>Synechocystis</i> sp. PCC 6803. <i>Bioscience, Biotechnology and Biochemistry</i> , 2006, 70, 273-275. | 1.3 | 23 |
| 76 | Plasma Membrane Aquaporin AqpZ Protein Is Essential for Glucose Metabolism during Photomixotrophic Growth of <i>Synechocystis</i> sp. PCC 6803. <i>Journal of Biological Chemistry</i> , 2011, 286, 25224-25235. | 3.4 | 23 |
| 77 | Ion Channels Regulate Nyctinastic Leaf Opening in <i>Samanea saman</i> . <i>Current Biology</i> , 2018, 28, 2230-2238.e7. | 3.9 | 23 |
| 78 | Cloning and sequencing of a gene encoding nitrite reductase from <i>Paracoccus denitrificans</i> and expression of the gene in <i>Escherichia coli</i> . <i>Journal of Bioscience and Bioengineering</i> , 1993, 76, 82-88. | 0.9 | 22 |
| 79 | A Cell-Free Translocation System Using Extracts of Cultured Insect Cells to Yield Functional Membrane Proteins. <i>PLoS ONE</i> , 2014, 9, e112874. | 2.5 | 22 |
| 80 | Stimulation of emergence of root apical meristems in horseradish hairy root by auxin supplementation and its kinetic model. <i>Journal of Bioscience and Bioengineering</i> , 1994, 77, 178-182. | 0.9 | 21 |
| 81 | Diverse Physiological Functions of Cation Proton Antiporters across Bacteria and Plant Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4566. | 4.1 | 21 |
| 82 | Enhancement of Peroxidase Production and Excretion from Horseradish Hairy Roots by Light, NaCl and Peroxidase-Adsorption in Situ.. <i>Plant Tissue Culture Letters</i> , 1991, 8, 158-165. | 0.1 | 21 |
| 83 | Characterization of the role of a mechanosensitive channel in osmotic down shock adaptation in <i>Synechocystis</i> sp PCC 6803. <i>Channels</i> , 2013, 7, 238-242. | 2.8 | 20 |
| 84 | Molecular Bases of Multimodal Regulation of a Fungal Transient Receptor Potential (TRP) Channel. <i>Journal of Biological Chemistry</i> , 2013, 288, 15303-15317. | 3.4 | 19 |
| 85 | Light activation of expression associated with the tomato <i>rbcS</i> promoter in transformed tobacco cell line BY-2. <i>Journal of Biotechnology</i> , 1994, 36, 55-62. | 3.8 | 18 |
| 86 | Topogenesis of Two Transmembrane Type K ⁺ Channels, Kir 2.1 and KcsA. <i>Journal of Biological Chemistry</i> , 2003, 278, 40373-40384. | 3.4 | 18 |
| 87 | A Trk/HKT-Type K ⁺ Transporter from <i>Trypanosoma brucei</i> . <i>Eukaryotic Cell</i> , 2010, 9, 539-546. | 3.4 | 18 |
| 88 | Micropropagation of horseradish hairy root by means of adventitious shoot primordia. <i>Plant Cell, Tissue and Organ Culture</i> , 1994, 36, 183-190. | 2.3 | 17 |
| 89 | Production of Regenerated Plantlet using Shaking Vessel-Type Bioreactor.. <i>Journal of Chemical Engineering of Japan</i> , 1997, 30, 179-182. | 0.6 | 17 |
| 90 | Residue Aspartate-147 from the Third Transmembrane Region of Na ⁺ /H ⁺ Antiporter NhaB of <i>Vibrio alginolyticus</i> Plays a Role in Its Activity. <i>Journal of Bacteriology</i> , 2001, 183, 5762-5767. | 2.2 | 17 |

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|-----|--|-----|-----------|
| 91 | Large-Scale Production of Hairy Root. <i>Advances in Biochemical Engineering/Biotechnology</i> , 2004, 91, 75-103. | 1.1 | 17 |
| 92 | The KtrA and KtrE Subunits Are Required for Na ⁺ -Dependent K ⁺ Uptake by KtrB across the Plasma Membrane in <i>Synechocystis</i> sp. Strain PCC 6803. <i>Journal of Bacteriology</i> , 2010, 192, 5063-5070. | 2.2 | 17 |
| 93 | Salicylic Acid Induces a Cytosolic Ca ²⁺ -Elevation in Yeast. <i>Bioscience, Biotechnology and Biochemistry</i> , 1998, 62, 986-989. | 1.3 | 16 |
| 94 | CLONING OF A cDNA ENCODING A 66-kDa Ca ²⁺ -DEPENDENT PROTEIN KINASE (CDPK) FROM DUNALIELLA TERTIOLECTA (CHLOROPHYTA). <i>Journal of Phycology</i> , 2000, 36, 545-552. | 2.3 | 14 |
| 95 | yam8+, a <i>Schizosaccharomyces pombe</i> Gene, Is a Potential Homologue of the <i>Saccharomyces cerevisiae</i> MID1 Gene Encoding a Stretch-Activated Ca ²⁺ -Permeable Channel. <i>Biochemical and Biophysical Research Communications</i> , 2000, 269, 265-269. | 2.1 | 14 |
| 96 | Involvement of Potassium Transport Systems in the Response of <i>Synechocystis</i> PCC 6803 Cyanobacteria to External pH Change, High-Intensity Light Stress and Heavy Metal Stress. <i>Plant and Cell Physiology</i> , 2016, 57, 862-877. | 3.1 | 14 |
| 97 | In vitro and in vivo characterization of modulation of the vacuolar cation channel TRPY 1 from <i>Saccharomyces cerevisiae</i> . <i>FEBS Journal</i> , 2018, 285, 1146-1161. | 4.7 | 14 |
| 98 | Efficient production of celery embryos and plantlets released in culture of immobilized gel beads. <i>Journal of Bioscience and Bioengineering</i> , 1995, 79, 585-588. | 0.9 | 13 |
| 99 | DAY-LENGTH-DEPENDENT DELAYED-GREENING1, the Arabidopsis Homolog of the Cyanobacterial H ⁺ -Extrusion Protein, Is Essential for Chloroplast pH Regulation and Optimization of Non-Photochemical Quenching. <i>Plant and Cell Physiology</i> , 2019, 60, 2660-2671. | 3.1 | 13 |
| 100 | Ion Channels and Plant Stress: Past, Present, and Future. <i>Signaling and Communication in Plants</i> , 2010, 1-22. | 0.7 | 12 |
| 101 | Light Dependency in Celery Somatic Embryogenesis and Plantlet Development in Suspension Culture.. <i>Plant Tissue Culture Letters</i> , 1993, 10, 25-32. | 0.1 | 11 |
| 102 | Efficient culture method for production of plantlets from mechanically cut horseradish hairy roots. <i>Journal of Bioscience and Bioengineering</i> , 1996, 81, 87-89. | 0.9 | 11 |
| 103 | Kup-mediated Cs ⁺ uptake and Kdp-driven K ⁺ uptake coordinate to promote cell growth during excess Cs ⁺ conditions in <i>Escherichia coli</i> . <i>Scientific Reports</i> , 2017, 7, 2122. | 3.3 | 11 |
| 104 | Evaluating Young's Modulus of Single Yeast Cells Based on Compression Using an Atomic Force Microscope with a Flat Tip. <i>Microscopy and Microanalysis</i> , 2021, 27, 392-399. | 0.4 | 11 |
| 105 | Application of Hairy Root and Bioreactors. , 1994, , 307-338. | | 10 |
| 106 | The mechanosensitive channel YbdG from <i>Escherichia coli</i> has a role in adaptation to osmotic up-shock. <i>Journal of Biological Chemistry</i> , 2019, 294, 12281-12292. | 3.4 | 9 |
| 107 | Hik36/Hik43 and Rre6 act as a two-component regulatory system to control cell aggregation in <i>Synechocystis</i> sp. PCC6803. <i>Scientific Reports</i> , 2020, 10, 19405. | 3.3 | 9 |
| 108 | Mutation of His-157 in the Second Pore Loop Drastically Reduces the Activity of the <i>Synechocystis</i> Ktr-Type Transporter. <i>Journal of Bacteriology</i> , 2006, 188, 7985-7987. | 2.2 | 8 |

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|-----|---|------|-----------|
| 109 | Electrophysiological Properties of NtTPK1 Expressed in Yeast Tonoplast. <i>Bioscience, Biotechnology and Biochemistry</i> , 2008, 72, 2785-2787. | 1.3 | 8 |
| 110 | Novel Treatment for Lithium-Induced Nephrogenic Diabetes Insipidus Rat Model Using the Sendai-Virus Vector Carrying Aquaporin 2 Gene. <i>Endocrinology</i> , 2008, 149, 5803-5810. | 2.8 | 8 |
| 111 | Purification of the functional plant membrane channel KAT1. <i>Biochemical and Biophysical Research Communications</i> , 2008, 374, 465-469. | 2.1 | 7 |
| 112 | Current Methods to Unravel the Functional Properties of Lysosomal Ion Channels and Transporters. <i>Cells</i> , 2022, 11, 921. | 4.1 | 7 |
| 113 | Molecular cloning of thermostable β -glucosidase gene from a thermophilic anaerobe NA10 and its high expression in <i>Escherichia coli</i> . <i>Journal of Bioscience and Bioengineering</i> , 1994, 77, 199-201. | 0.9 | 6 |
| 114 | Nerve growth factor enhances the CRE-dependent transcriptional activity activated by nobiletin in PC12 cells. <i>Canadian Journal of Physiology and Pharmacology</i> , 2016, 94, 728-733. | 1.4 | 6 |
| 115 | Dimerization of GTR1 regulates their plasma membrane localization. <i>Plant Signaling and Behavior</i> , 2017, 12, e1334749. | 2.4 | 6 |
| 116 | Development of Rotating-Mesh Basket Type Bioreactor for Carrot Embryo Production in Immobilized Callus System.. <i>Journal of Chemical Engineering of Japan</i> , 1998, 31, 613-617. | 0.6 | 6 |
| 117 | Addition of a Peptide Tag at the C Terminus of AtHKT1 Inhibits Its Na ⁺ -Transport. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 2291-2293. | 1.3 | 5 |
| 118 | Probing native metal ion association sites through quenching of fluorophores in the nucleotide-binding domains of the ABC transporter MsbA. <i>Biochemical Journal</i> , 2017, 474, 1993-2007. | 3.7 | 5 |
| 119 | Analysis of Arabidopsis TPK2 and KCO3 reveals structural properties required for K ⁺ channel function. <i>Channels</i> , 2020, 14, 336-346. | 2.8 | 5 |
| 120 | Loss of cell wall integrity genes <i>cpxA</i> and <i>mrcB</i> causes flocculation in <i>Escherichia coli</i> . <i>Biochemical Journal</i> , 2021, 478, 41-59. | 3.7 | 5 |
| 121 | A simple fed-batch method for transcription and insect cell-free translation. <i>Journal of Bioscience and Bioengineering</i> , 2012, 114, 677-679. | 2.2 | 4 |
| 122 | Molecular cloning and expression analysis of a gene encoding KUP/HAK/KT-type potassium uptake transporter from <i>Cryptomeria japonica</i> . <i>Trees - Structure and Function</i> , 2014, 28, 1527-1537. | 1.9 | 4 |
| 123 | The topogenic function of S4 promotes membrane insertion of the voltage-sensor domain in the KvAP channel. <i>Biochemical Journal</i> , 2016, 473, 4361-4372. | 3.7 | 4 |
| 124 | Rice amino acid transporter <i>OsATL6</i> is involved in amino acid homeostasis by modulating the vacuolar storage of glutamine in roots. <i>Plant Journal</i> , 2021, 107, 1616-1630. | 5.7 | 4 |
| 125 | Green Tea Catechins, (âˆ’)â€Catechin Gallate, and (âˆ’)â€Gallocatechin Gallate are Potent Inhibitors ofABAâ€Induced Stomatal Closure. <i>Advanced Science</i> , 2022, 9, e2201403. | 11.2 | 4 |
| 126 | Secretion of thermophilic bacterial cellobiohydrolase in <i>Saccharomyces cerevisiae</i> . <i>Journal of Bioscience and Bioengineering</i> , 1993, 75, 399-404. | 0.9 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 127 | Membrane-bound heparin binding proteins from HL-60 cells purified in a two-step affinity chromatography differentially eluted with divalent cations. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2002, 780, 1-12. | 2.3 | 3 |
| 128 | Regulatory Mechanism of Plant Nyctinastic Movement: An Ion Channel-Related Plant Behavior. , 2012, , 125-142. | | 3 |
| 129 | 12-Hydroxyjasmonic acid glucoside causes leaf-folding of <i>Samanea saman</i> through ROS accumulation. <i>Scientific Reports</i> , 2022, 12, 7232. | 3.3 | 3 |
| 130 | Requirement of Negative Residues, Asp 95 and Asp 105, in S2 on Membrane Integration of a Voltage-dependent K ⁺ Channel, KAT1. <i>Bioscience, Biotechnology and Biochemistry</i> , 2003, 67, 923-926. | 1.3 | 2 |
| 131 | Further application of a two-step heparin affinity chromatography method using divalent cations as eluents: Purification and identification of membrane-bound heparin binding proteins from the mitochondrial fraction of HL-60 cells. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2005, 823, 209-212. | 2.3 | 2 |
| 132 | Uniquely evolved plant ion channels. <i>FEBS Journal</i> , 2011, 278, 4261-4261. | 4.7 | 2 |
| 133 | Identification of regions responsible for the function of the plant K ⁺ channels KAT1 and AKT2 in <i>Saccharomyces cerevisiae</i> and <i>Xenopus laevis</i> oocytes. <i>Channels</i> , 2017, 11, 510-516. | 2.8 | 2 |
| 134 | Isolation of Adenosine and Cordysin B from <i>Anredera cordifolia</i> that Stimulates CRE-Mediated Transcription in PC12 Cells. <i>Planta Medica International Open</i> , 2021, 8, e19-e24. | 0.5 | 2 |
| 135 | Functional Roles of Active Site Residues of <i>Bacillus polymyxa</i> α -Amylase. <i>Annals of the New York Academy of Sciences</i> , 1992, 672, 24-28. | 3.8 | 2 |
| 136 | Functional characterization of multiple PAS domain-containing diguanylate cyclases in <i>Synechocystis</i> sp. PCC 6803. <i>Microbiology (United Kingdom)</i> , 2020, 166, 659-668. | 1.8 | 2 |
| 137 | Inducible production of recombinant xylose isomerase by <i>Escherichia coli</i> in fed-batch culture.. <i>Journal of Chemical Engineering of Japan</i> , 1992, 25, 702-708. | 0.6 | 1 |
| 138 | Functional Roles of Active Site Residues of <i>Bacillus polymyxa</i> α -Amylase. <i>Annals of the New York Academy of Sciences</i> , 1992, 672, 24-28. | 3.8 | 1 |
| 139 | Mechanical characterization system of cyanobacteria using a robot integrated microfluidic chip. , 2015, , . | | 1 |
| 140 | Plant Regeneration and Somatic Embryogenesis Frequency Using Callus Induced from Regenerated Celery Plant.. <i>Kagaku Kogaku Ronbunshu</i> , 1996, 22, 691-694. | 0.3 | 0 |
| 141 | Crystallization and preliminary X-ray analysis of β -amylase from <i>Bacillus polymyxa</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1999, 55, 898-900. | 2.5 | 0 |
| 142 | Membrane Motive Force and Membrane Transport System in Plant Cells and Bacteria. <i>Kagaku To Seibutsu</i> , 2012, 50, 86-92. | 0.0 | 0 |
| 143 | Mechanical characterization of a single <i>Synechocystis</i> sp. PCC 6803. , 2015, , . | | 0 |
| 144 | Limonene Enhances the cAMP Response Element (CRE)-Dependent Transcriptional Activity Activated via Adenosine A _{2A} Receptor in a Neural-Crest Derived Cell Line, PC-12. <i>Planta Medica International Open</i> , 2016, 3, e60-e62. | 0.5 | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|----|-----------|
| 145 | Mechanical characterization of a single synechocystis sp. PCC 6803 cell in different osmolarity solutions. , 2017, , . | | 0 |
| 146 | Mechanical Characterization of a Single Yeast Cell Using a Robot Integrated Microfluidic Chip. , 2018, , . | | 0 |
| 147 | Characterization of Potassium Channels from Arabidopsis thaliana. , 2004, , 167-169. | | 0 |
| 148 | Calibration process for the Young's modulus of a mechanically trapped microbead measured by atomic force microscopy. , 2019, , . | | 0 |