Arun Sampathkumar

List of Publications by Year
in descending order

39 papers	2,532 citations	331670 21 h-index	315739 38 g-index
46 all docs	46 docs citations	46 times ranked	2809 citing authors

#	Article	IF	Citations
1	2â€²,3â€²-cAMP treatment mimics the stress molecular response in Arabidopsis thaliana. Plant Physiology, 2022, 188, 1966-1978.	4.8	21
2	Chloroplast translational regulation uncovers nonessential photosynthesis genes as key players in plant cold acclimation. Plant Cell, 2022, 34, 2056-2079.	6.6	25
3	De-etiolation-induced protein 1 (DEIP1) mediates assembly of the cytochrome b6f complex in Arabidopsis. Nature Communications, 2022, 13, .	12.8	6
4	Selective autophagy regulates heat stress memory in Arabidopsis by NBR1-mediated targeting of HSP90.1 and ROF1. Autophagy, 2021, 17, 2184-2199.	9.1	68
5	Cell wall modification by the xyloglucan endotransglucosylase/hydrolase <scp>XTH19</scp> influences freezing tolerance after cold and subâ€zero acclimation. Plant, Cell and Environment, 2021, 44, 915-930.	5.7	43
6	A network-based framework for shape analysis enables accurate characterization of leaf epidermal cells. Nature Communications, 2021, 12, 458.	12.8	14
7	Long-term single-cell imaging and simulations of microtubules reveal principles behind wall patterning during proto-xylem development. Nature Communications, 2021, 12, 669.	12.8	26
8	Autophagy complements metalloprotease FtsH6 in degrading plastid heat shock protein HSP21 during heat stress recovery. Journal of Experimental Botany, 2021, , .	4.8	6
9	KATANIN and CLASP function at different spatial scales to mediate microtubule response to mechanical stress in Arabidopsis cotyledons. Current Biology, 2021, 31, 3262-3274.e6.	3.9	31
10	Pod indehiscence in common bean is associated with the fine regulation ofPvMYB26. Journal of Experimental Botany, 2021, 72, 1617-1633.	4.8	29
11	Subcellular Localization of Seed-Expressed LEA_4 Proteins Reveals Liquid-Liquid Phase Separation for LEA9 and for LEA48 Homo- and LEA42-LEA48 Heterodimers. Biomolecules, 2021, 11, 1770.	4.0	13
12	Microtubule-Mediated Wall Anisotropy Contributes to Leaf Blade Flattening. Current Biology, 2020, 30, 3972-3985.e6.	3.9	69
13	EPSIN1 and MTV1 define functionally overlapping but molecularly distinct trans -Golgi network subdomains in Arabidopsis. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 25880-25889.	7.1	36
14	Long-term live-cell imaging techniques for visualizing pavement cell morphogenesis. Methods in Cell Biology, 2020, 160, 365-380.	1.1	5
15	Mechanical feedback-loop regulation of morphogenesis in plants. Development (Cambridge), 2020, 147, .	2.5	34
16	A moonlighting role for enzymes of glycolysis in the co-localization of mitochondria and chloroplasts. Nature Communications, 2020, 11, 4509.	12.8	47
17	Live Cell Imaging of Microtubule Cytoskeleton and Micromechanical Manipulation of the Arabidopsis Shoot Apical Meristem. Journal of Visualized Experiments, 2020, , .	0.3	2
18	Cytoskeleton Architecture Regulates Glycolysis Coupling Cellular Metabolism to Mechanical Cues. Trends in Biochemical Sciences, 2020, 45, 637-638.	7.5	24

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19	Plant Biology: Bending of Plant Organs. Current Biology, 2020, 30, R402-R405.	3.9	4
20	Quantification of Cytoskeletal Dynamics in Timeâ€Lapse Recordings. Current Protocols in Plant Biology, 2019, 4, e20091.	2.8	7
21	Primary wall cellulose synthase regulates shoot apical meristem mechanics and growth. Development (Cambridge), 2019, 146, .	2.5	36
22	Insights into the Cell Wall and Cytoskeletal Regulation by Mechanical Forces in Plants. Plant Cell Monographs, 2019, , 23-36.	0.4	0
23	Hitting the Wallâ€"Sensing and Signaling Pathways Involved in Plant Cell Wall Remodeling in Response to Abiotic Stress. Plants, 2018, 7, 89.	3.5	110
24	Getting into shape: the mechanics behind plant morphogenesis. Current Opinion in Plant Biology, 2018, 46, 25-31.	7.1	53
25	AtRsgA from Arabidopsis thaliana is important for maturation of the small subunit of the chloroplast ribosome. Plant Journal, 2018, 96, 404-420.	5.7	9
26	FamNet: A Framework to Identify Multiplied Modules Driving Pathway Expansion in Plants. Plant Physiology, 2016, 170, 1878-1894.	4.8	63
27	An epidermis-driven mechanism positions and scales stem cell niches in plants. Science Advances, 2016, 2, e1500989.	10.3	109
28	Visualization of cellulose synthases in Arabidopsis secondary cell walls. Science, 2015, 350, 198-203.	12.6	132
29	Live Cell Imaging of the Cytoskeleton and Cell Wall Enzymes in Plant Cells. Methods in Molecular Biology, 2015, 1242, 133-141.	0.9	5
30	Subcellular and supracellular mechanical stress prescribes cytoskeleton behavior in Arabidopsis cotyledon pavement cells. ELife, 2014, 3, e01967.	6.0	323
31	Quantitative analyses of the plant cytoskeleton reveal underlying organizational principles. Journal of the Royal Society Interface, 2014, 11, 20140362.	3.4	7
32	Physical Forces Regulate Plant Development and Morphogenesis. Current Biology, 2014, 24, R475-R483.	3.9	146
33	Patterning and Lifetime of Plasma Membrane-Localized Cellulose Synthase Is Dependent on Actin Organization in Arabidopsis Interphase Cells Â. Plant Physiology, 2013, 162, 675-688.	4.8	171
34	CHITINASE-LIKE1/POM-POM1 and Its Homolog CTL2 Are Glucan-Interacting Proteins Important for Cellulose Biosynthesis in Arabidopsis. Plant Cell, 2012, 24, 589-607.	6.6	158
35	POM-POM2/CELLULOSE SYNTHASE INTERACTING1 Is Essential for the Functional Association of Cellulose Synthase and Microtubules inArabidopsisÂ Â. Plant Cell, 2012, 24, 163-177.	6.6	252
36	Live Cell Imaging Reveals Structural Associations between the Actin and Microtubule Cytoskeleton in Arabidopsis Â Â. Plant Cell, 2011, 23, 2302-2313.	6.6	151

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37	The Plasma Membrane and the Cell Wall. Plant Cell Monographs, 2011, , 57-85.	0.4	2
38	Identification of a cellulose synthase-associated protein required for cellulose biosynthesis. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 12866-12871.	7.1	228
39	Laying down the bricks: logistic aspects of cell wall biosynthesis. Current Opinion in Plant Biology, 2008, 11, 647-652.	7.1	45