Hojae Yi

List of Publications by Year
in descending order

33 papers	669 citations	567144 15 h-index	580701 25 g-index
36 all docs	36 docs citations	36 times ranked	606 citing authors

#	Article	IF	Citations
1	POLYGALACTURONASE INVOLVED IN EXPANSION3 Functions in Seedling Development, Rosette Growth, and Stomatal Dynamics in <i>Arabidopsis thaliana</i>. Plant Cell, 2017, 29, 2413-2432.	3.1	117
2	Activation tagging of Arabidopsis <i><scp>POLYGALACTURONASE INVOLVED IN EXPANSION</scp>2</i> promotes hypocotyl elongation, leaf expansion, stem lignification, mechanical stiffening, and lodging. Plant Journal, 2017, 89, 1159-1173.	2.8	55
3	Architecture-Based Multiscale Computational Modeling of Plant Cell Wall Mechanics to Examine the Hydrogen-Bonding Hypothesis of the Cell Wall Network Structure Model. Plant Physiology, 2012, 160, 1281-1292.	2.3	49
4	Mechanical characterization of outer epidermal middle lamella of onion under tensile loading. American Journal of Botany, 2014, 101, 778-787.	0.8	48
5	Characterizing microscale biological samples under tensile loading: Stressâ€“strain behavior of cell wall fragment of onion outer epidermis. American Journal of Botany, 2013, 100, 1105-1115.	0.8	38
6	Balancing Strength and Flexibility: How the Synthesis, Organization, and Modification of Guard Cell Walls Govern Stomatal Development and Dynamics. Frontiers in Plant Science, 2018, 9, 1202.	1.7	37
7	Multiscale stressâ€“strain characterization of onion outer epidermal tissue in wet and dry states. American Journal of Botany, 2015, 102, 12-20.	0.8	36
8	The mechanical properties of plant cell walls soft material at the subcellular scale: the implications of water and of the intercellular boundaries. Journal of Materials Science, 2015, 50, 6608-6623.	1.7	35
9	Examination of biological hotspot hypothesis of primary cell wall using a computational cell wall network model. Cellulose, 2015, 22, 1027-1038.	2.4	26
10	Contributions of the mechanical properties of major structural polysaccharides to the stiffness of a cell wall network model. American Journal of Botany, 2014, 101, 244-254.	0.8	25
11	Fundamental mechanical properties of ground switchgrass for quality assessment of pellets. Powder Technology, 2015, 283, 48-56.	2.1	25
12	Mechanical Effects of Cellulose, Xyloglucan, and Pectins on Stomatal Guard Cells of Arabidopsis thaliana. Frontiers in Plant Science, 2018, 9, 1566.	1.7	23
13	3â€Ð Milk Fouling Modeling of Plate Heat Exchangers with Different Surface Finishes Using Computational Fluid Dynamics Codes. Journal of Food Process Engineering, 2013, 36, 439-449.	1.5	22
14	Synergistic Pectin Degradation and Guard Cell Pressurization Underlie Stomatal Pore Formation. Plant Physiology, 2019, 180, 66-77.	2.3	22
15	Integrating cell biology, image analysis, and computational mechanical modeling to analyze the contributions of cellulose and xyloglucan to stomatal function. Plant Signaling and Behavior, 2016, 11, e1183086.	1.2	21
16	A multiscale FEA framework for bridging cell-wall to tissue-scale mechanical properties: the contributions of middle lamella interface and cell shape. Journal of Materials Science, 2017, 52, 7947-7968.	1.7	14
17	Comparison and explanation of predictive capability of pellet quality metrics based on fundamental mechanical properties of ground willow and switchgrass. Advanced Powder Technology, 2016, 27, 1411-1417.	2.0	13
18	The stomatal flexoskeleton: how the biomechanics of guard cell walls animate an elastic pressure vessel. Journal of Experimental Botany, 2019, 70, 3561-3572.	2.4	10

#	ARTICLE	IF	CITATIONS
19	Measurement of Bulk Mechanical Properties and Modeling the Load-Response of Rootzone Sands. Part 2: Effect of Moisture on Continuous Sand Mixtures. Particulate Science and Technology, 2001, 19, 369-386.	1.1	8
20	Percolation Segregation and Flowability Measurement of Urea under Different Relative Humidity Conditions. KONA Powder and Particle Journal, 2008, 26, 167-177.	0.9	7
21	Stress gradient within powder en masse during hydrostatic compression. Powder Technology, 2013, 239, 47-55.	2.1	7
22	Comparison of mechanical properties of ground corn stover, switchgrass, and willow and their pellet qualities. Particulate Science and Technology, 2018, 36, 447-456.	1.1	7
23	Bulk Mechanical Behavior of Rootzone Sand Mixtures as Influenced by Particle Shape, Moisture and Peat. Particle and Particle Systems Characterization, 2004, 21, 303-309.	1.2	5
24	Critical Review on Engineering Mechanical Quality of Green Compacts using Powder Properties. KONA Powder and Particle Journal, 2018, 35, 32-48.	0.9	5
25	Single particle mechanical characterization of ground switchgrass in air dry and wet states using a microextensometer. Powder Technology, 2016, 301, 568-574.	2.1	3
26	MicroCT imaging to determine coordination number and contact area of biomass particles in densified assemblies. Powder Technology, 2019, 354, 466-475.	2.1	3
27	Turgor pressure change in stomatal guard cells arises from interactions between water influx and mechanical responses of their cell walls. Quantitative Plant Biology, 2022, 3, .	0.8	3
28	Determination of fundamental mechanical properties of biomass using the cubical triaxial tester to model biomass flow. Biofuels, 2022, 13, 945-956.	1.4	2
29	Determination of optimum densification conditions for production of corn stover pellets. , 2013, , .		1
30	Evaluation of Dry Steam Preconditioning on Switchgrass Pellet Quality Metrics. Applied Engineering in Agriculture, 2018, 34, 637-644.	0.3	1
31	Micromechanical Characterization of Particle-Particle Bond in Biomass Assemblies Formed at Different Applied Pressure and Temperature. KONA Powder and Particle Journal, 2019, 36, 252-263.	0.9	1
32	Design of a Biomass Scale Cubical Triaxial Tester. , 2020, , .		0
33	Numerical Solution of Second Order Linear Partial Differential Equations using Agricultural Systems Application Platform. Journal of the Korean Society of Agricultural Engineers, 2016, 58, 81-90.	0.1	0