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	Determination of fundamental mechanical properties of biomass using the cubical triaxial tester to model biomass flow. Biofuels, 2022, 13, 945-956.	1.4	2
2	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
3	Design of a Biomass Scale Cubical Triaxial Tester. , 2020, , .		0
4	MicroCT imaging to determine coordination number and contact area of biomass particles in densified assemblies. Powder Technology, 2019, 354, 466-475.	2.1	3
5	Synergistic Pectin Degradation and Guard Cell Pressurization Underlie Stomatal Pore Formation. Plant Physiology, 2019, 180, 66-77.	2.3	22
6	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
7	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
8	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
9	Evaluation of Dry Steam Preconditioning on Switchgrass Pellet Quality Metrics. Applied Engineering in Agriculture, 2018, 34, 637-644.	0.3	1
10	Mechanical Effects of Cellulose, Xyloglucan, and Pectins on Stomatal Guard Cells of Arabidopsis thaliana. Frontiers in Plant Science, 2018, 9, 1566.	1.7	23
11	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
12	Critical Review on Engineering Mechanical Quality of Green Compacts using Powder Properties. KONA Powder and Particle Journal, 2018, 35, 32-48.	0.9	5
13	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
14	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
15	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
16	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
17	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
18	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

#	Article	IF	Citations
19	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
20	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
21	Examination of biological hotspot hypothesis of primary cell wall using a computational cell wall network model. Cellulose, 2015, 22, 1027-1038.	2.4	26
22	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
23	Fundamental mechanical properties of ground switchgrass for quality assessment of pellets. Powder Technology, 2015, 283, 48-56.	2.1	25
24	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
25	Mechanical characterization of outer epidermal middle lamella of onion under tensile loading. American Journal of Botany, 2014, 101, 778-787.	0.8	48
26	3â€Đ 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
27	Stress gradient within powder en masse during hydrostatic compression. Powder Technology, 2013, 239, 47-55.	2.1	7
28	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
29	Determination of optimum densification conditions for production of corn stover pellets. , 2013, , .		1
30	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
31	Percolation Segregation and Flowability Measurement of Urea under Different Relative Humidity Conditions. KONA Powder and Particle Journal, 2008, 26, 167-177.	0.9	7
32	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
33	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