Xinzhou Wang

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9082857/publications.pdf

Version: 2024-02-01

43 papers	1,035 citations	361413 20 h-index	434195 31 g-index
44 all docs	44 docs citations	44 times ranked	583 citing authors

#	Article	IF	Citations
1	Numerical investigation of the influence of process conditions on the temperature variation in fused deposition modeling. Materials and Design, 2017, 130, 59-68.	7.0	105
2	Bamboo flattening technique: a literature and patent review. European Journal of Wood and Wood Products, 2021, 79, 1035-1048.	2.9	72
3	Incorporation of graphitic nanoâ€filler and poly(lactic acid) in fused deposition modeling. Journal of Applied Polymer Science, 2017, 134, .	2.6	66
4	Effects of thermal modification on the physical, chemical and micromechanical properties of Masson pine wood (Pinus massoniana Lamb.). Holzforschung, 2018, 72, 1063-1070.	1.9	61
5	In situ identification of the molecular-scale interactions of phenol-formaldehyde resin and wood cell walls using infrared nanospectroscopy. RSC Advances, 2016, 6, 76318-76324.	3.6	52
6	Effect of high-temperature saturated steam treatment on the physical, chemical, and mechanical properties of moso bamboo. Journal of Wood Science, 2020, 66, .	1.9	47
7	Evaluation of the effects of compression combined with heat treatment by nanoindentation (NI) of poplar cell walls. Holzforschung, 2014, 68, 167-173.	1.9	43
8	Bamboo flattening technology ebables efficient and value-added utilization of bamboo in the manufacture of furniture and engineered composites. Composites Part B: Engineering, 2022, 242, 110097.	12.0	36
9	In situ measurement of heat-treated wood cell wall at elevated temperature by nanoindentation. Industrial Crops and Products, 2016, 87, 142-149.	5.2	35
10	The effects of thermal treatment on the nanomechanical behavior of bamboo (Phyllostachys) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 Holzforschung, 2017, 71, 129-135.	1.9	34
11	Multi-Scale Evaluation of the Effect of Phenol Formaldehyde Resin Impregnation on the Dimensional Stability and Mechanical Properties of Pinus Massoniana Lamb.. Forests, 2019, 10, 646.	2.1	31
12	Effect of Phenol Formaldehyde Resin Penetration on the Quasi-Static and Dynamic Mechanics of Wood Cell Walls Using Nanoindentation. Nanomaterials, 2019, 9, 1409.	4.1	30
13	Optimization of cellulose nanofibrils carbon aerogel fabrication using response surface methodology. European Polymer Journal, 2015, 73, 137-148.	5.4	29
14	Effects of saturated steam pretreatment on the drying quality of moso bamboo culms. European Journal of Wood and Wood Products, 2019, 77, 949-951.	2.9	29
15	Effect of the penetration of isocyanates (pMDI) on the nanomechanics of wood cell wall evaluated by AFM-IR and nanoindentation (NI). Holzforschung, 2018, 72, 301-309.	1.9	27
16	Multi-scale evaluation of the effects of nanoclay on the mechanical properties of wood/phenol formaldehyde bondlines. International Journal of Adhesion and Adhesives, 2017, 74, 92-99.	2.9	26
17	A new approach for fabricating crack-free, flattened bamboo board and the study of its macro-/micro-properties. European Journal of Wood and Wood Products, 2021, 79, 1531-1540.	2.9	26
18	Preparation of crack-free, non-notched, flattened bamboo board and its physical and mechanical properties. Industrial Crops and Products, 2021, 174, 114218.	5.2	26

#	Article	IF	Citations
19	Multi-scale characterization of the thermal â€“ mechanically isolated bamboo fiber bundles and its potential application on engineered composites. Construction and Building Materials, 2020, 262, 120866.	7.2	23
20	Comparison of the fabrication process and macro and micro properties of two types of crack-free, flatten bamboo board. Construction and Building Materials, 2022, 317, 125949.	7.2	23
21	Temperature-dependent mechanical properties of wood-adhesive bondline evaluated by nanoindentation. Journal of Adhesion, 2017, 93, 640-656.	3.0	22
22	Effects of One-Step Hot Oil Treatment on the Physical, Mechanical, and Surface Properties of Bamboo Scrimber. Molecules, 2020, 25, 4488.	3.8	21
23	Multi-scale evaluation of the effect of saturated steam on the micromechanical properties of Moso bamboo. Holzforschung, 2021, 75, 1052-1060.	1.9	21
24	Effects of the combination of compression and impregnation with phenolic resin on the dimensional stability in the multiscale wood structure of Chinese fir. Construction and Building Materials, 2022, 327, 126960.	7.2	17
25	Contributions of Basic Chemical Components to the Mechanical Behavior of Wood Fiber Cell Walls as Evaluated by Nanoindentation. BioResources, 2016, 11, .	1.0	13
26	Effects of accelerated aging treatment on the microstructure and mechanics of wood-resin interphase. Holzforschung, 2018, 72, 235-241.	1.9	13
27	Investigating the nanomechanical behavior of thermosetting polymers using high-temperature nanoindentation. European Polymer Journal, 2015, 70, 360-370.	5.4	11
28	Effect of the nano-titanium dioxide (nano-TiO₂) coating on the photoaging properties of thermally treated bamboo. Wood Material Science and Engineering, 2022, 17, 895-904.	2.3	10
29	Nanoscale Characterization of Reed Stalk Fiber Cell Walls. BioResources, 2013, 8, .	1.0	9
30	Understanding the effect of growth ring orientation on the compressive strength perpendicular to the grain of thermally treated wood. Wood Science and Technology, 2021, 55, 1439-1456.	3.2	9
31	Determination of the Effects of Superheated Steam on Microstructure and Micromechanical Properties of Bamboo Cell Walls Using Quasi-Static Nanoindentation. Forests, 2021, 12, 1742.	2.1	9
32	Multi-scale characterization of the effect of saturated steam on the macroscale properties and surface changes of moso bamboo. Materials Express, 2021, 11, 740-748.	0.5	8
33	Temperature-Dependent Creep Behavior and Quasi-Static Mechanical Properties of Heat-Treated Wood. Forests, 2021, 12, 968.	2.1	8
34	Change in Micro-Morphology and Micro-Mechanical Properties of Thermally Modified Moso Bamboo. Polymers, 2022, 14, 646.	4.5	8
35	Study on Bamboo Longitudinal Flattening Technology. Polymers, 2022, 14, 816.	4.5	8
36	Investigation of the relationship between surface colour, contact angle and chemical properties of heat-treated bamboo. Wood Material Science and Engineering, 2023, 18, 783-791.	2.3	6

#	Article	IF	Citations
37	Multi-Scale Analysis of Changes in Crack-Free Flattened Moso Bamboo After Saturated Steam Treatment and Flattening Process. Science of Advanced Materials, 2021, 13, 1259-1267.	0.7	5
38	New insights into Chinese traditional handmade paper: influence of growth age on morphology and cellulose structure of phloem fibers from Pteroceltis tatarinowii. Cellulose, 2021, 28, 9943-9957.	4.9	3
39	Quantitative Evaluation of the Influence of Densification Process on Bamboo Cell Walls. Journal of Nanoelectronics and Optoelectronics, 2021, 16, 1296-1302.	0.5	3
40	Characterization of the Influence of Heat Compression on Bamboo Cell Walls by Nanoindentation. Journal of Nanoelectronics and Optoelectronics, 2021, 16, 1436-1443.	0.5	3
41	Understanding the impact of wood type and moisture on the bonding strength of glued wood. Wood Material Science and Engineering, 2023, 18, 303-313.	2.3	3
42	Multi-scale investigation of the mechanical properties of Loblolly pine wood at elevated temperature. Wood Material Science and Engineering, 2023, 18, 517-524.	2.3	3
43	Study on Physicochemical Properties and Potential Applications of Chemically Treated Luffa Sponge Fibers. Journal of Natural Fibers, 0, , 1-11.	3.1	0