Paulo Hein

List of Publications by Year
in descending order

67 papers	959 citations	471371 17 h-index	580701 25 g-index
67 all docs	67 docs citations	67 times ranked	842 citing authors

#	Article	IF	Citations
1	Jute fibers and micro/nanofibrils as reinforcement in extruded fiber-cement composites. Construction and Building Materials, 2019, 211, 517-527.	3.2	60
2	Cellulose nanofibrils/nanoclay hybrid composite as a paper coating: Effects of spray time, nanoclay content and corona discharge on barrier and mechanical properties of the coated papers. Food Packaging and Shelf Life, 2018, 15, 87-94.	3.3	49
3	Robustness of Models Based on near Infrared Spectra to Predict the Basic Density in Eucalyptus Urophylla Wood. Journal of Near Infrared Spectroscopy, 2009, 17, 141-150.	0.8	43
4	MICRO/NANOFIBRILAS CELULÃ“SICAS DE EUCALYPTUS EM FIBROCIMENTOS EXTRUDADOS. Cerne, 2016, 22, 59-68.	0.9	34
5	Estimation of physical and mechanical properties of agro-based particleboards by near infrared spectroscopy. European Journal of Wood and Wood Products, 2011, 69, 431-442.	1.3	33
6	Effects of sample preparation on NIR spectroscopic estimation of chemical properties of Eucalyptus urophylla S.T. Blake wood. Holzforschung, 2010, 64, .	0.9	28
7	Artificial neural network and partial least square regressions for rapid estimation of cellulose pulp dryness based on near infrared spectroscopic data. Carbohydrate Polymers, 2019, 224, 115186.	5.1	28
8	Charcoal productivity and quality parameters for reliable classification of Eucalyptus clones from Brazilian energy forests. Renewable Energy, 2021, 164, 34-45.	4.3	28
9	Predicting Microfibril Angle in <i>Eucalyptus</i> Wood from Different Wood Faces and Surface Qualities Using near Infrared Spectra. Journal of Near Infrared Spectroscopy, 2010, 18, 455-464.	0.8	24
10	Potential of Near-Infrared Spectroscopy for Distinguishing Charcoal Produced from Planted and Native Wood for Energy Purpose. Energy & Fuels, 2017, 31, 1593-1599.	2.5	24
11	Age trends of microfibril angle inheritance and their genetic and environmental correlations with growth, density and chemical properties in Eucalyptus urophylla S.T. Blake wood. Annals of Forest Science, 2012, 69, 681-691.	0.8	23
12	Logging wastes from sustainable forest management as alternative fuels for thermochemical conversion systems in Brazilian Amazon. Biomass and Bioenergy, 2020, 140, 105660.	2.9	23
13	Evaluation and classification of eucalypt charcoal quality by near infrared spectroscopy. Biomass and Bioenergy, 2018, 112, 85-92.	2.9	22
14	Spraying Cellulose Nanofibrils for Improvement of Tensile and Barrier Properties of Writing & Printing (W&P) Paper. Journal of Wood Chemistry and Technology, 2018, 38, 233-245.	0.9	20
15	Colorimetry as a criterion for segregation of logging wastes from sustainable forest management in the Brazilian Amazon for bioenergy. Renewable Energy, 2021, 163, 792-806.	4.3	20
16	Estimating wood moisture by near infrared spectroscopy: Testing acquisition methods and wood surfaces qualities. Wood Material Science and Engineering, 2021, 16, 336-343.	1.1	20
17	Resonance and near Infrared Spectroscopy for Evaluating Dynamic Wood Properties. Journal of Near Infrared Spectroscopy, 2010, 18, 443-454.	0.8	19
18	Influence of spectral acquisition technique and wood anisotropy on the statistics of predictive near infraredâ€“based models for wood density. Journal of Near Infrared Spectroscopy, 2018, 26, 106-116.	0.8	19

#	Article	IF	Citations
19	Use of near infrared spectroscopy to distinguish carbonization processes and charcoal sources. Cerne, 2010, 16, 381-390.	0.9	18
20	Comparison between three-point and four-point flexural tests to determine wood strength of Eucalyptus specimens. Maderas: Ciencia Y Tecnologia, 2018, , 0-0.	0.7	18
21	Challenges in the use of Near Infrared Spectroscopy for improving wood quality: A review. Forest Systems, 2018, 26, eR03.	0.1	18
22	A candidate gene for lignin composition in Eucalyptus: cinnamoyl-CoA reductase (CCR). Tree Genetics and Genomes, 2012, 8, 353-364.	0.6	17
23	Spatial variation of wood density, stiffness and microfibril angle along Eucalyptus trunks grown under contrasting growth conditions. Trees - Structure and Function, 2016, 30, 871-882.	0.9	17
24	Near Infrared Spectroscopy for Estimating <i>Eucalyptus</i> Charcoal Properties. Journal of Near Infrared Spectroscopy, 2012, 20, 657-666.	0.8	16
25	NIR Spectral Heritability: A Promising Tool for Wood Breeders?. Journal of Near Infrared Spectroscopy, 2014, 22, 141-147.	0.8	16
26	Charcoal of logging wastes from sustainable forest management for industrial and domestic uses in the Brazilian Amazonia. Biomass and Bioenergy, 2020, 142, 105804.	2.9	16
27	Estimating Shrinkage, Microfibril Angle and Density of <i>Eucalyptus</i> Wood Using near Infrared Spectroscopy. Journal of Near Infrared Spectroscopy, 2012, 20, 427-436.	0.8	15
28	Evaluation of chemical properties of intact green coffee beans using nearâ€infrared spectroscopy. Journal of the Science of Food and Agriculture, 2021, 101, 3500-3507.	1.7	15
29	Rapid discrimination of wood species from native forest and plantations using near infrared spectroscopy. Forest Systems, 2018, 27, e008.	0.1	15
30	Estimation of the dynamic elastic properties of wood from Copaifera langsdorffii Desf using resonance analysis. Cerne, 2012, 18, 41-47.	0.9	14
31	Correlations among microfibril angle, density, modulus of elasticity, modulus of rupture and shrinkage in 6-year-old Eucalyptus urophylla Ã— E. grandis. Maderas: Ciencia Y Tecnologia, 2013, , 0-0.	0.7	13
32	DEVELOPING NEAR INFRARED SPECTROSCOPIC MODELS FOR PREDICTING DENSITY OF Eucalyptus WOOD BASED ON INDIRECT MEASUREMENT. Cerne, 2019, 25, 294-300.	0.9	13
33	Wood Knots Influence the Modulus of Elasticity and Resistance to Compression. Floresta E Ambiente, 2018, 25, .	0.1	12
34	Dynamic Hardness of Charcoal Varies According to the Final Temperature of Carbonization. Energy & Fuels, 2018, 32, 9659-9665.	2.5	12
35	Insights in quantitative indexes for better grouping and classification of Eucalyptus clones used in combustion and energy cogeneration processes in Brazil. Biomass and Bioenergy, 2020, 143, 105835.	2.9	12
36	Relationships between microfibril angle, modulus of elasticity and compressive strength in Eucalyptus wood. Maderas: Ciencia Y Tecnologia, 2012, , 0-0.	0.7	11

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37	NIR SPECTROSCOPIC MODELS FOR PHENOTYPING WOOD TRAITS IN BREEDING PROGRAMS OF Eucalyptus benthamii. Cerne, 2017, 23, 367-375.	0.9	11
38	Effect of final temperature on charcoal stiffness and its correlation with wood density and hardness. SN Applied Sciences, 2020, 2, 1.	1.5	11
39	Estimate of the density of Eucalyptus grandis W. Hill ex Maiden using near infrared spectroscopy. Cerne, 2013, 19, 647-652.	0.9	10
40	NEAR INFRARED SPECTROSCOPY: RAPID AND ACCURATE ANALYTICAL TOOL FOR PREDICTION OF NON-STRUCTURAL CARBOHYDRATES IN WOOD. Cerne, 2019, 25, 84-92.	0.9	10
41	Influence of Extractives Content and Lignin Quality of Eucalyptus Wood in the Mass Balance of Pyrolysis Process. Bioenergy Research, 2021, 14, 175-189.	2.2	9
42	Estimating hardness and density of wood and charcoal by near-infrared spectroscopy. Wood Science and Technology, 2021, 55, 215-230.	1.4	9
43	Do the Growing Conditions of Trees Influence the Wood Properties?. Floresta E Ambiente, 2019, 26, .	0.1	9
44	Efeito dos elementos anatÃ´micos da madeira na secagem das toras de Eucalyptus e Corymbia. Scientia Forestalis/Forest Sciences, 2017, 45, .	0.2	9
45	DETERMINATION OF HEAT-TREATED EUCALYPTUS AND PINUS WOOD PROPERTIES USING NIR SPECTROSCOPY. Journal of Tropical Forest Science, 2018, 30, 117-125.	0.1	9
46	Modelos de calibraÃ§Ã£o e a espectroscopia no infravermelho prÃ³ximo para prediÃ§Ã£o das propriedades quÃmicas e da densidade bÃ¡sica da madeira de <i>Eucalyptus</i>.. Ciencia Florestal, 2010, 20, 367-376.	0.1	9
47	Wood Permeability in Eucalyptus grandis and Eucalyptus dunnii. Floresta E Ambiente, 2017, 25, .	0.1	7
48	ESTABLISHMENT OF QUALITY CLASSES FOR HARDWOOD FLOORINGS BY SIMULATED USE. Cerne, 2019, 25, 105-109.	0.9	7
49	Classification of commercial charcoal for domestic use by near infrared spectroscopy. Biomass and Bioenergy, 2019, 127, 105280.	2.9	7
50	Propriedades energÃ©ticas do carvÃ£o vegetal em funÃ§Ã£o do espaÃ§amento de plantio. CiÃªncia Da Madeira, 2017, 8, 54-63.	0.3	7
51	Lenho e Casca de Eucalyptus e Acacia em Plantios MonoespecÃficos e Consorciados. Floresta E Ambiente, 2017, 25, .	0.1	6
52	Wood grain angles variations in<i>Eucalyptus</i>and their relationships to physical-mechanical properties. Holzforschung, 2020, 74, 1089-1097.	0.9	6
53	Resonance of scantlings indicates the stiffness even of small specimens of Eucalyptus from plantations. Wood Science and Technology, 2012, 46, 621-635.	1.4	5
54	Essential Oil Content in <i>Eremanthus Erythropappus</i> Wood Powder Can Be Estimated Using near Infrared Spectroscopy. Journal of Near Infrared Spectroscopy, 2015, 23, 33-39.	0.8	5

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55	Drying kinetics in Eucalyptus urophylla wood: analysis of anisotropy and region of the stem. Drying Technology, 0, , 1-12.	1.7	5
56	Classifying waste wood from Amazonian species by near-infrared spectroscopy (NIRS) to improve charcoal production. Renewable Energy, 2022, 193, 584-594.	4.3	5
57	Cellulose Nanofibrils as Reinforcement in the Process Manufacture of Paper Handsheets. Journal of Natural Fibers, 2022, 19, 7818-7833.	1.7	4
58	Artificial Neural Networks To Distinguish Charcoal from <i>Eucalyptus</i> and Native Forests Based on Their Mineral Components. Energy & Fuels, 2020, 34, 9599-9608.	2.5	2
59	Influence of Particles Size on NIR Spectroscopic Estimations of Charcoal Properties. Floresta E Ambiente, 2019, 26, .	0.1	2
60	InfluÃªncia do diÃ¢metro e umidade no tratamento preservativo de moirÃµes de Eucalyptus. Revista Arvore, 2014, 38, 919-925.	0.5	2
61	Estimativa do Ã‚ngulo Microfibrilar em Madeira de Eucalyptusurophyllax E. grandispor Meio da Espectroscopia no Infravermelho PrÃ³ximo. Floresta E Ambiente, 2012, 19, 194-199.	0.1	2
62	NIR spectroscopy can evaluate the crystallinity and the tensile and burst strengths of nanocellulosic films. Maderas: Ciencia Y Tecnologia, 2016, , 0-0.	0.7	1
63	InfluÃªncia do tratamento preservativo com CCA-C na estabilidade dimensional da madeira de Eucalyptus. Scientia Forestalis/Forest Sciences, 2017, 45, .	0.2	1
64	Effect of planting density on wood anatomy in Eucalyptus and Acacia from Brazil. Madera Bosques, 2018, 24, .	0.1	1
65	Relationship among the stiffness, wave propagation speed, density and moisture content of <i>pinus elliottii</i> and <i>bertholletia excelsa</i> wood specimens. Wood Material Science and Engineering, 2023, 18, 151-160.	1.1	1
66	PHYSICAL AND CHEMICAL PRETREATMENT OF SUGARCANE BAGASSE FOR ENHANCED ACID HYDROLYSIS. Cellulose Chemistry and Technology, 2020, 54, 699-704.	0.5	1
67	Evaluating biofibersâ€™ properties and products by NIR spectroscopy. , 2022, , 367-392.		1