Callum A S Hill

List of Publications by Year
in descending order

36 papers	3,258 citations	236925 25 h-index	377865 34 g-index
37 all docs	37 docs citations	37 times ranked	2363 citing authors

#	Article	IF	Citations
1	Review of the use of solid wood as an external cladding material in the built environment. Journal of Materials Science, 2022, 57, 9031-9076.	3.7	18
2	Thermal modification of woodâ€"a review: chemical changes and hygroscopicity. Journal of Materials Science, 2021, 56, 6581-6614.	3.7	139
3	Environmental Impact of Wood Modification. Coatings, 2021, 11, 366.	2.6	19
4	Conservation of Waterlogged Woodâ€"Past, Present and Future Perspectives. Forests, 2021, 12, 1193.	2.1	48
5	Embodied energy data implications for optimal specification of building envelopes. Building Research and Information, 2020, 48, 429-445.	3.9	22
6	Accessibility of hydroxyl groups in furfurylated wood at different weight percent gains and during Rhodonia placenta decay. European Journal of Wood and Wood Products, 2019, 77, 953-955.	2.9	8
7	Effect of methyltrimethoxysilane impregnation on the cell wall porosity and water vapour sorption of archaeological waterlogged oak. Wood Science and Technology, 2019, 53, 703-726.	3.2	24
8	Water up-take in fuel pellets studied by Dynamic Vapour Sorption (DVS) analysis and its potential role in self-heating during storage. European Journal of Wood and Wood Products, 2019, 77, 5-14.	2.9	5
9	Characterization of moisture in acetylated and propionylated radiata pine using low-field nuclear magnetic resonance (LFNMR) relaxometry. Holzforschung, 2018, 72, 225-233.	1.9	42
10	A comparison of the environmental impacts of different categories of insulation materials. Energy and Buildings, 2018, 162, 12-20.	6.7	91
11	An examination of the potential for the use of the Maillard reaction to modify wood. International Wood Products Journal, 2018, 9, 108-114.	1.1	8
12	Polyesterification of wood using sorbitol and citric acid under aqueous conditions. International Wood Products Journal, 2018, 9, 66-73.	1.1	28
13	Accessibility of hydroxyl groups in anhydride modified wood as measured by deuterium exchange and saponification. Holzforschung, 2017, 72, 17-23.	1.9	45
14	Comparative assessment for biogenic carbon accounting methods in carbon footprint of products: a review study for construction materials based on forest products. IForest, 2017, 10, 815-823.	1.4	41
15	Editorial for the IWPJ special edition for the 8th European Conference on Wood Modification. International Wood Products Journal, 2016, 7, 60-60.	1.1	0
16	The toughness of hygrothermally modified wood. Holzforschung, 2015, 69, 851-862.	1.9	35
17	Sorption behaviour of torrefied wood and charcoal determined by dynamic vapour sorption. Journal of Materials Science, 2015, 50, 7673-7680.	3.7	29
18	Accessibility of hydroxyl groups in birch kraft pulps quantified by deuterium exchange in D2O vapor. Cellulose, 2014, 21, 1217-1226.	4.9	38

#	Article	IF	Citations
19	The water vapour sorption behaviour of acetylated birch wood: how acetylation affects the sorption isotherm and accessible hydroxyl content. Journal of Materials Science, 2014, 49, 2362-2371.	3.7	108
20	What is the role of the accessibility of wood hydroxyl groups in controlling moisture content?. Journal of Materials Science, 2013, 48, 6352-6356.	3.7	95
21	Cupping behaviour of surface densified Scots pine wood: the effect of process parameters and correlation with density profile characteristics. Journal of Materials Science, 2013, 48, 6426-6430.	3.7	26
22	The water vapor sorption behavior of a galactomannan cellulose nanocomposite film analyzed using parallel exponential kinetics and the Kelvinâ€“Voigt viscoelastic model. Journal of Applied Polymer Science, 2013, 129, 2352-2359.	2.6	36
23	A critical discussion of the physics of woodâ€“water interactions. Wood Science and Technology, 2013, 47, 141-161.	3.2	414
24	Measuring the thickness swelling and set-recovery of densified and thermally modified Scots pine solid wood. Journal of Materials Science, 2013, 48, 8530-8538.	3.7	38
25	The water vapour sorption properties of thermally modified and densified wood. Journal of Materials Science, 2012, 47, 3191-3197.	3.7	120
26	The dynamic water vapour sorption behaviour of natural fibres and kinetic analysis using the parallel exponential kinetics model. Journal of Materials Science, 2011, 46, 479-489.	3.7	102
27	The dynamic water vapour sorption properties of natural fibres and viscoelastic behaviour of the cell wall: is there a link between sorption kinetics and hysteresis?. Journal of Materials Science, 2011, 46, 3738-3748.	3.7	26
28	The water vapour sorption behaviour of three celluloses: analysis using parallel exponential kinetics and interpretation using the Kelvin-Voigt viscoelastic model. Cellulose, 2011, 18, 517-530.	4.9	57
29	Surface only modification of bacterial cellulose nanofibres with organic acids. Cellulose, 2011, 18, 595-605.	4.9	177
30	Dynamic water vapour sorption properties of wood treated with glutaraldehyde. Wood Science and Technology, 2011, 45, 49-61.	3.2	66
31	The water vapour sorption properties of Sitka spruce determined using a dynamic vapour sorption apparatus. Wood Science and Technology, 2010, 44, 497-514.	3.2	144
32	Water vapor sorption kinetics of wood modified with glutaraldehyde. Journal of Applied Polymer Science, 2010, 117, 1674-1682.	2.6	23
33	Analysis of the water vapour sorption isotherms of thermally modified acacia and sesendok. Wood Material Science and Engineering, 2010, 5, 194-203.	2.3	56
34	The water vapor sorption behavior of natural fibers. Journal of Applied Polymer Science, 2009, 112, 1524-1537.	2.6	331
35	Why does acetylation protect wood from microbiological attack?. Wood Material Science and Engineering, 2009, 4, 37-45.	2.3	35
36	The water vapour sorption characteristics and kinetics of different wool types. Journal of the Textile Institute, 0, , 1-13.	1.9	9