

Klaus Richter

List of Publications by Year in descending order

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Version: 2024-02-01

72
papers

2,109
citations

186265

28
h-index

254184

43
g-index

76
all docs

76
docs citations

76
times ranked

1876
citing authors

#	ARTICLE	IF	CITATIONS
1	Mode of action of brown rot decay resistance in modified wood: a review. <i>Holzforschung</i> , 2014, 68, 239-246.	1.9	95
2	Weathering of wood modified with the N-methylol compound 1,3-dimethylol-4,5-dihydroxyethyleneurea. <i>Polymer Degradation and Stability</i> , 2005, 89, 189-199.	5.8	86
3	Allocation in lca of wood-based products experiences of cost action E9 part i. methodology. <i>International Journal of Life Cycle Assessment</i> , 2002, 7, 290-294.	4.7	81
4	Wooden building products in comparative LCA. <i>International Journal of Life Cycle Assessment</i> , 2007, 12, 470-479.	4.7	81
5	LCA-based optimization of wood utilization under special consideration of a cascading use of wood. <i>Journal of Environmental Management</i> , 2015, 152, 158-170.	7.8	81
6	Potentials for cascading of recovered wood from building deconstruction – A case study for south-east Germany. <i>Resources, Conservation and Recycling</i> , 2013, 78, 81-91.	10.8	80
7	Wooden building products in comparative LCA. <i>International Journal of Life Cycle Assessment</i> , 2007, 12, 470-479.	4.7	71
8	Economic Allocation in LCA: A Case Study About Aluminium Window Frames. <i>International Journal of Life Cycle Assessment</i> , 2000, 5, 79-83.	4.7	70
9	Utilization of recovered wood in cascades versus utilization of primary wood – a comparison with life cycle assessment using system expansion. <i>International Journal of Life Cycle Assessment</i> , 2014, 19, 1755-1766.	4.7	69
10	Effect of treatments with 1,3-dimethylol-4,5-dihydroxy-ethyleneurea (DMDHEU) on the tensile properties of wood. <i>Holzforschung</i> , 2007, 61, 43-50.	1.9	64
11	DMA analysis and wood bonding of PVAc latex reinforced with cellulose nanofibrils. <i>Cellulose</i> , 2010, 17, 387-398.	4.9	63
12	Allocation in LCA of wood-based products experiences of cost action E9. <i>International Journal of Life Cycle Assessment</i> , 2002, 7, 369-375.	4.7	54
13	Thermal Stability of Wood-Wood and Wood-FRP Bonding with Polyurethane and Epoxy Adhesives. <i>Advanced Engineering Materials</i> , 2005, 7, 419-426.	3.5	49
14	Greenhouse Gas Dynamics of an Increased Use of Wood in Buildings in Switzerland. <i>Climatic Change</i> , 2006, 74, 319-347.	3.6	46
15	Carbon footprints of the horticultural products strawberries, asparagus, roses and orchids in Germany. <i>Journal of Cleaner Production</i> , 2015, 87, 168-179.	9.3	45
16	Carbon pool and substitution effects of an increased use of wood in buildings in Switzerland: first estimates. <i>Annals of Forest Science</i> , 2005, 62, 889-902.	2.0	44
17	Influence of wood properties and bonding parameters on bond durability of European Beech (Fagus) Tj ETQq1 1 0.784314 rgBT / Over 2.0 843	2.0	43
18	Spectral sensitivity in the photodegradation of fir wood (Abies alba Mill.) surfaces: colour changes in natural weathering. <i>Wood Science and Technology</i> , 2014, 48, 239-252.	3.2	43

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19	Resource efficiency of multifunctional wood cascade chains using LCA and exergy analysis, exemplified by a case study for Germany. <i>Resources, Conservation and Recycling</i> , 2017, 126, 141-152.	10.8	43
20	Density related properties of bark insulation boards bonded with tannin hexamine resin. <i>European Journal of Wood and Wood Products</i> , 2014, 72, 417-424.	2.9	42
21	Thermal stability of structural one-component polyurethane adhesives for wood's structure-property relationship. <i>Journal of Applied Polymer Science</i> , 2006, 102, 5698-5707.	2.6	36
22	Influence of wood moisture content on bending and shear stiffness of cross laminated timber panels. <i>European Journal of Wood and Wood Products</i> , 2011, 69, 193-197.	2.9	35
23	The role of chemical transport in the brown-rot decay resistance of modified wood. <i>International Wood Products Journal</i> , 2016, 7, 66-70.	1.1	35
24	Anatomy of bioincised Norway spruce wood. <i>International Biodeterioration and Biodegradation</i> , 2010, 64, 346-355.	3.9	34
25	Product environmental footprint of strawberries: Case studies in Estonia and Germany. <i>Journal of Environmental Management</i> , 2017, 203, 564-577.	7.8	34
26	Eco-efficiency analysis of recycling recovered solid wood from construction into laminated timber products. <i>Science of the Total Environment</i> , 2019, 661, 107-119.	8.0	34
27	Porous SiC Ceramics Derived from Tailored Wood-Based Fiberboards. <i>Journal of the American Ceramic Society</i> , 2006, 89, 1499-1503.	3.8	32
28	Using Bark as a Heat Insulation Material. <i>BioResources</i> , 2013, 8, .	1.0	31
29	Effect of wood modification on gene expression during incipient <i>Postia placenta</i> decay. <i>International Biodeterioration and Biodegradation</i> , 2014, 86, 86-91.	3.9	30
30	The role of moisture in the nest thermoregulation of social wasps. <i>Die Naturwissenschaften</i> , 2005, 92, 427-430.	1.6	28
31	Investigation of thermally treated beech (<i>Fagus sylvatica</i>) and spruce (<i>Picea abies</i>) by means of multifunctional analytical pyrolysis-GC/MS. <i>Journal of Analytical and Applied Pyrolysis</i> , 2013, 100, 117-126.	5.5	28
32	Multifunctionality of Forests: A White Paper on Challenges and Opportunities in China and Germany. <i>Forests</i> , 2020, 11, 266.	2.1	28
33	Hydroxymethylated Resorcinol (HMR) and Novolak-Based HMR (n-HMR) Primers to Enhance Bond Durability of <i>Eucalyptus globulus</i> Glulams. <i>Journal of Adhesion Science and Technology</i> , 2009, 23, 1925-1937.	2.6	26
34	Post-consumer waste wood in attributive product LCA. <i>International Journal of Life Cycle Assessment</i> , 2007, 12, 160-172.	4.7	25
35	Systematic Review and Meta-Analysis of Life Cycle Assessments for Wood Energy Services. <i>Journal of Industrial Ecology</i> , 2016, 20, 743-763.	5.5	24
36	Post-consumer waste wood in attributive product LCA. <i>International Journal of Life Cycle Assessment</i> , 2007, 12, 160-172.	4.7	24

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37	Effects of thermal modification on <i>Postia placenta</i> wood degradation dynamics: measurements of mass loss, structural integrity and gene expression. <i>Wood Science and Technology</i> , 2016, 50, 385-397.	3.2	21
38	Topochemical analyses of furfuryl alcohol-modified radiata pine (<i>Pinus radiata</i>) by UMSP, light microscopy and SEM. <i>Holzforschung</i> , 2017, 71, 821-831.	1.9	21
39	Spectral sensitivity in the photodegradation of fir wood (<i>Abies alba</i> Mill.) surfaces: correspondence of physical and chemical changes in natural weathering. <i>Wood Science and Technology</i> , 2016, 50, 989-1002.	3.2	18
40	Mitigating environmental impacts through the energetic use of wood: Regional displacement factors generated by means of substituting non-wood heating systems. <i>Science of the Total Environment</i> , 2016, 569-570, 395-403.	8.0	17
41	Evaluation of relationships between particle orientation and thermal conductivity in bark insulation board by means of CT and discrete modeling. <i>Case Studies in Nondestructive Testing and Evaluation</i> , 2016, 6, 21-29.	1.7	16
42	Polyurea Networks from Moisture-Cure, Reaction-Setting, Aliphatic Polyisocyanates with Tunable Mechanical and Thermal Properties. <i>ACS Applied Polymer Materials</i> , 2021, 3, 4070-4078.	4.4	15
43	Quality control of glulam: shear testing of bondlines. <i>European Journal of Wood and Wood Products</i> , 2010, 68, 243-256.	2.9	14
44	Comparison of product carbon footprint standards with a case study on poinsettia (<i>Euphorbia</i>) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 46	4.7	14
45	A Methodical Approach for Systematic Life Cycle Assessment of Wood-Based Furniture. <i>Journal of Industrial Ecology</i> , 2018, 22, 671-685.	5.5	12
46	Post-consumer wood in environmental decision-support tools. <i>Schweizerische Zeitschrift Fur Forstwesen</i> , 2002, 153, 97-106.	0.1	12
47	Potentials for wood cascading: A model for the prediction of the recovery of timber in Germany. <i>Resources, Conservation and Recycling</i> , 2022, 178, 106101.	10.8	12
48	Effects of increased wood energy consumption on global warming potential, primary energy demand and particulate matter emissions on regional level based on the case study area Bavaria (Southeast) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	10.8	12
49	Environmental effects of shifts in a regional heating mix through variations in the utilization of solid biofuels. <i>Journal of Environmental Management</i> , 2016, 177, 177-191.	7.8	11
50	Analyzing wood bark insulation board structure using X-ray computed tomography and modeling its thermal conductivity by means of finite difference method. <i>Journal of Composite Materials</i> , 2016, 50, 795-806.	2.4	11
51	Incipient brown rot decay in modified wood: patterns of mass loss, structural integrity, moisture and acetyl content in high resolution. <i>International Wood Products Journal</i> , 2017, 8, 172-182.	1.1	11
52	Larch (<i>Larix decidua</i>) bark insulation board: interactions of particle orientation, physical and mechanical and thermal properties. <i>European Journal of Wood and Wood Products</i> , 2018, 76, 489-498.	2.9	10
53	Effect of <i>Physisporinus vitreus</i> on wood properties of Norway spruce. Part 1: Aspects of delignification and surface hardness. <i>Holzforschung</i> , 2011, 65, .	1.9	9
54	The impact of a new emission control act on particulate matter emissions from residential wood energy use in Bavaria, Germany. <i>Journal of Cleaner Production</i> , 2017, 145, 134-141.	9.3	9

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55	Brown rot gene expression and regulation in acetylated and furfurylated wood: a complex picture. <i>Holzforschung</i> , 2020, 74, 391-399.	1.9	9
56	Untersuchung der kapillaren Transportwege im Weißtannenholz. <i>European Journal of Wood and Wood Products</i> , 1992, 50, 329.	2.9	8
57	Strategies of social wasps for thermal homeostasis in light paper nests. <i>Journal of Thermal Biology</i> , 2006, 31, 599-604.	2.5	8
58	<i>In vitro</i> oxidative and enzymatic degradation of modified wood. <i>International Wood Products Journal</i> , 2015, 6, 36-39.	1.1	7
59	Combined FTIR spectroscopy and rheology for measuring melamine urea formaldehyde (MUF) adhesive curing as influenced by different wood extracts. <i>European Journal of Wood and Wood Products</i> , 2020, 78, 85-91.	2.9	7
60	Hydroxymethylated resorcinol (HMR) primer to improve the performance of wood-adhesive bonds – A review. <i>International Journal of Adhesion and Adhesives</i> , 2022, 113, 103070.	2.9	7
61	Reply to the “letter to the editor” by Gjalte Huppes. <i>International Journal of Life Cycle Assessment</i> , 2000, 5, 189.	4.7	5
62	A Flexible Adhesive Layer to Strengthen Glulam Beams. <i>Journal of Adhesion Science and Technology</i> , 2010, 24, 1665-1701.	2.6	5
63	Acidic wood extractives accelerate the curing process of emulsion polymer isocyanate adhesives. <i>Journal of Applied Polymer Science</i> , 2022, 139, .	2.6	5
64	A new analytical approach to investigate the influence of wood extracts on the curing properties of phenol-resorcinol-formaldehyde (PRF) adhesives. <i>Wood Science and Technology</i> , 2022, 56, 349-365.	3.2	5
65	Effect of <i>Physisporinus vitreus</i> on wood properties of Norway spruce. Part 2: Aspects of microtensile strength and chemical changes. <i>Holzforschung</i> , 2011, 65, .	1.9	4
66	Adhesion of water-borne acrylic and hybrid paint on wood treated with primers. <i>Surface Coatings International Part B: Coatings Transactions</i> , 2002, 85, 273-280.	0.3	3
67	PM10 emissions caused by the woodworking industry in Switzerland. <i>European Journal of Wood and Wood Products</i> , 2005, 63, 245-250.	2.9	2
68	Improvement of a method for topochemical investigations of degraded furfurylated wood. <i>International Wood Products Journal</i> , 2016, 7, 96-101.	1.1	2
69	Holzprodukte in vergleichenden Ökobilanzen Wood Products in Comparative Life Cycle Assessment Studies. <i>Schweizerische Zeitschrift Für Forstwesen</i> , 1999, 150, 96-104.	0.1	1
70	Assessment of the Forest Products Industries. , 2006, , 193-208.		0
71	Direct bioautography for the screening of selected tropical wood extracts against basidiomycetes. <i>Holzforschung</i> , 2020, 74, 733-743.	1.9	0
72	Press water from the mechanical drying of Douglas-fir wood chips has multiple beneficial effects on lignocellulolytic fungi. <i>Fungal Biology and Biotechnology</i> , 2022, 9, .	5.1	0