Ulrich G MÃ¼ller

List of Publications by Year
in descending order

104	2,131	236925 25	289244 40
papers	citations	h-index	g-index

105	105	105	1944
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Genetic parameters of growth and wood quality traits inPicea abies. Scandinavian Journal of Forest Research, 2004, 19, 14-29.	1.4	171
2	Cellulose nanofibrils as filler for adhesives: effect on specific fracture energy of solid wood-adhesive bonds. Cellulose, 2011, 18, 1227-1237.	4.9	91
3	Improving the mechanical resistance of waterborne wood coatings by adding cellulose nanofibres. Reactive and Functional Polymers, 2014, 85, 214-220.	4.1	77
4	Effects of thermal modification on the adhesion between spruce wood (Picea abies Karst.) and a thermoplastic polymer. European Journal of Wood and Wood Products, 2006, 64, 373-376.	2.9	64
5	Elastic properties of adhesive polymers. II. Polymer films and bond lines by means of nanoindentation. Journal of Applied Polymer Science, 2006, 102, 1234-1239.	2.6	62
6	Thermal conductivity of wood at angles to the principal anatomical directions. Wood Science and Technology, 2015, 49, 577-589.	3.2	61
7	The strength and stiffness of oriented wood and cellulose-fibre materials: A review. Progress in Materials Science, 2022, 125, 100916.	32.8	61
8	Direct measurement of strain distribution along a wood bond line. Part 2: Effects of adhesive penetration on strain distribution. Holzforschung, 2005, 59, 307-310.	1.9	58
9	Elastic properties of adhesive polymers. I. Polymer films by means of electronic speckle pattern interferometry. Journal of Applied Polymer Science, 2007, 103, 3936-3939.	2.6	58
10	Influence of additives on the global mechanical behavior and the microscopic strain localization in wood reinforced polypropylene composites during tensile deformation investigated using digital image correlation. Composites Science and Technology, 2009, 69, 139-146.	7.8	54
11	Hydraulic and mechanical properties of young Norway spruce clones related to growth and wood structure. Tree Physiology, 2007, 27, 1165-1178.	3.1	53
12	Direct measurement of strain distribution along a wood bond line. Part 1: Shear strain concentration in a lap joint specimen by means of electronic speckle pattern interferometry. Holzforschung, 2005, 59, 300-306.	1.9	50
13	Bonding of spruce wood with wheat flour glueâ€"Effect of press temperature on the adhesive bond strength. Industrial Crops and Products, 2010, 31, 255-260.	5.2	48
14	Effects of Heartwood Extractives on Mechanical Properties of Larch. IAWA Journal, 2005, 26, 211-220.	2.7	47
15	Resonance wood [Picea abies(L.) Karst.] â€“ evaluation and prediction of violin makersâ€™ quality-grading. Journal of the Acoustical Society of America, 2007, 121, 2384-2395.	1.1	45
16	Tradeoffs between hydraulic and mechanical stress responses of mature Norway spruce trunk wood. Tree Physiology, 2008, 28, 1179-1188.	3.1	45
17	Comparing dry bond strength of spruce and beech wood glued with different adhesives by means of scarf- and lap joint testing method. European Journal of Wood and Wood Products, 2006, 64, 269-271.	2.9	43
18	Biomechanics of a branch â€“ stem junction in softwood. Trees - Structure and Function, 2006, 20, 643-648.	1.9	42

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19	Chemical and mechanical changes during photooxidation of an acrylic clear wood coat and its prevention using UV absorber and micronized TiO2. Polymer Degradation and Stability, 2013, 98, 1329-1338.	5.8	38
20	Variability in surface polarity of wood by means of AFM adhesion force mapping. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2014, 457, 82-87.	4.7	33
21	Mechanism of stress transfer in a single wood fibre-LDPE composite by means of electronic laser speckle interferometry. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1406-1412.	7.6	32
22	Detection of fungal wood decay using Magnetic Resonance Imaging. European Journal of Wood and Wood Products, 2001, 59, 190-194.	2.9	31
23	Bond strength of end-grain joints and its dependence on surface roughness and adhesive spread. Journal of Wood Science, 2010, 56, 429-434.	1.9	29
24	Crash simulation of wood and composite wood for future automotive engineering. Wood Material Science and Engineering, 2020, 15, 312-324.	2.3	29
25	Measurement of strain distribution in timber finger joints. Wood Science and Technology, 2006, 40, 631-636.	3.2	28
26	Comparison of two optical methods for contactless, full field and highly sensitive in-plane deformation measurements using the example of plywood. Wood Science and Technology, 2011, 45, 755-765.	3.2	26
27	Ammonia vs. thermally modified timberâ€”comparison of physical and mechanical properties. European Journal of Wood and Wood Products, 2012, 70, 233-239.	2.9	25
28	Preparation of High Strength Plywood from Partially Delignified Densified Wood. Polymers, 2020, 12, 1796.	4.5	25
29	EFFECTS OF CELL ANATOMY ON THE PLASTIC AND ELASTIC BEHAVIOUR OF DIFFERENT WOOD SPECIES LOADED PERPENDICULAR TO GRAIN. IAWA Journal, 2003, 24, 117-128.	2.7	24
30	Effect of hydrolysis and denaturation of wheat gluten on adhesive bond strength of wood joints. Journal of Applied Polymer Science, 2013, 129, 2429-2434.	2.6	24
31	Homogeneous shear stress field of wood in an Arcan shear test configuration measured by means of electronic speckle pattern interferometry: description of the test setup. Wood Science and Technology, 2015, 49, 1123-1136.	3.2	23
32	Tensile Testing of Single Regenerated Cellulose Fibres. Macromolecular Symposia, 2006, 244, 83-88.	0.7	21
33	EFFECTS OF MACRO- AND MICRO-STRUCTURAL VARIABILITY ON THE SHEAR BEHAVIOR OF SOFTWOOD. IAWA Journal, 2004, 25, 231-243.	2.7	20
34	Studying thermal conductivity of wood at cell wall level by scanning thermal microscopy (SThM). Holzforschung, 2013, 67, 155-159.	1.9	20
35	Knots in trees: strain distribution in a naturally optimised structure. Wood Science and Technology, 2010, 44, 389-398.	3.2	19
36	Dimensional stability of multi-layered wood-based panels: a review. Wood Science and Technology, 2017, 51, 969-996.	3.2	19

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37	Genetic parameters for spiral-grain angle in two 19-year-old clonal Norway spruce trials. Annals of Forest Science, 2002, 59, 551-556.	2.0	18
38	Elastic properties of adhesive polymers. III. Adhesive polymer films under dry and wet conditions characterized by means of nanoindentation. Journal of Applied Polymer Science, 2010, 118, 1331-1334.	2.6	17
39	Simulation of a real-time process adaptation in the manufacture of high-density fibreboards using multivariate regression analysis and feedforward control. Wood Science and Technology, 2013, 47, 1243-1259.	3.2	16
40	Light microscopic detection of UF adhesive in industrial particle board. Wood Science and Technology, 2015, 49, 517-526.	3.2	16
41	Indented rings (hazel growth) of Norway spruce reduce anisotropy of mechanical properties. Wood Science and Technology, 2012, 46, 1239-1246.	3.2	15
42	Comparison ofÂfracture energy testing by means ofÂdouble cantilever beam-(DCB)-specimens and lap joint testing method forÂthe characterization ofÂadhesively bonded wood. European Journal of Wood and Wood Products, 2012, 70, 3-10.	2.9	15
43	Review: Comparative analysis of CO2 laser and conventional sawing for cutting of lumber and wood-based materials. Wood Science and Technology, 2017, 51, 943-966.	3.2	15
44	Moisture related elastic and viscoelastic behaviour of wood adhesives by means of in-situ nanoindentation. International Journal of Adhesion and Adhesives, 2018, 85, 123-129.	2.9	15
45	Influence of ageing on mechanical properties of wood to wood bonding with wheat flour glue. European Journal of Wood and Wood Products, 2012, 70, 679-688.	2.9	14
46	Shear strain distribution in PRF and PUR bonded 3â€“ply wood sheets by means of electronic laser speckle interferometry. Wood Science and Technology, 2006, 40, 351-357.	3.2	12
47	Application of Natural Dyes in the Coloration of Wood. , 0, , 277-313.		12
48	Detection of UF resin on wood particles and in particleboards: potential of selected methods for practice-oriented offline detection. European Journal of Wood and Wood Products, 2012, 70, 829-837.	2.9	12
49	Change in fracturing and colouring of solid spruce and ash wood after thermal modification. Wood Material Science and Engineering, 2014, 9, 92-101.	2.3	12
50	Synergy of multi-scale toughening and protective mechanisms at hierarchical branch-stem interfaces. Scientific Reports, 2015, 5, 14522.	3.3	12
51	How softwood tree branches are attached to stems: hierarchical extension of Shigoâ€™s stemâ€“branch model. Trees - Structure and Function, 2018, 32, 1113-1121.	1.9	12
52	Cutting force analysis of a linear cutting process of spruce. Wood Material Science and Engineering, 2018, 13, 279-285.	2.3	12
53	Measuring Poissonâ€™s ratio: mechanical characterization of spruce wood by means of non-contact optical gauging techniques. Wood Science and Technology, 2018, 52, 1451-1471.	3.2	12
54	The Influence of Thickness on the Tensile Strength of Finnish Birch Veneers under Varying Load Angles. Forests, 2021, 12, 87.	2.1	12

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55	Effect of grain angle on shear strength of glued end grain to flat grain joints of defect-free softwood timber. Wood Science and Technology, 2007, 41, 501-509.	3.2	11
56	Interfacial Adhesion and Mechanical Properties of Wood-Polymer Hybrid Composites Prepared by Injection Molding. Polymers, 2021, 13, 2849.	4.5	11
57	Strength of dried and re-moistened spruce wood compared to native wood. European Journal of Wood and Wood Products, 2003, 61, 439-443.	2.9	10
58	The potential of SilviScanâ€™s X-ray diffractometry method for the rapid assessment of spiral grain in softwood, evaluated by goniometric measurements. Wood Science and Technology, 2008, 42, 95-102.	3.2	10
59	Adhesive bond strength of end grain joints in softwood with varying density. Holzforschung, 2008, 62, 237-242.	1.9	10
60	Strain Measurements within Fiber Boards. Part I: Inhomogeneous Strain Distribution within Medium Density Fiberboards (MDF) Loaded Perpendicularly to the Plane of the Board. Materials, 2012, 5, 1115-1124.	2.9	10
61	Comparing the suitability of domestic spruce, beech, and poplar wood for high-strength densified wood. European Journal of Wood and Wood Products, 2022, 80, 859-876.	2.9	10
62	Influence of Fiber Deviation on Strength of Thin Birch (Betula pendula Roth.) Veneers. Materials, 2020, 13, 1484.	2.9	9
63	Detection on Incipient Fungal Attack in Wood Using Magnetic Resonance Parameter Mapping Wood Studied by Liquid State NMR Measurements. Holzforschung, 2002, 56, 529-534.	1.9	8
64	Comparison of the in-plane shear strength of OSB and plywood using five point bending and EN 789 steel plate test methods. European Journal of Wood and Wood Products, 2005, 63, 160-164.	2.9	8
65	Tensile strength of softwood butt end joints. Part 1: Effect of grain angle on adhesive bond strength. Wood Material Science and Engineering, 2007, 2, 83-89.	2.3	8
66	Effects of high temperature drying in nitrogen atmosphere on mechanical and colour properties of Norway spruce. European Journal of Wood and Wood Products, 2007, 65, 285-291.	2.9	8
67	Effects of Long-term Storage on the Mechanical Characteristics of Wood Plastic Composites Produced from Thermally Modified Wood Fibers. Journal of Thermoplastic Composite Materials, 2010, 23, 845-853.	4.2	8
68	INVESTIGATION OF THE MECHANICAL INTERACTIONS AT THE INTERFACE OF WOOD-CEMENT COMPOSITES BY MEANS OF ELECTRONIC SPECKLE PATTERN INTERFEROMETRY. BioResources, 2012, 7, .	1.0	8
69	Reliability of wood adhesive bonds in a 50 year old glider construction. European Journal of Wood and Wood Products, 2012, 70, 381-384.	2.9	8
70	Adhesive distribution related to mechanical performance of high density wood fibre board. International Journal of Adhesion and Adhesives, 2017, 78, 23-27.	2.9	8
71	Temperature-Related Properties of Solid Birch Wood under Quasi-Static and Dynamic Bending. Materials, 2020, 13, 5518.	2.9	8
72	Predicting strength of Finnish birch veneers based on three different failure criteria. Holzforschung, 2021, 75, 847-856.	1.9	8

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73	Artificial ageing of softwood joints and its effect on internal bond strength with special consideration of flat-to-end grain joints. European Journal of Wood and Wood Products, 2011, 69, 597-604.	2.9	7
74	Fracture energy approach for the identification of changes in the wood caused by the drying processes. Wood Science and Technology, 2013, 47, 1323-1334.	3.2	7
75	Determining cutting force parameters by applying a system function. Machining Science and Technology, 2017, 21, 436-451.	2.5	7
76	Residual wood polymers facilitate compounding of microfibrillated cellulose with poly(lactic acid) for 3D printer filaments. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170046.	3.4	7
77	A Comparative Study on the Temperature Effect of Solid Birch Wood and Solid Beech Wood under Impact Loading. Materials, 2021, 14, 7616.	2.9	7
78	Fracture energy vs. internal bond strength â€“ mechanical characterization of wood-based panels. Wood Material Science and Engineering, 2012, 7, 176-185.	2.3	6
79	Analysing orthotropy in the core layer of wood based panels by means of fracture mechanics. European Journal of Wood and Wood Products, 2012, 70, 851-856.	2.9	6
80	A note on evaluating the photocatalytical activity of anatase TiO2 during photooxidation of acrylic clear wood coatings by FTIR and mechanical characterization. Polymer Degradation and Stability, 2014, 105, 206-210.	5.8	6
81	Chemical and physical interactions of regenerated cellulose yarns and isocyanate-based matrix systems. Scientific Reports, 2021, 11, 11647.	3.3	6
82	The Optical Appearance of Wood Related to Nanoscale Surface Roughness. BioResources, 2013, 8, .	1.0	6
83	The significance of lap-shear testing of wood adhesive bonds by means of Volkersenâ€™s shear lag model. European Journal of Wood and Wood Products, 2012, 70, 903-905.	2.9	5
84	Durability of Wood Exposed to Alternating Climate Test and Natural Weathering. Forests, 2020, 11, 953.	2.1	5
85	Temperature-related tensile modulus of polymer-based adhesive films. Journal of Adhesion, 2023, 99, 259-276.	3.0	5
86	Tensile strength of softwood butt end joints. Part 2: Improvement of bond strength by a hydroxymethylated resorcinol primer. Wood Material Science and Engineering, 2007, 2, 90-95.	2.3	4
87	Determination of the bond strength of treated wood strands embedded in aâ€¯â€¯cement matrix by means of aâ€¯â€¯pull-out test. European Journal of Wood and Wood Products, 2010, 68, 407-414.	2.9	4
88	Fillets Formed by Adhesive Bonding of Axially Oriented Webs to Flat grain Wood Pieces and their Effects on Bond Strength. Journal of Sandwich Structures and Materials, 2009, 11, 245-256.	3.5	3
89	Strain Measurements within Fibre Boards. Part II: Strain Concentrations at the Crack Tip of MDF Specimens Tested by the Wedge Splitting Method. Materials, 2012, 5, 1495-1507.	2.9	3
90	Strain Measurements within Fibreboard. Part III: Analyzing the Process Zone at the Crack Tip of Medium Density Fiberboards (MDF) Double Cantilever I-Beam Specimens. Materials, 2012, 5, 2190-2204.	2.9	3

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91	Water retention of wood particles â€“ characterization of polarity and particle size. European Journal of Wood and Wood Products, 2013, 71, 147-151.	2.9	3
92	Influence of disintegration technologies on particle structure and its mechanical properties. Wood Material Science and Engineering, 2021, 16, 204-210.	2.3	3
93	Mechanical Characterization of Lumber of Small-Diameter Hardwood Species after Different Drying Schedules. Drying Technology, 2013, 31, 1056-1062.	3.1	2
94	Describing the sticking phenomenon of aminoplastic resins: introduction of a new test method. Wood Science and Technology, 2015, 49, 681-694.	3.2	2
95	Energy-absorbing wood composite for improved damage tolerance inspired by mollusc shells. Materials Research Express, 2020, 7, 095101.	1.6	2
96	Influence of yarn structure and coating on the mechanical performance of continuous viscose fiber/epoxy composites. Polymer Composites, 0, , .	4.6	2
97	Dauerhaftigkeit und mechanische StabilitÃt von Terrassendielen bei erhÃ¶hter Temperatur â€“ Ein Werkstoffvergleich: WPC, thermisch modifiziertes Holz und Massivholz. European Journal of Wood and Wood Products, 2014, 72, 815-823.	2.9	1
98	Describing the sticking phenomenon of aminoplastic resins: dependency on temperature and relative humidity. European Journal of Wood and Wood Products, 2016, 74, 31-36.	2.9	1
99	Study on torque and clamping forces of <scp>screwâ€connected</scp> plywood. Engineering Reports, 2020, 2, e12211.	1.7	1
100	Analyzing Process Related, In-Plane Mechanical Variation of High Density Fiber Boards (HDF) Across the Feed Direction. BioResources, 2013, 8, .	1.0	1
101	Wood Adhesive Bondlines by Nanoindentation. , 2007, , 493-494.		1
102	Novel Analytical Method to Determine Factors Causing Unwanted Sticking of Glued Wood Particles onto Machinery Parts*. Forest Products Journal, 2015, 65, 54-59.	0.4	1
103	Comparison of the effect of chemical and mechanical treatment of end-grain surfaces on adhesive bond strength. Wood Material Science and Engineering, 2009, 4, 98-104.	2.3	0
104	CONNECTIONS IN WOOD AND MATERIAL EFFICIENCY: WOOD FORMATION FOLLOWS MECHANICAL LOAD / VERBINDUNGEN IM HOLZ UND MATERIALEFFIZIENZ: DIE HOLZBILDUNG FOLGT DER MECHANISCHEN BELASTUNG. , 2021, , 30-38.		0