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	Temperature-related tensile modulus of polymer-based adhesive films. Journal of Adhesion, 2023, 99, 259-276.	3.0	5
2	The strength and stiffness of oriented wood and cellulose-fibre materials: A review. Progress in Materials Science, 2022, 125, 100916.	32.8	61
3	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
4	Influence of disintegration technologies on particle structure and its mechanical properties. Wood Material Science and Engineering, 2021, 16, 204-210.	2.3	3
5	Predicting strength of Finnish birch veneers based on three different failure criteria. Holzforschung, 2021, 75, 847-856.	1.9	8
6	Chemical and physical interactions of regenerated cellulose yarns and isocyanate-based matrix systems. Scientific Reports, 2021, 11, 11647.	3.3	6
7	The Influence of Thickness on the Tensile Strength of Finnish Birch Veneers under Varying Load Angles. Forests, 2021, 12, 87.	2.1	12
8	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
9	Interfacial Adhesion and Mechanical Properties of Wood-Polymer Hybrid Composites Prepared by Injection Molding. Polymers, 2021, 13, 2849.	4.5	11
10	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
11	Crash simulation of wood and composite wood for future automotive engineering. Wood Material Science and Engineering, 2020, 15, 312-324.	2.3	29
12	Durability of Wood Exposed to Alternating Climate Test and Natural Weathering. Forests, 2020, 11, 953.	2.1	5
13	Preparation of High Strength Plywood from Partially Delignified Densified Wood. Polymers, 2020, 12, 1796.	4.5	25
14	Temperature-Related Properties of Solid Birch Wood under Quasi-Static and Dynamic Bending. Materials, 2020, 13, 5518.	2.9	8
15	Study on torque and clamping forces of <scp>screwâ€connected</scp> plywood. Engineering Reports, 2020, 2, e12211.	1.7	1
16	Influence of Fiber Deviation on Strength of Thin Birch (Betula pendula Roth.) Veneers. Materials, 2020, 13, 1484.	2.9	9
17	Energy-absorbing wood composite for improved damage tolerance inspired by mollusc shells. Materials Research Express, 2020, 7, 095101.	1.6	2
18	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

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19	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
20	Cutting force analysis of a linear cutting process of spruce. Wood Material Science and Engineering, 2018, 13, 279-285.	2.3	12
21	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
22	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
23	Determining cutting force parameters by applying a system function. Machining Science and Technology, 2017, 21, 436-451.	2.5	7
24	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
25	Dimensional stability of multi-layered wood-based panels: a review. Wood Science and Technology, 2017, 51, 969-996.	3.2	19
26	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
27	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
28	Synergy of multi-scale toughening and protective mechanisms at hierarchical branch-stem interfaces. Scientific Reports, 2015, 5, 14522.	3.3	12
29	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
30	Describing the sticking phenomenon of aminoplastic resins: introduction of a new test method. Wood Science and Technology, 2015, 49, 681-694.	3.2	2
31	Thermal conductivity of wood at angles to the principal anatomical directions. Wood Science and Technology, 2015, 49, 577-589.	3.2	61
32	Light microscopic detection of UF adhesive in industrial particle board. Wood Science and Technology, 2015, 49, 517-526.	3.2	16
33	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
34	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
35	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
36	Improving the mechanical resistance of waterborne wood coatings by adding cellulose nanofibres. Reactive and Functional Polymers, 2014, 85, 214-220.	4.1	77

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37	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
38	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
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	Mechanical Characterization of Lumber of Small-Diameter Hardwood Species after Different Drying Schedules. Drying Technology, 2013, 31, 1056-1062.	3.1	2
41	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
42	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
43	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
44	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
45	Studying thermal conductivity of wood at cell wall level by scanning thermal microscopy (SThM). Holzforschung, 2013, 67, 155-159.	1.9	20
46	Analyzing Process Related, In-Plane Mechanical Variation of High Density Fiber Boards (HDF) Across the Feed Direction. BioResources, 2013, 8, .	1.0	1
47	The Optical Appearance of Wood Related to Nanoscale Surface Roughness. BioResources, 2013, 8, .	1.0	6
48	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
49	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
50	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
51	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
52	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
53	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
54	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

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55	Indented rings (hazel growth) of Norway spruce reduce anisotropy of mechanical properties. Wood Science and Technology, 2012, 46, 1239-1246.	3.2	15
56	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
57	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
58	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
59	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
60	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
61	Cellulose nanofibrils as filler for adhesives: effect on specific fracture energy of solid wood-adhesive bonds. Cellulose, 2011, 18, 1227-1237.	4.9	91
62	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
63	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
64	Knots in trees: strain distribution in a naturally optimised structure. Wood Science and Technology, 2010, 44, 389-398.	3.2	19
65	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
66	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
67	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
68	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
69	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
70	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
71	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
72	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

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73	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
74	Adhesive bond strength of end grain joints in softwood with varying density. Holzforschung, 2008, 62, 237-242.	1.9	10
75	Tradeoffs between hydraulic and mechanical stress responses of mature Norway spruce trunk wood. Tree Physiology, 2008, 28, 1179-1188.	3.1	45
76	Hydraulic and mechanical properties of young Norway spruce clones related to growth and wood structure. Tree Physiology, 2007, 27, 1165-1178.	3.1	53
77	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
78	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
79	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
80	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
81	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
82	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
83	Wood Adhesive Bondlines by Nanoindentation. , 2007, , 493-494.		1
84	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
85	Tensile Testing of Single Regenerated Cellulose Fibres. Macromolecular Symposia, 2006, 244, 83-88.	0.7	21
86	Biomechanics of a branch â€“ stem junction in softwood. Trees - Structure and Function, 2006, 20, 643-648.	1.9	42
87	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
88	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
89	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
90	Measurement of strain distribution in timber finger joints. Wood Science and Technology, 2006, 40, 631-636.	3.2	28

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91	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
92	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
93	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
94	Effects of Heartwood Extractives on Mechanical Properties of Larch. IAWA Journal, 2005, 26, 211-220.	2.7	47
95	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
96	EFFECTS OF MACRO- AND MICRO-STRUCTURAL VARIABILITY ON THE SHEAR BEHAVIOR OF SOFTWOOD. IAWA Journal, 2004, 25, 231-243.	2.7	20
97	Genetic parameters of growth and wood quality traits inPicea abies. Scandinavian Journal of Forest Research, 2004, 19, 14-29.	1.4	171
98	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
99	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
100	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
101	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
102	Detection of fungal wood decay using Magnetic Resonance Imaging. European Journal of Wood and Wood Products, 2001, 59, 190-194.	2.9	31
103	Application of Natural Dyes in the Coloration of Wood. , 0, , 277-313.		12
104	Influence of yarn structure and coating on the mechanical performance of continuous viscose fiber/epoxy composites. Polymer Composites, 0, , .	4.6	2