

# Timo KÄärki

## List of Publications by Year in descending order

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Version: 2024-02-01

97  
papers

2,152  
citations

257429

24  
h-index

265191

42  
g-index

97  
all docs

97  
docs citations

97  
times ranked

2015  
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on the recycling of waste carbon fibre/glass fibre-reinforced composites: fibre recovery, properties and life-cycle analysis. <i>SN Applied Sciences</i> , 2020, 2, 1.	2.9	196
2	Review of natural fiber-reinforced engineering plastic composites, their applications in the transportation sector and processing techniques. <i>Journal of Thermoplastic Composite Materials</i> , 2022, 35, 1169-1209.	4.2	130
3	Characterization of wood plastic composites manufactured from recycled plastic blends. <i>Composite Structures</i> , 2017, 161, 469-476.	5.8	115
4	A study of surface changes of wood-polypropylene composites as the result of exterior weathering. <i>Polymer Degradation and Stability</i> , 2012, 97, 337-345.	5.8	110
5	Mineral wool waste in Europe: a review of mineral wool waste quantity, quality, and current recycling methods. <i>Journal of Material Cycles and Waste Management</i> , 2014, 16, 62-72.	3.0	85
6	Recycled construction and demolition waste as a possible source of materials for composite manufacturing. <i>Journal of Building Engineering</i> , 2019, 24, 100742.	3.4	79
7	The use of waste materials in wood-plastic composites and their impact on the profitability of the product. <i>Resources, Conservation and Recycling</i> , 2018, 134, 257-261.	10.8	71
8	Properties of Wood Fibre-Polypropylene Composites: Effect of Wood Fibre Source. <i>Applied Composite Materials</i> , 2011, 18, 101-111.	2.5	67
9	The Modelling of Extrusion Processes for Polymers—A Review. <i>Polymers</i> , 2020, 12, 1306.	4.5	59
10	Accelerated weathering of fire-retarded wood-polypropylene composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016, 81, 305-312.	7.6	55
11	Utilization of recycled mineral wool as filler in wood-polypropylene composites. <i>Construction and Building Materials</i> , 2014, 55, 220-226.	7.2	53
12	Durability of wood plastic composites manufactured from recycled plastic. <i>Heliyon</i> , 2018, 4, e00559.	3.2	50
13	Construction and demolition waste as a raw material for wood polymer composites – Assessment of environmental impacts. <i>Journal of Cleaner Production</i> , 2019, 225, 716-727.	9.3	45
14	Composition of Plastic Fractions in Waste Streams: Toward More Efficient Recycling and Utilization. <i>Polymers</i> , 2019, 11, 69.	4.5	42
15	The effect of carbon fibers, glass fibers and nanoclay on wood flour-polypropylene composite properties. <i>European Journal of Wood and Wood Products</i> , 2014, 72, 73-79.	2.9	38
16	The effect of the use of construction and demolition waste on the mechanical and moisture properties of a wood-plastic composite. <i>Composite Structures</i> , 2019, 210, 321-326.	5.8	37
17	Research progress in wood-plastic nanocomposites. <i>Journal of Thermoplastic Composite Materials</i> , 2014, 27, 180-204.	4.2	36
18	Characterization of plastic blends made from mixed plastics waste of different sources. <i>Waste Management and Research</i> , 2017, 35, 200-206.	3.9	36

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19	Weathering properties of coextruded polypropylene-based composites containing inorganic pigments. <i>Polymer Degradation and Stability</i> , 2015, 120, 10-16.	5.8	35
20	Characterization of Polystyrene Wastes as Potential Extruded Feedstock Filament for 3D Printing. <i>Recycling</i> , 2018, 3, 57.	5.0	35
21	Accelerated weathering of wood-polypropylene composites containing minerals. <i>Composites Part A: Applied Science and Manufacturing</i> , 2012, 43, 2087-2094.	7.6	32
22	Effects of impregnation and heat treatment on the physical and mechanical properties of Scots pine ( <i>Pinus sylvestris</i> ) wood. <i>Wood Material Science and Engineering</i> , 2016, 11, 217-227.	2.3	32
23	Environmental assessment of recycled mineral wool and polypropylene utilized in wood polymer composites. <i>Resources, Conservation and Recycling</i> , 2015, 104, 38-48.	10.8	31
24	Lignin as a functional additive in a biocomposite: Influence on mechanical properties of polylactic acid composites. <i>Industrial Crops and Products</i> , 2019, 140, 111704.	5.2	30
25	Comparison of water absorption and mechanical properties of wood-plastic composites made from polypropylene and polylactic acid. <i>Wood Material Science and Engineering</i> , 2010, 5, 220-228.	2.3	28
26	A Study to Investigate the Mechanical Properties of Recycled Carbon Fibre/Glass Fibre-Reinforced Epoxy Composites Using a Novel Thermal Recycling Process. <i>Processes</i> , 2020, 8, 954.	2.8	26
27	Physical and Mechanical Properties of Wood-Polypropylene Composites Made with Virgin and/or Recycled Polypropylene. <i>Polymer-Plastics Technology and Engineering</i> , 2011, 50, 1040-1046.	1.9	25
28	Mineral fillers for wood-plastic composites. <i>Wood Material Science and Engineering</i> , 2010, 5, 34-40.	2.3	24
29	Effect of Hybrid Talc-Basalt Fillers in the Shell Layer on Thermal and Mechanical Performance of Co-Extruded Wood Plastic Composites. <i>Materials</i> , 2015, 8, 8510-8523.	2.9	24
30	Mechanical Properties of 3D-Printed Wood-Plastic Composites. <i>Key Engineering Materials</i> , 0, 777, 499-507.	0.4	22
31	Influence of mineral fillers on the fire retardant properties of wood-polypropylene composites. <i>Fire and Materials</i> , 2013, 37, 612-620.	2.0	21
32	Different coupling agents in wood-polypropylene composites containing recycled mineral wool: A comparison of the effects. <i>Journal of Reinforced Plastics and Composites</i> , 2015, 34, 879-895.	3.1	21
33	Influence of fire retardants on the reaction-to-fire properties of coextruded wood-polypropylene composites. <i>Fire and Materials</i> , 2016, 40, 535-543.	2.0	19
34	Raw material potential of recyclable materials for fiber composites: a review study. <i>Journal of Material Cycles and Waste Management</i> , 2017, 19, 1136-1143.	3.0	19
35	Novel mechanical pre-treatment methods for effective indium recovery from end-of-life liquid-crystal display panels. <i>Journal of Cleaner Production</i> , 2019, 230, 580-591.	9.3	19
36	Weathering of wood-polypropylene composites containing pigments. <i>European Journal of Wood and Wood Products</i> , 2012, 70, 719-726.	2.9	18

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37	Title is missing!. <i>New Forests</i> , 2000, 20, 65-86.	1.7	16
38	Compression Molded Thermoplastic Composites Entirely Made of Recycled Materials. <i>Sustainability</i> , 2019, 11, 631.	3.2	16
39	Color Changes of Birch Wood During High-Temperature Drying. <i>Drying Technology</i> , 2008, 26, 1125-1128.	3.1	15
40	Promoting Recycling of Mixed Waste Polymers in Wood-Polymer Composites Using Compatibilizers. <i>Recycling</i> , 2019, 4, 6.	5.0	15
41	Use of construction and demolition wastes as mineral fillers in hybrid wood-polymer composites. <i>Journal of Applied Polymer Science</i> , 2016, 133, .	2.6	14
42	Effect of strain rate and temperature on press forming of extruded WPC profiles. <i>Composite Structures</i> , 2017, 180, 845-852.	5.8	14
43	An evaluation of thermoplastic composite fillers derived from construction and demolition waste based on their economic and environmental characteristics. <i>Journal of Cleaner Production</i> , 2021, 280, 125198.	9.3	14
44	The Effect of Fire Retardants on the Flammability, Mechanical Properties, and Wettability of Co-Extruded PP-Based Wood-Plastic Composites. <i>BioResources</i> , 2013, 9, .	1.0	12
45	Effects of wood flour modification on the fire retardancy of wood-plastic composites. <i>European Journal of Wood and Wood Products</i> , 2014, 72, 703-711.	2.9	12
46	Sorting efficiency in mechanical sorting of construction and demolition waste. <i>Waste Management and Research</i> , 2020, 38, 812-816.	3.9	12
47	Printing Parameter Requirements for 3D Printable Geopolymer Materials Prepared from Industrial Side Streams. <i>Materials</i> , 2021, 14, 4758.	2.9	12
48	Life Cycle Assessment of a Thermal Recycling Process as an Alternative to Existing CFRP and GFRP Composite Wastes Management Options. <i>Polymers</i> , 2021, 13, 4430.	4.5	12
49	The effect of mineral fillers on the thermal properties of wood-plastic composites. <i>Wood Material Science and Engineering</i> , 2012, 7, 107-114.	2.3	11
50	Reinforcing wood-plastic composites with macro- and micro-sized cellulosic fillers: Comparative analysis. <i>Journal of Reinforced Plastics and Composites</i> , 2013, 32, 1746-1756.	3.1	10
51	Improving the UV and water-resistance properties of Scots pine ( <i>Pinus sylvestris</i> ) with impregnation modifiers. <i>European Journal of Wood and Wood Products</i> , 2014, 72, 445-452.	2.9	10
52	The effect of primary sludge on the mechanical performance of high-density polyethylene composites. <i>Industrial Crops and Products</i> , 2017, 104, 129-132.	5.2	10
53	Utilization of Industrial Wastes from Mining and Packaging Industries in Wood-Plastic Composites. <i>Journal of Polymers and the Environment</i> , 2018, 26, 1504-1510.	5.0	10
54	Reaction-to-Fire Properties of Wood-Polypropylene Composites Containing Different Fire Retardants. <i>Fire Technology</i> , 2015, 51, 53-65.	3.0	9

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55	Effect of inorganic pigments on the properties of coextruded polypropylene-based composites. <i>Journal of Thermoplastic Composite Materials</i> , 2018, 31, 23-33.	4.2	9
56	Effects of Atmospheric Plasma Treatment on the Surface Properties of Wood-Plastic Composites. <i>Advanced Materials Research</i> , 0, 718-720, 176-185.	0.3	8
57	Resistance to weathering of wood-polypropylene and wood-wollastonite-polypropylene composites made with and without carbon black. <i>Pigment and Resin Technology</i> , 2014, 43, 185-193.	0.9	8
58	Flammability of wood plastic composites prepared from plastic waste. <i>Fire and Materials</i> , 2018, 42, 198-201.	2.0	8
59	Mechanical Properties of Recycled Polymer Composites Made from Side-Stream Materials from Different Industries. <i>Sustainability</i> , 2019, 11, 6054.	3.2	8
60	Mechanical Sorting Processing of Waste Material Before Composite Manufacturing – A Review. <i>Journal of Engineering Science and Technology Review</i> , 2018, 11, 35-46.	0.4	8
61	Effect of Fiber Content and Silane Treatment on the Mechanical Properties of Recycled Acrylonitrile-Butadiene-Styrene Fiber Composites. <i>Chemistry</i> , 2021, 3, 1258-1270.	2.2	8
62	Feasibility Assessment of a Wood-Plastic Composite Post-Production Process: Formability. <i>BioResources</i> , 2016, 11, .	1.0	7
63	The influence of carbon-based fillers on the flammability of polypropylene-based coextruded wood-plastic composite. <i>Fire and Materials</i> , 2016, 40, 498-506.	2.0	7
64	Role of moisture on press formed products made of Wood Plastic Composites. <i>Procedia Manufacturing</i> , 2018, 17, 1090-1096.	1.9	7
65	The Potential of Reusing Technical Plastics. <i>Procedia Manufacturing</i> , 2019, 39, 502-508.	1.9	7
66	Optimization of Compression Molding Process Parameters for NFPC Manufacturing Using Taguchi Design of Experiment and Moldflow Analysis. <i>Processes</i> , 2021, 9, 1853.	2.8	7
67	Thermal performance and optical properties of wood-polymer composites. <i>Journal of Thermoplastic Composite Materials</i> , 2013, 26, 60-73.	4.2	6
68	The Effects of the Substitution of Wood Fiber with Agro-based Fiber (Barley Straw) on the Properties of Natural Fiber/Polypropylene Composites. <i>MATEC Web of Conferences</i> , 2015, 30, 01014.	0.2	6
69	Three-dimensional forming of plastic-coated fibre-based materials using a thermoforming process. <i>Packaging Technology and Science</i> , 2022, 35, 543-555.	2.8	6
70	Eine Methode zur Bestimmung des Fließverhaltens von flüssigem Wasser im Holz während des Trocknens unter Anwendung eines fluoreszierenden Farbstofftracers. <i>European Journal of Wood and Wood Products</i> , 2011, 69, 287-293.	2.9	5
71	Accelerated weathering of wood-polypropylene composite containing carbon fillers. <i>Journal of Composite Materials</i> , 2016, 50, 1387-1393.	2.4	5
72	Effects of water immersion-freeze-thaw cycling on the properties of wood-polypropylene composites containing pigments. <i>Pigment and Resin Technology</i> , 2011, 40, 386-392.	0.9	4

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73	Manufacturability of Wood Plastic Composite Sheets on the Basis of the Post-Processing Cooling Curve. <i>BioResources</i> , 2015, 10, .	1.0	4
74	The Influence of Different Carbon Type Fillers on the Mechanical and Physical Properties of Co-Extruded PP-Based WPC. <i>Advanced Materials Research</i> , 0, 1025-1026, 200-207.	0.3	3
75	Weathering of wood-polypropylene and wood-wollastonite-polypropylene composites containing pigments in Finnish climatic conditions. <i>Pigment and Resin Technology</i> , 2015, 44, 313-321.	0.9	3
76	The influence of melamine impregnation and heat treatment on the fire performance of Scots pine ( <i>Pinus sylvestris</i> ) wood. <i>Fire and Materials</i> , 2016, 40, 731-737.	2.0	3
77	Design of Tooling System and Identifying Crucial Processing Parameters for NFPC Manufacturing in Automotive Applications. <i>Journal of Composites Science</i> , 2021, 5, 169.	3.0	3
78	Ultraviolet Light Protection of Wood-Plastic Composites. A Review of the Current Situation. <i>Advanced Science Letters</i> , 2013, 19, 320-324.	0.2	3
79	Esterified Lignin from Construction and Demolition Waste (CDW) as a Versatile Additive for Poly(lactic acid) (PLA) Composites – The Effect of Artificial Weathering on its Performance. <i>Global Challenges</i> , 2022, 6, .	3.6	3
80	Co-Extrusion of Wood Flour/PP Composites with PP-Based Cap Layer Reinforced with Macro-and Micro-Sized Cellulosic Fibres. <i>Advanced Materials Research</i> , 0, 834-836, 203-210.	0.3	2
81	Effect of Weathering on the Properties of Wood-Polypropylene Composites Containing Minerals. <i>Polymers and Polymer Composites</i> , 2014, 22, 763-770.	1.9	2
82	Post-Extrusion Processing of Extruded Wood Plastic Composites and Selection of Belt Conveyor Cover Material. <i>BioResources</i> , 2016, 11, .	1.0	2
83	Promoting and Demoting Factors of Ecodesign Methodologies for The Application of Recycled Construction Waste: A Case Study of a Composite Product. <i>Urban Science</i> , 2019, 3, 114.	2.3	2
84	The Impact of Textile Waste on the Features of High-Density Polyethylene (HDPE) Composites. <i>Urban Science</i> , 2021, 5, 59.	2.3	2
85	A Finite Element Study to Investigate the Mechanical Behaviour of Unidirectional Recycled Carbon Fibre/Glass Fibre Reinforced Epoxy Composites. <i>Polymers</i> , 2021, 13, 3192.	4.5	2
86	Tracing the migration of liquid water and wood extractives in silver birch and Scots pine sawn timber during drying using a dye solution. <i>Wood Material Science and Engineering</i> , 2010, 5, 116-122.	2.3	1
87	Determination and Comparison of Material Properties of Commercial Wood-Plastic Composite Products. <i>Advanced Materials Research</i> , 0, 1051, 242-249.	0.3	1
88	Effect of press force in tensile strength and surface quality of press formed wood plastic composite products. <i>AIP Conference Proceedings</i> , 2019, , .	0.4	1
89	Improving durability of wood-mixed waste plastic composites with compatibilizers. <i>IOP Conference Series: Materials Science and Engineering</i> , 0, 490, 022001.	0.6	1
90	A Study on the Effect of Construction and Demolition Waste (CDW) Plastic Fractions on the Moisture and Resistance to Indentation of Wood-Polymer Composites (WPC). <i>Journal of Composites Science</i> , 2021, 5, 205.	3.0	1

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91	Comparison of Hot Gas and Hot Plate Welding of Wood-Plastic Composites. <i>Advanced Materials Research</i> , 2013, 664, 525-532.	0.3	0
92	Heat Build-Up and Fire Performance of Wood-Polypropylene Composites Containing Recycled Mineral Wool. <i>Advanced Materials Research</i> , 2013, 849, 269-276.	0.3	0
93	Method for Limiting Waste in Wood Plastic Composite Post-Production by Means of Press Unit Control Parameters Utilizing Temperature-Related Dimensional Changes. <i>BioResources</i> , 2017, 12, .	1.0	0
94	The Mechanical and Physical Properties of Construction and Demolition Waste - Epoxy Composites. <i>Key Engineering Materials</i> , 0, 759, 9-14.	0.4	0
95	The Impact of Primary Sludge on the Physical Features of High-Density Polyethylene (HDPE) Composites. <i>Resources</i> , 2019, 8, 184.	3.5	0
96	Technological Landscape and Ideation in the Field of Waste Separation with Help of TRIZ. <i>IFIP Advances in Information and Communication Technology</i> , 2019, , 328-339.	0.7	0
97	The Effect of Construction and Demolition Waste Plastic Fractions on Wood-Polymer Composite Properties. <i>Journal of Visualized Experiments</i> , 2020, , .	0.3	0