

Mateusz Barczewski

List of Publications by Year in descending order

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102
papers

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citations

236912

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all docs

102
docs citations

102
times ranked

1438
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of sunflower husk, hazelnut shell and walnut shell as waste agricultural fillers for epoxy-based composites: A study into mechanical behavior related to structural and rheological properties. <i>Polymer Testing</i> , 2019, 75, 1-11.	4.8	107
2	Hybrid effects of basalt fibers and basalt powder on thermomechanical properties of epoxy composites. <i>Composites Part B: Engineering</i> , 2017, 125, 157-164.	12.0	94
3	Basalt waste management in the production of highly effective porous polyurethane composites for thermal insulating applications. <i>Polymer Testing</i> , 2019, 76, 90-100.	4.8	67
4	Evaluation of highly filled epoxy composites modified with walnut shell waste filler. <i>Polymer Bulletin</i> , 2018, 75, 2511-2528.	3.3	66
5	Advanced SA/PVA-based hydrogel matrices with prolonged release of Aloe vera as promising wound dressings. <i>Materials Science and Engineering C</i> , 2021, 120, 111667.	7.3	60
6	Cork-wood hybrid filler system for polypropylene and poly(lactic acid) based injection molded composites. Structure evaluation and mechanical performance. <i>Composites Part B: Engineering</i> , 2019, 163, 655-668.	12.0	55
7	Basalt powder as an eco-friendly filler for epoxy composites: Thermal and thermo-mechanical properties assessment. <i>Composites Part B: Engineering</i> , 2019, 164, 272-279.	12.0	50
8	Rigid polyurethane foams modified with thermoset polyester-glass fiber composite waste. <i>Polymer Testing</i> , 2020, 81, 106190.	4.8	46
9	Rotational Molding of Linear Low-Density Polyethylene Composites Filled with Wheat Bran. <i>Polymers</i> , 2020, 12, 1004.	4.5	44
10	Correlation between Processing Parameters and Degradation of Different Polylactide Grades during Twin-Screw Extrusion. <i>Polymers</i> , 2020, 12, 1333.	4.5	41
11	Thermal Stability, Fire and Smoke Behaviour of Epoxy Composites Modified with Plant Waste Fillers. <i>Polymers</i> , 2019, 11, 1234.	4.5	39
12	Characterization of poly(lactic acid) biocomposites filled with chestnut shell waste. <i>Journal of Material Cycles and Waste Management</i> , 2018, 20, 914-924.	3.0	37
13	Complex modification effect of linseed cake as an agricultural waste filler used in high density polyethylene composites. <i>Iranian Polymer Journal (English Edition)</i> , 2018, 27, 677-688.	2.4	36
14	Polyethylene green composites modified with post agricultural waste filler: thermo-mechanical and damping properties. <i>Composite Interfaces</i> , 2018, 25, 287-299.	2.3	32
15	Injection Molding of Highly Filled Polypropylene-based Biocomposites. Buckwheat Husk and Wood Flour Filler: A Comparison of Agricultural and Wood Industry Waste Utilization. <i>Polymers</i> , 2019, 11, 1881.	4.5	32
16	Sustainable upcycling of brewers' spent grain by thermo-mechanical treatment in twin-screw extruder. <i>Journal of Cleaner Production</i> , 2021, 285, 124839.	9.3	32
17	Comparison of Various Chemical Treatments Efficiency in Relation to the Properties of Flax, Hemp Fibers and Cotton trichomes. <i>Journal of Natural Fibers</i> , 2021, 18, 735-751.	3.1	32
18	On the impact of flax fibers as an internal layer on the properties of basalt-epoxy composites modified with silanized basalt powder. <i>Composites Communications</i> , 2020, 20, 100360.	6.3	31

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19	Application of the Basalt Powder as a Filler for Polypropylene Composites With Improved Thermo-Mechanical Stability and Reduced Flammability. <i>Polymer Engineering and Science</i> , 2019, 59, E71.	3.1	30
20	Fire behavior of flame retarded unsaturated polyester resin with high nitrogen content additives. <i>Polymer Testing</i> , 2020, 84, 106379.	4.8	30
21	Rotational molding of polylactide (PLA) composites filled with copper slag as a waste filler from metallurgical industry. <i>Polymer Testing</i> , 2022, 106, 107449.	4.8	29
22	Coffee Silverskin as a Multifunctional Waste Filler for High-Density Polyethylene Green Composites. <i>Journal of Composites Science</i> , 2021, 5, 44.	3.0	27
23	Evaluation of polypropylene hybrid composites containing glass fiber and basalt powder. <i>Journal of Polymer Engineering</i> , 2018, 38, 281-289.	1.4	26
24	The effect of two-step surface treatment by hydrogen peroxide and silanization of flax/cotton fabrics on epoxy-based laminates thermomechanical properties and structure. <i>Journal of Materials Research and Technology</i> , 2020, 9, 13813-13824.	5.8	26
25	Development of polylactide composites with improved thermomechanical properties by simultaneous use of basalt powder and a nucleating agent. <i>Polymer Composites</i> , 2020, 41, 2947-2957.	4.6	26
26	Melt fracture and rheology of linear low density polyethylene - calcium carbonate composites. <i>Polymer Engineering and Science</i> , 2017, 57, 998-1004.	3.1	25
27	Accelerated Weathering of Polylactide-Based Composites Filled with Linseed Cake: The Influence of Time and Oil Content within the Filler. <i>Polymers</i> , 2019, 11, 1495.	4.5	25
28	Mechanical, Thermal and Rheological Properties of Polyethylene-Based Composites Filled with Micrometric Aluminum Powder. <i>Materials</i> , 2020, 13, 1242.	2.9	25
29	Utilization of linseed cake as a postagricultural functional filler for poly(lactic acid) green composites. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47152.	2.6	24
30	Synergistic effect of different basalt fillers and annealing on the structure and properties of polylactide composites. <i>Polymer Testing</i> , 2020, 89, 106628.	4.8	24
31	Recent Advances in Development of Waste-Based Polymer Materials: A Review. <i>Polymers</i> , 2022, 14, 1050.	4.5	24
32	Poly(lactic acid) green composites filled with linseed cake as an agricultural waste filler. Influence of oil content within the filler on the rheological behavior. <i>Journal of Applied Polymer Science</i> , 2019, 136, 47651.	2.6	22
33	Thermal Insulation and Sound Absorption Properties of Open-Cell Polyurethane Foams Modified with Bio-Polyol Based on Used Cooking Oil. <i>Materials</i> , 2020, 13, 5673.	2.9	22
34	Crystallization of polylactide-based green composites filled with oil-rich waste fillers. <i>Journal of Polymer Research</i> , 2020, 27, 1.	2.4	21
35	Effect of wood flour addition and modification of its surface on the properties of rotationally molded polypropylene composites. <i>Polimery</i> , 2018, 63, 772-784.	0.7	21
36	Polyethylene Wax Modified by Organoclay Bentonite Used in the Lost-Wax Casting Process: Processing-Structure-Property Relationships. <i>Materials</i> , 2020, 13, 2255.	2.9	20

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37	Thermal Stability and Flammability of Polypropylene-Silsesquioxane Nanocomposites. <i>International Journal of Polymer Analysis and Characterization</i> , 2014, 19, 500-509.	1.9	19
38	The Effect of Surface Treatment with Isocyanate and Aromatic Carbodiimide of Thermally Expanded Vermiculite Used as a Functional Filler for Polylactide-Based Composites. <i>Polymers</i> , 2021, 13, 890.	4.5	18
39	The Effect of Manufacture Process on Mechanical Properties and Burning Behavior of Epoxy-Based Hybrid Composites. <i>Materials</i> , 2022, 15, 301.	2.9	18
40	Processing properties of thermoplastic polymers modified by polyhedral oligomeric silsesquioxanes (POSS). <i>Polimery</i> , 2013, 58, 805-815.	0.7	17
41	Novel polypropylene nucleating agent with polyhedral oligomeric silsesquioxane core: synthesis and application. <i>Polymer International</i> , 2016, 65, 1080-1088.	3.1	16
42	Application of waste bulk moulded composite (BMC) as a filler for isotactic polypropylene composites. <i>Journal of Advanced Research</i> , 2016, 7, 373-380.	9.5	16
43	Rheological and Processing Properties of Poly(lactic acid) Composites Filled with Ground Chestnut Shell. <i>Porrime</i> , 2018, 42, 267-274.	0.2	15
44	The Effect of Glycerin Content in Sodium Alginate/Poly(vinyl alcohol)-Based Hydrogels for Wound Dressing Application. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12022.	4.1	14
45	Valorization of disposable polylactide (PLA) cups by rotational molding technology: The influence of pre-processing grinding and thermal treatment. <i>Polymer Testing</i> , 2022, 107, 107481.	4.8	14
46	Fabrication of the self-reinforced composites using co-extrusion technique. <i>Journal of Applied Polymer Science</i> , 2014, 131, .	2.6	13
47	The influence of degree of fragmentation of <i>Pinus sibirica</i> on flammability, thermal and thermomechanical behavior of the epoxy-composites. <i>Polymer Testing</i> , 2019, 79, 106036.	4.8	13
48	Assessment of the Electrostatic Separation Effectiveness of Plastic Waste Using a Vision System. <i>Sensors</i> , 2020, 20, 7201.	3.8	13
49	Insights into the Thermo-Mechanical Treatment of Brewers' Spent Grain as a Potential Filler for Polymer Composites. <i>Polymers</i> , 2021, 13, 879.	4.5	13
50	Morphology and thermomechanical properties of epoxy composites highly filled with waste bulk molding compounds (BMC). <i>Journal of Polymer Engineering</i> , 2015, 35, 805-811.	1.4	12
51	Effect of Basalt Powder Surface Treatments on Mechanical and Processing Properties of Polylactide-Based Composites. <i>Materials</i> , 2020, 13, 5436.	2.9	12
52	Impact Strength of Hybrid Epoxy-Basalt Composites Modified with Mineral and Natural Fillers. <i>ChemEngineering</i> , 2021, 5, 56.	2.4	12
53	Recycling of Plastics from Cable Waste from Automotive Industry in Poland as an Approach to the Circular Economy. <i>Polymers</i> , 2021, 13, 3845.	4.5	12
54	Synthesis and Influence of Sodium Benzoate Silsesquioxane Based Nucleating Agent on Thermal and Mechanical Properties of Isotactic Polypropylene. <i>Journal of Macromolecular Science - Pure and Applied Chemistry</i> , 2014, 51, 907-913.	2.2	11

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55	Thermo-mechanical and mechanical behavior of hybrid isotactic polypropylene glass fiber reinforced composites (GFRG) modified with calcium carbonate (CaCO ₃). Polymer Engineering and Science, 2020, 60, 1588-1603.	3.1	11
56	Influence of a sorbitol-based nucleating agent modified with silsesquioxanes on the non-isothermal crystallization of isotactic polypropylene. Journal of Applied Polymer Science, 2014, 131, .	2.6	10
57	Rheological and single screw extrusion processability studies of isotactic polypropylene composites filled with basalt powder. Polymer Testing, 2020, 91, 106768.	4.8	10
58	Mechanical Properties, Microstructure and Surface Quality of Polypropylene Green Composites as a Function of Sunflower Husk Waste Filler Particle Size and Content. Journal of Renewable Materials, 2021, 9, 841-853.	2.2	10
59	Tribo-Electrostatic Separation Analysis of a Beneficial Solution in the Recycling of Mixed Poly(Ethylene Terephthalate) and High-Density Polyethylene. Energies, 2021, 14, 1755.	3.1	10
60	MuCell and InduMold technologies in production of high quality automotive parts from polymer materials. Polimery, 2018, 63, 145-152.	0.7	10
61	Effect of heterogeneous nucleation on isotactic polypropylene-polyoxymethylene blends properties and miscibility. Macromolecular Research, 2015, 23, 850-860.	2.4	9
62	Mechanically robust and thermally stable abrasive tools from phenolic resins reinforced with diazonium-modified zeolites. Polymer Composites, 2019, 40, 3209-3219.	4.6	9
63	Comparative Study of the Reinforcement Type Effect on the Thermomechanical Properties and Burning of Epoxy-Based Composites. Journal of Composites Science, 2021, 5, 89.	3.0	9
64	The accelerated aging impact on polyurea spray-coated composites filled with basalt fibers, basalt powder, and halloysite nanoclay. Composites Part B: Engineering, 2021, 225, 109286.	12.0	9
65	Influence of the cooling rate on the non-isothermal crystallization of isotactic polypropylene modified with sorbitol derivative and silsesquioxane. Polimery, 2013, 58, 920-923.	0.7	9
66	Thermo-rheological properties and miscibility of linear low-density polyethylene-silsesquioxane nanocomposites. Journal of Applied Polymer Science, 2015, 132, .	2.6	8
67	Effect of Quinacridone Pigments on Properties and Morphology of Injection Molded Isotactic Polypropylene. International Journal of Polymer Science, 2017, 2017, 1-8.	2.7	8
68	The influence of oil content within lignocellulosic filler on thermal degradation kinetics and flammability of polylactide composites modified with linseed cake. Polymer Composites, 2020, 41, 4503-4513.	4.6	8
69	Polylactide: from Synthesis and Modification to Final Properties. Advances in Science and Technology Research Journal, 2021, 15, 9-29.	0.8	8
70	Influence of accelerated weathering on mechanical and thermomechanical properties of poly(lactic) Tj ETQq0 0 0 rgBT /Overlçck 10 Tf 5	0.7	8
71	Milled basalt fibers as reinforcement for polyurea composite spray coatings with improved thermomechanical stability and mechanical performance. Polimery, 2020, 65, 184-195.	0.7	8
72	Thermomechanical and Fire Properties of Polyethylene-Composite-Filled Ammonium Polyphosphate and Inorganic Fillers: An Evaluation of Their Modification Efficiency. Polymers, 2022, 14, 2501.	4.5	8

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73	Influence of heterogeneous nucleation on thermodynamic properties of isotactic polypropylene. Polish Journal of Chemical Technology, 2013, 15, 71-74.	0.5	7
74	Nonisothermal crystallization of highly filled polyolefin/calcium carbonate composites. Journal of Applied Polymer Science, 2014, 131, .	2.6	7
75	Development and Characterization of the Injection-Molded Polymer Composites Made from Bicomponent Fibers. Polymer-Plastics Technology and Engineering, 2015, 54, 33-46.	1.9	7
76	Improvement of mechanical properties of silica/phenolic composites and abrasive tools by modification of filler using diazonium salt with hydroxymethyl groups. Polymer Testing, 2019, 75, 373-379.	4.8	7
77	Synthesis and Characterization of Low-Cost Cresol-Based Benzoxazine Resins as Potential Binders in Abrasive Composites. Materials, 2020, 13, 2995.	2.9	7
78	The Effect of Poly(Vinyl Chloride) Powder Addition on the Thermomechanical Properties of Epoxy Composites Reinforced with Basalt Fiber. Materials, 2020, 13, 3611.	2.9	7
79	Spray-formed polyurea composites filled with basalt powder as inorganic waste filler. Plastics, Rubber and Composites, 2021, 50, 276-284.	2.0	7
80	Morphology, Thermo-Mechanical Properties and Biodegradability of PCL/PLA Blends Reactively Compatibilized by Different Organic Peroxides. Materials, 2021, 14, 4205.	2.9	7
81	Comparison of off-line, on-line and in-line measuring techniques used for determining the rheological characteristics of polyethylene composites with calcium carbonate. Polimery, 2019, 64, 83-92.	0.7	7
82	Moisture Resistance, Thermal Stability and Fire Behavior of Unsaturated Polyester Resin Modified with L-histidinium Dihydrogen Phosphate-Phosphoric Acid. Molecules, 2021, 26, 932.	3.8	6
83	The inhibiting effect of basalt powder on crystallization behavior and the structure-property relationship of β -nucleated polypropylene composites. Polymer Testing, 2021, 103, 107372.	4.8	6
84	Bio-Hybrid Hydrogels Incorporated into a System of Salicylic Acid-pH/Thermosensitive Nanocarriers Intended for Cutaneous Wound-Healing Processes. Pharmaceutics, 2022, 14, 773.	4.5	6
85	The in-line detection method of sharkskin melt flow instability during polyethylene extrusion based on pressure analysis. Journal of Manufacturing Processes, 2020, 59, 153-166.	5.9	5
86	The Influence of Sub-Zero Conditions on the Mechanical Properties of Polylactide-Based Composites. Materials, 2020, 13, 5789.	2.9	5
87	A new method of curing epoxy resin by using bis(heptaphenylaluminosilsesquioxane) as a hardener. Polimery, 2013, 58, 270-275.	0.7	5
88	Evaluation of the Oil-Rich Waste Fillers™ Influence on the Tribological Properties of Polylactide-Based Composites. Materials, 2022, 15, 1237.	2.9	5
89	Dynamic pressure analysis as a tool for determination of sharkskin instability by extrusion of molten polymers. Journal of Polymer Engineering, 2012, 32, 335-341.	1.4	4
90	Poly(vinyl chloride) powder as a low-cost flame retardant modifier for epoxy composites. International Journal of Polymer Analysis and Characterization, 2019, 24, 447-456.	1.9	4

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91	Copper slag as a potential waste filler for polyethylene-based composites manufacturing. Tanzania Journal of Science, 2021, 47, 405-420.	0.3	4
92	Flow instabilities in polymer melt extrusion. Part I. Types and characteristics of flow instabilities. Polimery, 2015, 61, 612-619.	0.7	4
93	Enhanced aging resistance of poly($\hat{\mu}$ -caprolactone)/brewersâ€™ spent grain composites. Polimery, 2022, 67, 3-12.	0.7	4
94	Effect of intumescent flame retardants on nonâ€™isothermal crystallization behavior of highâ€™density polyethylene. Polymer Engineering and Science, 0, , .	3.1	4
95	Flow instabilities in polymer melt extrusions. Part II. Instabilities suppression and evaluation methods. Polimery, 2016, 61, 248-254.	0.7	3
96	The Influence of Poly(Vinyl Alcohol) on Oil Release Behavior of Polylactide- Based Composites Filled with Linseed Cake. Journal of Renewable Materials, 2020, 8, 347-363.	2.2	3
97	Biocomposites from recycled resources as candidates for laboratory reference material to validate analytical tools used in organic compounds emissions investigation. Building and Environment, 2022, 219, 109259.	6.9	3
98	Inhibition of Polymer Photodegradation by Incorporation of Coffee Silverskin. , 0, , .		2
99	Mechanical Properties and Structure of Reactive Rotationally Molded Polyurethane - Basalt Powder Composites. Lecture Notes in Mechanical Engineering, 2019, , 601-609.	0.4	1
100	Plasticized Poly(vinyl chloride) Modified with Developed Fire Retardant System Based on Nanoclay and L-histidinium Dihydrogen Phosphate-Phosphoric Acid. Polymers, 2021, 13, 2909.	4.5	1
101	Fully biodegradable hybrid poly(vinyl alcohol)-based composites reinforced with flax/cotton fabric and modified with a waste filler: Thermomechanical properties. Polymers and Polymer Composites, 2021, 29, 383-392.	1.9	0
102	Concept and Design of the Test Bench for Electrostatic Separation in Plastic Recycling Application. MATEC Web of Conferences, 2022, 357, 04005.	0.2	0