

Florian Arbeiter

List of Publications by Year in descending order

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1,415
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430843

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1048
citing authors

#	ARTICLE	IF	CITATIONS
1	Multimaterial Extrusion-Based Additive Manufacturing of Compliant Crack Arresters: Influence of Interlayer Length, Thickness, and Applied Strain Rate. <i>Advanced Engineering Materials</i> , 2023, 25, .	3.5	6
2	Parameter Optimization of the ARBURG Plastic Freeforming Process by Means of a Design of Experiments Approach. <i>Advanced Engineering Materials</i> , 2023, 25, .	3.5	6
3	How hydrogen bonds influence the slow crack growth resistance of polyamide 12. <i>Polymer</i> , 2022, 239, 124437.	3.8	6
4	Injection Molding Simulation of Polyoxymethylene Using Crystallization Kinetics Data and Comparison with the Experimental Process. <i>Polymer Crystallization</i> , 2022, 2022, 1-15.	0.8	0
5	Toward a new generation of vaginal pessaries via 3D-printing: Concomitant mechanical support and drug delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2022, 174, 77-89.	4.3	11
6	Combined Crack Initiation and Crack Growth Model for Multi-Layer Polymer Materials. <i>Materials</i> , 2022, 15, 3273.	2.9	1
7	Influence of layer architecture on fracture toughness and specimen stiffness in polymer multilayer composites. <i>Materials and Design</i> , 2022, 219, 110828.	7.0	6
8	Optimization of Mechanical Properties and Damage Tolerance in Polymer-Mineral Multilayer Composites. <i>Materials</i> , 2021, 14, 725.	2.9	9
9	Correlation of the cyclic cracked round bar test and hydrostatic pressure test for unplasticized polyvinylchloride. <i>Polymer Testing</i> , 2021, 95, 107125.	4.8	5
10	Size-Induced Constraint Effects on Crack Initiation and Propagation Parameters in Ductile Polymers. <i>Materials</i> , 2021, 14, 1945.	2.9	2
11	Fatigue characterization of polyethylene under mixed mode I/III conditions. <i>International Journal of Fatigue</i> , 2021, 145, 106084.	5.7	3
12	Crack Propagation Analysis of Compression Loaded Rolling Elements. <i>Materials</i> , 2021, 14, 2656.	2.9	1
13	Bending Properties of Lightweight Copper Specimens with Different Infill Patterns Produced by Material Extrusion Additive Manufacturing, Solvent Debinding and Sintering. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 7262.	2.5	18
14	Personalised urethra pessaries prepared by material extrusion-based additive manufacturing. <i>International Journal of Pharmaceutics</i> , 2021, 608, 121112.	5.2	9
15	Structure-Property Relationships of Polyamide 12 Grades Exposed to Rapid Crack Extension. <i>Materials</i> , 2021, 14, 5899.	2.9	3
16	Mechanisms of rapid fracture in PA12 grades. <i>Theoretical and Applied Fracture Mechanics</i> , 2021, , 103145.	4.7	2
17	Mixed Mode I/III fatigue fracture characterization of Polyoxymethylene. <i>International Journal of Fatigue</i> , 2020, 130, 105269.	5.7	12
18	Bioinspired toughness improvement through soft interlayers in mineral reinforced polypropylene. <i>Mechanics of Materials</i> , 2020, 140, 103243.	3.2	14

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19	Mechanical properties of polymeric implant materials produced by extrusion-based additive manufacturing. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 104, 103611.	3.1	74
20	Application of the material inhomogeneity effect for the improvement of fracture toughness of a brittle polymer. <i>Engineering Fracture Mechanics</i> , 2020, 224, 106776.	4.3	23
21	Fracture of Thin-Walled Polyoxymethylene Bulk Specimens in Modes I and III. <i>Materials</i> , 2020, 13, 5096.	2.9	5
22	Effect of polyethylene and polypropylene cross-contamination on slow crack growth resistance. <i>International Journal of Polymer Analysis and Characterization</i> , 2020, 25, 649-666.	1.9	10
23	Damage tolerance-based methodology for fatigue lifetime estimation of a structural component produced by material extrusion-based additive manufacturing. <i>Additive Manufacturing</i> , 2020, 36, 101730.	3.0	5
24	Development of Porous Polyurethane Implants Manufactured via Hot-Melt Extrusion. <i>Polymers</i> , 2020, 12, 2950.	4.5	15
25	Process-induced morphological features in material extrusion-based additive manufacturing of polypropylene. <i>Additive Manufacturing</i> , 2020, 35, 101384.	3.0	23
26	Exploiting the Carbon and Oxa Michael Addition Reaction for the Synthesis of Yne Monomers: Towards the Conversion of Acrylates to Biocompatible Building Blocks. <i>ChemPhotoChem</i> , 2020, 4, 476-480.	3.0	2
27	Slow crack growth resistance of modern PA-U12 grades measured by cyclic cracked round bar tests and strain hardening tests. <i>Polymer Testing</i> , 2020, 86, 106468.	4.8	8
28	J-testing of polymers via the load separation criterion based ESIS TC4 procedure: Effect of the specimen size. <i>Polymer Testing</i> , 2020, 89, 106637.	4.8	4
29	Using Compliant Interlayers as Crack Arresters in 3-D-Printed Polymeric Structures. <i>Materials Performance and Characterization</i> , 2020, 9, 688-700.	0.3	4
30	Methods for automated crack length detection in fracture mechanical fatigue tests of unreinforced polymers. <i>Procedia Structural Integrity</i> , 2020, 28, 1184-1192.	0.8	1
31	Mechanical Recyclability of Polypropylene Composites Produced by Material Extrusion-Based Additive Manufacturing. <i>Polymers</i> , 2019, 11, 1318.	4.5	48
32	Research on pipe materials for tunnel drainage by the A-BB Task Force Drainage. <i>Geomechanik Und Tunnelbau</i> , 2019, 12, 467-471.	0.3	6
33	Impact Optimization of 3D-Printed Poly(methyl methacrylate) for Cranial Implants. <i>Macromolecular Materials and Engineering</i> , 2019, 304, 1900263.	3.6	21
34	Additive manufacturing of zirconia parts by fused filament fabrication and solvent debinding: Selection of binder formulation. <i>Additive Manufacturing</i> , 2019, 26, 117-128.	3.0	49
35	Inter-layer bonding characterisation between materials with different degrees of stiffness processed by fused filament fabrication. <i>Additive Manufacturing</i> , 2019, 28, 184-193.	3.0	25
36	Tensile properties of sintered 17-4PH stainless steel fabricated by material extrusion additive manufacturing. <i>Materials Letters</i> , 2019, 248, 165-168.	2.6	81

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37	Optimization of material properties for highly-filled thermoplastic polymers used in fused filament fabrication of ceramics. AIP Conference Proceedings, 2019, , .	0.4	6
38	Fracture Mechanics Lifetime Prediction of Polyethylene Pipes. Journal of Pipeline Systems Engineering and Practice, 2019, 10, .	1.6	35
39	Optimization of mechanical properties of glassâ€spheresâ€filled polypropylene composites for extrusionâ€based additive manufacturing. Polymer Composites, 2019, 40, 638-651.	4.6	83
40	Influence of crosslinker and water on cyclic properties of carboxylated nitrile butadiene rubber (XNBR). Polymer Testing, 2018, 67, 309-321.	4.8	3
41	Influence of crosslinker and water on mechanical properties of carboxylated nitrile butadiene rubber (XNBR). Polymer Testing, 2018, 66, 24-31.	4.8	14
42	Fracture mechanical characterization and lifetime estimation of near-homogeneous components produced by fused filament fabrication. Polymer Testing, 2018, 66, 105-113.	4.8	71
43	Polypropylene Filled With Glass Spheres in Extrusionâ€Based Additive Manufacturing: Effect of Filler Size and Printing Chamber Temperature. Macromolecular Materials and Engineering, 2018, 303, 1800179.	3.6	95
44	Comparison of J-integral methods for the characterization of tough polypropylene grades close to the glass transition temperature. Engineering Fracture Mechanics, 2018, 203, 2-17.	4.3	8
45	Using (VA)RTM with a Rigid Mould to Produce Fibre Metal Laminates with Proven Impact Strength. Journal of Manufacturing and Materials Processing, 2018, 2, 38.	2.2	3
46	Anisotropic properties of oriented short carbon fibre filled polypropylene parts fabricated by extrusion-based additive manufacturing. Composites Part A: Applied Science and Manufacturing, 2018, 113, 95-104.	7.6	156
47	Cranial Polypropylene Implants by Fused Filament Fabrication. Advanced Engineering Materials, 2017, 19, 1600676.	3.5	16
48	Shrinkage and Warpage Optimization of Expandedâ€Perliteâ€Filled Polypropylene Composites in Extrusionâ€Based Additive Manufacturing. Macromolecular Materials and Engineering, 2017, 302, 1700143.	3.6	111
49	Parametric optimization of intraâ€and interâ€layer strengths in parts produced by extrusionâ€based additive manufacturing of poly(lactic acid). Journal of Applied Polymer Science, 2017, 134, 45401.	2.6	163
50	Influence of molecular structure and reinforcement on fatigue behavior of tough polypropylene materials. Journal of Applied Polymer Science, 2016, 133, .	2.6	10
51	Cyclic tests on cracked round bars as a quick tool to assess the long term behaviour of thermoplastics and elastomers. Polymer Testing, 2015, 45, 83-92.	4.8	27
52	Fracture toughness of high density polyethylene: Fatigue pre-cracking versus femtolaser, razor sharpening and broaching. Engineering Fracture Mechanics, 2015, 149, 199-213.	4.3	25
53	On crack propagation in the welded polyolefin pipes with and without the presence of weld beads. Materials and Design, 2015, 87, 95-104.	7.0	9
54	Fracture mechanical analysis of two commercial polyoxymethylene homopolymer resins. Journal of Applied Polymer Science, 2014, 131, .	2.6	17

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55	Characterisation of quasi-brittle fatigue crack growth in pipe grade polypropylene block copolymer. Polymer Testing, 2014, 37, 186-192.	4.8	14
56	Stiffness Based Fatigue Characterisation of CFRP. Advanced Materials Research, 0, 891-892, 166-171.	0.3	13
57	The Effect of Soil Load on Fracture Behaviour of Three-Layer Polymer Pipe for Non-Pressurised Applications. Key Engineering Materials, 0, 627, 197-200.	0.4	2
58	Numerical Modelling of Cylindrical Specimen under Mixed-Mode Loading Conditions. Key Engineering Materials, 0, 774, 325-330.	0.4	0
59	Compression-Loaded Cracked Cylinder - Stress Intensity Factor Evaluation. Key Engineering Materials, 0, 774, 331-336.	0.4	3
60	Fatigue Crack Propagation under Mixed Mode I and III in Polyoxymethelene Homopolymer. Key Engineering Materials, 0, 827, 404-409.	0.4	2
61	Characterization methods for strain-induced damage in polypropylene. Polymer Engineering and Science, 0, , .	3.1	1
62	On the slow crack growth process and associated structure-property relationships in polyamide 12 grades. Journal of Applied Polymer Science, 0, , 52357.	2.6	0
63	The effects of washing and formaldehyde sterilization on the mechanical performance of poly(methyl) Tj ETQq1 1 0.784314 rgBT /Overd jetting. Advanced Engineering Materials, 0, , .	3.5	0