

Christopher B Williams

List of Publications by Year in descending order

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Version: 2024-02-01

48
papers

2,348
citations

236925
25
h-index

214800
47
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48
all docs

48
docs citations

48
times ranked

2678
citing authors

#	ARTICLE	IF	CITATIONS
1	Mechanical properties of tissue-mimicking composites formed by material jetting additive manufacturing. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2022, 125, 104938.	3.1	10
2	Ageing of PBFâ€Grade Poly(Phenylene Sulfide) Powder and its Effect on Critical Printability Properties. <i>Macromolecular Materials and Engineering</i> , 2021, 306, 2000599.	3.6	3
3	Process-structureâ€property relationships following thermo-oxidative exposure of powder bed fusion printed poly(phenylene sulfide). <i>MRS Communications</i> , 2021, 11, 179-188.	1.8	2
4	3D Printing Carbonaceous Objects from Polyimide Pyrolysis. <i>ACS Macro Letters</i> , 2021, 10, 412-418.	4.8	14
5	Additively manufactured respirators: quantifying particle transmission and identifying system-level challenges for improving filtration efficiency. <i>Journal of Manufacturing Systems</i> , 2021, 60, 762-773.	13.9	13
6	Dissociative Carbamate Exchange Anneals 3D Printed Acrylates. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 38680-38687.	8.0	18
7	Supramolecular Salts for Additive Manufacturing of Polyimides. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 48061-48070.	8.0	9
8	A physical hash for preventing and detecting cyber-physical attacks in additive manufacturing systems. <i>Journal of Manufacturing Systems</i> , 2020, 56, 202-212.	13.9	23
9	Quadruple Hydrogen Bonding Supramolecular Elastomers for Melt Extrusion Additive Manufacturing. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32006-32016.	8.0	41
10	Polymer-inorganic hybrid colloids for ultraviolet-assisted direct ink write of polymer nanocomposites. <i>Additive Manufacturing</i> , 2020, 35, 101393.	3.0	19
11	3D Printing Latex: A Route to Complex Geometries of High Molecular Weight Polymers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 10918-10928.	8.0	46
12	Design of a low-cost, high-temperature inverted build environment to enable desktop-scale additive manufacturing of performance polymers. <i>Additive Manufacturing</i> , 2020, 33, 101111.	3.0	7
13	Vat photopolymerization of liquid, biodegradable PLGA-based oligomers as tissue scaffolds. <i>European Polymer Journal</i> , 2020, 130, 109693.	5.4	22
14	Current understanding and challenges in high temperature additive manufacturing of engineering thermoplastic polymers. <i>Additive Manufacturing</i> , 2020, 34, 101218.	3.0	68
15	3D printing tissue-mimicking materials for realistic transseptal puncture models. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2020, 110, 103971.	3.1	20
16	Impacts of process-induced porosity on material properties of copper made by binder jetting additive manufacturing. <i>Materials and Design</i> , 2019, 182, 108001.	7.0	53
17	<i>110th Anniversary</i>: Vat Photopolymerization-Based Additive Manufacturing: Current Trends and Future Directions in Materials Design. <i>Industrial & Engineering Chemistry Research</i> , 2019, 58, 15109-15118.	3.7	80
18	Polymer Design for 3D Printing Elastomers: Recent Advances in Structure, Properties, and Printing. <i>Progress in Polymer Science</i> , 2019, 97, 101144.	24.7	169

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19	Deposition path planning for material extrusion using specified orientation fields. <i>Procedia Manufacturing</i> , 2019, 34, 754-763.	1.9	9
20	Additive Manufacturing of Hydrocarbon Elastomers via Simultaneous Chain Extension and Cross-linking of Hydrogenated Polybutadiene. <i>ACS Applied Polymer Materials</i> , 2019, 1, 684-690.	4.4	30
21	Comparison of Linear and 4-Arm Star Poly(vinyl pyrrolidone) for Aqueous Binder Jetting Additive Manufacturing of Personalized Dosage Tablets. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 23938-23947.	8.0	51
22	Tuning the material properties of a water-soluble ionic polymer using different counterions for material extrusion additive manufacturing. <i>Polymer</i> , 2019, 176, 283-292.	3.8	16
23	Powder bed fusion of poly(phenylene sulfide) at bed temperatures significantly below melting. <i>Additive Manufacturing</i> , 2019, 28, 506-516.	3.0	18
24	Semi-Crystalline Polymer Blends for Material Extrusion Additive Manufacturing Printability: A Case Study with Poly(ethylene terephthalate) and Polypropylene. <i>Macromolecular Materials and Engineering</i> , 2019, 304, 1800764.	3.6	35
25	A review of the process physics and material screening methods for polymer powder bed fusion additive manufacturing. <i>Progress in Polymer Science</i> , 2019, 93, 68-95.	24.7	177
26	Vat photopolymerization of charged monomers: 3D printing with supramolecular interactions. <i>Polymer Chemistry</i> , 2019, 10, 1442-1451.	3.9	46
27	Mechanical and material properties of castings produced via 3D printed molds. <i>Additive Manufacturing</i> , 2019, 27, 199-207.	3.0	36
28	3D Printing Amorphous Polysiloxane Terpolymers via Vat Photopolymerization. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1800425.	2.2	33
29	Vat photopolymerization 3D printing of acid-cleavable PEG-methacrylate networks for biomaterial applications. <i>Materials Today Communications</i> , 2019, 19, 204-211.	1.9	59
30	Functional siloxanes with photo-activated, simultaneous chain extension and crosslinking for lithography-based 3D printing. <i>Polymer</i> , 2018, 152, 25-34.	3.8	64
31	3D Printing All-Aromatic Polyimides Using Stereolithographic 3D Printing of Polyamic Acid Salts. <i>ACS Macro Letters</i> , 2018, 7, 493-497.	4.8	79
32	Model analysis of feedstock behavior in fused filament fabrication: Enabling rapid materials screening. <i>Polymer</i> , 2018, 152, 51-61.	3.8	77
33	Binder jetting additive manufacturing with a particle-free metal ink as a binder precursor. <i>Materials and Design</i> , 2018, 147, 146-156.	7.0	85
34	Using multi-axis material extrusion to improve mechanical properties through surface reinforcement. <i>Virtual and Physical Prototyping</i> , 2018, 13, 32-38.	10.4	21
35	Printing nanomaterials in shrinking gels. <i>Science</i> , 2018, 362, 1244-1245.	12.6	7
36	Ultraviolet-Assisted Direct Ink Write to Additively Manufacture All-Aromatic Polyimides. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 34828-34833.	8.0	69

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37	Introduction for polymer special issue: Advanced polymers for 3D printing/additive manufacturing. <i>Polymer</i> , 2018, 152, 2-3.	3.8	4
38	Additive manufacturing of pharmaceuticals for precision medicine applications: A review of the promises and perils in implementation. <i>Additive Manufacturing</i> , 2018, 23, 319-328.	3.0	36
39	Binder jetting advanced ceramics for metal-ceramic composite structures. <i>International Journal of Advanced Manufacturing Technology</i> , 2017, 92, 531-545.	3.0	47
40	3D Printing All- ϵ -Aromatic Polyimides using Mask-Projection Stereolithography: Processing the Nonprocessable. <i>Advanced Materials</i> , 2017, 29, 1701240.	21.0	131
41	Polymer structure-property requirements for stereolithographic 3D printing of soft tissue engineering scaffolds. <i>Biomaterials</i> , 2017, 140, 170-188.	11.4	339
42	Poly(ether ester) Ionomers as Water-Soluble Polymers for Material Extrusion Additive Manufacturing Processes. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 12324-12331.	8.0	25
43	3D Printing Polymers with Supramolecular Functionality for Biological Applications. <i>Biomacromolecules</i> , 2017, 18, 2669-2687.	5.4	90
44	Toward Rapid Manufacturability Analysis Tools for Engineering Design Education. <i>Procedia Manufacturing</i> , 2016, 5, 1183-1196.	1.9	11
45	3D-Printable Biodegradable Polyester Tissue Scaffolds for Cell Adhesion. <i>Australian Journal of Chemistry</i> , 2015, 68, 1409.	0.9	17
46	3D Printing Phosphonium Ionic Liquid Networks with Mask Projection Microstereolithography. <i>ACS Macro Letters</i> , 2014, 3, 1205-1209.	4.8	91
47	Inkjet Printing of Quantum Dots in Photopolymer for Use in Additive Manufacturing of Nanocomposites. <i>Advanced Engineering Materials</i> , 2013, 15, 903-907.	3.5	23
48	Penetration Resistance of Cast Metal-Ceramic Composite Lattice Structures. <i>Advanced Engineering Materials</i> , 0, , 2100577.	3.5	5