

Daniel Therriault

List of Publications by Year in descending order

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78
papers

4,425
citations

159585

30
h-index

106344

65
g-index

78
all docs

78
docs citations

78
times ranked

5462
citing authors

#	ARTICLE	IF	CITATIONS
1	Chaotic mixing in three-dimensional microvascular networks fabricated by direct-write assembly. <i>Nature Materials</i> , 2003, 2, 265-271.	27.5	627
2	Three-Dimensional Printing of Multifunctional Nanocomposites: Manufacturing Techniques and Applications. <i>Advanced Materials</i> , 2016, 28, 5794-5821.	21.0	470
3	Multi-Material 3D and 4D Printing: A Survey. <i>Advanced Science</i> , 2020, 7, 1902307.	11.2	323
4	Lightning strike protection of composites. <i>Progress in Aerospace Sciences</i> , 2014, 64, 1-16.	12.1	279
5	One-Step Solvent Evaporation-Assisted 3D Printing of Piezoelectric PVDF Nanocomposite Structures. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 20833-20842.	8.0	206
6	Ultraviolet-Assisted Direct-Write Fabrication of Carbon Nanotube/Polymer Nanocomposite Microcoils. <i>Advanced Materials</i> , 2010, 22, 592-596.	21.0	175
7	Solvent-Cast Three-Dimensional Printing of Multifunctional Microsystems. <i>Small</i> , 2013, 9, 4118-4122.	10.0	163
8	Three-dimensional printing of highly conductive polymer nanocomposites for EMI shielding applications. <i>Materials Today Communications</i> , 2017, 11, 112-118.	1.9	138
9	3D printing of a multifunctional nanocomposite helical liquid sensor. <i>Nanoscale</i> , 2015, 7, 6451-6456.	5.6	124
10	Direct 3D Printing of Hybrid Nanofiber-Based Nanocomposites for Highly Conductive and Shape Memory Applications. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 24523-24532.	8.0	119
11	Processing and Properties of Chitosan Inks for 3D Printing of Hydrogel Microstructures. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 2643-2652.	5.2	99
12	3D Printing of Highly Conductive Nanocomposites for the Functional Optimization of Liquid Sensors. <i>Small</i> , 2016, 12, 6076-6082.	10.0	91
13	Properties of Polylactide Inks for Solvent-Cast Printing of Three-Dimensional Freeform Microstructures. <i>Langmuir</i> , 2014, 30, 1142-1150.	3.5	86
14	Multi-Material Direct Ink Writing (DIW) for Complex 3D Metallic Structures with Removable Supports. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 8499-8506.	8.0	82
15	Rheological and foaming behavior of linear and branched polylactides. <i>Rheologica Acta</i> , 2014, 53, 779-790.	2.4	81
16	3D Printing of Microstructured and Stretchable Chitosan Hydrogel for Guided Cell Growth. <i>Advanced Biology</i> , 2017, 1, 1700058.	3.0	76
17	Mechanical and morphological properties of injection molded linear and branched-polylactide (PLA) nanocomposite foams. <i>European Polymer Journal</i> , 2015, 73, 455-465.	5.4	73
18	3D printing of a self-healing nanocomposite for stretchable sensors. <i>Journal of Materials Chemistry C</i> , 2018, 6, 12180-12186.	5.5	70

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19	Novel direct-write CMOS-based laboratory-on-chip: Design, assembly and experimental results. <i>Sensors and Actuators A: Physical</i> , 2007, 134, 27-36.	4.1	65
20	Micro-extrusion of organic inks for direct-write assembly. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 115020.	2.6	63
21	Simultaneous 3D Printing and Poling of PVDF and Its Nanocomposites. <i>ACS Applied Energy Materials</i> , 2018, 1, 2474-2482.	5.1	61
22	Fast Synthesis of ZnO Nanostructures by Laser-Induced Decomposition of Zinc Acetylacetonate. <i>Inorganic Chemistry</i> , 2007, 46, 11036-11047.	4.0	58
23	Damage response of composites coated with conducting materials subjected to emulated lightning strikes. <i>Materials and Design</i> , 2018, 139, 45-55.	7.0	56
24	Rheological Behavior of Fugitive Organic Inks for Direct-Write Assembly. <i>Applied Rheology</i> , 2007, 17, 10112-1-10112-8.	5.2	49
25	A 0.18- μ m CMOS capacitive sensor Lab-on-Chip. <i>Sensors and Actuators A: Physical</i> , 2008, 141, 454-462.	4.1	49
26	Instability-Assisted Direct Writing of Microstructured Fibers Featuring Sacrificial Bonds. <i>Advanced Materials</i> , 2015, 27, 3676-3680.	21.0	43
27	Metallization of Carbon Fiber Reinforced Polymers for Lightning Strike Protection. <i>Journal of Materials Engineering and Performance</i> , 2018, 27, 5205-5211.	2.5	41
28	Preparation of Highly Exfoliated Polyester-Clay Nanocomposites: Process-Property Correlations. <i>Langmuir</i> , 2012, 28, 791-803.	3.5	39
29	Solvent-cast based metal 3D printing and secondary metallic infiltration. <i>Journal of Materials Chemistry C</i> , 2017, 5, 10448-10455.	5.5	38
30	Preparation and mechanical characterization of laser ablated single-walled carbon-nanotubes/polyurethane nanocomposite microbeams. <i>Composites Science and Technology</i> , 2010, 70, 518-524.	7.8	34
31	Reinforcing epoxy nanocomposites with functionalized carbon nanotubes via biotin-streptavidin interactions. <i>Composites Science and Technology</i> , 2012, 72, 1387-1395.	7.8	31
32	Synthesis of Highly Conductive, Uniformly Silver-Coated Carbon Nanofibers by Electroless Deposition. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 29010-29020.	8.0	29
33	Quiescent and shear-induced crystallization of linear and branched polylactides. <i>Rheologica Acta</i> , 2015, 54, 831-845.	2.4	27
34	CMOS based capacitive sensor laboratory-on-chip: a multidisciplinary approach. <i>Analog Integrated Circuits and Signal Processing</i> , 2009, 59, 1-12.	1.4	26
35	Coextrusion of Multifunctional Smart Sensors. <i>Advanced Engineering Materials</i> , 2018, 20, 1800206.	3.5	26
36	A direct-write microfluidic fabrication process for CMOS-based Lab-on-Chip applications. <i>Microelectronic Engineering</i> , 2009, 86, 2104-2109.	2.4	22

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37	Development of aqueous protein/polysaccharide mixture-based inks for 3D printing towards food applications. <i>Food Hydrocolloids</i> , 2022, 131, 107742.	10.7	22
38	Electrically Conductive Silver Nanoparticles-Filled Nanocomposite Materials as Surface Coatings of Composite Structures. <i>Advanced Engineering Materials</i> , 2016, 18, 1189-1199.	3.5	21
39	Hybrid image processing approach for autonomous crack area detection and tracking using local digital image correlation results applied to single-fiber interfacial debonding. <i>Engineering Fracture Mechanics</i> , 2019, 216, 106485.	4.3	21
40	An efficient and robust monolithic approach to phase-field quasi-static brittle fracture using a modified Newton method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021, 386, 114091.	6.6	20
41	Direct-Dispense Polymeric Waveguides Platform for Optical Chemical Sensors. <i>Sensors</i> , 2008, 8, 7636-7648.	3.8	19
42	Fused filament fabrication of PVDF films for piezoelectric sensing and energy harvesting applications. <i>Materials Advances</i> , 2022, 3, 4851-4860.	5.4	18
43	Experimental Study of Current Collection in Single-Chamber Micro Solid Oxide Fuel Cells with Comblike Electrodes. <i>Journal of the Electrochemical Society</i> , 2008, 155, B994.	2.9	17
44	Residual mechanical properties of a carbon fibers/PEEK space robotic arm after simulated orbital debris impact. <i>International Journal of Impact Engineering</i> , 2015, 84, 78-87.	5.0	16
45	Single-chamber micro solid oxide fuel cells: Study of anode and cathode materials in coplanar electrode design. <i>Solid State Ionics</i> , 2010, 181, 332-337.	2.7	15
46	Spiderweb-Inspired, Transparent, Impact-Absorbing Composite. <i>Cell Reports Physical Science</i> , 2020, 1, 100240.	5.6	14
47	Structural and photoluminescence properties of laser processed ZnO/carbon nanotube nanohybrids. <i>Journal of Materials Research</i> , 2009, 24, 3313-3320.	2.6	13
48	Model Approach for Binder Selection in Binder Jetting. <i>Industrial & Engineering Chemistry Research</i> , 2021, 60, 15162-15173.	3.7	13
49	Fabrication and testing of coplanar single-chamber micro solid oxide fuel cells with geometrically complex electrodes. <i>Journal of Power Sources</i> , 2008, 177, 148-153.	7.8	12
50	Miniaturization limits for single-chamber micro-solid oxide fuel cells with coplanar electrodes. <i>Journal of Power Sources</i> , 2009, 194, 941-949.	7.8	12
51	Micro-infiltration of three-dimensional porous networks with carbon nanotube-based nanocomposite for material design. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1910-1919.	7.6	12
52	High-frequency electromagnetic properties of epitaxial Bi ₂ FeCrO ₆ thin films grown by pulsed laser deposition. <i>Applied Physics Letters</i> , 2011, 99, 183505.	3.3	12
53	Electric field induced alignment of multiwalled carbon nanotubes in polymers and multiscale composites. <i>Advanced Manufacturing: Polymer and Composites Science</i> , 2015, 1, 16-25.	0.4	12
54	Multi-scale modeling of distortion in the non-flat 3D woven composite part manufactured using resin transfer molding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2021, 140, 106145.	7.6	11

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55	Advances in Coaxial Additive Manufacturing and Applications. <i>Advanced Materials Technologies</i> , 2021, 6, 2100356.	5.8	11
56	Selective area synthesis of aligned carbon nanofibers by laser-assisted catalytic chemical vapor deposition. <i>Diamond and Related Materials</i> , 2007, 16, 1541-1549.	3.9	10
57	Continuous and selective-area coating of silver on fiber-reinforced polymer composites for aerospace applications. <i>Materials Today Communications</i> , 2019, 18, 206-212.	1.9	10
58	Hybrid Carbon-Silver Nanofillers for Composite Coatings with Near Metallic Electrical Conductivity. <i>Advanced Engineering Materials</i> , 2018, 20, 1800541.	3.5	8
59	Filling the gap. <i>Nature Nanotechnology</i> , 2007, 2, 393-394.	31.5	7
60	Laser-assisted synthesis of carbon nanofibers: From arrays to thin films and coatings. <i>Surface and Coatings Technology</i> , 2008, 202, 2661-2669.	4.8	6
61	Fast synthesis of ZnO nanostructures by laser-induced chemical liquid deposition. <i>Applied Surface Science</i> , 2009, 255, 5359-5362.	6.1	5
62	3D Printing: Solvent-Cast Three-Dimensional Printing of Multifunctional Microsystems (<i>Small</i> 24/2013). <i>Small</i> , 2013, 9, 4090-4090.	10.0	5
63	Toughening elastomers via microstructured thermoplastic fibers with sacrificial bonds and hidden lengths. <i>Extreme Mechanics Letters</i> , 2021, 43, 101208.	4.1	5
64	Physicochemical Limitations of Capillary Models Applied to High-Concentration Polymer Solutions. <i>ACS Omega</i> , 2022, 7, 5636-5645.	3.5	5
65	Failure mechanisms of coiling fibers with sacrificial bonds made by instability-assisted fused deposition modeling. <i>Soft Matter</i> , 2018, 14, 9777-9785.	2.7	4
66	Design of thermoset composites for high-speed additive manufacturing of lightweight sound-absorbing micro-scaffolds. <i>Additive Manufacturing</i> , 2021, 47, 102245.	3.0	4
67	Experimentally validated modeling of the temperature distribution and the distortion during the Fused Filament Fabrication process. <i>Additive Manufacturing</i> , 2022, 54, 102693.	3.0	4
68	Multi-Material, Multi-Process, Planar, and Nonplanar Additive Manufacturing of Piezoelectric Devices. <i>Advanced Engineering Materials</i> , 2022, 24, .	3.5	4
69	Influence of solution parameters for the fast growth of ZnO nanostructures by laser-induced chemical liquid deposition. <i>Applied Physics A: Materials Science and Processing</i> , 2009, 94, 819-829.	2.3	3
70	Manufacturing of Three-dimensionally Microstructured Nanocomposites through Microfluidic Infiltration. <i>Journal of Visualized Experiments</i> , 2014, , .	0.3	3
71	Liquid Materials: 3D Printing of Highly Conductive Nanocomposites for the Functional Optimization of Liquid Sensors (<i>Small</i> 44/2016). <i>Small</i> , 2016, 12, 6176-6176.	10.0	3
72	High-speed multinozzle additive manufacturing and extrusion modeling of large-scale microsccaffold networks. <i>Additive Manufacturing</i> , 2021, 47, 102294.	3.0	3

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73	Viscoelastic Inks for Direct-Write Microfabrication of Single-Chamber Micro Solid Oxide Fuel Cells with Coplanar Thick Electrodes. Materials Research Society Symposia Proceedings, 2009, 1179, 51.	0.1	2
74	CMOS-Based Capacitive Sensor Array Dedicated to Microfluidic Studies. , 2006, , .		1
75	Direct-Write Microfabrication of Single-Chamber Solid Oxide Fuel Cells with Interdigitated Electrodes. Materials Research Society Symposia Proceedings, 2006, 972, 1.	0.1	1
76	Microstructured Fibers: Instability-Assisted Direct Writing of Microstructured Fibers Featuring Sacrificial Bonds (Adv. Mater. 24/2015). Advanced Materials, 2015, 27, 3708-3708.	21.0	1
77	Photoluminescence quenching, structures, and photovoltaic properties of ZnO nanostructures decorated plasma grown single walled carbon nanotubes. Journal of Nanoparticle Research, 2017, 19, 1.	1.9	1
78	Microstructural and Mechanical Properties of Polyester/Nanoclay Nanocomposites: Microstructure-Mixing Strategy Correlation. Materials Research Society Symposia Proceedings, 2011, 1312, 1.	0.1	0