Daniel Therriault

List of Publications by Year
in descending order

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	Physicochemical Limitations of Capillary Models Applied to High-Concentration Polymer Solutions. ACS Omega, 2022, 7, 5636-5645.	3.5	5
2	Experimentally validated modeling of the temperature distribution and the distortion during the Fused Filament Fabrication process. Additive Manufacturing, 2022, 54, 102693.	3.0	4
3	Development of aqueous protein/polysaccharide mixture-based inks for 3D printing towards food applications. Food Hydrocolloids, 2022, 131, 107742.	10.7	22
4	Multiâ€Material, Multiâ€Process, Planar, and Nonplanar Additive Manufacturing of Piezoelectric Devices. Advanced Engineering Materials, 2022, 24, .	3.5	4
5	Fused filament fabrication of PVDF films for piezoelectric sensing and energy harvesting applications. Materials Advances, 2022, 3, 4851-4860.	5.4	18
6	Multi-scale modeling of distortion in the non-flat 3D woven composite part manufactured using resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2021, 140, 106145.	7.6	11
7	Toughening elastomers via microstructured thermoplastic fibers with sacrificial bonds and hidden lengths. Extreme Mechanics Letters, 2021, 43, 101208.	4.1	5
8	Advances in Coaxial Additive Manufacturing and Applications. Advanced Materials Technologies, 2021, 6, 2100356.	5.8	11
9	Design of thermoset composites for high-speed additive manufacturing of lightweight soundÂabsorbing micro-scaffolds. Additive Manufacturing, 2021, 47, 102245.	3.0	4
10	High-speed multinozzle additive manufacturing and extrusion modeling of large-scale microscaffold networks. Additive Manufacturing, 2021, 47, 102294.	3.0	3
11	An efficient and robust monolithic approach to phase-field quasi-static brittle fracture using a modified Newton method. Computer Methods in Applied Mechanics and Engineering, 2021, 386, 114091.	6.6	20
12	Model Approach for Binder Selection in Binder Jetting. Industrial & Engineering Chemistry Research, 2021, 60, 15162-15173.	3.7	13
13	Spiderweb-Inspired, Transparent, Impact-Absorbing Composite. Cell Reports Physical Science, 2020, 1, 100240.	5.6	14
14	Multiâ€Material 3D and 4D Printing: A Survey. Advanced Science, 2020, 7, 1902307.	11.2	323
15	Multi-Material Direct Ink Writing (DIW) for Complex 3D Metallic Structures with Removable Supports. ACS Applied Materials & Interfaces, 2019, 11, 8499-8506.	8.0	82
16	Hybrid image processing approach for autonomous crack area detection and tracking using local digital image correlation results applied to single-fiber interfacial debonding. Engineering Fracture Mechanics, 2019, 216, 106485.	4.3	21
17	Direct 3D Printing of Hybrid Nanofiber-Based Nanocomposites for Highly Conductive and Shape Memory Applications. ACS Applied Materials & Interfaces, 2019, 11, 24523-24532.	8.0	119
18	Continuous and selective-area coating of silver on fiber-reinforced polymer composites for aerospace applications. Materials Today Communications, 2019, 18, 206-212.	1.9	10

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19	Damage response of composites coated with conducting materials subjected to emulated lightning strikes. Materials and Design, 2018, 139, 45-55.	7.0	56
20	Failure mechanisms of coiling fibers with sacrificial bonds made by instability-assisted fused deposition modeling. Soft Matter, 2018, 14, 9777-9785.	2.7	4
21	3D printing of a self-healing nanocomposite for stretchable sensors. Journal of Materials Chemistry C, 2018, 6, 12180-12186.	5.5	70
22	Hybrid Carbonâ€“Silver Nanofillers for Composite Coatings with Near Metallic Electrical Conductivity. Advanced Engineering Materials, 2018, 20, 1800541.	3.5	8
23	Metallization of Carbon Fiber Reinforced Polymers for Lightning Strike Protection. Journal of Materials Engineering and Performance, 2018, 27, 5205-5211.	2.5	41
24	Processing and Properties of Chitosan Inks for 3D Printing of Hydrogel Microstructures. ACS Biomaterials Science and Engineering, 2018, 4, 2643-2652.	5.2	99
25	Simultaneous 3D Printing and Poling of PVDF and Its Nanocomposites. ACS Applied Energy Materials, 2018, 1, 2474-2482.	5.1	61
26	Coextrusion of Multifunctional Smart Sensors. Advanced Engineering Materials, 2018, 20, 1800206.	3.5	26
27	Three-dimensional printing of highly conductive polymer nanocomposites for EMI shielding applications. Materials Today Communications, 2017, 11, 112-118.	1.9	138
28	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
29	3D Printing of Microstructured and Stretchable Chitosan Hydrogel for Guided Cell Growth. Advanced Biology, 2017, 1, 1700058.	3.0	76
30	One-Step Solvent Evaporation-Assisted 3D Printing of Piezoelectric PVDF Nanocomposite Structures. ACS Applied Materials & Interfaces, 2017, 9, 20833-20842.	8.0	206
31	Solvent-cast based metal 3D printing and secondary metallic infiltration. Journal of Materials Chemistry C, 2017, 5, 10448-10455.	5.5	38
32	Synthesis of Highly Conductive, Uniformly Silver-Coated Carbon Nanofibers by Electroless Deposition. ACS Applied Materials & Interfaces, 2017, 9, 29010-29020.	8.0	29
33	Threeâ€Dimensional Printing of Multifunctional Nanocomposites: Manufacturing Techniques and Applications. Advanced Materials, 2016, 28, 5794-5821.	21.0	470
34	Electrically Conductive Silver Nanoparticlesâ€Filled Nanocomposite Materials as Surface Coatings of Composite Structures. Advanced Engineering Materials, 2016, 18, 1189-1199.	3.5	21
35	3D Printing of Highly Conductive Nanocomposites for the Functional Optimization of Liquid Sensors. Small, 2016, 12, 6076-6082.	10.0	91
36	Liquid Materials: 3D Printing of Highly Conductive Nanocomposites for the Functional Optimization of Liquid Sensors (Small 44/2016). Small, 2016, 12, 6176-6176.	10.0	3

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37	Microstructured Fibers: Instabilityâ€Assisted Direct Writing of Microstructured Fibers Featuring Sacrificial Bonds (Adv. Mater. 24/2015). Advanced Materials, 2015, 27, 3708-3708.	21.0	1
38	Instabilityâ€Assisted Direct Writing of Microstructured Fibers Featuring Sacrificial Bonds. Advanced Materials, 2015, 27, 3676-3680.	21.0	43
39	Mechanical and morphological properties of injection molded linear and branched-polylactide (PLA) nanocomposite foams. European Polymer Journal, 2015, 73, 455-465.	5.4	73
40	Electric field induced alignment of multiwalled carbon nanotubes in polymers and multiscale composites. Advanced Manufacturing: Polymer and Composites Science, 2015, 1, 16-25.	0.4	12
41	3D printing of a multifunctional nanocomposite helical liquid sensor. Nanoscale, 2015, 7, 6451-6456.	5.6	124
42	Residual mechanical properties of a carbon fibers/PEEK space robotic arm after simulated orbital debris impact. International Journal of Impact Engineering, 2015, 84, 78-87.	5.0	16
43	Quiescent and shear-induced crystallization of linear and branched polylactides. Rheologica Acta, 2015, 54, 831-845.	2.4	27
44	Rheological and foaming behavior of linear and branched polylactides. Rheologica Acta, 2014, 53, 779-790.	2.4	81
45	Lightning strike protection of composites. Progress in Aerospace Sciences, 2014, 64, 1-16.	12.1	279
46	Properties of Polylactide Inks for Solvent-Cast Printing of Three-Dimensional Freeform Microstructures. Langmuir, 2014, 30, 1142-1150.	3.5	86
47	Manufacturing of Three-dimensionally Microstructured Nanocomposites through Microfluidic Infiltration. Journal of Visualized Experiments, 2014, , .	0.3	3
48	Solventâ€Cast Threeâ€Dimensional Printing of Multifunctional Microsystems. Small, 2013, 9, 4118-4122.	10.0	163
49	3D Printing: Solventâ€Cast Threeâ€Dimensional Printing of Multifunctional Microsystems (Small 24/2013). Small, 2013, 9, 4090-4090.	10.0	5
50	Reinforcing epoxy nanocomposites with functionalized carbon nanotubes via biotinâ€“streptavidin interactions. Composites Science and Technology, 2012, 72, 1387-1395.	7.8	31
51	Preparation of Highly Exfoliated Polyesterâ€“Clay Nanocomposites: Processâ€“Property Correlations. Langmuir, 2012, 28, 791-803.	3.5	39
52	Micro-infiltration of three-dimensional porous networks with carbon nanotube-based nanocomposite for material design. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1910-1919.	7.6	12
53	High-frequency electromagnetic properties of epitaxial Bi2FeCrO6 thin films grown by pulsed laser deposition. Applied Physics Letters, 2011, 99, 183505.	3.3	12
54	Microstructural and Mechanical Properties of Polyester/Nanoclay Nanocomposites: Microstructure-Mixing Strategy Correlation. Materials Research Society Symposia Proceedings, 2011, 1312, 1.	0.1	0

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55	Ultravioletâ€Assisted Directâ€Write Fabrication of Carbon Nanotube/Polymer Nanocomposite Microcoils. Advanced Materials, 2010, 22, 592-596.	21.0	175
56	Single-chamber micro solid oxide fuel cells: Study of anode and cathode materials in coplanar electrode design. Solid State Ionics, 2010, 181, 332-337.	2.7	15
57	Preparation and mechanical characterization of laser ablated single-walled carbon-nanotubes/polyurethane nanocomposite microbeams. Composites Science and Technology, 2010, 70, 518-524.	7.8	34
58	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
59	Structural and photoluminescence properties of laser processed ZnO/carbon nanotube nanohybrids. Journal of Materials Research, 2009, 24, 3313-3320.	2.6	13
60	CMOS based capacitive sensor laboratory-on-chip: a multidisciplinary approach. Analog Integrated Circuits and Signal Processing, 2009, 59, 1-12.	1.4	26
61	Influence of solution parameters for the fast growth of ZnO nanostructures by laser-induced chemical liquid deposition. Applied Physics A: Materials Science and Processing, 2009, 94, 819-829.	2.3	3
62	A direct-write microfluidic fabrication process for CMOS-based Lab-on-Chip applications. Microelectronic Engineering, 2009, 86, 2104-2109.	2.4	22
63	Miniaturization limits for single-chamber micro-solid oxide fuel cells with coplanar electrodes. Journal of Power Sources, 2009, 194, 941-949.	7.8	12
64	Fast synthesis of ZnO nanostructures by laser-induced chemical liquid deposition. Applied Surface Science, 2009, 255, 5359-5362.	6.1	5
65	Fabrication and testing of coplanar single-chamber micro solid oxide fuel cells with geometrically complex electrodes. Journal of Power Sources, 2008, 177, 148-153.	7.8	12
66	A 0.18-Î¼m CMOS capacitive sensor Lab-on-Chip. Sensors and Actuators A: Physical, 2008, 141, 454-462.	4.1	49
67	Laser-assisted synthesis of carbon nanofibers: From arrays to thin films and coatings. Surface and Coatings Technology, 2008, 202, 2661-2669.	4.8	6
68	Micro-extrusion of organic inks for direct-write assembly. Journal of Micromechanics and Microengineering, 2008, 18, 115020.	2.6	63
69	Direct-Dispense Polymeric Waveguides Platform for Optical Chemical Sensors. Sensors, 2008, 8, 7636-7648.	3.8	19
70	Experimental Study of Current Collection in Single-Chamber Micro Solid Oxide Fuel Cells with Comblike Electrodes. Journal of the Electrochemical Society, 2008, 155, B994.	2.9	17
71	Selective area synthesis of aligned carbon nanofibers by laser-assisted catalytic chemical vapor deposition. Diamond and Related Materials, 2007, 16, 1541-1549.	3.9	10
72	Fast Synthesis of ZnO Nanostructures by Laser-Induced Decomposition of Zinc Acetylacetonate. Inorganic Chemistry, 2007, 46, 11036-11047.	4.0	58

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73	Rheological Behavior of Fugitive Organic Inks for Direct-Write Assembly. Applied Rheology, 2007, 17, 10112-1-10112-8.	5.2	49
74	Novel direct-write CMOS-based laboratory-on-chip: Design, assembly and experimental results. Sensors and Actuators A: Physical, 2007, 134, 27-36.	4.1	65
75	Filling the gap. Nature Nanotechnology, 2007, 2, 393-394.	31.5	7
76	CMOS-Based Capacitive Sensor Array Dedicated to Microfluidic Studies. , 2006, , .		1
77	Direct-Write Microfabrication of Single-Chamber Solid Oxide Fuel Cells with Interdigitated Electrodes. Materials Research Society Symposia Proceedings, 2006, 972, 1.	0.1	1
78	Chaotic mixing in three-dimensional microvascular networks fabricated by direct-write assembly. Nature Materials, 2003, 2, 265-271.	27.5	627