Christopher C Bowland

List of Publications by Year
in descending order

35	923	516710 16	477307 29
papers	citations	h-index	g-index

35	35	35	1154
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A general method to improve 3D-printability and inter-layer adhesion in lignin-based composites. Applied Materials Today, 2018, 12, 138-152.	4.3	145
2	Synthesis of calcium copper titanate (CaCu3Ti4O12) nanowires with insulating SiO2 barrier for low loss high dielectric constant nanocomposites. Nano Energy, 2015, 17, 302-307.	16.0	131
3	A path for lignin valorization via additive manufacturing of high-performance sustainable composites with enhanced 3D printability. Science Advances, 2018, 4, eaat4967.	10.3	131
4	Lead-free 0.5Ba(Zr_{0.2}Ti_{0.8})O₃â€“0.5(Ba_{0.7}Ca_{0.3})TiO₃ nanowires for energy harvesting. Nanoscale, 2016, 8, 5098-5105.	5.8	69
5	Design of tough adhesive from commodity thermoplastics through dynamic crosslinking. Science Advances, 2021, 7, eabk2451.	10.3	66
6	An Acrylonitrileâ€“Butadieneâ€“Lignin Renewable Skin with Programmable and Switchable Electrical Conductivity for Stress/Strain-Sensing Applications. Macromolecules, 2018, 51, 115-127.	4.8	38
7	Ultra-long vertically aligned lead titanate nanowire arrays for energy harvesting in extreme environments. Nano Energy, 2017, 31, 168-173.	16.0	30
8	Enhancing functionalities in carbon fiber composites by titanium dioxide nanoparticles. Composites Science and Technology, 2021, 201, 108491.	7.8	30
9	Barium Titanate Film Interfaces for Hybrid Composite Energy Harvesters. ACS Applied Materials & Interfaces, 2017, 9, 4057-4065.	8.0	28
10	Tunable Electromechanical Liquid Crystal Elastomer Actuators. Advanced Intelligent Systems, 2020, 2, 2000022.	6.1	27
11	Conformal BaTiO₃ Films with High Piezoelectric Coupling through an Optimized Hydrothermal Synthesis. ACS Applied Materials & Interfaces, 2016, 8, 21446-21453.	8.0	24
12	Multifunctional Barium Titanate Coated Carbon Fibers. Advanced Functional Materials, 2014, 24, 6303-6308.	14.9	22
13	A fundamental understanding of whole biomass dissolution in ionic liquid for regeneration of fiber by solution-spinning. Green Chemistry, 2019, 21, 4354-4367.	9.0	22
14	Highly aligned arrays of high aspect ratio barium titanate nanowires via hydrothermal synthesis. Applied Physics Letters, 2015, 106, .	3.3	21
15	Mechanical, thermal, morphological, and rheological characteristics of high performance 3D-printing lignin-based composites for additive manufacturing applications. Data in Brief, 2018, 19, 936-950.	1.0	21
16	Structureâ€“Property Relationships in Aligned Electrospun Barium Titanate Nanofibers. Journal of the American Ceramic Society, 2016, 99, 3902-3908.	3.8	20
17	Responsive lignin for shape memory applications. Polymer, 2019, 160, 210-222.	3.8	16
18	Roll-to-Roll Processing of Silicon Carbide Nanoparticle-Deposited Carbon Fiber for Multifunctional Composites. ACS Applied Materials & Interfaces, 2018, 10, 26576-26585.	8.0	15

#	Article	IF	Citations
19	An Ionomeric Renewable Thermoplastic from Ligninâ€Reinforced Rubber. Macromolecular Rapid Communications, 2019, 40, e1900059.	3.9	10
20	Effects of graphene surface functionalities towards controlled reinforcement of a lignin based renewable thermoplastic rubber. Composites Science and Technology, 2020, 199, 108352.	7.8	10
21	Synthesis of High-Performance Lignin-Based Inverse Thermoplastic Vulcanizates with Tailored Morphology and Properties. ACS Applied Polymer Materials, 2021, 3, 2911-2920.	4.4	10
22	Butanol-Based Organosolv Lignin and Reactive Modification of Poly(ethylene-glycidyl methacrylate). Industrial & Engineering Chemistry Research, 2019, 58, 20300-20308.	3.7	8
23	Hydrothermal synthesis of tetragonal phase BaTiO3 on carbon fiber with enhanced electromechanical coupling. Journal of Materials Science, 2017, 52, 7893-7906.	3.7	6
24	An Engineered Multifunctional Composite for Passive Sensing, Power Harvesting, and In Situ Damage Identification with Enhanced Mechanical Performance. Advanced Materials Technologies, 2022, 7, .	5.8	6
25	Growth of highly textured PbTiO₃films on conductive substrate under hydrothermal conditions. Nanotechnology, 2015, 26, 345602.	2.6	5
26	Vertically Aligned Lead Titanate Nanowire Arrays for High Temperature Energy Harvesting. , 2015, , .		4
27	Fractionation of Lignin for Selective Shape Memory Effects at Elevated Temperatures. Materials, 2020, 13, 1940.	2.9	3
28	Piezoelectric interfaces enabled energy harvesting and tailored damping in fiber composites. Proceedings of SPIE, 2017, , .	0.8	2
29	Development of nanoparticle embedded sizing for enhanced structural health monitoring of carbon fiber composites. Proceedings of SPIE, 2017, , .	0.8	2
30	Data of thermally active lignin-linkages and shape memory of lignin-rubber composites. Data in Brief, 2019, 22, 392-399.	1.0	1
31	Conformal Growth of Textured Barium Titanate Films on Patterned Silicon Wafer. , 2016, , .		0
32	Editorial for the Special Issue on Advanced Fiber-Reinforced Polymer Composites. Journal of Composites Science, 2021, 5, 241.	3.0	0
33	The effect of nanoparticle enhanced sizing on the structural health monitoring sensitivity and mechanical properties of carbon fiber composites. , 2018, , .		0
34	Enhanced piezoresistive sensing of fiber-reinforced composites via embedded nanoparticles. , 2019, , .		0
35	Multifunctional fiber-reinforced composites for passive sensing and energy harvesting with enhanced mechanical performance. , 2022, , .		0