Fei Ren

List of Publications by Year
in descending order

73 papers	1,395 citations	279798 23 h-index	361022 35 g-index
75 all docs	75 docs citations	75 times ranked	1668 citing authors

#	Article	IF	Citations
1	Wear Study of Cubic Boron Nitride (cBN) Cutting Tool for Machining of Compacted Graphite Iron (CGI) with Different Metalworking Fluids. Lubricants, 2022, 10, 51.	2.9	2
2	Improving Interlayer Adhesion of Poly(p-phenylene terephthalamide) (PPTA)/Ultra-high-molecular-weight Polyethylene (UHMWPE) Laminates Prepared by Plasma Treatment and Hot Pressing Technique. Polymers, 2021, 13, 2600.	4.5	9
3	Effect of composite coating on insertion mechanics of needle structure in soft materials. Medical Engineering and Physics, 2021, 95, 104-110.	1.7	7
4	Development of copper powder paste for direct printing and soft mold casting. Additive Manufacturing, 2020, 31, 100992.	3.0	5
5	Nanoindentation study of time-dependent mechanical properties of ultra-high-molecular-weight polyethylene (UHMWPE) at different temperatures. Polymer Testing, 2020, 91, 106787.	4.8	9
6	Synthesis and catalytic performance of polydopamine supported metal nanoparticles. Scientific Reports, 2020, 10, 10416.	3.3	27
7	Biopolymer-Assisted Manufacturing of Aluminumâ€“Copper Nanoparticle Composites with Enhanced Sinterability. ACS Applied Nano Materials, 2019, 2, 5688-5694.	5.0	3
8	Electron-beam induced in situ growth of self-supported metal nanoparticles in ion-containing polydopamine. Materials Letters, 2019, 252, 277-281.	2.6	6
9	Enhanced Thermoelectric Cooling through Introduction of Material Anisotropy in Transverse Thermoelectric Composites. Materials, 2019, 12, 2049.	2.9	0
10	Freestanding Polymer Assembly Conductor by Contact-Free Annealing. ACS Applied Polymer Materials, 2019, 1, 3196-3202.	4.4	0
11	Structure-Mechanical Property Relations of Skin-Core Regions of Poly(p-phenylene terephthalamide) Single Fiber. Scientific Reports, 2019, 9, 740.	3.3	7
12	Nanoparticle-Infused UHMWPE Layer as Multifunctional Coating for High-Performance PPTA Single Fibers. Scientific Reports, 2019, 9, 7183.	3.3	5
13	Mechanical properties of polydopamine (PDA) thin films. MRS Advances, 2019, 4, 405-412.	0.9	19
14	Enhancing the electrical and mechanical properties of copper by introducing nanocarbon derived from polydopamine coating. Journal of Alloys and Compounds, 2019, 778, 288-293.	5.5	7
15	Structural evolution and electrical properties of metal ion-containing polydopamine. Journal of Materials Science, 2019, 54, 6393-6400.	3.7	19
16	Effect of material anisotropy on the transverse thermoelectricity of layered composites. International Journal of Energy Research, 2019, 43, 181-188.	4.5	9
17	Preparation and electrical properties of sintered copper powder compacts modified by polydopamine-derived carbon nanofilms. Journal of Materials Science, 2018, 53, 6562-6573.	3.7	16
18	Copper-polydopamine composite derived from bioinspired polymer coating. Journal of Alloys and Compounds, 2018, 742, 191-198.	5.5	9

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19	Kirigami-Inspired Conducting Polymer Thermoelectrics from Electrostatic Recognition Driven Assembly. ACS Nano, 2018, 12, 7967-7973.	14.6	23
20	Structure Evolution and Thermoelectric Properties of Carbonized Polydopamine Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 6655-6660.	8.0	77
21	Structural health monitoring of compression connectors for overhead transmission lines. , 2017, , .		0
22	Electrical and mechanical properties of poly(dopamine)-modified copper/reduced graphene oxide composites. Journal of Materials Science, 2017, 52, 11620-11629.	3.7	45
23	In Situ Neutron Scattering Study of Nanostructured PbTe-PbS Bulk Thermoelectric Material. Journal of Electronic Materials, 2017, 46, 2604-2610.	2.2	4
24	Transverse Thermoelectricity in Fibrous Composite Materials. Energies, 2017, 10, 1006.	3.1	6
25	Smart patch integration development of compression connector structural health monitoring in overhead transmission lines. , 2016, , .		0
26	In situ neutron scattering study of nanoscale phase evolution in PbTe-PbS thermoelectric material. Applied Physics Letters, 2016, 109, 081903.	3.3	8
27	Polydopamine Coating for Thermal Insulation of Shape Memory Alloy Wires. , 2016, , .		2
28	Steel-Concrete Composite Vessel for Stationary High-Pressure Hydrogen Storage. , 2016, , .		2
29	Cooling performance of transverse thermoelectric devices. International Journal of Heat and Mass Transfer, 2016, 95, 787-794.	4.8	28
30	Chemically Driven Interfacial Coupling in Charge-Transfer Mediated Functional Superstructures. Nano Letters, 2016, 16, 2851-2859.	9.1	14
31	Development of Thermoelectric Fibers for Miniature Thermoelectric Devices. Journal of Electronic Materials, 2016, 45, 1412-1418.	2.2	22
32	Reciprocated suppression of polymer crystallization toward improved solid polymer electrolytes: Higher ion conductivity and tunable mechanical properties. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1450-1457.	2.1	24
33	The development of in situ fracture toughness evaluation techniques in hydrogen environment. International Journal of Hydrogen Energy, 2015, 40, 2013-2024.	7.1	44
34	Nanostructure enhanced ionic transport in fullerene reinforced solid polymer electrolytes. Physical Chemistry Chemical Physics, 2015, 17, 8266-8275.	2.8	13
35	Nanostructure-Driven Ion Transport in PCBM-Based Polymer Electrolytes. ECS Transactions, 2014, 61, 31-33.	0.5	0
36	Thermal runaway risk evaluation of Li-ion cells using a pinchâ€“torsion test. Journal of Power Sources, 2014, 249, 156-162.	7.8	64

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37	Failure analysis of pinchâ€“torsion tests as a thermal runaway risk evaluation method of Li-ion cells. Journal of Power Sources, 2014, 265, 356-362.	7.8	32
38	Visualizing the Structural Evolution of LSM/xYSZ Composite Cathodes for SOFC by in-situ Neutron Diffraction. Scientific Reports, 2014, 4, 5179.	3.3	31
39	Investigating fracture behavior of polymer and polymeric composite materials using spiral notch torsion test. Engineering Fracture Mechanics, 2013, 101, 109-128.	4.3	44
40	Effect of projectile impact and penetration on the phase composition and microstructure of high performance concretes. Cement and Concrete Composites, 2013, 41, 1-8.	10.7	19
41	Rehabilitation of notch damaged steel beams using a carbon fiber reinforced hybrid polymeric-matrix composite. Composite Structures, 2013, 106, 690-702.	5.8	43
42	Thermal Expansion Study and Microstructural Characterization of High-Performance Concretes. Journal of Materials in Civil Engineering, 2013, 25, 1574-1578.	2.9	5
43	Thermoelectric and mechanical properties of multi-walled carbon nanotube doped Bi0.4Sb1.6Te3 thermoelectric material. Applied Physics Letters, 2013, 103, .	3.3	69
44	Spiral Notch Torsion Test Use for Determining Fracture Toughness of Structural Materials. , 2012, , .		0
45	Integrity Study of ACSR and ACSS Two Stage Splice Connectors at High Operation Temperatures. , 2012, , .		0
46	Elastic modulus, biaxial fracture strength, electrical and thermal transport properties of thermally fatigued hot pressed LAST and LASTT thermoelectric materials. Materials Chemistry and Physics, 2012, 134, 973-987.	4.0	14
47	Fractographic study of epoxy under mode I and mixed mode I/III loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 532, 449-455.	5.6	9
48	Part I: Porosity dependence of the Weibull modulus for hydroxyapatite and other brittle materials. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 8, 21-36.	3.1	53
49	Part II: Fracture strength and elastic modulus as a function of porosity for hydroxyapatite and other brittle materials. Journal of the Mechanical Behavior of Biomedical Materials, 2012, 8, 99-110.	3.1	46
50	An in situ SEM experimental study of the thermal stability of a LAST thermoelectric material. Philosophical Magazine Letters, 2011, 91, 443-451.	1.2	1
51	Development of In Situ Techniques for Torsion and Tension Testing in Hydrogen Environment. , 2011, , .		0
52	Alternative approach for cavitation damage study utilizing repetitive laser pulses. Wear, 2010, 270, 115-119.	3.1	2
53	Anomalous temperature-dependent Youngâ€™s modulus of a cast LAST (Pbâ€“Sbâ€“Agâ€“Te) thermoelectric material. Acta Materialia, 2010, 58, 31-38.	7.9	15
54	Cavitation Damage Study via a Novel Repetitive Pressure Pulse Approach. , 2010, , .		0

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55	Agglomeration during wet milling of LAST (leadâ€“antimonyâ€“silverâ€“tellurium) powders. Materials Chemistry and Physics, 2009, 113, 497-502.	4.0	10
56	Porosity dependence of elastic moduli in LAST (Leadâ€“antimonyâ€“silverâ€“tellurium) thermoelectric materials. Materials Chemistry and Physics, 2009, 118, 459-466.	4.0	30
57	Room-temperature mechanical properties of LAST (Pbâ€“Sbâ€“Agâ€“Te) thermoelectric materials as a function of cooling rate during ingot casting. Philosophical Magazine Letters, 2009, 89, 267-275.	1.2	5
58	Temperature-dependent elastic moduli of lead telluride-based thermoelectric materials. Philosophical Magazine, 2009, 89, 143-167.	1.6	35
59	Resonant ultrasound spectroscopy measurement of Young's modulus, shear modulus and Poisson's ratio as a function of porosity for alumina and hydroxyapatite. Philosophical Magazine, 2009, 89, 1163-1182.	1.6	58
60	Temperature-dependent thermal expansion of cast and hot-pressed LAST (Pbâ€“Sbâ€“Agâ€“Te) thermoelectric materials. Philosophical Magazine, 2009, 89, 1439-1455.	1.6	10
61	SOLID-STATE SYNTHESIS AND SOME PROPERTIES OF MAGNESIUM-DOPED COPPER ALUMINUM OXIDES. Materials Research Society Symposia Proceedings, 2009, 1218, 1.	0.1	0
62	The high-temperature elastic moduli of polycrystalline PbTe measured by resonant ultrasound spectroscopy. Acta Materialia, 2008, 56, 5954-5963.	7.9	61
63	Hardness as a function of composition for n-type LAST thermoelectric material. Journal of Alloys and Compounds, 2008, 455, 340-345.	5.5	46
64	Electrical Contact Fabrication and Measurements of Metals and Alloys to Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2007, 1044, 1.	0.1	4
65	Study on the Fabrication and Characterization of LAST and LASTT Based Thermoelectric Generators. Materials Research Society Symposia Proceedings, 2007, 1044, 1.	0.1	0
66	Mechanical Characterization of PbTe-based Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2007, 1044, 1.	0.1	15
67	Young's modulus as a function of composition for an n-type leadâ€“antimonyâ€“silverâ€“telluride (LAST) thermoelectric material. Philosophical Magazine, 2007, 87, 4907-4934.	1.6	29
68	Characterization of dry milled powders of LAST (leadâ€“antimonyâ€“silverâ€“tellurium) thermoelectric material. Philosophical Magazine, 2007, 87, 4567-4591.	1.6	25
69	Nanostructured Thermoelectric Materials and High-Efficiency Power-Generation Modules. Journal of Electronic Materials, 2007, 36, 704-710.	2.2	52
70	Weibull analysis of the biaxial fracture strength of a cast p-type LAST-T thermoelectric material. Philosophical Magazine Letters, 2006, 86, 673-682.	1.2	32
71	Confocal laser scanning microscopy as a tool for imaging cancellous bone. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2006, 79B, 185-192.	3.4	26
72	Three-Dimensional Microstructural Characterization of Porous Hydroxyapatite Using Confocal Laser Scanning Microscopy. International Journal of Applied Ceramic Technology, 2005, 2, 200-211.	2.1	21

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73	Machining and Ceramic/Ceramic Joining to Form Internal Mesoscale Channels. International Journal of Applied Ceramic Technology, 2004, 1, 95-103.	2.1	17