

Z F Ren

List of Publications by Year in descending order

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133
papers

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citations

30070

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134
all docs

134
docs citations

134
times ranked

16119
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of Large Arrays of Well-Aligned Carbon Nanotubes on Glass. , 1998, 282, 1105-1107.		2,324
2	Bulk nanostructured thermoelectric materials: current research and future prospects. Energy and Environmental Science, 2009, 2, 466.	30.8	1,698
3	Perspectives on thermoelectrics: from fundamentals to device applications. Energy and Environmental Science, 2012, 5, 5147-5162.	30.8	1,080
4	Carbon nanotube/carbon fiber hybrid multiscale composites. Journal of Applied Physics, 2002, 91, 6034-6037.	2.5	704
5	Interaction between carbon nanotubes and mammalian cells: characterization by flow cytometry and application. Nanotechnology, 2008, 19, 345102.	2.6	671
6	Enhanced thermoelectric figure of merit in nanostructured n-type silicon germanium bulk alloy. Applied Physics Letters, 2008, 93, .	3.3	623
7	ZnO Nanobridges and Nanonails. Nano Letters, 2003, 3, 235-238.	9.1	622
8	Experimental Studies on Anisotropic Thermoelectric Properties and Structures of n-Type Bi ₂ Te _{2.7} Se _{0.3} . Nano Letters, 2010, 10, 3373-3378.	9.1	608
9	Broadband ZnO Single-Nanowire Light-Emitting Diode. Nano Letters, 2006, 6, 1719-1722.	9.1	531
10	Growth of a single freestanding multiwall carbon nanotube on each nanonickel dot. Applied Physics Letters, 1999, 75, 1086-1088.	3.3	391
11	Enhanced Thermoelectric Figure of Merit of p-Type Half-Heuslers. Nano Letters, 2011, 11, 556-560.	9.1	362
12	Superplastic carbon nanotubes. Nature, 2006, 439, 281-281.	27.8	347
13	Preparation and photoabsorption characterization of BiFeO ₃ nanowires. Applied Physics Letters, 2006, 89, 102506.	3.3	335
14	Photonic Crystals Based on Periodic Arrays of Aligned Carbon Nanotubes. Nano Letters, 2003, 3, 13-18.	9.1	285
15	Growth of highly oriented carbon nanotubes by plasma-enhanced hot filament chemical vapor deposition. Applied Physics Letters, 1998, 73, 3845-3847.	3.3	269
16	Field-emission studies on thin films of zinc oxide nanowires. Applied Physics Letters, 2003, 83, 4821-4823.	3.3	269
17	Increased Phonon Scattering by Nanograins and Point Defects in Nanostructured Silicon with a Low Concentration of Germanium. Physical Review Letters, 2009, 102, 196803.	7.8	263
18	Effect of length and spacing of vertically aligned carbon nanotubes on field emission properties. Applied Physics Letters, 2003, 82, 3520-3522.	3.3	256

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19	Receiving and transmitting light-like radio waves: Antenna effect in arrays of aligned carbon nanotubes. Applied Physics Letters, 2004, 85, 2607-2609.	3.3	253
20	Enhanced Field Emission of ZnO Nanowires. Advanced Materials, 2004, 16, 2028-2032.	21.0	240
21	Atomic-Scale Imaging of Wall-by-Wall Breakdown and Concurrent Transport Measurements in Multiwall Carbon Nanotubes. Physical Review Letters, 2005, 94, 236802.	7.8	214
22	Pairing Symmetry in Single-Layer Tetragonal Tl_2Ba_2CuO Superconductors. Science, 1996, 271, 329-332.	12.6	212
23	Sonochemical synthesis of hierarchical ZnO nanostructures. Ultrasonics Sonochemistry, 2013, 20, 395-400.	8.2	182
24	Effects of nanoscale porosity on thermoelectric properties of SiGe. Journal of Applied Physics, 2010, 107, .	2.5	181
25	High-Yield Synthesis of Single-Crystalline Antimony Telluride Hexagonal Nanoplates Using a Solvothermal Approach. Journal of the American Chemical Society, 2005, 127, 13792-13793.	13.7	180
26	Field emission of zinc oxide nanowires grown on carbon cloth. Applied Physics Letters, 2004, 85, 1407-1409.	3.3	178
27	Modeling study of thermoelectric SiGe nanocomposites. Physical Review B, 2009, 80, .	3.2	178
28	Large-quantity free-standing ZnO nanowires. Applied Physics Letters, 2003, 83, 2061-2063.	3.3	167
29	Growth of aligned carbon nanotubes with controlled site density. Applied Physics Letters, 2002, 80, 4018-4020.	3.3	163
30	High thermoelectric conversion efficiency of MgAgSb-based material with hot-pressed contacts. Energy and Environmental Science, 2015, 8, 1299-1308.	30.8	154
31	Growth of large periodic arrays of carbon nanotubes. Applied Physics Letters, 2003, 82, 460-462.	3.3	145
32	Nanoelectrode Arrays Based on Low Site Density Aligned Carbon Nanotubes. Nano Letters, 2003, 3, 107-109.	9.1	141
33	Unrestricted superlensing in a triangular two dimensional photonic crystal. Optics Express, 2004, 12, 2919.	3.4	133
34	Physics and applications of aligned carbon nanotubes. Advances in Physics, 2011, 60, 553-678.	14.4	128
35	Pure $d \times 2 - y \times 2$. Nature, 1997, 387, 481-483.	27.8	125
36	Surface phase separation in nanosized charge-ordered manganites. Applied Physics Letters, 2007, 90, 082508.	3.3	115

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37	Straight carbon nanotube Y junctions. Applied Physics Letters, 2001, 79, 1879-1881.	3.3	113
38	Real-Time Observation of Tubule Formation from Amorphous Carbon Nanowires under High-Bias Joule Heating. Nano Letters, 2006, 6, 1699-1705.	9.1	112
39	Global and local measures of the intrinsic Josephson coupling in Tl ₂ Ba ₂ CuO ₆ as a test of the interlayer tunnelling model. Nature, 1998, 395, 360-362.	27.8	104
40	Solubility study of Yb in skutterudites. Physical Review B, 2009, 80, .	3.2	104
41	Synthesis and photoluminescence studies on ZnO nanowires. Nanotechnology, 2004, 15, 404-409.	2.6	103
42	Giant field enhancement at carbon nanotube tips induced by multistage effect. Applied Physics Letters, 2005, 87, 053110.	3.3	98
43	Diffusion of nickel and tin in p-type (Bi,Sb) ₂ Te ₃ and n-type Bi ₂ (Te,Se) ₃ thermoelectric materials. Applied Physics Letters, 2008, 92, .	3.3	97
44	Field emission of carbon nanotubes grown on carbon cloth. Applied Physics Letters, 2004, 85, 810-812.	3.3	88
45	Efficient nanocoax-based solar cells. Physica Status Solidi - Rapid Research Letters, 2010, 4, 181-183.	2.4	87
46	Formation of Super Arrays of Periodic Nanoparticles and Aligned ZnO Nanorods ~ Simulation and Experiments. Nano Letters, 2004, 4, 2037-2040.	9.1	85
47	Investigation of the bipolar effect in the thermoelectric material CaMg ₂ Bi ₂ using a first-principles study. Physical Chemistry Chemical Physics, 2016, 18, 16566-16574.	2.8	83
48	Full-scale computation for all the thermoelectric property parameters of half-Heusler compounds. Scientific Reports, 2016, 6, 22778.	3.3	79
49	Kink Formation and Motion in Carbon Nanotubes at High Temperatures. Physical Review Letters, 2006, 97, 075501.	7.8	74
50	Correlation of field emission and surface microstructure of vertically aligned carbon nanotubes. Applied Physics Letters, 2004, 84, 413-415.	3.3	71
51	Growth and characterization of aligned carbon nanotubes from patterned nickel nanodots and uniform thin films. Journal of Materials Research, 2001, 16, 3246-3253.	2.6	69
52	Thermoelectric properties and efficiency measurements under large temperature differences. Review of Scientific Instruments, 2009, 80, 093901.	1.3	65
53	Subwavelength waveguide for visible light. Applied Physics Letters, 2007, 90, 021104.	3.3	64
54	Effect of selenium deficiency on the thermoelectric properties of n-type In ₄ Se ₃ x compounds. Physical Review B, 2011, 83, .	3.2	61

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55	Effect of temperature, pressure, and gas ratio of methane to hydrogen on the synthesis of double-walled carbon nanotubes by chemical vapour deposition. <i>Nanotechnology</i> , 2005, 16, 532-535.	2.6	57
56	Enhanced Ductile Behavior of Tensile-Elongated Individual Double-Walled and Triple-Walled Carbon Nanotubes at High Temperatures. <i>Physical Review Letters</i> , 2007, 98, 185501.	7.8	53
57	Field emission of silicon nanowires grown on carbon cloth. <i>Applied Physics Letters</i> , 2007, 90, 033112.	3.3	50
58	Optimizing the thermoelectric performance of low-temperature SnSe compounds by electronic structure design. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13365-13370.	10.3	50
59	Thermoelectric property studies on thallium-doped lead telluride prepared by ball milling and hot pressing. <i>Journal of Applied Physics</i> , 2010, 108, .	2.5	49
60	Experimental test of the interlayer pairing models for high-T _c superconductivity using grazing-incidence infrared reflectometry. <i>Physical Review B</i> , 1997, 55, 11118-11121.	3.2	47
61	Field emission of silicon nanowires. <i>Applied Physics Letters</i> , 2006, 88, 213108.	3.3	47
62	A hot-wire probe for thermal measurements of nanowires and nanotubes inside a transmission electron microscope. <i>Review of Scientific Instruments</i> , 2007, 78, 104903.	1.3	47
63	Uniform and flexible 24- μ m superconducting tape of silver-sheathed Tl _{0.5} Pb _{0.5} Ba _{0.4} Sr _{1.6} Ca ₂ Cu ₃ O _{8.2} . <i>Applied Physics Letters</i> , 1992, 61, 1715-1717.	3.3	45
64	Periodicity and alignment of large-scale carbon nanotubes arrays. <i>Applied Physics Letters</i> , 2004, 85, 4741-4743.	3.3	44
65	Predicting high thermoelectric performance of ABX ternary compounds NaMgX (X = P, Sb, As) with weak electron-phonon coupling and strong bonding anharmonicity. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3281-3289.	5.5	43
66	High-bias-induced structure and the corresponding electronic property changes in carbon nanotubes. <i>Applied Physics Letters</i> , 2005, 87, 263107.	3.3	41
67	Enhancement of field emission of aligned carbon nanotubes by thermal oxidation. <i>Applied Physics Letters</i> , 2006, 89, 223119.	3.3	41
68	Hot electron effect in nanoscopically thin photovoltaic junctions. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	41
69	New composite thermoelectric materials for energy harvesting applications. <i>Jom</i> , 2009, 61, 86-90.	1.9	40
70	Synthesis and characterization of La _{0.825} Sr _{0.175} MnO ₃ nanowires. <i>Journal of Physics Condensed Matter</i> , 2005, 17, L467-L475.	1.8	34
71	Pairing symmetry from in-plane torque anisotropy in Tl ₂ Ba ₂ CuO ₆ + δ thin films. <i>Physical Review B</i> , 1998, 57, 6137-6144.	3.2	33
72	Low temperature solvothermal synthesis of multiwall carbon nanotubes. <i>Nanotechnology</i> , 2005, 16, 21-23.	2.6	33

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73	A-site disorder induced collapse of charge-ordered state and phase separated phase in manganites. Applied Physics Letters, 2006, 89, 222505.	3.3	33
74	Electrostatic-Force-Directed Assembly of Ag Nanocrystals onto Vertically Aligned Carbon Nanotubes. Journal of Physical Chemistry C, 2007, 111, 17919-17922.	3.1	33
75	Superconducting epitaxial (Tl,Bi)Sr _{1.6} Ba _{0.4} Ca ₂ Cu ₃ O ₉ film with high critical current in magnetic field. Applied Physics Letters, 1994, 65, 237-239.	3.3	32
76	Systematics of c-axis phonons in the thallium- and bismuth-based cuprate superconductors. Physical Review B, 1999, 60, 13196-13205.	3.2	32
77	Boron carbide nanolumps on carbon nanotubes. Applied Physics Letters, 2002, 80, 500-502.	3.3	31
78	Synthesis of gram-scale germanium nanocrystals by a low-temperature inverse micelle solvothermal route. Nanotechnology, 2005, 16, 1126-1129.	2.6	31
79	Visible light diffraction studies on periodically aligned arrays of carbon nanotubes: Experimental and theoretical comparison. Applied Physics Letters, 2006, 88, 203122.	3.3	31
80	Crossover between fractal and nonfractal flux penetration in high-temperature superconducting thin films. Physical Review B, 1998, 58, 12467-12477.	3.2	28
81	Large-scale triangular lattice arrays of sub-micron islands by microsphere self-assembly. Nanotechnology, 2005, 16, 819-822.	2.6	27
82	Carbon nanotube-mediated delivery of nucleic acids does not result in non-specific activation of B lymphocytes. Nanotechnology, 2007, 18, 365101.	2.6	27
83	Field emission of carbon nanotubes grown on carbon cloth. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2363.	1.6	26
84	Rapid photon flux switching in two-dimensional photonic crystals. Applied Physics Letters, 2004, 84, 1817-1819.	3.3	25
85	Improved superlensing in two-dimensional photonic crystals with a basis. Applied Physics Letters, 2005, 86, 061105.	3.3	25
86	Superior flux pinning in in situ synthesized silver sheathed superconducting tape of Tl _{0.5} Pb _{0.5} Sr _{1.6} Ba _{0.4} Ca _{0.8} Y _{0.2} Cu ₂ O _y . Applied Physics Letters, 1993, 62, 3025-3027.	3.3	24
87	The structural symmetry of epitaxial Tl ₂ Ba ₂ CuO ₆ + δ thin films. Applied Physics Letters, 1996, 69, 1798-1800.	3.3	24
88	Transplanting carbon nanotubes. Applied Physics Letters, 2004, 85, 5995-5997.	3.3	23
89	Synthesis of Multiwalled Carbon Nanotubes through a Modified Wolff-Kishner Reduction Process. Journal of the American Chemical Society, 2005, 127, 18018-18019.	13.7	22
90	Nanocoax solar cells based on aligned multiwalled carbon nanotube arrays. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 924-927.	1.8	22

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91	Chemical bonding in Tl cuprates studied by x-ray photoemission. Physical Review B, 1999, 60, 4309-4319.	3.2	21
92	Effect of filler mass and binding on thermal conductivity of fully filled skutterudites. Physical Review B, 2010, 82, .	3.2	21
93	Title is missing!. Journal of Superconductivity and Novel Magnetism, 1998, 11, 159-161.	0.5	17
94	Ferromagnetic metal to cluster-glass insulator transition induced by A-site disorder in manganites. Applied Physics Letters, 2006, 88, 152505.	3.3	17
95	Continuous control of the superconducting transition temperature from overdoped to underdoped regimes in tetragonal Tl ₂ Ba ₂ CuO ₆ +f thin films. Applied Physics Letters, 1997, 71, 1706-1708.	3.3	16
96	c-axis penetration depth and interlayer conductivity in the thallium-based cuprate superconductors. Physical Review B, 1999, 60, R15051-R15054.	3.2	16
97	Transport properties of Ni, Co, Fe, Mn doped Cu _{0.01} Bi ₂ Te _{2.7} Se _{0.3} for thermoelectric device applications. Journal of Applied Physics, 2012, 112, .	2.5	16
98	Plasma deposition of thin carbonfluorine films on aligned carbon nanotube. Applied Physics Letters, 2005, 86, 043107.	3.3	15
99	Triangular lattice of carbon nanotube arrays for negative index of refraction and subwavelength lensing effect. Applied Physics Letters, 2005, 86, 153120.	3.3	15
100	Epitaxial superconducting Tl _{0.5} Pb _{0.5} Sr _{1.6} Ba _{0.4} Ca ₂ Cu ₃ O ₉ films on LaAlO ₃ by thermal spray and post-spray annealing. Superconductor Science and Technology, 1999, 12, L1-L4.	3.5	14
101	Synthesis and characterization of thallium-based 1212 films with high critical current density on LaAlO ₃ substrates. Superconductor Science and Technology, 2000, 13, 173-177.	3.5	14
102	Assembly of multi-functional nanocomponents on periodic nanotube array for biosensors. Micro and Nano Letters, 2009, 4, 27-33.	1.3	14
103	Discretely guided electromagnetic effective medium. Applied Physics Letters, 2008, 92, 043114.	3.3	13
104	The evolution of carbon nanotubes during their growth by plasma enhanced chemical vapor deposition. Nanotechnology, 2011, 22, 405601.	2.6	13
105	Study on the effect of Pb partial substitution for Te on the thermoelectric properties of La ₃ Te ₄ xPbx materials. Journal Physics D: Applied Physics, 2012, 45, 185303.	2.8	12
106	SYNTHESIS OF AMORPHOUS SiO _x NANOSTRUCTURES. International Journal of Nanoscience, 2002, 01, 149-157.	0.7	11
107	Electronic structure of Tl ₂ Ba ₂ CuO ₆ +f epitaxial films measured by x-ray photoemission. Physical Review B, 1996, 54, 6115-6118.	3.2	9
108	Structural studies of electrodeposited and sprayed thallium-oxide films. Superconductor Science and Technology, 2002, 15, 1288-1294.	3.5	9

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109	Thermoelectric properties of Ho-doped Bi _{0.88} Sb _{0.12} . Journal of Materials Science, 2012, 47, 5729-5734.	3.7	8
110	Structural study of undoped and doped Bi ₂ Sr ₂ CuO ₆ phases by transmission electron microscopy. Applied Physics Letters, 1989, 55, 2775-2777.	3.3	7
111	Aligned carbon nanofibres by a low-energy dark discharge for field emission and optoelectronics. Nanotechnology, 2006, 17, 501-505.	2.6	7
112	Scanning SQUID microscope tests of the symmetry of the high-T _c gap. European Physical Journal D, 1996, 46, 3169-3176.	0.4	6
113	Near-infrared photoluminescence in germanium oxide enclosed germanium nano- and micro-crystals. Nanotechnology, 2007, 18, 075707.	2.6	6
114	Unusual consequences of donor and acceptor doping on the thermoelectric properties of the MgAg _{0.97} Sb _{0.99} alloy. Journal of Materials Chemistry A, 2018, 6, 2600-2611.	10.3	6
115	Using carbon nanotube cantilevers in scanning probe metrology. , 2002, , .		5
116	Enhancement of Thermoelectric Figure-of-Merit by a Nanostructure Approach. Materials Research Society Symposia Proceedings, 2009, 1166, 3.	0.1	5
117	Fabrication of Ag-clad (Ti,V)(Sr,Ba) ₂ Ca ₂ Cu ₃ O _y superconducting tapes. Superconductor Science and Technology, 1995, 8, 174-176.	3.5	4
118	Making carbon nanotube probes for high aspect ratio scanning probe metrology. , 2003, , .		4
119	Tl ₂ Ba ₂ CuO ₆ + δ by XPS. Surface Science Spectra, 1998, 5, 304-312.	1.3	3
120	Fabrication of Freestanding Carbon Nanotube Arrays in Large Scale. Materials Research Society Symposia Proceedings, 2000, 633, 13221.	0.1	3
121	Superconductor Bi-oxide films via an electrodeposition process. Superconductor Science and Technology, 2004, 17, 120-124.	3.5	3
122	Enhanced Thermoelectric Performance of Te-doped FeSb $\text{FeSb}_{1-x}\text{Te}_x$ Nanocomposite. Journal of Low Temperature Physics, 2014, 176, 122-130.	1.4	3
123	Half-integer flux quantum effect in cuprate superconductors – a probe of pairing symmetry. Physica Scripta, 1996, T66, 212-214.	2.5	2
124	Plasma Coating and Enhanced Dispersion of Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	2
125	Spectroscopic studies of arrays of multiwalled carbon nanotubes. , 2005, 5931, 242.		2
126	The Promise of Nanocomposite Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2009, 1166, 1.	0.1	2

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127	Large arrays of well-aligned carbon nanotubes. , 1999, , .		1
128	Tl Cuprate Superconductors Studied by XPS. Surface Science Spectra, 1999, 6, 237-253.	1.3	0
129	Optical antenna arrays of carbon nanotubes and their fabrication on polyimide and transparent conducting oxides for direct device integration. , 2005, 6003, 127.		0
130	Nanomaterials fabrication and physics. , 2005, 6002, 181.		0
131	Ex-Situ Processing of Ti-Containing Films. , 2005, , 275-316.		0
132	Growth and Characterizations of Well-Aligned Carbon Nanotubes. , 2003, , 133-140.		0
133	Anisotropy Induced Crossover from Fractal to Non-Fractal Flux Penetration in High-Tc thin Films. , 1999, , 291-306.		0