

# Z F Ren

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	Unusual consequences of donor and acceptor doping on the thermoelectric properties of the $\text{MgAg}_{0.97}\text{Sb}_{0.99}$ alloy. <i>Journal of Materials Chemistry A</i> , 2018, 6, 2600-2611.	5.2	6
2	Full-scale computation for all the thermoelectric property parameters of half-Heusler compounds. <i>Scientific Reports</i> , 2016, 6, 22778.	1.6	79
3	Investigation of the bipolar effect in the thermoelectric material $\text{CaMg}_2\text{Bi}_2$ using a first-principles study. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 16566-16574.	1.3	83
4	Predicting high thermoelectric performance of ABX ternary compounds $\text{NaMgX}$ ( $X = \text{P, Sb, As}$ ) with weak electron-phonon coupling and strong bonding anharmonicity. <i>Journal of Materials Chemistry C</i> , 2016, 4, 3281-3289.	2.7	43
5	Optimizing the thermoelectric performance of low-temperature $\text{SnSe}$ compounds by electronic structure design. <i>Journal of Materials Chemistry A</i> , 2015, 3, 13365-13370.	5.2	50
6	High thermoelectric conversion efficiency of $\text{MgAgSb}$ -based material with hot-pressed contacts. <i>Energy and Environmental Science</i> , 2015, 8, 1299-1308.	15.6	154
7	Enhanced Thermoelectric Performance of Te-doped $\text{FeSb}_2$ Nanocomposite. <i>Journal of Low Temperature Physics</i> , 2014, 176, 122-130.	0.6	3
8	Sonochemical synthesis of hierarchical $\text{ZnO}$ nanostructures. <i>Ultrasonics Sonochemistry</i> , 2013, 20, 395-400.	3.8	182
9	Transport properties of Ni, Co, Fe, Mn doped $\text{Cu}_{0.01}\text{Bi}_2\text{Te}_{2.7}\text{Se}_{0.3}$ for thermoelectric device applications. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	16
10	Study on the effect of Pb partial substitution for Te on the thermoelectric properties of $\text{La}_3\text{Te}_4\text{Pb}_x$ materials. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 185303.	1.3	12
11	Perspectives on thermoelectrics: from fundamentals to device applications. <i>Energy and Environmental Science</i> , 2012, 5, 5147-5162.	15.6	1,080
12	Thermoelectric properties of Ho-doped $\text{Bi}_{0.88}\text{Sb}_{0.12}$ . <i>Journal of Materials Science</i> , 2012, 47, 5729-5734.	1.7	8
13	Enhanced Thermoelectric Figure of Merit of p-Type Half-Heuslers. <i>Nano Letters</i> , 2011, 11, 556-560.	4.5	362
14	Physics and applications of aligned carbon nanotubes. <i>Advances in Physics</i> , 2011, 60, 553-678.	35.9	128
15	Nanocoax solar cells based on aligned multiwalled carbon nanotube arrays. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 924-927.	0.8	22
16	The evolution of carbon nanotubes during their growth by plasma enhanced chemical vapor deposition. <i>Nanotechnology</i> , 2011, 22, 405601.	1.3	13
17	Effect of selenium deficiency on the thermoelectric properties of n-type $\text{In}_4\text{Se}_3$ compounds. <i>Physical Review B</i> , 2011, 83, .	1.1	61
18	Efficient nanocoax-based solar cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2010, 4, 181-183.	1.2	87

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19	Experimental Studies on Anisotropic Thermoelectric Properties and Structures of n-Type $\text{Bi}_{2-x}\text{Te}_{2.7-x}\text{Se}_{0.3-x}$ . Nano Letters, 2010, 10, 3373-3378.	4.5	608
20	Thermoelectric property studies on thallium-doped lead telluride prepared by ball milling and hot pressing. Journal of Applied Physics, 2010, 108, .	1.1	49
21	Effects of nanoscale porosity on thermoelectric properties of SiGe. Journal of Applied Physics, 2010, 107, .	1.1	181
22	Effect of filler mass and binding on thermal conductivity of fully filled skutterudites. Physical Review B, 2010, 82, .	1.1	21
23	Hot electron effect in nanoscopically thin photovoltaic junctions. Applied Physics Letters, 2009, 95, .	1.5	41
24	Thermoelectric properties and efficiency measurements under large temperature differences. Review of Scientific Instruments, 2009, 80, 093901.	0.6	65
25	The Promise of Nanocomposite Thermoelectric Materials. Materials Research Society Symposia Proceedings, 2009, 1166, 1.	0.1	2
26	Assembly of multi-functional nanocomponents on periodic nanotube array for biosensors. Micro and Nano Letters, 2009, 4, 27-33.	0.6	14
27	New composite thermoelectric materials for energy harvesting applications. Jom, 2009, 61, 86-90.	0.9	40
28	Bulk nanostructured thermoelectric materials: current research and future prospects. Energy and Environmental Science, 2009, 2, 466.	15.6	1,698
29	Increased Phonon Scattering by Nanograins and Point Defects in Nanostructured Silicon with a Low Concentration of Germanium. Physical Review Letters, 2009, 102, 196803.	2.9	263
30	Solubility study of Yb in n-type skutterudites $\text{Yb}_x\text{Co}_4\text{Sb}_{13}$ . Physical Review B, 2009, 80, .	1.1	104
31	Modeling study of thermoelectric SiGe nanocomposites. Physical Review B, 2009, 80, .	1.1	178
32	Enhancement of Thermoelectric Figure-of-Merit by a Nanostructure Approach. Materials Research Society Symposia Proceedings, 2009, 1166, 3.	0.1	5
33	Enhanced thermoelectric figure of merit in nanostructured n-type silicon germanium bulk alloy. Applied Physics Letters, 2008, 93, .	1.5	623
34	Interaction between carbon nanotubes and mammalian cells: characterization by flow cytometry and application. Nanotechnology, 2008, 19, 345102.	1.3	671
35	Discretely guided electromagnetic effective medium. Applied Physics Letters, 2008, 92, 043114.	1.5	13
36	Diffusion of nickel and tin in p-type $(\text{Bi,Sb})_2\text{Te}_3$ and n-type $\text{Bi}_2(\text{Te,Se})_3$ thermoelectric materials. Applied Physics Letters, 2008, 92, .	1.5	97

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37	Carbon nanotube-mediated delivery of nucleic acids does not result in non-specific activation of B lymphocytes. <i>Nanotechnology</i> , 2007, 18, 365101.	1.3	27
38	Field emission of silicon nanowires grown on carbon cloth. <i>Applied Physics Letters</i> , 2007, 90, 033112.	1.5	50
39	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.	0.6	47
40	Surface phase separation in nanosized charge-ordered manganites. <i>Applied Physics Letters</i> , 2007, 90, 082508.	1.5	115
41	Subwavelength waveguide for visible light. <i>Applied Physics Letters</i> , 2007, 90, 021104.	1.5	64
42	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.	2.9	53
43	Near-infrared photoluminescence in germanium oxide enclosed germanium nano- and micro-crystals. <i>Nanotechnology</i> , 2007, 18, 075707.	1.3	6
44	Electrostatic-Force-Directed Assembly of Ag Nanocrystals onto Vertically Aligned Carbon Nanotubes. <i>Journal of Physical Chemistry C</i> , 2007, 111, 17919-17922.	1.5	33
45	Real-Time Observation of Tubule Formation from Amorphous Carbon Nanowires under High-Bias Joule Heating. <i>Nano Letters</i> , 2006, 6, 1699-1705.	4.5	112
46	A-site disorder induced collapse of charge-ordered state and phase separated phase in manganites. <i>Applied Physics Letters</i> , 2006, 89, 222505.	1.5	33
47	Preparation and photoabsorption characterization of BiFeO <sub>3</sub> nanowires. <i>Applied Physics Letters</i> , 2006, 89, 102506.	1.5	335
48	Broadband ZnO Single-Nanowire Light-Emitting Diode. <i>Nano Letters</i> , 2006, 6, 1719-1722.	4.5	531
49	Ferromagnetic metal to cluster-glass insulator transition induced by A-site disorder in manganites. <i>Applied Physics Letters</i> , 2006, 88, 152505.	1.5	17
50	Superplastic carbon nanotubes. <i>Nature</i> , 2006, 439, 281-281.	13.7	347
51	Aligned carbon nanofibres by a low-energy dark discharge for field emission and optoelectronics. <i>Nanotechnology</i> , 2006, 17, 501-505.	1.3	7
52	Kink Formation and Motion in Carbon Nanotubes at High Temperatures. <i>Physical Review Letters</i> , 2006, 97, 075501.	2.9	74
53	Field emission of silicon nanowires. <i>Applied Physics Letters</i> , 2006, 88, 213108.	1.5	47
54	Enhancement of field emission of aligned carbon nanotubes by thermal oxidation. <i>Applied Physics Letters</i> , 2006, 89, 223119.	1.5	41

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55	Visible light diffraction studies on periodically aligned arrays of carbon nanotubes: Experimental and theoretical comparison. Applied Physics Letters, 2006, 88, 203122.	1.5	31
56	Spectroscopic studies of arrays of multiwalled carbon nanotubes. , 2005, 5931, 242.		2
57	Optical antenna arrays of carbon nanotubes and their fabrication on polyimide and transparent conducting oxides for direct device integration. , 2005, 6003, 127.		0
58	Nanomaterials fabrication and physics. , 2005, 6002, 181.		0
59	Ex-Situ Processing of Ti-Containing Films. , 2005, , 275-316.		0
60	Synthesis of gram-scale germanium nanocrystals by a low-temperature inverse micelle solvothermal route. Nanotechnology, 2005, 16, 1126-1129.	1.3	31
61	Large-scale triangular lattice arrays of sub-micron islands by microsphere self-assembly. Nanotechnology, 2005, 16, 819-822.	1.3	27
62	Plasma deposition of thin carbonfluorine films on aligned carbon nanotube. Applied Physics Letters, 2005, 86, 043107.	1.5	15
63	Giant field enhancement at carbon nanotube tips induced by multistage effect. Applied Physics Letters, 2005, 87, 053110.	1.5	98
64	High-bias-induced structure and the corresponding electronic property changes in carbon nanotubes. Applied Physics Letters, 2005, 87, 263107.	1.5	41
65	Synthesis and characterization of La <sub>0.825</sub> Sr <sub>0.175</sub> MnO <sub>3</sub> nanowires. Journal of Physics Condensed Matter, 2005, 17, L467-L475.	0.7	34
66	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
67	Atomic-Scale Imaging of Wall-by-Wall Breakdown and Concurrent Transport Measurements in Multiwall Carbon Nanotubes. Physical Review Letters, 2005, 94, 236802.	2.9	214
68	Improved superlensing in two-dimensional photonic crystals with a basis. Applied Physics Letters, 2005, 86, 061105.	1.5	25
69	Triangular lattice of carbon nanotube arrays for negative index of refraction and subwavelength lensing effect. Applied Physics Letters, 2005, 86, 153120.	1.5	15
70	Synthesis of Multiwalled Carbon Nanotubes through a Modified WolffâKishner Reduction Process. Journal of the American Chemical Society, 2005, 127, 18018-18019.	6.6	22
71	Low temperature solvothermal synthesis of multiwall carbon nanotubes. Nanotechnology, 2005, 16, 21-23.	1.3	33
72	High-Yield Synthesis of Single-Crystalline Antimony Telluride Hexagonal Nanoplates Using a Solvothermal Approach. Journal of the American Chemical Society, 2005, 127, 13792-13793.	6.6	180

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73	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.	1.3	57
74	Superconductor Bi-oxide films via an electrodeposition process. <i>Superconductor Science and Technology</i> , 2004, 17, 120-124.	1.8	3
75	Correlation of field emission and surface microstructure of vertically aligned carbon nanotubes. <i>Applied Physics Letters</i> , 2004, 84, 413-415.	1.5	71
76	Transplanting carbon nanotubes. <i>Applied Physics Letters</i> , 2004, 85, 5995-5997.	1.5	23
77	Field emission of carbon nanotubes grown on carbon cloth. <i>Applied Physics Letters</i> , 2004, 85, 810-812.	1.5	88
78	Synthesis and photoluminescence studies on ZnO nanowires. <i>Nanotechnology</i> , 2004, 15, 404-409.	1.3	103
79	Enhanced Field Emission of ZnO Nanowires. <i>Advanced Materials</i> , 2004, 16, 2028-2032.	11.1	240
80	Rapid photon flux switching in two-dimensional photonic crystals. <i>Applied Physics Letters</i> , 2004, 84, 1817-1819.	1.5	25
81	Receiving and transmitting light-like radio waves: Antenna effect in arrays of aligned carbon nanotubes. <i>Applied Physics Letters</i> , 2004, 85, 2607-2609.	1.5	253
82	Periodicity and alignment of large-scale carbon nanotubes arrays. <i>Applied Physics Letters</i> , 2004, 85, 4741-4743.	1.5	44
83	Formation of Super Arrays of Periodic Nanoparticles and Aligned ZnO Nanorods $\hat{a}^2$ Simulation and Experiments. <i>Nano Letters</i> , 2004, 4, 2037-2040.	4.5	85
84	Field emission of zinc oxide nanowires grown on carbon cloth. <i>Applied Physics Letters</i> , 2004, 85, 1407-1409.	1.5	178
85	Unrestricted superlensing in a triangular two dimensional photonic crystal. <i>Optics Express</i> , 2004, 12, 2919.	1.7	133
86	Nanoelectrode Arrays Based on Low Site Density Aligned Carbon Nanotubes. <i>Nano Letters</i> , 2003, 3, 107-109.	4.5	141
87	Field-emission studies on thin films of zinc oxide nanowires. <i>Applied Physics Letters</i> , 2003, 83, 4821-4823.	1.5	269
88	Growth of large periodic arrays of carbon nanotubes. <i>Applied Physics Letters</i> , 2003, 82, 460-462.	1.5	145
89	ZnO Nanobridges and Nanonails. <i>Nano Letters</i> , 2003, 3, 235-238.	4.5	622
90	Photonic Crystals Based on Periodic Arrays of Aligned Carbon Nanotubes. <i>Nano Letters</i> , 2003, 3, 13-18.	4.5	285

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91	Plasma Coating and Enhanced Dispersion of Carbon Nanotubes. Materials Research Society Symposia Proceedings, 2003, 791, 1.	0.1	2
92	Effect of length and spacing of vertically aligned carbon nanotubes on field emission properties. Applied Physics Letters, 2003, 82, 3520-3522.	1.5	256
93	Large-quantity free-standing ZnO nanowires. Applied Physics Letters, 2003, 83, 2061-2063.	1.5	167
94	Making carbon nanotube probes for high aspect ratio scanning probe metrology. , 2003, , .		4
95	Growth and Characterizations of Well-Aligned Carbon Nanotubes. , 2003, , 133-140.		0
96	Boron carbide nanolumps on carbon nanotubes. Applied Physics Letters, 2002, 80, 500-502.	1.5	31
97	SYNTHESIS OF AMORPHOUS SiO <sub>x</sub> NANOSTRUCTURES. International Journal of Nanoscience, 2002, 01, 149-157.	0.4	11
98	Structural studies of electrodeposited and sprayed thallium-oxide films. Superconductor Science and Technology, 2002, 15, 1288-1294.	1.8	9
99	Using carbon nanotube cantilevers in scanning probe metrology. , 2002, , .		5
100	Growth of aligned carbon nanotubes with controlled site density. Applied Physics Letters, 2002, 80, 4018-4020.	1.5	163
101	Carbon nanotube/carbon fiber hybrid multiscale composites. Journal of Applied Physics, 2002, 91, 6034-6037.	1.1	704
102	Straight carbon nanotube Y junctions. Applied Physics Letters, 2001, 79, 1879-1881.	1.5	113
103	Growth and characterization of aligned carbon nanotubes from patterned nickel nanodots and uniform thin films. Journal of Materials Research, 2001, 16, 3246-3253.	1.2	69
104	Fabrication of Freestanding Carbon Nanotube Arrays in Large Scale. Materials Research Society Symposia Proceedings, 2000, 633, 13221.	0.1	3
105	Synthesis and characterization of thallium-based 1212 films with high critical current density on LaAlO <sub>3</sub> substrates. Superconductor Science and Technology, 2000, 13, 173-177.	1.8	14
106	Large arrays of well-aligned carbon nanotubes. , 1999, , .		1
107	Systematics of c-axis phonons in the thallium- and bismuth-based cuprate superconductors. Physical Review B, 1999, 60, 13196-13205.	1.1	32
108	c-axis penetration depth and interlayer conductivity in the thallium-based cuprate superconductors. Physical Review B, 1999, 60, R15051-R15054.	1.1	16

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109	Tl Cuprate Superconductors Studied by XPS. Surface Science Spectra, 1999, 6, 237-253.	0.3	0
110	Chemical bonding in Tl cuprates studied by x-ray photoemission. Physical Review B, 1999, 60, 4309-4319.	1.1	21
111	Growth of a single freestanding multiwall carbon nanotube on each nanonickel dot. Applied Physics Letters, 1999, 75, 1086-1088.	1.5	391
112	Epitaxial superconducting Tl <sub>0.5</sub> Pb <sub>0.5</sub> Sr <sub>1.6</sub> Ba <sub>0.4</sub> Ca <sub>2</sub> Cu <sub>3</sub> O <sub>9</sub> films on LaAlO <sub>3</sub> by thermal spray and post-spray annealing. Superconductor Science and Technology, 1999, 12, L1-L4.	1.8	14
113	Anisotropy Induced Crossover from Fractal to Non-Fractal Flux Penetration in High-T <sub>c</sub> thin Films. , 1999, , 291-306.		0
114	Title is missing!. Journal of Superconductivity and Novel Magnetism, 1998, 11, 159-161.	0.5	17
115	Global and local measures of the intrinsic Josephson coupling in Tl <sub>2</sub> Ba <sub>2</sub> CuO <sub>6</sub> as a test of the interlayer tunnelling model. Nature, 1998, 395, 360-362.	13.7	104
116	Synthesis of Large Arrays of Well-Aligned Carbon Nanotubes on Glass. , 1998, 282, 1105-1107.		2,324
117	Tl <sub>2</sub> Ba <sub>2</sub> CuO <sub>6</sub> + $\delta$ by XPS. Surface Science Spectra, 1998, 5, 304-312.	0.3	3
118	Growth of highly oriented carbon nanotubes by plasma-enhanced hot filament chemical vapor deposition. Applied Physics Letters, 1998, 73, 3845-3847.	1.5	269
119	Pairing symmetry from in-plane torque anisotropy in Tl <sub>2</sub> Ba <sub>2</sub> CuO <sub>6</sub> + $\delta$ thin films. Physical Review B, 1998, 57, 6137-6144.	1.1	33
120	Crossover between fractal and nonfractal flux penetration in high-temperature superconducting thin films. Physical Review B, 1998, 58, 12467-12477.	1.1	28
121	Continuous control of the superconducting transition temperature from overdoped to underdoped regimes in tetragonal Tl <sub>2</sub> Ba <sub>2</sub> CuO <sub>6</sub> + $\delta$ thin films. Applied Physics Letters, 1997, 71, 1706-1708.	1.5	16
122	Experimental test of the interlayer pairing models for high-T <sub>c</sub> superconductivity using grazing-incidence infrared reflectometry. Physical Review B, 1997, 55, 11118-11121.	1.1	47
123	Pure d x 2 - y 2. Nature, 1997, 387, 481-483.	13.7	125
124	Pairing Symmetry in Single-Layer Tetragonal Tl <sub>2</sub> Ba <sub>2</sub> CuO [IMAGE] Superconductors. Science, 1996, 271, 329-332.	6.0	212
125	Half-integer flux quantum effect in cuprate superconductors â€“ a probe of pairing symmetry. Physica Scripta, 1996, T66, 212-214.	1.2	2
126	Scanning SQUID microscope tests of the symmetry of the high-T <sub>c</sub> gap. European Physical Journal D, 1996, 46, 3169-3176.	0.4	6



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127	Electronic structure of $Tl_2Ba_2CuO_6+\delta$ epitaxial films measured by x-ray photoemission. Physical Review B, 1996, 54, 6115-6118.	1.1	9
128	The structural symmetry of epitaxial $Tl_2Ba_2CuO_6+\delta$ thin films. Applied Physics Letters, 1996, 69, 1798-1800.	1.5	24
129	Fabrication of Ag-clad $(Tl,V)(Sr,Ba)_2Ca_2Cu_3O_{9-\delta}$ superconducting tapes. Superconductor Science and Technology, 1995, 8, 174-176.	1.8	4
130	Superconducting epitaxial $(Tl,Bi)Sr_{1.6}Ba_{0.4}Ca_2Cu_3O_{9-\delta}$ film with high critical current in magnetic field. Applied Physics Letters, 1994, 65, 237-239.	1.5	32
131	Superior flux pinning in in situ synthesized silver sheathed superconducting tape of $Tl_{0.5}Pb_{0.5}Sr_{1.6}Ba_{0.4}Ca_{0.8}Y_{0.2}Cu_2O_y$ . Applied Physics Letters, 1993, 62, 3025-3027.	1.5	24
132	Uniform and flexible 24 $\mu$ m superconducting tape of silver sheathed $Tl_{0.5}Pb_{0.5}Ba_{0.4}Sr_{1.6}Ca_2Cu_3O_{8.2}$ . Applied Physics Letters, 1992, 61, 1715-1717.	1.5	45
133	Structural study of undoped and doped $Bi_2Sr_2CuO_6$ phases by transmission electron microscopy. Applied Physics Letters, 1989, 55, 2775-2777.	1.5	7