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List of Publications by Year
in descending order

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125 papers	6,148 citations	66234 42 h-index	74018 75 g-index
125 all docs	125 docs citations	125 times ranked	9146 citing authors

#	Article	IF	Citations
1	Conducting and transparent single-wall carbon nanotube electrodes for polymer-fullerene solar cells. Applied Physics Letters, 2005, 87, 203511.	1.5	480
2	Polyol Synthesis of Silver Nanowires: An Extensive Parametric Study. Crystal Growth and Design, 2011, 11, 4963-4969.	1.4	346
3	Influence of thermal annealing on microstructural, morphological, optical properties and surface electronic structure of copper oxide thin films. Materials Chemistry and Physics, 2014, 147, 987-995.	2.0	289
4	Field emission from graphene based composite thin films. Applied Physics Letters, 2008, 93, .	1.5	258
5	Opto-thermoelectric nanotweezers. Nature Photonics, 2018, 12, 195-201.	15.6	216
6	Highly Efficient Room Temperature Synthesis of Silverâ€Doped Zinc Oxide (<scp><scp>ZnO</scp></scp>:<scp><scp>Ag</scp></scp>) Nanoparticles: Structural, Optical, and Photocatalytic Properties. Journal of the American Ceramic Society, 2013, 96, 766-773.	1.9	173
7	Design Criteria for Transparent Single-Wall Carbon Nanotube Thin-Film Transistors. Nano Letters, 2006, 6, 677-682.	4.5	164
8	Nanomaterial-Enhanced All-Solid Flexible Zincâ^'Carbon Batteries. ACS Nano, 2010, 4, 2730-2734.	7.3	148
9	Thin films of hard cubic Zr3N4 stabilized by stress. Nature Materials, 2005, 4, 317-322.	13.3	146
10	Optimization of silver nanowire networks for polymer light emitting diode electrodes. Nanotechnology, 2013, 24, 125202.	1.3	145
11	Transparent and Flexible Supercapacitors with Single Walled Carbon Nanotube Thin Film Electrodes. ACS Applied Materials & Interfaces, 2014, 6, 15434-15439.	4.0	131
12	Rapid synthesis of aligned zinc oxide nanowires. Nanotechnology, 2008, 19, 255608.	1.3	127
13	Hybrid energy storage device from binder-free zinc-cobalt sulfide decorated biomass-derived carbon microspheres and pyrolyzed polyaniline nanotube-iron oxide. Energy Storage Materials, 2020, 25, 621-635.	9.5	124
14	ZnO nanowires grown on SOI CMOS substrate for ethanol sensing. Sensors and Actuators B: Chemical, 2010, 146, 559-565.	4.0	101
15	Flexible organic photovoltaics from zinc oxide nanowires grown on transparent and conducting single walled carbon nanotube thin films. Journal of Materials Chemistry, 2008, 18, 5909.	6.7	94
16	Effect of electroless etching parameters on the growth and reflection properties of silicon nanowires. Nanotechnology, 2011, 22, 155606.	1.3	90
17	Stretchable/flexible silver nanowire electrodes for energy device applications. Nanoscale, 2019, 11, 20356-20378.	2.8	90
18	Zinc oxide nanowire enhanced multifunctional coatings for cotton fabrics. Thin Solid Films, 2012, 520, 4658-4661.	0.8	85

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19	Flexible, silver nanowire network nickel hydroxide core-shell electrodes for supercapacitors. Journal of Power Sources, 2016, 328, 167-173.	4.0	83
20	Electrical, mechanical and thermal properties of aligned silver nanowire/polylactide nanocomposite films. Composites Part B: Engineering, 2016, 99, 288-296.	5.9	78
21	Photoelectrochemical cell using dye sensitized zinc oxide nanowires grown on carbon fibers. Applied Physics Letters, 2008, 93, .	1.5	76
22	Hydrothermal zinc oxide nanowire growth using zinc acetate dihydrate salt. Journal of Materials Research, 2012, 27, 1445-1451.	1.2	69
23	A solid-state dye-sensitized solar cell based on a novel ionic liquid gel and ZnO nanoparticles on a flexible polymer substrate. Nanotechnology, 2008, 19, 424006.	1.3	68
24	Zinc Oxide Nanowire Photodetectors with Single-Walled Carbon Nanotube Thin-Film Electrodes. ACS Applied Materials & Interfaces, 2012, 4, 5142-5146.	4.0	65
25	Silicon nanowire network metal-semiconductor-metal photodetectors. Applied Physics Letters, 2013, 103, .	1.5	65
26	Ternary nanocomposite SWNT/WO 3 /PANI thin film electrodes for supercapacitors. Journal of Alloys and Compounds, 2016, 658, 183-189.	2.8	63
27	3D printed antibacterial silver nanowire/polylactide nanocomposites. Composites Part B: Engineering, 2019, 172, 671-678.	5.9	61
28	Coaxial silver nanowire network core molybdenum oxide shell supercapacitor electrodes. Electrochimica Acta, 2016, 193, 39-44.	2.6	59
29	A novel approach for the fabrication of a flexible glucose biosensor: The combination of vertically aligned CNTs and a conjugated polymer. Food Chemistry, 2017, 220, 299-305.	4.2	59
30	Coaxial silver nanowire/polypyrrole nanocomposite supercapacitors. Organic Electronics, 2018, 52, 272-280.	1.4	59
31	Investigation of single-walled carbon nanotube growth parameters using alcohol catalytic chemical vapour deposition. Nanotechnology, 2005, 16, 2153-2163.	1.3	58
32	Enhanced supercapacitors from hierarchical carbon nanotube and nanohorn architectures. Journal of Materials Chemistry, 2011, 21, 17810.	6.7	57
33	Silver nanowire decorated heatable textiles. Nanotechnology, 2016, 27, 435201.	1.3	57
34	Vertically aligned carbon nanotube â€“ Polyaniline nanocomposite supercapacitor electrodes. International Journal of Hydrogen Energy, 2018, 43, 18617-18625.	3.8	55
35	Silicon nanowire - poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate) heterojunction solar cells. Applied Physics Letters, 2011, 99, .	1.5	51
36	Growth and process conditions of aligned and patternable films of iron(III) oxide nanowires by thermal oxidation of iron. Nanotechnology, 2008, 19, 455608.	1.3	49

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37	Zinc oxide nanowire networks for macroelectronic devices. Applied Physics Letters, 2009, 94, .	1.5	49
38	Flexible supercapacitor electrodes with vertically aligned carbon nanotubes grown on aluminum foils. Progress in Natural Science: Materials International, 2016, 26, 232-236.	1.8	48
39	Optoelectronic properties of transparent and conducting single-wall carbon nanotube thin films. Applied Physics Letters, 2006, 88, 191919.	1.5	47
40	Zinc Oxide Nanostructures and High Electron Mobility Nanocomposite Thin Film Transistors. IEEE Transactions on Electron Devices, 2008, 55, 3001-3011.	1.6	46
41	Textile supercapacitors-based on MnO2/SWNT/conducting polymer ternary composites. International Journal of Energy Research, 2015, 39, 2042-2052.	2.2	46
42	<scp><scp>ZnO</scp></scp> Nanorods as Antireflective Coatings for Industrialâ€Scale Singleâ€Crystalline Silicon Solar Cells. Journal of the American Ceramic Society, 2013, 96, 1253-1257.	1.9	43
43	All-carbon hybrids for high performance supercapacitors. International Journal of Energy Research, 2018, 42, 3575-3587.	2.2	43
44	Modification of transparent and conducting single wall carbon nanotube thin films via bromine functionalization. Applied Physics Letters, 2007, 90, 092114.	1.5	42
45	Nanowire-based multifunctional antireflection coatings for solar cells. Nanoscale, 2014, 6, 14555-14562.	2.8	42
46	An effective surface design based on a conjugated polymer and silver nanowires for the detection of paraoxon in tap water and milk. Sensors and Actuators B: Chemical, 2016, 228, 278-286.	4.0	42
47	Nanowires for energy generation. Nanotechnology, 2012, 23, 194002.	1.3	41
48	All solution processed, nanowire enhanced ultraviolet photodetectors. Applied Physics Letters, 2013, 102, .	1.5	41
49	Application of Si Nanowires Fabricated by Metal-Assisted Etching to Crystalline Si Solar Cells. IEEE Journal of Photovoltaics, 2013, 3, 548-553.	1.5	40
50	Fabric based wearable triboelectric nanogenerators for human machine interface. Nano Energy, 2021, 89, 106412.	8.2	40
51	All-Organic Electrochromic Supercapacitor Electrodes. Journal of the Electrochemical Society, 2015, 162, A2805-A2810.	1.3	39
52	Silver Nanowire/Conducting Polymer Nanocomposite Electrochromic Supercapacitor Electrodes. Journal of the Electrochemical Society, 2017, 164, A721-A727.	1.3	39
53	Advances in protective layer-coating on metal nanowires with enhanced stability and their applications. Applied Materials Today, 2021, 22, 100909.	2.3	38
54	Stable, self-ballasting field emission from zinc oxide nanowires grown on an array of vertically aligned carbon nanofibers. Applied Physics Letters, 2010, 96, .	1.5	37

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55	ZnO Nanowire and $hbox{WS}_{2}$ Nanotube Electronics. IEEE Transactions on Electron Devices, 2008, 55, 2988-3000.	1.6	35
56	High-performance, bare silver nanowire network transparent heaters. Nanotechnology, 2016, 27, 445708.	1.3	34
57	Understanding the Dielectric Properties of Heat-Treated Carbon Nanofibers at Terahertz Frequencies: a New Perspective on the Catalytic Activity of Structured Carbonaceous Materials. Journal of Physical Chemistry C, 2009, 113, 10554-10559.	1.5	33
58	Fabrication and characterization of copper oxide-silicon nanowire heterojunction photodiodes. Journal Physics D: Applied Physics, 2014, 47, 065106.	1.3	33
59	The Use of Terahertz Spectroscopy as a Sensitive Probe in Discriminating the Electronic Properties of Structurally Similar Multiâ€Walled Carbon Nanotubes. Advanced Materials, 2009, 21, 3953-3957.	11.1	32
60	Paper Based Glucose Biosensor Using Graphene Modified with a Conducting Polymer and Gold Nanoparticles. Journal of the Electrochemical Society, 2017, 164, G59-G64.	1.3	32
61	Multifunctional and Physically Transient Supercapacitors, Triboelectric Nanogenerators, and Capacitive Sensors. Advanced Functional Materials, 2022, 32, 2106066.	7.8	31
62	Irreversible blocking of ion channels using functionalized single-walled carbon nanotubes. Nanotechnology, 2005, 16, 2982-2986.	1.3	29
63	Metal-Enhanced Fluorescence from Silver Nanowires with High Aspect Ratio on Glass Slides for Biosensing Applications. Journal of Physical Chemistry C, 2015, 119, 675-684.	1.5	29
64	Heat transfer enhancement by silver nanowire suspensions in microchannel heat sinks. International Journal of Thermal Sciences, 2018, 123, 1-13.	2.6	29
65	Biomass-derived wearable energy storage systems based on poplar tree-cotton fibers coupled with binary nickelâ€“cobalt nanostructures. Sustainable Energy and Fuels, 2020, 4, 643-654.	2.5	29
66	Transparent, highly flexible, all nanowire network germanium photodetectors. Nanotechnology, 2012, 23, 325202.	1.3	28
67	Cobalt Oxide Nanoflakes on Single Walled Carbon Nanotube Thin Films for Supercapacitor Electrodes. Electrochimica Acta, 2016, 222, 1475-1482.	2.6	28
68	A Novel Blue to Transparent Polymer for Electrochromic Supercapacitor Electrodes. Electroanalysis, 2018, 30, 266-273.	1.5	26
69	Seamless Monolithic Design for Foam Based, Flexible, Parallel Plate Capacitive Sensors. Advanced Materials Technologies, 2021, 6, 2001168.	3.0	26
70	All-Solution-Processed, Oxidation-Resistant Copper Nanowire Networks for Optoelectronic Applications with Year-Long Stability. ACS Applied Materials & Interfaces, 2020, 12, 45136-45144.	4.0	25
71	A new highâ€performance blue to transmissive electrochromic material and use of silver nanowire network electrodes as substrates. Journal of Polymer Science Part A, 2017, 55, 1680-1686.	2.5	24
72	Wearable supercapacitors based on nickel tungstate decorated commercial cotton fabrics. International Journal of Energy Research, 2020, 44, 7603-7616.	2.2	22

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73	Manganese dioxide nanowires on carbon nanofiber frameworks for efficient electrochemical device electrodes. RSC Advances, 2017, 7, 12351-12358.	1.7	21
74	Microwave-assisted decoration of cotton fabrics with Nickel-Cobalt sulfide as a wearable glucose sensing platform. Journal of Electroanalytical Chemistry, 2021, 890, 115244.	1.9	21
75	Silicon nanowireâ€“silver indium selenide heterojunction photodiodes. Nanotechnology, 2013, 24, 375203.	1.3	20
76	Photovoltaic performance of Gallium-doped ZnO thin film/Si nanowires heterojunction diodes. Philosophical Magazine, 2016, 96, 1093-1109.	0.7	20
77	Core/shell copper nanowire networks for transparent thin film heaters. Nanotechnology, 2019, 30, 325202.	1.3	19
78	Thermally Induced Phase Transition and Defectâ€Assisted Nonlinear Absorption and Optical Limiting in Nanorod Morphology V₂O₅ Thin Films. Advanced Engineering Materials, 2021, 23, 2100468.	1.6	19
79	Enhanced localized surface plasmon resonance obtained in two step etched silicon nanowires decorated with silver nanoparticles. Applied Physics Letters, 2013, 103, .	1.5	18
80	Titanium disulfide decorated hollow carbon spheres towards capacitive deionization. Desalination, 2022, 533, 115766.	4.0	18
81	Paper Based, Expanded Graphite/Polypyrrole Nanocomposite Supercapacitors Free from Binders and Current Collectors. Journal of the Electrochemical Society, 2018, 165, A283-A290.	1.3	17
82	Silver-based nanomaterials: A critical review on factors affecting water disinfection performance and silver release. Critical Reviews in Environmental Science and Technology, 2021, 51, 2389-2423.	6.6	17
83	The mechanism of the sudden termination of carbon nanotube supergrowth. Carbon, 2011, 49, 214-221.	5.4	16
84	Enhanced diode performance in cadmium tellurideâ€“silicon nanowire heterostructures. Journal of Alloys and Compounds, 2015, 644, 131-139.	2.8	16
85	Sequential Deposition of Electrochromic MoO3Thin Films with High Coloration Efficiency and Stability. Journal of the Electrochemical Society, 2017, 164, E565-E571.	1.3	16
86	Silver nanowire networks as transparent top electrodes for silicon solar cells. Solar Energy, 2017, 141, 110-117.	2.9	15
87	Highly stable silverâ€“platinum coreâ€“shell nanowires for H₂O₂ detection. Nanoscale, 2021, 13, 13129-13141.	2.8	15
88	Hierarchically structured nanocarbon electrodes for flexible solid lithium batteries. Nano Energy, 2013, 2, 1054-1062.	8.2	14
89	Nanowire decorated, ultra-thin, single crystalline silicon for photovoltaic devices. Nanotechnology, 2017, 28, 405205.	1.3	14
90	Facile preparation of nanoparticle based SERS substrates for trace molecule detection. Physical Chemistry Chemical Physics, 2020, 22, 21139-21146.	1.3	13

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91	Direct measurement of charge transport through helical poly(ethyl propiolate) nanorods wired into gaps in single walled carbon nanotubes. Nanotechnology, 2009, 20, 105201.	1.3	12
92	Indium rich InGaN solar cells grown by MOCVD. Journal of Materials Science: Materials in Electronics, 2014, 25, 3652-3658.	1.1	12
93	Improved diode properties in zinc telluride thin film-silicon nanowire heterojunctions. Philosophical Magazine, 2015, 95, 1164-1183.	0.7	12
94	Silver-nanowire-modified fabrics for wide-spectrum antimicrobial applications. Journal of Materials Research, 2019, 34, 500-509.	1.2	12
95	Multichromic Vanadium Pentoxide Thin Films Through Ultrasonic Spray Deposition. Journal of the Electrochemical Society, 2021, 168, 106511.	1.3	12
96	Enhanced second harmonic generation from coupled asymmetric plasmonic metal nanostructures. Journal of Optics (United Kingdom), 2015, 17, 125005.	1.0	11
97	All Solutionâ€Based Fabrication of Copper Oxide Thin Film/Cobaltâ€Doped Zinc Oxide Nanowire Heterojunctions. Journal of the American Ceramic Society, 2016, 99, 2497-2503.	1.9	11
98	Nanometer-Thick Mn:NiO and Co:NiO Films for High Performance Nonenzymatic Biosensors. ACS Applied Nano Materials, 2021, 4, 13871-13883.	2.4	11
99	Growth of branched gold nanoparticles on solid surfaces and their use as surface-enhanced Raman scattering substrates. RSC Advances, 2015, 5, 101656-101663.	1.7	10
100	Scalable, microwave-assisted decoration of commercial cotton fabrics with binary nickel cobalt sulfides towards textile-based energy storage. Electrochimica Acta, 2022, 404, 139731.	2.6	10
101	Performance of nanowire decorated mono- and multi-crystalline Si solarcells. Physica E: Low-Dimensional Systems and Nanostructures, 2013, 51, 71-74.	1.3	9
102	Germanium nanowire synthesis using solid precursors. Journal of Crystal Growth, 2014, 392, 20-29.	0.7	9
103	Zinc Oxide Nanowire Decorated Singleâ€Use Electrodes for Electrochemical DNA Detection. Journal of the American Ceramic Society, 2015, 98, 663-668.	1.9	9
104	A Point-of-Use (POU) Water Disinfection: Silver Nanowire Decorated Glass Fiber Filters. Journal of Water Process Engineering, 2020, 38, 101616.	2.6	9
105	Synthesis of ZnO nanowires for thin film network transistors. Proceedings of SPIE, 2008, , .	0.8	8
106	Hydrothermal zinc oxide nanowire growth with different zinc salts. Journal of Materials Research, 2012, 27, 2401-2407.	1.2	7
107	Voltage-Induced Dependence of Raman-Active Modes in Single-Wall Carbon Nanotube Thin Films. Nano Letters, 2007, 7, 1129-1133.	4.5	6
108	Enhancing capacitive deionization technology as an effective method for water treatment using commercially available graphene. Water Science and Technology, 2017, 75, 643-649.	1.2	6

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109	Genotoxicity study of high aspect ratio silver nanowires. Toxicological and Environmental Chemistry, 2017, 99, 837-847.	0.6	5
110	CMOS Alcohol Sensor Employing ZnO Nanowire Sensing Films. , 2009, , .		4
111	Silver nanowire loaded poly(Îµ-caprolactone) nanocomposite fibers as electroactive scaffolds for skeletal muscle regeneration. Materials Science and Engineering C, 2022, 134, 112567.	3.8	4
112	Corrections to â€œZinc Oxide Nanostructures and High Electron Mobility Nanocomposite Thin Film Transistorsâ€•[Nov 08 3001-3011. IEEE Transactions on Electron Devices, 2009, 56, 156-156.	1.6	3
113	Thin-film transistors based on poly(3,3â€´-dialkyl-quarterthiophene) and zinc oxide nanowires with improved ambient stability. Applied Physics Letters, 2011, 98, 102106.	1.5	3
114	Deposition of Carbon Nanotubes on CMOS. IEEE Nanotechnology Magazine, 2012, 11, 215-219.	1.1	3
115	Periodic Nanopillar N-I-P Amorphous Si Photovoltaic Cells Using Carbon Nanotube Scaffolds. IEEE Nanotechnology Magazine, 2014, 13, 997-1004.	1.1	3
116	Plasmonic Light-Management Interfaces by Polyol-Synthesized Silver Nanoparticles for Industrial Scale Silicon Solar Cells. ACS Applied Nano Materials, 2020, 3, 12231-12239.	2.4	3
117	Phototransistors Utilizing Individual WS2 Nanotubes. , 2008, , .		2
118	Optimisation of CNTs and ZnO nanostructures for electron sources. , 2010, , .		2
119	Zinc Oxide Nanowire Networks for Macroelectronic Devices. , 2008, , .		1
120	Heterojunction photovoltaic devices utilizing single wall carbon nanotube thin films and silicon substrates. Conference Record of the IEEE Photovoltaic Specialists Conference, 2008, , .	0.0	1
121	Understanding the catalytic activity of heat treated carbon nanofibres: Investigation of their dielectric properties at THz frequencies. , 2008, , .		1
122	Metal oxide surfaces for enhanced colorimetric response in bioassays. Colloids and Surfaces B: Biointerfaces, 2017, 154, 331-340.	2.5	1
123	Parametric Study of Single-Walled Carbon Nanotubes Using Alcohol Catalytic Chemical Vapor Deposition. Materials Research Society Symposia Proceedings, 2004, 858, 14.	0.1	0
124	Light management on industrial size c-Si solar cells by Si nanowires fabricated by metal-assisted etching. , 2012, , .		0
125	Suppressed Hysteretic Field Emission from Polymer Encapsulated Silver Nanowires. IEEE Nanotechnology Magazine, 2016, , 1-1.	1.1	0