Meyya Meyyappan

List of Publications by Year
in descending order

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		8181	9861
414	24,665	76	141
papers	citations	h-index	g-index

420	420	420	23792
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Carbon Nanotube Sensors for Gas and Organic Vapor Detection. Nano Letters, 2003, 3, 929-933.	9.1	1,664
2	Carbon nanotube growth by PECVD: a review. Plasma Sources Science and Technology, 2003, 12, 205-216.	3.1	697
3	Single Crystal Nanowire Vertical Surround-Gate Field-Effect Transistor. Nano Letters, 2004, 4, 1247-1252.	9.1	681
4	Carbon Nanotube Nanoelectrode Array for Ultrasensitive DNA Detection. Nano Letters, 2003, 3, 597-602.	9.1	633
5	Flexible Graphene-Based Wearable Gas and Chemical Sensors. ACS Applied Materials & Interfaces, 2017, 9, 34544-34586.	8.0	603
6	Modeling gas flow through microchannels and nanopores. Journal of Applied Physics, 2003, 93, 4870-4879.	2.5	546
7	Bottom-up approach for carbon nanotube interconnects. Applied Physics Letters, 2003, 82, 2491-2493.	3.3	491
8	Plasma nanoscience: from nano-solids in plasmas to nano-plasmas in solids. Advances in Physics, 2013, 62, 113-224.	14.4	486
9	Growth of Epitaxial Nanowires at the Junctions of Nanowalls. Science, 2003, 300, 1249-1249.	12.6	396
10	Preparation of Nucleic Acid Functionalized Carbon Nanotube Arrays. Nano Letters, 2002, 2, 1079-1081.	9.1	349
11	Room temperature methane detection using palladium loaded single-walled carbon nanotube sensors. Chemical Physics Letters, 2004, 391, 344-348.	2.6	349
12	CO2 adsorption in single-walled carbon nanotubes. Chemical Physics Letters, 2003, 376, 761-766.	2.6	334
13	Highly selective CO2 capture on N-doped carbon produced by chemical activation of polypyrrole functionalized graphene sheets. Chemical Communications, 2012, 48, 735-737.	4.1	328
14	Novel Three-Dimensional Electrodes:â€‰ Electrochemical Properties of Carbon Nanotube Ensembles. Journal of Physical Chemistry B, 2002, 106, 9299-9305.	2.6	293
15	Dense Vertically Aligned Multiwalled Carbon Nanotube Arrays as Thermal Interface Materials. IEEE Transactions on Components and Packaging Technologies, 2007, 30, 92-100.	1.3	292
16	Optical properties of single-crystalline ZnO nanowires on m-sapphire. Applied Physics Letters, 2003, 82, 2023-2025.	3.3	283
17	Direct Integration of Metal Oxide Nanowire in Vertical Field-Effect Transistor. Nano Letters, 2004, 4, 651-657.	9.1	264
18	Carbon Nanotube Based Humidity Sensor on Cellulose Paper. Journal of Physical Chemistry C, 2012, 116, 22094-22097.	3.1	259

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19	The fabrication and electrochemical characterization of carbon nanotube nanoelectrode arrays. Journal of Materials Chemistry, 2004, 14, 676.	6.7	248
20	Pore structure of raw and purified HiPco single-walled carbon nanotubes. Chemical Physics Letters, 2002, 365, 69-74.	2.6	222
21	A Growth Mechanism for Free-Standing Vertical Graphene. Nano Letters, 2014, 14, 3064-3071.	9.1	221
22	Growth of multiwall carbon nanotubes in an inductively coupled plasma reactor. Journal of Applied Physics, 2002, 91, 6027-6033.	2.5	213
23	A review of plasma enhanced chemical vapour deposition of carbon nanotubes. Journal Physics D: Applied Physics, 2009, 42, 213001.	2.8	208
24	Interfacial energy and strength of multiwalled-carbon-nanotube-based dry adhesive. Journal of Vacuum Science & Technology B, 2006, 24, 331.	1.3	198
25	Thermal Interface Properties of Cu-filled Vertically Aligned Carbon Nanofiber Arrays. Nano Letters, 2004, 4, 2403-2407.	9.1	197
26	Vacuum nanoelectronics: Back to the future?â€"Gate insulated nanoscale vacuum channel transistor. Applied Physics Letters, 2012, 100, .	3.3	195
27	Functionalization of Carbon Nanotubes Using Atomic Hydrogen from a Glow Discharge. Nano Letters, 2002, 2, 73-77.	9.1	179
28	Ultrasensitive label-free DNA analysis using an electronic chip based on carbon nanotube nanoelectrode arrays. Nanotechnology, 2003, 14, 1239-1245.	2.6	179
29	Multilayered metal catalysts for controlling the density of single-walled carbon nanotube growth. Chemical Physics Letters, 2001, 348, 368-374.	2.6	170
30	Silicon nanowire biosensors for detection of cardiac troponin I (cTnI) with high sensitivity. Biosensors and Bioelectronics, 2016, 77, 695-701.	10.1	167
31	Carbon nanotube tip probes: stability and lateral resolution in scanning probe microscopy and application to surface science in semiconductors. Nanotechnology, 2001, 12, 363-367.	2.6	161
32	Carbon Nanotubeâ€Based Chemical Sensors. Small, 2016, 12, 2118-2129.	10.0	155
33	Electronic properties of multiwalled carbon nanotubes in an embedded vertical array. Applied Physics Letters, 2002, 81, 910-912.	3.3	154
34	Inlaid Multi-Walled Carbon Nanotube Nanoelectrode Arrays for Electroanalysis. Electroanalysis, 2005, 17, 15-27.	2.9	153
35	Label-Free Detection of Cardiac Troponin-I Using Carbon Nanofiber Based Nanoelectrode Arrays. Analytical Chemistry, 2013, 85, 3858-3863.	6.5	152
36	Nanoscale Vacuum Channel Transistor. Nano Letters, 2017, 17, 2146-2151.	9.1	139

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37	Epitaxial Directional Growth of Indium-Doped Tin Oxide Nanowire Arrays. Nano Letters, 2003, 3, 925-928.	9.1	138
38	Near-infrared semiconductor subwavelength-wire lasers. Applied Physics Letters, 2006, 88, 163115.	3.3	136
39	The Significance of Plasma Heating in Carbon Nanotube and Nanofiber Growth. Nano Letters, 2004, 4, 921-926.	9.1	135
40	Vertically Aligned Carbon Nanofiber Architecture as a Multifunctional 3-D Neural Electrical Interface. IEEE Transactions on Biomedical Engineering, 2007, 54, 1121-1128.	4.2	133
41	Mechanisms of 1D Crystal Growth in Reactive Vapor Transport:Â Indium Nitride Nanowires. Nano Letters, 2005, 5, 1625-1631.	9.1	129
42	Graphene: Piecing it Together. Advanced Materials, 2011, 23, 4471-4490.	21.0	127
43	Transparent Poly(methyl methacrylate)/Single-Walled Carbon Nanotube (PMMA/SWNT) Composite Films with Increased Dielectric Constants. Advanced Functional Materials, 2005, 15, 101-106.	14.9	126
44	A carbon nanotube sensor array for sensitive gas discrimination using principal component analysis. Journal of Electroanalytical Chemistry, 2006, 593, 105-110.	3.8	124
45	A carbon nanofiber based biosensor for simultaneous detection of dopamine and serotonin in the presence of ascorbicacid. Biosensors and Bioelectronics, 2013, 42, 434-438.	10.1	123
46	Label-free detection of C-reactive protein using a carbon nanofiber based biosensor. Biosensors and Bioelectronics, 2014, 59, 112-119.	10.1	123
47	Synthesis and characterization of carbon nanowalls on different substrates by radio frequency plasma enhanced chemical vapor deposition. Carbon, 2014, 72, 372-380.	10.3	121
48	Multiwalled Carbon Nanotubes by Chemical Vapor Deposition Using Multilayered Metal Catalysts. Journal of Physical Chemistry B, 2002, 106, 5629-5635.	2.6	120
49	Reactor design considerations in the hot filament/direct current plasma synthesis of carbon nanofibers. Journal of Applied Physics, 2003, 94, 4070-4078.	2.5	117
50	Large-Scale Fabrication of Carbon Nanotube Probe Tips for Atomic Force Microscopy Critical Dimension Imaging Applications. Nano Letters, 2004, 4, 1301-1308.	9.1	116
51	A carbon nanotube based ammonia sensor on cellulose paper. RSC Advances, 2014, 4, 549-553.	3.6	113
52	A carbon nanotube-infused polysulfone membrane with polyvinyl alcohol layer for treating oil-containing waste water. Scientific Reports, 2013, 3, 1509.	3.3	108
53	Gas Permeability of a Buckypaper Membrane. Nano Letters, 2003, 3, 189-192.	9.1	107
54	Combinatorial Optimization of Heterogeneous Catalysts Used in the Growth of Carbon Nanotubes. Langmuir, 2001, 17, 260-264.	3.5	106

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55	Data Storage Studies on Nanowire Transistors with Self-Assembled Porphyrin Molecules. Journal of Physical Chemistry B, 2004, 108, 9646-9649.	2.6	105
56	Nanotechnology: Role in emerging nanoelectronics. Solid-State Electronics, 2006, 50, 536-544.	1.4	101
57	Surface functionalized halloysite nanotubes decorated with silver nanoparticles for enzyme immobilization and biosensing. Journal of Materials Chemistry B, 2016, 4, 2553-2560.	5.8	99
58	Improved fabrication approach for carbon nanotube probe devices. Applied Physics Letters, 2000, 77, 3453-3455.	3.3	98
59	Functionalization of Carbon Nanotubes by Ammonia Glow-Discharge:â€‰ Experiments and Modeling. Journal of Physical Chemistry B, 2004, 108, 8166-8172.	2.6	97
60	Nanoscale memory devices. Nanotechnology, 2010, 21, 412001.	2.6	97
61	All-printed triboelectric nanogenerator. Nano Energy, 2018, 44, 82-88.	16.0	97
62	Glow discharge simulation through solutions to the moments of the Boltzmann transport equation. Journal of Applied Physics, 1990, 68, 1506-1512.	2.5	95
63	One-Dimensional Phase-Change Nanostructure:â€‰ Germanium Telluride Nanowire. Journal of Physical Chemistry C, 2007, 111, 2421-2425.	3.1	95
64	Wafer-scale fabrication of patterned carbon nanofiber nanoelectrode arrays: A route for development of multiplexed, ultrasensitive disposable biosensors. Biosensors and Bioelectronics, 2009, 24, 2818-2824.	10.1	95
65	Electron Transport Through Metalâ€“Multiwall Carbon Nanotube Interfaces. IEEE Nanotechnology Magazine, 2004, 3, 311-317.	2.0	94
66	Indium selenide nanowire phase-change memory. Applied Physics Letters, 2007, 91, .	3.3	94
67	Growth of Individual Vertical Germanium Nanowires. Advanced Materials, 2005, 17, 549-553.	21.0	90
68	Coal as a carbon source for carbon nanotube synthesis. Carbon, 2012, 50, 2679-2690.	10.3	90
69	Carbon nanofiber electrode array for electrochemical detection of dopamine using fast scan cyclic voltammetry. Analyst, The, 2011, 136, 1802.	3.5	88
70	Functionalization of Carbon Nanotubes via Nitrogen Glow Discharge. Journal of Physical Chemistry B, 2005, 109, 23466-23472.	2.6	87
71	III-VI compound semiconductor indium selenide (In2Se3) nanowires: Synthesis and characterization. Applied Physics Letters, 2006, 89, 233121.	3.3	86
72	Graphene Fieldâ€Effect Transistors for the Sensitive and Selective Detection of Escherichia coli Using Pyreneâ€Tagged DNA Aptamer. Advanced Healthcare Materials, 2017, 6, 1700736.	7.6	84

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73	Gas Transport Characteristics through a Carbon Nanotubule. Nano Letters, 2004, 4, 377-381.	9.1	83
74	Carbon nanotubes by plasma-enhanced chemical vapor deposition. Pure and Applied Chemistry, 2006, 78, 1117-1125.	1.9	80
75	Growth of Carbon Nanotubes:Â A Combinatorial Method To Study the Effects of Catalysts and Underlayers. Journal of Physical Chemistry B, 2003, 107, 8484-8489.	2.6	79
76	Carbon nanotube tips for scanning probe microscopy: fabrication and high aspect ratio nanometrology. Measurement Science and Technology, 2005, 16, 2138-2146.	2.6	79
77	X-ray Absorption Study of Graphene Oxide and Transition Metal Oxide Nanocomposites. Journal of Physical Chemistry C, 2014, 118, 18706-18712.	3.1	79
78	Model based comparison of thermal and plasma chemical vapor deposition of carbon nanotubes. Journal of Applied Physics, 2003, 93, 750-752.	2.5	78
79	Combinatorial chips for optimizing the growth and integration of carbon nanofibre based devices. Nanotechnology, 2004, 15, 9-15.	2.6	77
80	Catalyst Metal Selection for Synthesis of Inorganic Nanowires. Advanced Materials, 2005, 17, 1773-1777.	21.0	77
81	Height Independent Compressive Modulus of Vertically Aligned Carbon Nanotube Arrays. Nano Letters, 2008, 8, 511-515.	9.1	77
82	Very high-frequency capacitively coupled argon discharges. Plasma Sources Science and Technology, 1994, 3, 181-189.	3.1	75
83	Radio-Frequency Oxygen Plasma as a Sterilization Source. AIAA Journal, 2004, 42, 823-832.	2.6	75
84	Characterization of Carbon Nanofiber Electrode Arrays Using Electrochemical Impedance Spectroscopy: Effect of Scaling Down Electrode Size. ACS Nano, 2010, 4, 955-961.	14.6	75
85	A glow-discharge approach for functionalization of carbon nanotubes. Applied Physics Letters, 2002, 81, 5237-5239.	3.3	74
86	Impact of Low-Temperature Plasmas on Deinococcus radiodurans and Biomolecules. Biotechnology Progress, 2003, 19, 776-783.	2.6	73
87	Nanoscale vacuum channel transistors fabricated on silicon carbide wafers. Nature Electronics, 2019, 2, 405-411.	26.0	73
88	The slow axisymmetric motion of two bubbles in a thermal gradient. Journal of Colloid and Interface Science, 1983, 94, 243-257.	9.4	72
89	A carbon nanotube based ammonia sensor on cotton textile. Applied Physics Letters, 2013, 102, .	3.3	72
90	Effects of gamma radiation on poly(methyl methacrylate)/single-wall nanotube composites. Journal of Materials Research, 2002, 17, 2507-2513.	2.6	71

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91	Proton Irradiation of Carbon Nanotubes. Nano Letters, 2003, 3, 643-646.	9.1	71
92	Structural and Electrical Characterization of Carbon Nanofibers for Interconnect Via Applications. IEEE Nanotechnology Magazine, 2007, 6, 688-695.	2.0	71
93	Cofabrication of Vacuum Field Emission Transistor (VFET) and MOSFET. IEEE Nanotechnology Magazine, 2014, 13, 464-468.	2.0	71
94	Hexagonal Boron Nitride: The Thinnest Insulating Barrier to Microbial Corrosion. ACS Nano, 2018, 12, 2242-2252.	14.6	71
95	Nano Chemical Sensors With Polymer-Coated Carbon Nanotubes. IEEE Sensors Journal, 2006, 6, 1047-1051.	4.7	70
96	U-Health Smart Home. IEEE Nanotechnology Magazine, 2011, 5, 6-11.	1.3	70
97	Doping effects of surface functionalization on graphene with aromatic molecule and organic solvents. Applied Surface Science, 2017, 425, 713-721.	6.1	70
98	Carbon nanotube ink for writing on cellulose paper. Materials Research Bulletin, 2014, 50, 249-253.	5.2	69
99	Neutral gas temperature estimates in an inductively coupled CF4 plasma by fitting diatomic emission spectra. Journal of Applied Physics, 2002, 91, 8955-8964.	2.5	68
100	Monolayer to Multilayer Nanostructural Growth Transition in N-Type Oligothiophenes on Au(111) and Implications for Organic Field-Effect Transistor Performance. Nano Letters, 2006, 6, 2447-2455.	9.1	67
101	Carbon nanotube scanning probe for profiling of deep-ultraviolet and 193 nm photoresist patterns. Applied Physics Letters, 2002, 81, 901-903.	3.3	66
102	One-dimensional Germanium Nanowires for Future Electronics. Journal of Cluster Science, 2006, 17, 579-597.	3.3	66
103	Silicon nanowire ion sensitive field effect transistor with integrated Ag/AgCl electrode: pH sensing and noise characteristics. Analyst, The, 2011, 136, 5012.	3.5	66
104	Vertical ZnO nanowire growth on metal substrates. Nanotechnology, 2012, 23, 194015.	2.6	66
105	Observation of ultraviolet emission and effect of surface states on the luminescence from tin oxide nanowires. Applied Physics Letters, 2009, 94, .	3.3	64
106	Effect of metastable oxygen molecules in high density power-modulated oxygen discharges. Journal of Applied Physics, 2000, 87, 8323-8333.	2.5	61
107	Nonlinear tapping dynamics of multi-walled carbon nanotube tipped atomic force microcantilevers. Nanotechnology, 2004, 15, 416-421.	2.6	61
108	The fluorination of single wall carbon nanotubes using microwave plasma. Nanotechnology, 2004, 15, 1650-1654.	2.6	61

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109	Plasma nanotechnology: past, present and future. Journal Physics D: Applied Physics, 2011, 44, 174002.	2.8	61
110	Low temperature Pd/SnO2 sensor for carbon monoxide detection. Sensors and Actuators B: Chemical, 2013, 177, 770-775.	7.8	59
111	Chitosan-Covered Pd@Pt Coreâ€“Shell Nanocubes for Direct Electron Transfer in Electrochemical Enzymatic Glucose Biosensor. ACS Omega, 2017, 2, 1896-1904.	3.5	59
112	Plasma jet printing for flexible substrates. Applied Physics Letters, 2016, 108, .	3.3	58
113	Simulation of the dc plasma in carbon nanotube growth. Journal of Applied Physics, 2003, 93, 6284-6290.	2.5	56
114	A Gas Sensor Array Using Carbon Nanotubes and Microfabrication Technology. Electrochemical and Solid-State Letters, 2005, 8, H100.	2.2	56
115	Hexagonal Boron Nitride for Sulfur Corrosion Inhibition. ACS Nano, 2020, 14, 14809-14819.	14.6	56
116	Leaky Integrate-and-Fire Biristor Neuron. IEEE Electron Device Letters, 2018, 39, 1457-1460.	3.9	55
117	Single-crystalline CdTe nanowire field effect transistors as nanowire-based photodetector. Physical Chemistry Chemical Physics, 2014, 16, 22687-22693.	2.8	54
118	High efficiency silicon solar cell based on asymmetric nanowire. Scientific Reports, 2015, 5, 11646.	3.3	54
119	Radio frequency discharge modeling: Moment equations approach. Journal of Applied Physics, 1993, 74, 2250-2259.	2.5	53
120	Impact of gas heating in inductively coupled plasmas. Journal of Applied Physics, 2001, 90, 2148-2157.	2.5	53
121	Toward the Responsible Development and Commercialization of Sensor Nanotechnologies. ACS Sensors, 2016, 1, 207-216.	7.8	52
122	Ion dynamics model for collisionless radio frequency sheaths. Journal of Applied Physics, 2000, 87, 7176-7184.	2.5	51
123	High Lateral Resolution Imaging with Sharpened Tip of Multi-Walled Carbon Nanotube Scanning Probe. Journal of Physical Chemistry B, 2004, 108, 2816-2821.	2.6	50
124	Chalcogenide-Nanowire-Based Phase Change Memory. IEEE Nanotechnology Magazine, 2008, 7, 496-502.	2.0	49
125	Triboelectric nanogenerator for Mars environment. Nano Energy, 2017, 39, 238-244.	16.0	49
126	Wearable UV Sensor Based on Carbon Nanotube-Coated Cotton Thread. ACS Applied Materials & Interfaces, 2018, 10, 40198-40202.	8.0	49

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127	Synthesis and nanoscale thermal encoding of phase-change nanowires. Applied Physics Letters, 2007, 90, 183116.	3.3	48
128	Synthesis of Group III Antimonide Nanowires. Journal of Physical Chemistry C, 2007, 111, 7339-7347.	3.1	48
129	A Sensor Array for the Detection and Discrimination of Methane and Other Environmental Pollutant Gases. Sensors, 2016, 16, 1163.	3.8	48
130	Modeling of electronegative radio-frequency discharges. IEEE Transactions on Plasma Science, 1991, 19, 122-129.	1.3	47
131	Hysteretic behavior of contact force response in triboelectric nanogenerator. Nano Energy, 2017, 32, 408-413.	16.0	47
132	Heterogeneous Single-Walled Carbon Nanotube Catalyst Discovery and Optimization. Chemistry of Materials, 2002, 14, 1891-1896.	6.7	46
133	Chemical Gated Field Effect Transistor by Hybrid Integration of One-Dimensional Silicon Nanowire and Two-Dimensional Tin Oxide Thin Film for Low Power Gas Sensor. ACS Applied Materials & Interfaces, 2015, 7, 21263-21269.	8.0	46
134	Thermocapillary migration of a bubble normal to a plane surface. Journal of Colloid and Interface Science, 1981, 83, 199-208.	9.4	45
135	The thermocapillary motion of two bubbles oriented arbitrarily relative to a thermal gradient. Journal of Colloid and Interface Science, 1984, 97, 291-294.	9.4	45
136	Carbon Nanotube Scanning Probe for Imaging in Aqueous Environment. IEEE Transactions on Nanobioscience, 2004, 3, 56-60.	3.3	45
137	An investigation of plasma chemistry for dc plasma enhanced chemical vapour deposition of carbon nanotubes and nanofibres. Nanotechnology, 2005, 16, 925-930.	2.6	45
138	Field emission properties of carbon nanotube pillar arrays. Journal of Applied Physics, 2008, 103, 064312.	2.5	45
139	Characteristics of aligned carbon nanofibers for interconnect via applications. IEEE Electron Device Letters, 2006, 27, 221-224.	3.9	44
140	Rapid thermal annealing effects on tin oxide nanowires prepared by vaporâ€“liquidâ€“solid technique. Nanotechnology, 2009, 20, 065704.	2.6	44
141	Chitosan supported silver nanowires as a platform for direct electrochemistry and highly sensitive electrochemical glucose biosensing. RSC Advances, 2016, 6, 20102-20108.	3.6	44
142	Maleic anhydride-functionalized graphene nanofillers render epoxy coatings highly resistant to corrosion and microbial attack. Carbon, 2020, 159, 586-597.	10.3	44
143	Carbon nanotube networks by chemical vapor deposition. Applied Physics Letters, 2003, 82, 817-819.	3.3	43
144	Enabling communication and cooperation in bio-nanosensor networks: toward innovative healthcare solutions. IEEE Wireless Communications, 2012, 19, 42-51.	9.0	43

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145	Thermally Phaseâ€Transformed In₂Se₃ Nanowires for Highly Sensitive Photodetectors. Small, 2014, 10, 3795-3802.	10.0	43
146	Foldable and Disposable Memory on Paper. Scientific Reports, 2016, 6, 38389.	3.3	43
147	Correlation between sp³-to-sp² Ratio and Surface Oxygen Functionalities in Tetrahedral Amorphous Carbon (ta-C) Thin Film Electrodes and Implications of Their Electrochemical Properties. Journal of Physical Chemistry C, 2016, 120, 8298-8304.	3.1	43
148	Growth of carbon nanotubes by thermal and plasma chemical vapour deposition processes and applications in microscopy. Nanotechnology, 2002, 13, 280-284.	2.6	42
149	Photostable Zn₂SnO₄ Nanowire Transistors for Transparent Displays. ACS Nano, 2012, 6, 4912-4920.	14.6	41
150	Thermocapillary migration of a gas bubble in an arbitrary direction with respect to a plane surface. Journal of Colloid and Interface Science, 1987, 115, 206-219.	9.4	40
151	Mass spectrometric and Langmuir probe measurements in inductively coupled plasmas in Ar, CHF3/Ar and CHF3/Ar/O2mixtures. Plasma Sources Science and Technology, 2001, 10, 191-204.	3.1	40
152	Thermal phase transformation of In2Se3 nanowires studied by in situ synchrotron radiation X-ray diffraction. Journal of Materials Chemistry, 2011, 21, 6944.	6.7	40
153	Plasma Jet Printing of Electronic Materials on Flexible and Nonconformal Objects. ACS Applied Materials & Interfaces, 2014, 6, 20860-20867.	8.0	40
154	All 3D printed energy harvester for autonomous and sustainable resource utilization. Nano Energy, 2018, 52, 271-278.	16.0	40
155	Vertical Silicon Nanowire Thermoelectric Modules with Enhanced Thermoelectric Properties. Nano Letters, 2019, 19, 747-755.	9.1	40
156	Uncertainty and sensitivity analysis of gas-phase chemistry in a CHF3plasma. Plasma Sources Science and Technology, 2003, 12, 225-234.	3.1	39
157	Growth and properties of tin oxide nanowires and the effect of annealing conditions. Semiconductor Science and Technology, 2010, 25, 024012.	2.0	39
158	Copper oxide resistive switching memory for e-textile. AIP Advances, 2011, 1, .	1.3	39
159	Building Brain-Inspired Logic Circuits from Dynamically Switchable Transition-Metal Oxides. Trends in Chemistry, 2019, 1, 711-726.	8.5	39
160	Structural characteristics of carbon nanofibers for on-chip interconnect applications. Applied Physics Letters, 2005, 87, 233105.	3.3	38
161	Nanostructured materials for supercapacitors. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, .	2.1	38
162	Single-Event Transient in FinFETs and Nanosheet FETs. IEEE Electron Device Letters, 2018, 39, 1840-1843.	3.9	38

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163	Improvement of Thermal Contact Resistance by Carbon Nanotubes and Nanofibers. Journal of Nanoscience and Nanotechnology, 2004, 4, 964-967.	0.9	37
164	Corrections to "Characteristics of Aligned Carbon Nanofibers for Interconnect Via Applications". IEEE Electron Device Letters, 2006, 27, 622-622.	3.9	37
165	Integrated Carbon Nanostructures for Detection of Neurotransmitters. Molecular Neurobiology, 2015, 52, 859-866.	4.0	37
166	Synthesis of germanium nanowires on insulator catalyzed by indium or antimony. Journal of Vacuum Science & Technology B, 2007, 25, 415.	1.3	36
167	Enhanced acetone sensing properties of monolayer graphene at room temperature by electrode spacing effect and UV illumination. Sensors and Actuators B: Chemical, 2017, 253, 77-84.	7.8	36
168	Room temperature carbon nanotube based sensor for carbon monoxide detection. Journal of Sensors and Sensor Systems, 2014, 3, 349-354.	0.9	36
169	Carbon nanotube pillar arrays for achieving high emission current densities. Applied Physics Letters, 2009, 95, 133111.	3.3	35
170	Multiplexed electrochemical immunosensor for label-free detection of cardiac markers using a carbon nanofiber array chip. Journal of Electroanalytical Chemistry, 2016, 773, 53-62.	3.8	35
171	Detection of ricin using a carbon nanofiber based biosensor. Biosensors and Bioelectronics, 2011, 28, 428-433.	10.1	34
172	Synthesis of ZnTe nanostructures by vaporâ€“liquidâ€“solid technique. Chemical Physics Letters, 2011, 504, 62-66.	2.6	34
173	Carbon Nanotube Synthesis Using Coal Pyrolysis. Langmuir, 2015, 31, 9464-9472.	3.5	34
174	Plasma Jet Printing and in Situ Reduction of Highly Acidic Graphene Oxide. ACS Nano, 2018, 12, 5473-5481.	14.6	34
175	All 3D-Printed Flexible ZnO UV Photodetector on an Ultraflat Substrate. ACS Sensors, 2020, 5, 1028-1032.	7.8	34
176	A Continuum Model for the Inductively Coupled Plasma Reactor in Semiconductor Processing. Journal of the Electrochemical Society, 1999, 146, 2705-2711.	2.9	33
177	Langmuir probe and mass spectrometric measurements in inductively coupled CF4plasmas. Plasma Sources Science and Technology, 2002, 11, 69-76.	3.1	33
178	Plasma-Enhanced Chemical Vapor Deposition of Multiwalled Carbon Nanofibers. Journal of Nanoscience and Nanotechnology, 2002, 2, 475-480.	0.9	33
179	Nano biosensors for neurochemical monitoring. Nano Convergence, 2015, 2, .	12.1	33
180	A continuum model for lowâ€pressure radioâ€frequency discharges. Journal of Applied Physics, 1991, 69, 8047-8051.	2.5	32

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181	All-Printed In-Plane Supercapacitors by Sequential Additive Manufacturing Process. ACS Applied Energy Materials, 2020, 3, 4965-4973.	5.1	32
182	A multicomponent, multitemperature model for high density plasma processing reactors. Journal of Applied Physics, 1996, 80, 1345-1351.	2.5	31
183	A carbon-nanotube-based sensor array for formaldehyde detection. Nanotechnology, 2011, 22, 055502.	2.6	31
184	Floating Oscillator-Embedded Triboelectric Generator for Versatile Mechanical Energy Harvesting. Scientific Reports, 2015, 5, 16409.	3.3	31
185	Electronic Applications of Carbon Nanotubes Become Closer to Reality. Journal of Nanoparticle Research, 1999, 1, 151-152.	1.9	30
186	Germanium Antimonide Phase-Change Nanowires for Memory Applications. IEEE Transactions on Electron Devices, 2008, 55, 3131-3135.	3.0	30
187	Tailoring the surface properties and carrier dynamics in SnO₂nanowires. Nanotechnology, 2011, 22, 285709.	2.6	30
188	Synthesis of gold nanoparticles supported on functionalized nanosilica using deep eutectic solvent for an electrochemical enzymatic glucose biosensor. Journal of Materials Chemistry B, 2017, 5, 7072-7081.	5.8	30
189	Annealing effect on UV-illuminated recovery in gas response of graphene-based NO₂ sensors. RSC Advances, 2019, 9, 23343-23351.	3.6	30
190	Trends in Carbon, Oxygen, and Nitrogen Core in the X-ray Absorption Spectroscopy of Carbon Nanomaterials: A Guide for the Perplexed. Journal of Physical Chemistry C, 2021, 125, 973-988.	3.1	30
191	Vertically aligned carbon nanotube heterojunctions. Applied Physics Letters, 2004, 85, 2364-2366.	3.3	28
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