S Ravi P Silva

List of Publications by Year
in descending order

592 papers	20,799 citations	10956 71 h-index	19690 117 g-index
604 all docs	604 docs citations	604 times ranked	20127 citing authors

#	Article	IF	Citations
1	Raman spectroscopy on amorphous carbon films. Journal of Applied Physics, 1996, 80, 440-447.	1.1	1,201
2	Low-threshold cold cathodes made of nitrogen-doped chemical-vapour-deposited diamond. Nature, 1996, 381, 140-141.	13.7	539
3	Nitrogen containing hydrogenated amorphous carbon for thinâ€film field emission cathodes. Applied Physics Letters, 1996, 68, 2529-2531.	1.5	478
4	From 1D and 2D ZnO nanostructures to 3D hierarchical structures with enhanced gas sensing properties. Nanoscale, 2014, 6, 235-247.	2.8	352
5	Influence of ion energy and substrate temperature on the optical and electronic properties of tetrahedral amorphous carbon (ta-C) films. Journal of Applied Physics, 1997, 81, 139-145.	1.1	344
6	Nitrogen modification of hydrogenated amorphous carbon films. Journal of Applied Physics, 1997, 81, 2626-2634.	1.1	333
7	Properties of carbon ion deposited tetrahedral amorphous carbon films as a function of ion energy. Journal of Applied Physics, 1996, 79, 7234-7240.	1.1	294
8	Hardness, elastic modulus, and structure of very hard carbon films produced by cathodicâ€arc deposition with substrate pulse biasing. Applied Physics Letters, 1996, 68, 779-781.	1.5	255
9	Role of the Exposed Polar Facets in the Performance of Thermally and UV Activated ZnO Nanostructured Gas Sensors. Journal of Physical Chemistry C, 2013, 117, 17850-17858.	1.5	249
10	Polyurea-Functionalized Multiwalled Carbon Nanotubes:â€‰ Synthesis, Morphology, and Raman Spectroscopy. Journal of Physical Chemistry B, 2005, 109, 11925-11932.	1.2	227
11	Triple functionalisation of single-walled carbon nanotubes with doxorubicin, a monoclonal antibody, and a fluorescent marker for targeted cancer therapy. Carbon, 2009, 47, 2152-2160.	5.4	225
12	Pulsed-laser-induced nanoscale island formation in thin metal-on-oxide films. Physical Review B, 2005, 72, .	1.1	220
13	Large-area synthesis of carbon nanofibres at room temperature. Nature Materials, 2002, 1, 165-168.	13.3	204
14	Tetrahedral amorphous carbon films prepared by magnetron sputtering and dc ion plating. Journal of Applied Physics, 1996, 79, 1416-1422.	1.1	195
15	Higher Dispersion Efficacy of Functionalized Carbon Nanotubes in Chemical and Biological Environments. ACS Nano, 2010, 4, 2615-2626.	7.3	189
16	Triboelectric nanogenerators: providing a fundamental framework. Energy and Environmental Science, 2017, 10, 1801-1811.	15.6	186
17	Photoluminescence and Raman spectroscopy in hydrogenated carbon films. IEEE Transactions on Magnetics, 1997, 33, 3148-3150.	1.2	180
18	Mechanical properties and Raman spectra of tetrahedral amorphous carbon films with high sp³ fraction deposited using a filtered cathodic arc. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1997, 76, 351-361.	0.6	173

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19	Critical review of recent progress of flexible perovskite solar cells. Materials Today, 2020, 39, 66-88.	8.3	169
20	High sensitivity organic inorganic hybrid X-ray detectors with direct transduction and broadband response. Nature Communications, 2018, 9, 2926.	5.8	166
21	Platinum Integrated Graphene for Methanol Fuel Cells. Journal of Physical Chemistry C, 2010, 114, 15837-15841.	1.5	163
22	Characterization of aâ€C:H:N deposition from CH4/N2 rf plasmas using optical emission spectroscopy. Journal of Applied Physics, 1996, 79, 7227-7233.	1.1	147
23	â€˜Inorganics-in-Organicsâ€™: recent developments and outlook for 4G polymer solar cells. Nanoscale, 2013, 5, 8411.	2.8	147
24	Drug loading, dispersion stability, and therapeutic efficacy in targeted drug delivery with carbon nanotubes. Carbon, 2012, 50, 622-632.	5.4	144
25	A flexible metallic <scp>TiC</scp> nanofiber/vertical graphene <scp>1D</scp>/<scp>2D</scp> heterostructured as active electrocatalyst for advanced <scp>Liâ€“S</scp> batteries. InformaÄnÃ-MateriÃ¡ly, 2021, 3, 790-803.	8.5	142
26	Iron filled single-wall carbon nanotubes â€“ A novel ferromagnetic medium. Chemical Physics Letters, 2006, 421, 129-133.	1.2	130
27	Carbon nanotubes: a multi-functional material for organic optoelectronics. Journal of Materials Chemistry, 2008, 18, 1183.	6.7	130
28	Stable Hollowâ€Structured Silicon Suboxideâ€Based Anodes toward Highâ€Performance Lithiumâ€Ion Batteries. Advanced Functional Materials, 2021, 31, 2101796.	7.8	127
29	Vertically aligned graphene nanosheets on multi-yolk/shell structured TiC@C nanofibers for stable Liâ€“S batteries. Energy Storage Materials, 2020, 27, 159-168.	9.5	124
30	Recent progress in silver nanowire networks for flexible organic electronics. Journal of Materials Chemistry C, 2020, 8, 4636-4674.	2.7	122
31	Novel Catalysts, Room Temperature, and the Importance of Oxygen for the Synthesis of Single-Walled Carbon Nanotubes. Nano Letters, 2005, 5, 1209-1215.	4.5	120
32	On-chip Fabrication of High Performance Nanostructured ZnO UV Detectors. Scientific Reports, 2015, 5, 8516.	1.6	120
33	Stress-induced formation of high-density amorphous carbon thin films. Journal of Applied Physics, 1997, 82, 6024-6030.	1.1	116
34	A study of electron field emission as a function of film thickness from amorphous carbon films. Applied Physics Letters, 1998, 73, 3784-3786.	1.5	109
35	Resonant tunnelling and fast switching in amorphous-carbon quantum-well structures. Nature Materials, 2006, 5, 19-22.	13.3	107
36	Nitrogen doping of amorphous carbon thin films. Journal of Applied Physics, 1998, 84, 2071-2081.	1.1	105

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37	Flexible carbon nanofiber film with diatomic Fe-Co sites for efficient oxygen reduction and evolution reactions in wearable zinc-air batteries. Nano Energy, 2021, 87, 106147.	8.2	103
38	Hybrid Carbon Nanotube Networks as Efficient Hole Extraction Layers for Organic Photovoltaics. ACS Nano, 2013, 7, 556-565.	7.3	102
39	Lithiumâ€“Sulfur Batteries Meet Electrospinning: Recent Advances and the Key Parameters for High Gravimetric and Volume Energy Density. Advanced Science, 2022, 9, e2103879.	5.6	98
40	Ultra-broadband light trapping using nanotextured decoupled graphene multilayers. Science Advances, 2016, 2, e1501238.	4.7	97
41	Nanostructured Copper Phthalocyanine-Sensitized Multiwall Carbon Nanotube Films. Langmuir, 2007, 23, 6424-6430.	1.6	96
42	A unified theoretical model for Triboelectric Nanogenerators. Nano Energy, 2018, 48, 391-400.	8.2	96
43	Electron field emission from a single carbon nanotube: Effects of anode location. Applied Physics Letters, 2005, 87, 103112.	1.5	95
44	First human trials of a dry electrophysiology sensor using a carbon nanotube array interface. Sensors and Actuators A: Physical, 2008, 144, 275-279.	2.0	95
45	Interpenetrating multiwall carbon nanotube electrodes for organic solar cells. Applied Physics Letters, 2006, 89, 133117.	1.5	94
46	Structural and optoelectronic properties of C60 rods obtained via a rapid synthesis route. Journal of Materials Chemistry, 2006, 16, 3715.	6.7	94
47	Origin of electric field enhancement in field emission from amorphous carbon thin films. Applied Physics Letters, 2001, 78, 2339-2341.	1.5	93
48	Oxidised carbon nanotubes as solution processable, high work function hole-extraction layers for organic solar cells. Organic Electronics, 2009, 10, 388-395.	1.4	90
49	Evidence for a New Twoâ€Dimensional C₄Hâ€Type Polymer Based on Hydrogenated Graphene. Advanced Materials, 2011, 23, 4497-4503.	11.1	90
50	Nature of Power Generation and Output Optimization Criteria for Triboelectric Nanogenerators. Advanced Energy Materials, 2018, 8, 1802190.	10.2	90
51	Structure and luminescence properties of an amorphous hydrogenated carbon. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1996, 74, 369-386.	0.6	89
52	Electron-energy-loss spectroscopy characterization of thesp2bonding fraction within carbon thin films. Physical Review B, 2000, 62, 12628-12631.	1.1	89
53	Hybrid Grapheneâ€Metal Oxide Solution Processed Electron Transport Layers for Large Area Highâ€Performance Organic Photovoltaics. Advanced Materials, 2014, 26, 2078-2083.	11.1	86
54	Thermal expansion coefficient of hydrogenated amorphous carbon. Applied Physics Letters, 2003, 83, 3099-3101.	1.5	85

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55	Disorder, clustering, and localization effects in amorphous carbon. Physical Review B, 2004, 70, .	1.1	82
56	A dry electrophysiology electrode using CNT arrays. Sensors and Actuators A: Physical, 2006, 132, 34-41.	2.0	82
57	Self-texturing of nitrogenated amorphous carbon thin films for electron field emission. Applied Physics Letters, 1997, 71, 1477-1479.	1.5	81
58	Low temperature growth of carbon nanotubes â€“ A review. Carbon, 2020, 158, 24-44.	5.4	80
59	EPR linewidth variation, spin relaxation times, and exchange in amorphous hydrogenated carbon. Physical Review B, 2000, 61, 3546-3554.	1.1	79
60	Influence of sp2 clusters on the field emission properties of amorphous carbon thin films. Applied Physics Letters, 2000, 77, 2006-2008.	1.5	79
61	The importance of oxygen-containing defects on carbon nanotubes for the detection of polar and non-polar vapours through hydrogen bond formation. Nanotechnology, 2007, 18, 175701.	1.3	79
62	Characterization of carbon nanotube (MWCNT) containing P(3HB)/bioactive glass composites for tissue engineering applications. Acta Biomaterialia, 2010, 6, 735-742.	4.1	79
63	Low temperature growth of carbon nanotubes on carbon fibre to create a highly networked fuzzy fibre reinforced composite with superior electrical conductivity. Carbon, 2014, 74, 319-328.	5.4	79
64	Charge transport effects in field emission from carbon nanotube-polymer composites. Applied Physics Letters, 2005, 87, 263105.	1.5	78
65	Formation of low-temperature self-organized nanoscale nickel metal islands. Nanotechnology, 2003, 14, 1223-1227.	1.3	77
66	Electronic properties of semiconducting diamond-like carbon-diamond. Thin Solid Films, 1992, 212, 232-239.	0.8	76
67	Field emission from nonaligned carbon nanotubes embedded in a polystyrene matrix. Applied Physics Letters, 2002, 80, 3189-3191.	1.5	76
68	Multi-Functional Carbon Fibre Composites using Carbon Nanotubes as an Alternative to Polymer Sizing. Scientific Reports, 2016, 6, 37334.	1.6	76
69	Photoluminescence Quenching in Carbon Nanotubeâ€Polymer/Fullerene Films: Carbon Nanotubes as Exciton Dissociation Centres in Organic Photovoltaics. Advanced Materials, 2011, 23, 3796-3800.	11.1	74
70	Solution processed reduced graphene oxide/metal oxide hybrid electron transport layers for highly efficient polymer solar cells. Journal of Materials Chemistry A, 2013, 1, 9922.	5.2	74
71	Quantum Biology: An Update and Perspective. Quantum Reports, 2021, 3, 80-126.	0.6	74
72	Doping of rf plasma deposited diamond-like carbon films. Thin Solid Films, 1995, 270, 194-199.	0.8	73

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73	Disentanglement of the electronic properties of metallicity-selected single-walled carbon nanotubes. Physical Review B, 2009, 80, .	1.1	73
74	Confined Crystals of the Smallest Phase-Change Material. Nano Letters, 2013, 13, 4020-4027.	4.5	73
75	Carbon Materials in Perovskite Solar Cells: Prospects and Future Challenges. Energy and Environmental Materials, 2019, 2, 107-118.	7.3	72
76	Solution-processable graphene oxide as an efficient hole injection layer for high luminance organic light-emitting diodes. Journal of Materials Chemistry C, 2013, 1, 1708.	2.7	71
77	Novel nanoparticles with Cr³⁺ substituted ferrite for self-regulating temperature hyperthermia. Nanoscale, 2017, 9, 13929-13937.	2.8	71
78	Room temperature photoluminescence from nanostructured amorphous carbon. Applied Physics Letters, 2004, 85, 6236-6238.	1.5	70
79	Properties of nitrogen doped tetrahedral amorphous carbon films prepared by filtered cathodic vacuum arc technique. Journal of Non-Crystalline Solids, 1998, 242, 40-48.	1.5	68
80	Maximizing the electron field emission performance of carbon nanotube arrays. Applied Physics Letters, 2009, 94, 133104.	1.5	68
81	Synthesis, structure and applications of amorphous diamond. Thin Solid Films, 1991, 206, 198-203.	0.8	67
82	Water-soluble multiwall-carbon-nanotube-polythiophene composite for bilayer photovoltaics. Applied Physics Letters, 2006, 89, 123115.	1.5	67
83	Carbon nanotubes grown on In2O3:Sn glass as large area electrodes for organic photovoltaics. Applied Physics Letters, 2007, 90, 023105.	1.5	66
84	Screening the Missing Electron: Nanochemistry in Action. Physical Review Letters, 2009, 102, 046804.	2.9	64
85	Tuning the work function of surface oxidised multi-wall carbon nanotubes via cation exchange. Chemical Physics Letters, 2007, 434, 92-95.	1.2	62
86	Formation of hollow MoS2/carbon microspheres for high capacity and high rate reversible alkali-ion storage. Journal of Materials Chemistry A, 2018, 6, 8280-8288.	5.2	62
87	Properties of cadmium sulphide films grown by single-source metalorganic chemical vapour deposition with dithiocarbamate precursors. Journal of Crystal Growth, 1996, 167, 133-142.	0.7	61
88	Effect of aspect ratio and anode location on the field emission properties of a single tip based emitter. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 632.	1.6	61
89	Metal nanoparticle production by pulsed laser nanostructuring of thin metal films. Applied Surface Science, 2007, 253, 8080-8085.	3.1	60
90	The band structure of graphene oxide examined using photoluminescence spectroscopy. Journal of Materials Chemistry C, 2015, 3, 12484-12491.	2.7	60

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91	Photoluminescence in amorphous carbon thin films and its relation to the microscopic properties. Thin Solid Films, 1995, 270, 160-164.	0.8	58
92	ZnO Nanodisk Based UV Detectors with Printed Electrodes. Langmuir, 2014, 30, 3913-3921.	1.6	58
93	Exploring the theoretical and experimental optimization of high-performance triboelectric nanogenerators using microarchitectured silk cocoon films. Nano Energy, 2020, 74, 104882.	8.2	58
94	Evidence of hexagonal diamond in plasma-deposited carbon films. Journal of Materials Science, 1994, 29, 4962-4966.	1.7	57
95	Operation of a reversed pentacene-fullerene discrete heterojunction photovoltaic device. Applied Physics Letters, 2007, 90, 113505.	1.5	56
96	Dynamics of confined plumes during short and ultrashort pulsed laser ablation of graphite. Physical Review B, 2005, 72, .	1.1	55
97	Intrinsic Gain in Self-Aligned Polysilicon Source-Gated Transistors. IEEE Transactions on Electron Devices, 2010, 57, 2434-2439.	1.6	55
98	Generation of Chemically Unmodified Pure Single-Walled Carbon Nanotubes by Solubilizing with RNA and Treatment with Ribonucleaseâ€‰‰A. Advanced Materials, 2006, 18, 1598-1602.	11.1	54
99	Catalyst and Chirality Dependent Growth of Carbon Nanotubes Determined Through Nanoâ€Test Tube Chemistry. Advanced Materials, 2010, 22, 3685-3689.	11.1	54
100	Optical properties of amorphous C/diamond thin films. Journal of Applied Physics, 1992, 72, 1149-1153.	1.1	53
101	Growth of carbon nanotubes at temperatures compatible with integrated circuit technologies. Carbon, 2011, 49, 280-285.	5.4	53
102	Graphene oxide hole transport layers for large area, high efficiency organic solar cells. Applied Physics Letters, 2014, 105, .	1.5	53
103	Source-gated transistors for order-of-magnitude performance improvements in thin-film digital circuits. Scientific Reports, 2014, 4, 4295.	1.6	53
104	Effects of humidity on the electronic properties of graphene prepared by chemical vapour deposition. Carbon, 2016, 103, 273-280.	5.4	53
105	Solvent Engineering as a Vehicle for High Quality Thin Films of Perovskites and Their Device Fabrication. Small, 2021, 17, e2008145.	5.2	53
106	Interpretation of enhancement factor in nonplanar field emitters. Applied Physics Letters, 2005, 87, 013111.	1.5	52
107	Fluoropolymer indium-tin-oxide buffer layers for improved power conversion in organic photovoltaics. Applied Physics Letters, 2008, 93, .	1.5	52
108	The Role of Substituent Effects in Tuning Metallophilic Interactions and Emission Energy of Bisâ€4â€(2â€pyridyl)â€1,2,3â€triazolatoplatinum(II) Complexes. Angewandte Chemie - International Edition, 2015, 54, 7949-7953.	7.2	52

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109	Wearable Triboelectric Nanogenerator from Waste Materials for Autonomous Information Transmission via Morse Code. ACS Applied Materials & Interfaces, 2022, 14, 5328-5337.	4.0	52
110	Excimer laser nanostructuring of nickel thin films for the catalytic growth of carbon nanotubes. Applied Physics Letters, 2004, 84, 4035-4037.	1.5	51
111	Thickness dependence of properties of excimer laser crystallized nano-polycrystalline silicon. Journal of Applied Physics, 2005, 97, 114305.	1.1	51
112	Organicâ€“Inorganic Solar Cells: Recent Developments and Outlook. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1595-1606.	1.9	51
113	Electrical semiconduction modulated by light in a cobalt and naphthalene diimide metal-organic framework. Nature Communications, 2017, 8, 2139.	5.8	51
114	Nitrogenated amorphous carbon as a semiconductor. Diamond and Related Materials, 1996, 5, 401-404.	1.8	50
115	A PbS nanocrystal-C60 photovoltaic device for infrared light harvesting. Applied Physics Letters, 2007, 91, 133506.	1.5	49
116	Highly efficient near-infrared hybrid organic-inorganic nanocrystal electroluminescence device. Applied Physics Letters, 2008, 92, .	1.5	49
117	Dimensionally and environmentally ultra-stable polymer composites reinforced with carbon fibres. Nature Materials, 2020, 19, 317-322.	13.3	49
118	The structure of tetrahedral amorphous carbon thin films. Thin Solid Films, 1996, 290-291, 317-322.	0.8	48
119	Influence of dc bias voltage on the refractive index and stress of carbonâ€diamond films deposited from a CH4/Ar rf plasma. Journal of Applied Physics, 1991, 70, 5374-5379.	1.1	47
120	Field emission from undoped and nitrogen-doped tetrahedral amorphous carbon film prepared by filtered cathodic vacuum arc technique. Diamond and Related Materials, 1998, 7, 640-644.	1.8	47
121	Silver filled single-wall carbon nanotubesâ€”synthesis, structural and electronic properties. Nanotechnology, 2006, 17, 2415-2419.	1.3	47
122	Uptake and Release of Doubleâ€Walled Carbon Nanotubes by Mammalian Cells. Advanced Functional Materials, 2010, 20, 3272-3279.	7.8	47
123	Carrier type inversion in quasi-free standing graphene: studies of local electronic and structural properties. Scientific Reports, 2015, 5, 10505.	1.6	47
124	Photoconductivity in highly tetrahedral diamondlike amorphous carbon. Applied Physics Letters, 1993, 63, 370-372.	1.5	46
125	Evidence for Metal-Semiconductor Transitions in Twisted and Collapsed Double-Walled Carbon Nanotubes by Scanning Tunneling Microscopy. Nano Letters, 2008, 8, 3350-3356.	4.5	46
126	Design of double-walled carbon nanotubes for biomedical applications. Nanotechnology, 2012, 23, 365102.	1.3	46

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127	Influence of precursor gases on the structure of plasma deposited amorphous hydrogenated carbonâ€“nitrogen films. Applied Physics Letters, 1996, 68, 2645-2647.	1.5	45
128	Low-Field Behavior of Source-Gated Transistors. IEEE Transactions on Electron Devices, 2013, 60, 2444-2449.	1.6	45
129	Reduced bilateral recombination by functional molecular interface engineering for efficient inverted perovskite solar cells. Nano Energy, 2020, 78, 105249.	8.2	45
130	Complex <scp>permittivityâ€dependent</scp> plasma <scp>confinementâ€assisted</scp> growth of asymmetric vertical graphene nanofiber membrane for <scp>highâ€performance Liâ€S</scp> full cells. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	45
131	Interpretation of the field enhancement factor for electron emission from carbon nanotubes. Journal of Applied Physics, 2009, 106, 014314.	1.1	44
132	Optimising DNA binding to carbon nanotubes by non-covalent methods. Carbon, 2011, 49, 1775-1781.	5.4	44
133	Modeling of the electron field emission process in polycrystalline diamond and diamond-like carbon thin films. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1999, 17, 557.	1.6	43
134	Enhancing the electrical conduction in amorphous carbon and prospects for device applications. Diamond and Related Materials, 2003, 12, 151-158.	1.8	42
135	Laser-nanostructured Ag films as substrates for surface-enhanced Raman spectroscopy. Applied Physics Letters, 2006, 88, 081904.	1.5	42
136	Organic solar cells with plasmonic layers formed by laser nanofabrication. Physical Chemistry Chemical Physics, 2013, 15, 8237.	1.3	42
137	Thin film hexagonal gold grids as transparent conducting electrodes in organic light emitting diodes. Laser and Photonics Reviews, 2014, 8, 172-179.	4.4	42
138	Reactive ion etching of quartz and Pyrex for microelectronic applications. Journal of Applied Physics, 2002, 92, 3624-3629.	1.1	41
139	Poly(3- hydroxybutyrate)/BioglassÂ®composite films containing carbon nanotubes. Nanotechnology, 2007, 18, 075701.	1.3	41
140	Engineering the plasmon resonance of large area bimetallic nanoparticle films by laser nanostructuring for chemical sensors. Optics Letters, 2011, 36, 1362.	1.7	41
141	Highly conductive and dispersible graphene and its application in P3HT-based solar cells. Chemical Communications, 2014, 50, 8705.	2.2	41
142	Exceptional rate capability from carbonâ€encapsulated polyaniline supercapacitor electrodes. Energy and Environmental Materials, 2020, 3, 389-397.	7.3	41
143	Thermal stability of plasma deposited thin films of hydrogenated carbonâ€“nitrogen alloys. Journal of Applied Physics, 1999, 86, 6276-6281.	1.1	40
144	Measurement and validation of PbS nanocrystal energy levels. Applied Physics Letters, 2008, 93, .	1.5	40

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145	Near infrared up-conversion in organic photovoltaic devices using an efficient Yb3+:Ho3+ Co-doped Ln2BaZnO5 (Ln = Y, Gd) phosphor. Journal of Applied Physics, 2012, 111, 094502.	1.1	40
146	Photo-thermal chemical vapor deposition growth of graphene. Carbon, 2012, 50, 668-673.	5.4	40
147	Defect Engineering toward Highly Efficient and Stable Perovskite Solar Cells. Advanced Materials Interfaces, 2018, 5, 1800326.	1.9	40
148	Natural silk-composite enabled versatile robust triboelectric nanogenerators for smart applications. Nano Energy, 2021, 83, 105819.	8.2	40
149	Electron delocalization in amorphous carbon by ion implantation. Physical Review B, 2001, 63, .	1.1	39
150	ENOBIO dry electrophysiology electrode; first human trial plus wireless electrode system. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 6690-4.	0.5	39
151	Enhancing the performance of polymer solar cells using solution-processed copper doped nickel oxide nanoparticles as hole transport layer. Journal of Colloid and Interface Science, 2019, 535, 308-317.	5.0	39
152	High-rate low-temperature growth of vertically aligned carbon nanotubes. Nanotechnology, 2010, 21, 505604.	1.3	38
153	High Quality Carbon Nanotubes on Conductive Substrates Grown at Low Temperatures. Advanced Functional Materials, 2015, 25, 4419-4429.	7.8	38
154	Supercapacitor electrode with high charge density based on boron-doped porous carbon derived from covalent organic frameworks. Carbon, 2021, 184, 418-425.	5.4	38
155	Direct Observation of Compositionally Homogeneousa-C: H Band-Gap-Modulated Superlattices. Physical Review Letters, 1995, 75, 4258-4261.	2.9	37
156	Conditioning of hydrogenated amorphous carbon thin films for field emission via current stressing. Applied Physics Letters, 2001, 78, 347-349.	1.5	36
157	Field emission from multiwall carbon nanotubes on paper substrates. Applied Physics Letters, 2007, 90, 173124.	1.5	36
158	Electron field emission from surface treated tetrahedral amorphous carbon films. Applied Physics Letters, 1999, 74, 833-835.	1.5	35
159	Efficient field emission from Li-salt functionalized multiwall carbon nanotubes on flexible substrates. Applied Physics Letters, 2007, 90, 013120.	1.5	35
160	Nanocrystalline silicon solar cells from excimer laser crystallization of amorphous silicon. Solar Energy Materials and Solar Cells, 2008, 92, 634-638.	3.0	35
161	Field emission from a-C:H and a-C:H:N. Journal of Non-Crystalline Solids, 1996, 198-200, 611-614.	1.5	34
162	Energy Scavenging and Powering E-Skin Functional Devices. Proceedings of the IEEE, 2019, 107, 2118-2136.	16.4	34

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163	Tin(<scp>iv</scp>) dopant removal through anti-solvent engineering enabling tin based perovskite solar cells with high charge carrier mobilities. Journal of Materials Chemistry C, 2019, 7, 8389-8397.	2.7	34
164	Quantum Size Effects in Amorphous Diamond-like Carbon Superlattices. Japanese Journal of Applied Physics, 1994, 33, 6458-6465.	0.8	33
165	Use of space-charge-limited current to evaluate the electronic density of states in diamond-like carbon thin films. Thin Solid Films, 1994, 253, 146-150.	0.8	33
166	Characterisation of defects in thin films of hydrogenated amorphous carbon. Diamond and Related Materials, 2000, 9, 781-785.	1.8	33
167	Electron field emission from room temperature grown carbon nanofibers. Journal of Applied Physics, 2004, 95, 3153-3157.	1.1	33
168	Transport properties of low-dimensional amorphous carbon films. Thin Solid Films, 2005, 482, 94-98.	0.8	33
169	Controlled Growth-Reversal of Catalytic Carbon Nanotubes under Electron-Beam Irradiation. Nano Letters, 2006, 6, 1837-1841.	4.5	33
170	Atomic and electronic structure in collapsed carbon nanotubes evidenced by scanning tunneling microscopy. Physical Review B, 2007, 76, .	1.1	33
171	RF Response of Single-Walled Carbon Nanotubes. Nano Letters, 2007, 7, 2672-2675.	4.5	33
172	The Inner Shell Influence on the Electronic Structure of Doubleâ€Walled Carbon Nanotubes. Advanced Materials, 2008, 20, 189-194.	11.1	33
173	Low cost patterning of poly(3,4-ethylenedioxythiophene) poly(styrenesulfonate) films to increase organic photovoltaic device efficiency. Applied Physics Letters, 2008, 93, 103301.	1.5	33
174	Field Plate Optimization in Low-Power High-Gain Source-Gated Transistors. IEEE Transactions on Electron Devices, 2012, 59, 2180-2186.	1.6	33
175	Cr³⁺substituted spinel ferrite nanoparticles with high coercivity. Nanotechnology, 2016, 27, 245707.	1.3	33
176	Novel Tunnelâ€Contactâ€Controlled IGZO Thinâ€Film Transistors with High Tolerance to Geometrical Variability. Advanced Materials, 2019, 31, e1902551.	11.1	33
177	Approaching the Shockleyâ€“Queisser limit for fill factors in leadâ€“tin mixed perovskite photovoltaics. Journal of Materials Chemistry A, 2020, 8, 693-705.	5.2	33
178	Electron field emission from carbon-based materials. Thin Solid Films, 2005, 482, 79-85.	0.8	32
179	Polymer supported carbon nanotube arrays for field emission and sensor devices. Applied Physics Letters, 2006, 89, 103113.	1.5	32
180	Laser direct write of silver nanoparticles from solution onto glass substrates for surface-enhanced Raman spectroscopy. Applied Physics Letters, 2007, 91, 023107.	1.5	32

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181	Chloroquine-enhanced gene delivery mediated by carbon nanotubes. Carbon, 2011, 49, 5348-5358.	5.4	32
182	Electron field emission from excimer laser crystallized amorphous silicon. Applied Physics Letters, 2002, 80, 4154-4156.	1.5	31
183	Thermionic emission from defective carbon nanotubes. Applied Physics Letters, 2004, 85, 2065-2067.	1.5	31
184	Nanoimprinted large area heterojunction pentacene-C60 photovoltaic device. Applied Physics Letters, 2007, 90, 253502.	1.5	31
185	Inner-Tube Chirality Determination for Double-Walled Carbon Nanotubes by Scanning Tunneling Microscopy. Nano Letters, 2007, 7, 1232-1239.	4.5	31
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