Stephen B Cronin

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1000127/publications.pdf

Version: 2024-02-01

205 papers	11,916 citations	36203 51 h-index	28224 105 g-index
211 all docs	211 docs citations	211 times ranked	16776 citing authors

#	Article	IF	Citations
1	A Review of Surface Plasmon Resonanceâ€Enhanced Photocatalysis. Advanced Functional Materials, 2013, 23, 1612-1619.	7.8	1,307
2	Plasmon Resonant Enhancement of Photocatalytic Water Splitting Under Visible Illumination. Nano Letters, 2011, 11, 1111-1116.	4.5	934
3	Photocatalytic Conversion of CO₂ to Hydrocarbon Fuels via Plasmon-Enhanced Absorption and Metallic Interband Transitions. ACS Catalysis, 2011, 1, 929-936.	5.5	498
4	Graphene-Silicon Schottky Diodes. Nano Letters, 2011, 11, 1863-1867.	4.5	435
5	Stacking-dependent band gap and quantum transport in trilayer graphene. Nature Physics, 2011, 7, 948-952.	6.5	415
6	Black Arsenicâ€“Phosphorus: Layered Anisotropic Infrared Semiconductors with Highly Tunable Compositions and Properties. Advanced Materials, 2015, 27, 4423-4429.	11.1	378
7	Bismuth nanowire arrays:â€ƒSynthesis and galvanomagnetic properties. Physical Review B, 2000, 61, 2921-2930.	1.1	329
8	Low-dimensional thermoelectric materials. Physics of the Solid State, 1999, 41, 679-682.	0.2	276
9	Giant optical anisotropy in a quasi-one-dimensional crystal. Nature Photonics, 2018, 12, 392-396.	15.6	269
10	Nanoscale temperature mapping in operating microelectronic devices. Science, 2015, 347, 629-632.	6.0	253
11	Recent Progress on Stability and Passivation of Black Phosphorus. Advanced Materials, 2018, 30, e1704749.	11.1	248
12	Formation of Thick Porous Anodic Alumina Films and Nanowire Arrays on Silicon Wafers and Glass. Advanced Functional Materials, 2003, 13, 631-638.	7.8	240
13	Plasmonic Nanoparticle Arrays with Nanometer Separation for High-Performance SERS Substrates. Nano Letters, 2010, 10, 2749-2754.	4.5	231
14	Measuring the Uniaxial Strain of Individual Single-Wall Carbon Nanotubes: Resonance Raman Spectra of Atomic-Force-Microscope Modified Single-Wall Nanotubes. Physical Review Letters, 2004, 93, 167401.	2.9	211
15	Electrical and Optical Characterization of Surface Passivation in GaAs Nanowires. Nano Letters, 2012, 12, 4484-4489.	4.5	183
16	Transport properties of Bi nanowire arrays. Applied Physics Letters, 2000, 76, 3944-3946.	1.5	177
17	Plasmonic enhancement of photocatalytic decomposition of methyl orange under visible light. Journal of Catalysis, 2011, 277, 149-153.	3.1	171
18	Semimetalâ€“semiconductor transition in Bi1âˆ’xSbx alloy nanowires and their thermoelectric properties. Applied Physics Letters, 2002, 81, 2403-2405.	1.5	170

#	Article	IF	Citations
19	Experimental proof-of-principle investigation of enhanced Z3DT in (001) oriented Si/Ge superlattices. Applied Physics Letters, 2000, 77, 1490-1492.	1.5	169
20	Plasmon Resonant Enhancement of Carbon Monoxide Catalysis. Nano Letters, 2010, 10, 1314-1318.	4.5	163
21	Atomically Thin Femtojoule Memristive Device. Advanced Materials, 2017, 29, 1703232.	11.1	147
22	CO₂ Reduction to Methanol on TiO₂-Passivated GaP Photocatalysts. ACS Catalysis, 2014, 4, 3512-3516.	5.5	130
23	Making electrical contacts to nanowires with a thick oxide coating. Nanotechnology, 2002, 13, 653-658.	1.3	124
24	Tandem Solar Cells Using GaAs Nanowires on Si: Design, Fabrication, and Observation of Voltage Addition. Nano Letters, 2015, 15, 7217-7224.	4.5	114
25	Raman Spectroscopy of Ripple Formation in Suspended Graphene. Nano Letters, 2009, 9, 4172-4176.	4.5	108
26	THE PROMISE OF LOW-DIMENSIONAL THERMOELECTRIC MATERIALS. Microscale Thermophysical Engineering, 1999, 3, 89-100.	1.2	103
27	Direct Bandgap Transition in Manyâ€Layer MoS₂ by Plasmaâ€Induced Layer Decoupling. Advanced Materials, 2015, 27, 1573-1578.	11.1	102
28	Thermoelectric transport across graphene/hexagonal boron nitride/graphene heterostructures. Nano Research, 2015, 8, 666-672.	5.8	95
29	Carrier pocket engineering applied to â€œstrainedâ€•Si/Ge superlattices to design useful thermoelectric materials. Applied Physics Letters, 1999, 75, 2438-2440.	1.5	94
30	Optical measurement of thermal transport in suspended carbon nanotubes. Applied Physics Letters, 2008, 92, .	1.5	91
31	Spatially Resolved Temperature Measurements of Electrically Heated Carbon Nanotubes. Physical Review Letters, 2009, 102, 105501.	2.9	89
32	Artificial Photosynthesis on TiO₂-Passivated InP Nanopillars. Nano Letters, 2015, 15, 6177-6181.	4.5	86
33	Plasmon resonant enhancement of dye sensitized solar cells. Energy and Environmental Science, 2011, 4, 4650.	15.6	85
34	Screening of Excitons in Single, Suspended Carbon Nanotubes. Nano Letters, 2007, 7, 1485-1488.	4.5	81
35	Layer Control of WSe₂ via Selective Surface Layer Oxidation. ACS Nano, 2016, 10, 6836-6842.	7.3	77
36	Thermal interface conductance across a graphene/hexagonal boron nitride heterojunction. Applied Physics Letters, 2014, 104, .	1.5	76

#	Article	IF	Citations
37	Temperature Dependence of the Optical Transition Energies of Carbon Nanotubes: The Role of Electron-Phonon Coupling and Thermal Expansion. Physical Review Letters, 2006, 96, 127403.	2.9	75
38	Asymmetric response of interfacial water to applied electric fields. Nature, 2021, 594, 62-65.	13.7	75
39	Optical Absorption and Thermal Transport of Individual Suspended Carbon Nanotube Bundles. Nano Letters, 2009, 9, 590-594.	4.5	72
40	Twin-Free GaAs Nanosheets by Selective Area Growth: Implications for Defect-Free Nanostructures. Nano Letters, 2013, 13, 2506-2515.	4.5	68
41	Quantum size effects in PbSe quantum wells. Applied Physics Letters, 2002, 80, 2690-2692.	1.5	67
42	Nanoscopy of Black Phosphorus Degradation. Advanced Materials Interfaces, 2016, 3, 1600121.	1.9	67
43	Electrochemical gating of individual single-wall carbon nanotubes observed by electron transport measurements and resonant Raman spectroscopy. Applied Physics Letters, 2004, 84, 2052-2054.	1.5	66
44	A New Lower Limit for the Ultimate Breaking Strain of Carbon Nanotubes. ACS Nano, 2010, 4, 5095-5100.	7.3	64
45	A microscopic study of strongly plasmonic Au and Ag island thin films. Journal of Applied Physics, 2013, 113, .	1.1	64
46	Low-Frequency Acoustic Phonon Temperature Distribution in Electrically Biased Graphene. Nano Letters, 2011, 11, 85-90.	4.5	63
47	Strain-Induced Interference Effects on the Resonance Raman Cross Section of Carbon Nanotubes. Physical Review Letters, 2005, 95, 217403.	2.9	61
48	Direct Observation of Mode Selective Electronâ"Phonon Coupling in Suspended Carbon Nanotubes. Nano Letters, 2007, 7, 3618-3622.	4.5	61
49	Indirect Band Gap Emission by Hot Electron Injection in Metal/MoS₂ and Metal/WSe₂ Heterojunctions. Nano Letters, 2015, 15, 3977-3982.	4.5	60
50	Surface-enhanced Raman spectroscopy and correlated scanning electron microscopy of individual carbon nanotubes. Applied Physics Letters, 2007, 91, 223105.	1.5	55
51	Direct observation of heat dissipation in individual suspended carbon nanotubes using a two-laser technique. Journal of Applied Physics, 2011, 110, .	1.1	52
52	Enhanced Photocatalytic Reduction of CO₂ to CO through TiO₂ Passivation of InP in Ionic Liquids. Chemistry - A European Journal, 2015, 21, 13502-13507.	1.7	52
53	Transport properties of Bi1â"xSbx alloy nanowires synthesized by pressure injection. Applied Physics Letters, 2001, 79, 677-679.	1.5	49
54	Plasmon-enhanced water splitting on TiO2-passivated GaP photocatalysts. Physical Chemistry Chemical Physics, 2014, 16, 3115-3121.	1.3	49

#	Article	IF	Citations
55	Optimal Bandgap in a 2D Ruddlesdenâ€“Popper Perovskite Chalcogenide for Single-Junction Solar Cells. Chemistry of Materials, 2018, 30, 4882-4886.	3.2	49
56	Doping concentration dependence of the photoluminescence spectra of n-type GaAs nanowires. Applied Physics Letters, 2016, 108, .	1.5	46
57	Intersubband transitions in bismuth nanowires. Applied Physics Letters, 2000, 77, 4142-4144.	1.5	44
58	Raman scattering of carbon nanotube bundles under axial strain and strain-induced debundling. Physical Review B, 2007, 75, .	1.1	44
59	Laser Directed Growth of Carbon-Based Nanostructures by Plasmon Resonant Chemical Vapor Deposition. Nano Letters, 2008, 8, 3278-3282.	4.5	43
60	Monitoring Local Electric Fields at Electrode Surfaces Using Surface Enhanced Raman Scattering-Based Stark-Shift Spectroscopy during Hydrogen Evolution Reactions. ACS Applied Materials & Interfaces, 2018, 10, 33678-33683.	4.0	43
61	Plasmon-Resonant Enhancement of Photocatalysis on Monolayer WSe₂. ACS Photonics, 2019, 6, 787-792.	3.2	43
62	(Photo)Electrocatalytic CO₂ Reduction at the Defective Anatase TiO₂ (101) Surface. ACS Catalysis, 2020, 10, 4048-4058.	5.5	42
63	The effect of gas environment on electrical heating in suspended carbon nanotubes. Journal of Applied Physics, 2010, 108, .	1.1	41
64	Enhanced photocurrent and photoluminescence spectra in MoS2 under ionic liquid gating. Nano Research, 2014, 7, 973-980.	5.8	41
65	Direct Observation of Bornâ€“Oppenheimer Approximation Breakdown in Carbon Nanotubes. Nano Letters, 2009, 9, 607-611.	4.5	40
66	Thermal Emission Spectra from Individual Suspended Carbon Nanotubes. ACS Nano, 2011, 5, 4634-4640.	7.3	40
67	Gate tunable graphene-silicon Ohmic/Schottky contacts. Applied Physics Letters, 2012, 101, .	1.5	40
68	Plasmon-enhanced photocatalytic water purification. Physical Chemistry Chemical Physics, 2014, 16, 15111.	1.3	38
69	Nanoscopy reveals surface-metallic black phosphorus. Light: Science and Applications, 2016, 5, e16162-e16162.	7.7	37
70	Hot electron-driven photocatalytic water splitting. Physical Chemistry Chemical Physics, 2017, 19, 2877-2881.	1.3	37
71	Near-Field Surface Waves in Few-Layer MoS₂. ACS Photonics, 2018, 5, 2106-2112.	3.2	37
72	Probing Gap Plasmons Down to Subnanometer Scales Using Collapsible Nanofingers. ACS Nano, 2017, 11, 5836-5843.	7.3	35

#	Article	IF	Citations
73	Plasmonic hot spots: nanogap enhancement vs focusing effects from surrounding nanoparticles. Optics Express, 2012, 20, 14656.	1.7	33
74	Large Reduction of Hot Spot Temperature in Graphene Electronic Devices with Heat-Spreading Hexagonal Boron Nitride. ACS Applied Materials & Interfaces, 2018, 10, 11101-11107.	4.0	33
75	Probing the Mechanisms of Strong Fluorescence Enhancement in Plasmonic Nanogaps with Sub-nanometer Precision. ACS Nano, 2020, 14, 14769-14778.	7.3	33
76	Effect of thickness on the thermoelectric properties of PbS thin films. Thin Solid Films, 2003, 423, 115-118.	0.8	32
77	Optical manipulation of plasmonic nanoparticles, bubble formation and patterning of SERS aggregates. Nanotechnology, 2010, 21, 105304.	1.3	29
78	Gate Voltage Controllable Non-Equilibrium and Non-Ohmic Behavior in Suspended Carbon Nanotubes. Nano Letters, 2009, 9, 2862-2866.	4.5	28
79	The Influence of Substrate in Determining the Band Gap of Metallic Carbon Nanotubes. Nano Letters, 2012, 12, 4843-4847.	4.5	28
80	Evaluation of gold-decorated halloysite nanotubes as plasmonic photocatalysts. Catalysis Communications, 2014, 56, 115-118.	1.6	27
81	Microscopic Study of Atomic Layer Deposition of TiO₂ on GaAs and Its Photocatalytic Application. Chemistry of Materials, 2015, 27, 7977-7981.	3.2	27
82	Raman spectroscopy of substrate-induced compression and substrate doping in thermally cycled graphene. Physical Review B, 2012, 85, .	1.1	26
83	Radiation-induced direct bandgap transition in few-layer MoS2. Applied Physics Letters, 2017, 111, 131101.	1.5	26
84	Thermoacoustic Transduction in Individual Suspended Carbon Nanotubes. ACS Nano, 2015, 9, 5372-5376.	7.3	25
85	Correlation of Ti3+ states with photocatalytic enhancement in TiO2-passivated p-GaAs. Journal of Catalysis, 2016, 337, 133-137.	3.1	25
86	Cross-Plane Seebeck Coefficient Measurement of Misfit Layered Compounds (SnSe)_n(TiSe₂)_n (n = 1,3,4,5). Nano Letters, 2017, 17, 1978-1986.	4.5	25
87	Quantum size effects in IVâ€“VI quantum wells. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 313-315.	1.3	24
88	Clamping Instability and van der Waals Forces in Carbon Nanotube Mechanical Resonators. Nano Letters, 2014, 14, 2426-2430.	4.5	24
89	Large Modulations in the Intensity of Raman-Scattered Light from Pristine Carbon Nanotubes. Physical Review Letters, 2009, 103, 067401.	2.9	23
90	Strain-induced D band observed in carbon nanotubes. Nano Research, 2012, 5, 854-862.	5.8	23

#	Article	IF	Citations
91	Single-ion adsorption and switching in carbon nanotubes. Nature Communications, 2016, 7, 10475.	5.8	23
92	Bismuth Nanowires for Potential Applications in Nanoscale Electronics Technology. Microscopy and Microanalysis, 2002, 8, 58-63.	0.2	22
93	Highly efficient, high speed vertical photodiodes based on few-layer MoS ₂. 2D Materials, 2017, 4, 015004.	2.0	22
94	Selective destruction of individual single walled carbon nanotubes by laser irradiation. Carbon, 2009, 47, 1292-1296.	5.4	20
95	Charge neutral MoS2 field effect transistors through oxygen plasma treatment. Journal of Applied Physics, 2016, 120, .	1.1	20
96	In Situ Investigation of Ultrafast Dynamics of Hot Electron-Driven Photocatalysis in Plasmon-Resonant Grating Structures. Journal of the American Chemical Society, 2022, 144, 3517-3526.	6.6	20
97	Nanostructured Silicon Photocathodes for Solar Water Splitting Patterned by the Self-Assembly of Lamellar Block Copolymers. ACS Applied Materials & Interfaces, 2015, 7, 26043-26049.	4.0	19
98	Confined Liquid-Phase Growth of Crystalline Compound Semiconductors on Any Substrate. ACS Nano, 2018, 12, 5158-5167.	7.3	19
99	Mid-wave and Long-Wave Infrared Linear Dichroism in a Hexagonal Perovskite Chalcogenide. Chemistry of Materials, 2018, 30, 4897-4901.	3.2	19
100	Imaging interfacial electrical transport in grapheneâ€“MoS2 heterostructures with electron-beam-induced-currents. Applied Physics Letters, 2015, 107, 223104.	1.5	18
101	Effects of Surface Passivation on Twin-Free GaAs Nanosheets. ACS Nano, 2015, 9, 1336-1340.	7.3	18
102	Cross-plane Thermoelectric and Thermionic Transport across Au/h-BN/Graphene Heterostructures. Scientific Reports, 2017, 7, 14148.	1.6	18
103	Ultrafast Dynamics of Hot Electrons in Nanostructures: Distinguishing the Influence on Interband and Plasmon Resonances. ACS Photonics, 2019, 6, 2295-2302.	3.2	18
104	Carbon-doped GaAs single junction solar microcells grown in multilayer epitaxial assemblies. Applied Physics Letters, 2013, 102, 253902.	1.5	17
105	Enhanced Fabry-Perot resonance in GaAs nanowires through local field enhancement and surface passivation. Nano Research, 2014, 7, 1146-1153.	5.8	17
106	Effects of basal-plane thermal conductivity and interface thermal conductance on the hot spot temperature in graphene electronic devices. Applied Physics Letters, 2017, 110, 073104.	1.5	17
107	Hot electron-driven photocatalysis and transient absorption spectroscopy in plasmon resonant grating structures. Faraday Discussions, 2019, 214, 325-339.	1.6	17
108	Enhanced thermoelectric efficiency in topological insulator Bi2Te3 nanoplates via atomic layer deposition-based surface passivation. Applied Physics Letters, 2018, 113, .	1.5	16

#	Article	IF	Citations
109	Cell kinase activity assay based on surface enhanced Raman spectroscopy. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2009, 73, 226-230.	2.0	15
110	A Comparison of Photocurrent Mechanisms in Quasi-Metallic and Semiconducting Carbon Nanotube pn-Junctions. ACS Nano, 2015, 9, 11551-11556.	7.3	15
111	Sensing local pH and ion concentration at graphene electrode surfaces using in situ Raman spectroscopy. Nanoscale, 2018, 10, 2398-2403.	2.8	15
112	High Quantum Efficiency Hot Electron Electrochemistry. Nano Letters, 2019, 19, 6227-6234.	4.5	15
113	Carrier dynamics and doping profiles in GaAs nanosheets. Nano Research, 2014, 7, 163-170.	5.8	14
114	Study of the Plasmon Energy Transfer Processes in Dye Sensitized Solar Cells. Journal of Nanomaterials, 2015, 2015, 1-6.	1.5	14
115	Plasmon resonant amplification of hot electron-driven photocatalysis. Applied Physics Letters, 2018, 113, .	1.5	14
116	Iterative optimization of plasmon resonant nanostructures. Applied Physics Letters, 2009, 94, .	1.5	13
117	Zener Tunneling and Photocurrent Generation in Quasi-Metallic Carbon Nanotube pn-Devices. Nano Letters, 2013, 13, 5129-5134.	4.5	13
118	Plasmonic mode mixing in nanoparticle dimers with nm-separations via substrate-mediated coupling. Nano Research, 2014, 7, 1344-1354.	5.8	13
119	Photocurrent spectroscopy of exciton and free particle optical transitions in suspended carbon nanotube pn-junctions. Applied Physics Letters, 2015, 107, 053107.	1.5	13
120	Enhanced Cross-Plane Thermoelectric Transport of Rotationally Disordered SnSe2 via Se-Vapor Annealing. Nano Letters, 2018, 18, 6876-6881.	4.5	13
121	Rapid prototyping of three-dimensional microstructures from multiwalled carbon nanotubes. Applied Physics Letters, 2007, 91, 093121.	1.5	12
122	Strong Circularly Polarized Photoluminescence from Multilayer MoS₂ Through Plasma Driven Direct-Gap Transition. ACS Photonics, 2016, 3, 310-314.	3.2	12
123	Hot Electron Driven Photocatalysis on Plasmon-Resonant Grating Nanostructures. ACS Applied Materials & Interfaces, 2020, 12, 17459-17465.	4.0	12
124	Tunable Resonant Raman Scattering From Singly Resonant Single Wall Carbon Nanotubes. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1083-1090.	1.9	11
125	Scaling of exciton binding energy with external dielectric function in carbon nanotubes. Physica E: Low-Dimensional Systems and Nanostructures, 2008, 40, 2375-2379.	1.3	11
126	Effect of nanotube-nanotube coupling on the radial breathing mode of carbon nanotubes. Physical Review B, 2008, 78, .	1.1	10

#	Article	IF	Citations
127	Competing Photocurrent Mechanisms in Quasiâ€Metallic Carbon Nanotube pn Devices. Small, 2015, 11, 3119-3123.	5.2	10
128	Resonant micro-Raman spectroscopy of aligned single-walled carbon nanotubes on a-plane sapphire. Applied Physics Letters, 2008, 93, 123112.	1.5	9
129	Optical Properties of Carbon Nanotubes Under Axial Strain. Journal of Nanoscience and Nanotechnology, 2008, 8, 122-130.	0.9	9
130	Nonideal Diode Behavior and Bandgap Renormalization in Carbon Nanotube p-n Junctions. IEEE Nanotechnology Magazine, 2014, 13, 41-45.	1.1	9
131	Electrical Transport and Channel Length Modulation in Semiconducting Carbon Nanotube Field Effect Transistors. IEEE Nanotechnology Magazine, 2014, 13, 176-181.	1.1	9
132	Plasmon resonant amplification of a hot electron-driven photodiode. Nano Research, 2018, 11, 2310-2314.	5.8	9
133	Measuring nanoscale thermal gradients in suspended MoS2 with STEM-EELS. Applied Physics Letters, 2019, 115, .	1.5	9
134	New materials for hot electron generation: general discussion. Faraday Discussions, 2019, 214, 365-386.	1.6	9
135	A Review of Diverse Academic Research in Nanosecond Pulsed Power and Plasma Science. IEEE Transactions on Plasma Science, 2020, 48, 742-748.	0.6	9
136	Nanofabrication Using Self-Assembled Alumina Templates. Materials Research Society Symposia Proceedings, 2000, 636, 471.	0.1	8
137	Single Event Effects in Carbon Nanotube-Based Field Effect Transistors Under Energetic Particle Radiation. IEEE Transactions on Nuclear Science, 2014, 61, 2839-2846.	1.2	8
138	Broadband terahertz modulation in electrostatically-doped artificial trilayer graphene. Nanoscale, 2017, 9, 1721-1726.	2.8	8
139	Demonstration of enhanced carrier transport, charge separation, and long-term stability for photocatalytic water splitting by a rapid hot pressing process. Journal of Materials Chemistry A, 2017, 5, 10687-10695.	5.2	8
140	Monitoring Reaction Intermediates in Plasma-Driven SO₂, NO, and NO₂ Remediation Chemistry Using In Situ SERS Spectroscopy. Analytical Chemistry, 2021, 93, 6421-6427.	3.2	8
141	Observation of Asymmetric Nanoscale Optical Cavity in GaAs Nanosheets. ACS Photonics, 2015, 2, 1124-1128.	3.2	7
142	Enhanced photoluminescence in air-suspended carbon nanotubes by oxygen doping. Applied Physics Letters, 2016, 109, .	1.5	7
143	Measuring Local Electric Fields and Local Charge Densities at Electrode Surfaces Using Graphene-Enhanced Raman Spectroscopy (GERS)-Based Stark-Shifts. ACS Applied Materials & Interfaces, 2019, 11, 36252-36258.	4.0	7
144	Effects of Proton Radiation-Induced Defects on Optoelectronic Properties of MoS2. IEEE Transactions on Nuclear Science, 2019, 66, 413-419.	1.2	7

#	Article	IF	Citations
145	Plasma-enhanced NOx remediation using nanosecond pulsed discharges in a water aerosol matrix. Fuel Processing Technology, 2020, 208, 106521.	3.7	7
146	Stacking Independence and Resonant Interlayer Excitation of Monolayer WSe₂/MoSe₂ Heterostructures for Photocatalytic Energy Conversion. ACS Applied Nano Materials, 2020, 3, 1175-1181.	2.4	7
147	Nanoparticle-Enhanced Plasma Discharge Using Nanosecond High-Voltage Pulses. Journal of Physical Chemistry C, 2020, 124, 7487-7491.	1.5	7
148	CO₂ Reduction to Higher Hydrocarbons by Plasma Discharge in Carbonated Water. ACS Energy Letters, 2021, 6, 3924-3930.	8.8	7
149	Independent tuning of work function and field enhancement factor in hybrid lanthanum hexaboride-graphene-silicon field emitters. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 062202.	0.6	6
150	First results on transient plasma-based remediation of nanoscale particulate matter in restaurant smoke emissions. Environmental Research, 2019, 178, 108635.	3.7	6
151	Enhanced Low-Temperature Thermoelectric Performance in (PbSe)_{1+Î´}(VSe₂)₁ Heterostructures due to Highly Correlated Electrons in Charge Density Waves. Nano Letters, 2020, 20, 8008-8014.	4.5	6
152	Tunable Onset of Hydrogen Evolution in Graphene with Hot Electrons. Nano Letters, 2020, 20, 1791-1799.	4.5	6
153	Enhanced Plasma Generation from Metal Nanostructures via Photoexcited Hot Electrons. Journal of Physical Chemistry C, 2021, 125, 6800-6804.	1.5	6
154	Nanoscale TiO₂ Protection Layer Enhances the Built-In Field and Charge Separation Performance of GaP Photoelectrodes. Nano Letters, 2021, 21, 8017-8024.	4.5	6
155	4-Point Resistance Measurements of Individual Bi Nanowires. Materials Research Society Symposia Proceedings, 2001, 635, C5.7.1.	0.1	5
156	Memristive Behavior Observed in a Defected Single-Walled Carbon Nanotube. IEEE Nanotechnology Magazine, 2011, 10, 582-586.	1.1	5
157	Tailoring the crystal structure of individual silicon nanowires by polarized laser annealing. Nanotechnology, 2011, 22, 305709.	1.3	5
158	Evidence for structural phase transitions and large effective band gaps in quasi-metallic ultra-clean suspended carbon nanotubes. Nano Research, 2013, 6, 736-744.	5.8	5
159	Drude Theoryâ€“Free Carrier Contribution to the Optical Properties. Graduate Texts in Physics, 2018, , 329-344.	0.1	5
160	Transient plasma-enhanced remediation of nanoscale particulate matter in restaurant smoke emissions via electrostatic precipitation. Particuology, 2021, 55, 43-47.	2.0	5
161	Microwave properties of suspended single-walled carbon nanotubes with a field-effect transistor configuration. , 2011, , .		4
162	Pronounced electron-phonon interactions in ultraclean suspended carbon nanotubes. Physical Review B, 2012, 86, .	1.1	4

#	Article	IF	Citations
163	Avalanche Photoemission in Suspended Carbon Nanotubes: Light without Heat. ACS Photonics, 2017, 4, 2706-2710.	3.2	4
164	Monitoring Local Electric Fields using Stark Shifts on Napthyl Nitrile-Functionalized Silicon Photoelectrodes. Journal of Physical Chemistry C, 2020, 124, 17000-17005.	1.5	4
165	Hot Electron Plasmon-Resonant Grating Structures for Enhanced Photochemistry: A Theoretical Study. Crystals, 2021, 11, 118.	1.0	4
166	Top-down lithographic method for inducing strain in carbon nanotubes. Journal of Applied Physics, 2009, 106, 014306.	1.1	3
167	Low Temperature Growth of Crystalline Semiconductors on Nonepitaxial Substrates. Advanced Materials Interfaces, 2020, 7, 1902191.	1.9	3
168	Increasing the Hotâ€Electron Driven Hydrogen Evolution Reaction Rate on a Metalâ€Free Graphene Electrode. Advanced Materials Interfaces, 2021, 8, 2001706.	1.9	3
169	Au Nanoparticle Enhancement of Plasma-Driven Methane Conversion into Higher Order Hydrocarbons via Hot Electrons. ACS Applied Nano Materials, 2020, 3, 12388-12393.	2.4	3
170	Thermoelectric Nanowires by Electrochemical Deposition. Materials Research Society Symposia Proceedings, 2001, 691, 1.	0.1	2
171	Electromechanical resonance behavior of suspended single-walled carbon nanotubes under high bias voltages. Journal of Micromechanics and Microengineering, 2011, 21, 085008.	1.5	2
172	Plasmon Resonant Enhancement of Photocatalytic Solar Fuel Production. ECS Transactions, 2011, 41, 197-205.	0.3	2
173	Effects of Parylene Coating on Electron Transport in Pristine Suspended Carbon Nanotube Field-Effect-Transistors. IEEE Transactions on Electron Devices, 2014, 61, 3539-3545.	1.6	2
174	Radiation Induced Single Ion Surface Effects in Nanoelectronic Circuits. IEEE Transactions on Nuclear Science, 2015, 62, 2926-2932.	1.2	2
175	Black Phosphorous: Nanoscopy of Black Phosphorus Degradation (Adv. Mater. Interfaces 12/2016). Advanced Materials Interfaces, 2016, 3, .	1.9	2
176	Prevention of surface recombination by electrochemical tuning of TiO2-passivated photocatalysts. Applied Physics Letters, 2017, 111, 141603.	1.5	2
177	Taguchi analysis of parameters for small-diameter single wall carbon nanotube growth. AIP Advances, 2017, 7, 095301.	0.6	2
178	Suspended individual SWCNT characterization via bottom gate FET configuration. Microwave and Optical Technology Letters, 2017, 59, 2610-2614.	0.9	2
179	Ultra-Low Power Light Emission via Avalanche and Sub-avalanche Breakdown in Suspended Carbon Nanotubes. ACS Photonics, 2018, 5, 4432-4436.	3.2	2
180	Defect-Induced Photoluminescence Enhancement and Corresponding Transport Degradation in Individual Suspended Carbon Nanotubes. Physical Review Applied, 2018, 9, .	1.5	2

#	Article	IF	Citations
181	Plasma-enhanced SO2 remediation in a humidified gas matrix: A potential strategy for the continued burning of high sulfur bunker fuel. Fuel, 2020, 274, 117810.	3.4	2
182	Formation of Brightly Luminescent MoS₂ Nanoislands from Multilayer Flakes via Plasma Treatment and Laser Exposure. ACS Omega, 2020, 5, 20543-20547.	1.6	2
183	Transport Measurements of Individual Bi Nanowires. Materials Research Society Symposia Proceedings, 1999, 582, 13.	0.1	1
184	Electronic Properties of Bismuth Nanowires. Materials Research Society Symposia Proceedings, 2001, 679, 1.	0.1	1
185	Thermoelectric Properties of Bi1-xSbx Nanowire Arrays. Materials Research Society Symposia Proceedings, 2001, 691, 1.	0.1	1
186	Transport Properties and Observation of Semimetal-Semiconductor Transition in Bi-based Nanowires. Materials Research Society Symposia Proceedings, 2002, 737, 385.	0.1	1
187	Formation of Fabry-Perot cavity in one-dimensional and two-dimensional GaAs nanostructures. Proceedings of SPIE, 2014, , .	0.8	1
188	Resonant and Selective Excitation of Photocatalytically Active Defect Sites in TiO₂. ACS Applied Materials & Interfaces, 2019, 11, 10351-10355.	4.0	1
189	Direct Measurement of Water-Assisted Ion Desorption and Solvation on Isolated Carbon Nanotubes. ACS Nano, 2020, 14, 16854-16863.	7.3	1
190	Broadband electroluminescence from reverse breakdown in individual suspended carbon nanotube pn-junctions. Nano Research, 2020, 13, 2857-2861.	5.8	1
191	Auger Suppression of Incandescence in Individual Suspended Carbon Nanotube pn-Junctions. ACS Applied Materials & Interfaces, 2020, 12, 11907-11912.	4.0	1
192	Voltage-induced modulation in the charge state of Si-vacancy defects in diamond using high voltage nanosecond pulses. Applied Physics Letters, 2021, 119, .	1.5	1
193	Thermoelectric Transport Properties of Individual Bismuth Nanowires. Materials Research Society Symposia Proceedings, 2001, 691, 1.	0.1	0
194	Thermoelectric Nanowires By Template Synthesis: Fabrication, Contacts and Properties. Materials Research Society Symposia Proceedings, 2002, 739, 7241.	0.1	0
195	Unperturbed Optical Transition Energies from Resonant Raman Scattering of Individual Suspended Single Wall Carbon Nanotubes. , 2005, , LTuE2.		0
196	Iteratively optimized nonperiodic plasmon resonant nanostructures. , 2010, , .		0
197	Exploring optimized configurations of plasmonic nanoparticles. Proceedings of SPIE, 2010, , .	0.8	0
198	Optical and electrical characterization of surface passivated GaAs nanostructures. Proceedings of SPIE, 2014, , .	0.8	0

#	Article	IF	Citations
199	Computational modeling of channel length modulation in carbon nanotube field effect transistors. , 2014, , .		0
200	Bulk direct band gap MoS<inf>2</inf> by plasma induced layer decoupling. , 2015, , .		0
201	Frontispiece: Enhanced Photocatalytic Reduction of CO2to CO through TiO2Passivation of InP in Ionic Liquids. Chemistry - A European Journal, 2015, 21, n/a-n/a.	1.7	0
202	Applications of Plasmon Energy Expansion Thermometry. Microscopy and Microanalysis, 2015, 21, 663-664.	0.2	0
203	Introduction to Plasmon Energy Expansion Thermometry. Microscopy and Microanalysis, 2015, 21, 1907-1908.	0.2	0
204	Nanoscale Mapping of Interfacial Electrical Transport in Graphene-MoS 2 Heterostructures with STEM-EBIC. Microscopy and Microanalysis, 2016, 22, 1552-1553.	0.2	0
205	Screening Of Excitons In Single, Suspended Carbon Nanotubes. , 2006, , .		0