Michael B Johnston

List of Publications by Year
in descending order

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264 papers	42,178 citations	7551 77 h-index	2940 189 g-index
265 all docs	265 docs citations	265 times ranked	27678 citing authors

#	Article	IF	Citations
1	Efficient planar heterojunction perovskite solar cells by vapour deposition. Nature, 2013, 501, 395-398.	13.7	7,055
2	Formamidinium lead trihalide: a broadly tunable perovskite for efficient planar heterojunction solar cells. Energy and Environmental Science, 2014, 7, 982.	15.6	3,352
3	High Charge Carrier Mobilities and Lifetimes in Organolead Trihalide Perovskites. Advanced Materials, 2014, 26, 1584-1589.	11.1	2,785
4	A mixed-cation lead mixed-halide perovskite absorber for tandem solar cells. Science, 2016, 351, 151-155.	6.0	2,514
5	Lead-free organicâ€“inorganic tin halide perovskites for photovoltaic applications. Energy and Environmental Science, 2014, 7, 3061-3068.	15.6	2,086
6	Bandgapâ€Tunable Cesium Lead Halide Perovskites with High Thermal Stability for Efficient Solar Cells. Advanced Energy Materials, 2016, 6, 1502458.	10.2	1,265
7	The 2017 terahertz science and technology roadmap. Journal Physics D: Applied Physics, 2017, 50, 043001.	1.3	1,160
8	Perovskite-perovskite tandem photovoltaics with optimized band gaps. Science, 2016, 354, 861-865.	6.0	1,107
9	Electronâ€“phonon coupling in hybrid lead halide perovskites. Nature Communications, 2016, 7, .	5.8	919
10	Hybrid Perovskites for Photovoltaics: Charge-Carrier Recombination, Diffusion, and Radiative Efficiencies. Accounts of Chemical Research, 2016, 49, 146-154.	7.6	819
11	Temperatureâ€Dependent Chargeâ€Carrier Dynamics in CH₃NH₃PbI₃ Perovskite Thin Films. Advanced Functional Materials, 2015, 25, 6218-6227.	7.8	785
12	Cs₂InAgCl₆: A New Lead-Free Halide Double Perovskite with Direct Band Gap. Journal of Physical Chemistry Letters, 2017, 8, 772-778.	2.1	752
13	Electron Mobility and Injection Dynamics in Mesoporous ZnO, SnO₂, and TiO₂ Films Used in Dye-Sensitized Solar Cells. ACS Nano, 2011, 5, 5158-5166.	7.3	698
14	Enhanced UV-light stability of planar heterojunction perovskite solar cells with caesium bromide interface modification. Energy and Environmental Science, 2016, 9, 490-498.	15.6	535
15	Photovoltaic mixed-cation lead mixed-halide perovskites: links between crystallinity, photo-stability and electronic properties. Energy and Environmental Science, 2017, 10, 361-369.	15.6	482
16	A piperidinium salt stabilizes efficient metal-halide perovskite solar cells. Science, 2020, 369, 96-102.	6.0	461
17	Charge-Carrier Dynamics in 2D Hybrid Metalâ€“Halide Perovskites. Nano Letters, 2016, 16, 7001-7007.	4.5	428
18	Charge-carrier dynamics in vapour-deposited films of the organolead halide perovskite CH₃NH₃PbI_{3â^'x}Cl_x. Energy and Environmental Science, 2014, 7, 2269-2275.	15.6	427

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19	Optical properties and limiting photocurrent of thin-film perovskite solar cells. Energy and Environmental Science, 2015, 8, 602-609.	15.6	417
20	Efficient perovskite solar cells by metal ion doping. Energy and Environmental Science, 2016, 9, 2892-2901.	15.6	372
21	Charge selective contacts, mobile ions and anomalous hysteresis in organicâ€“inorganic perovskite solar cells. Materials Horizons, 2015, 2, 315-322.	6.4	366
22	Chargeâ€Carrier Dynamics and Mobilities in Formamidinium Lead Mixedâ€Halide Perovskites. Advanced Materials, 2015, 27, 7938-7944.	11.1	343
23	Solution Depositionâ€Conversion for Planar Heterojunction Mixed Halide Perovskite Solar Cells. Advanced Energy Materials, 2014, 4, 1400355.	10.2	325
24	Homogeneous Emission Line Broadening in the Organo Lead Halide Perovskite CH₃NH₃PbI_{3â€“x}Cl_x. Journal of Physical Chemistry Letters, 2014, 5, 1300-1306.	2.1	319
25	A low viscosity, low boiling point, clean solvent system for the rapid crystallisation of highly specular perovskite films. Energy and Environmental Science, 2017, 10, 145-152.	15.6	319
26	Simulation of terahertz generation at semiconductor surfaces. Physical Review B, 2002, 65, .	1.1	308
27	Highly Efficient Perovskite Solar Cells with Tunable Structural Color. Nano Letters, 2015, 15, 1698-1702.	4.5	289
28	Revealing the origin of voltage loss in mixed-halide perovskite solar cells. Energy and Environmental Science, 2020, 13, 258-267.	15.6	283
29	Vibrational Properties of the Organicâ€“Inorganic Halide Perovskite CH₃NH₃PbI₃ from Theory and Experiment: Factor Group Analysis, First-Principles Calculations, and Low-Temperature Infrared Spectra. Journal of Physical Chemistry C, 2015, 119, 25703-25718.	1.5	276
30	Electronic properties of GaAs, InAs and InP nanowires studied by terahertz spectroscopy. Nanotechnology, 2013, 24, 214006.	1.3	264
31	Crystallization Kinetics and Morphology Control of Formamidiniumâ€“Cesium Mixedâ€Cation Lead Mixedâ€Halide Perovskite via Tunability of the Colloidal Precursor Solution. Advanced Materials, 2017, 29, 1607039.	11.1	263
32	Structured Organicâ€“Inorganic Perovskite toward a Distributed Feedback Laser. Advanced Materials, 2016, 28, 923-929.	11.1	257
33	IIIâ€“V semiconductor nanowires for optoelectronic device applications. Progress in Quantum Electronics, 2011, 35, 23-75.	3.5	256
34	Carrier Lifetime and Mobility Enhancement in Nearly Defect-Free Coreâ^'Shell Nanowires Measured Using Time-Resolved Terahertz Spectroscopy. Nano Letters, 2009, 9, 3349-3353.	4.5	253
35	Bimolecular recombination in methylammonium lead triiodide perovskite is an inverse absorption process. Nature Communications, 2018, 9, 293.	5.8	243
36	Efficient and Airâ€Stable Mixedâ€Cation Lead Mixedâ€Halide Perovskite Solar Cells with nâ€Doped Organic Electron Extraction Layers. Advanced Materials, 2017, 29, 1604186.	11.1	237

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37	Electronic Traps and Phase Segregation in Lead Mixed-Halide Perovskite. ACS Energy Letters, 2019, 4, 75-84.	8.8	212
38	Plasmonicâ€Induced Photon Recycling in Metal Halide Perovskite Solar Cells. Advanced Functional Materials, 2015, 25, 5038-5046.	7.8	198
39	Transient Terahertz Conductivity of GaAs Nanowires. Nano Letters, 2007, 7, 2162-2165.	4.5	194
40	Charge carrier recombination channels in the low-temperature phase of organic-inorganic lead halide perovskite thin films. APL Materials, 2014, 2, .	2.2	194
41	Ultrafast Transient Terahertz Conductivity of Monolayer MoS₂ and WSe₂ Grown by Chemical Vapor Deposition. ACS Nano, 2014, 8, 11147-11153.	7.3	191
42	Atomic-scale microstructure of metal halide perovskite. Science, 2020, 370, .	6.0	183
43	High irradiance performance of metal halide perovskites for concentrator photovoltaics. Nature Energy, 2018, 3, 855-861.	19.8	180
44	Solution-Processed All-Perovskite Multi-junction Solar Cells. Joule, 2019, 3, 387-401.	11.7	177
45	Efficient, Semitransparent Neutral-Colored Solar Cells Based on Microstructured Formamidinium Lead Trihalide Perovskite. Journal of Physical Chemistry Letters, 2015, 6, 129-138.	2.1	173
46	A review of the electrical properties of semiconductor nanowires: insights gained from terahertz conductivity spectroscopy. Semiconductor Science and Technology, 2016, 31, 103003.	1.0	168
47	Crystallization of CsPbBr3 single crystals in water for X-ray detection. Nature Communications, 2021, 12, 1531.	5.8	161
48	Ultralow Surface Recombination Velocity in InP Nanowires Probed by Terahertz Spectroscopy. Nano Letters, 2012, 12, 5325-5330.	4.5	158
49	The Effects of Doping Density and Temperature on the Optoelectronic Properties of Formamidinium Tin Triiodide Thin Films. Advanced Materials, 2018, 30, e1804506.	11.1	156
50	Unveiling the Influence of pH on the Crystallization of Hybrid Perovskites, Delivering Low Voltage Loss Photovoltaics. Joule, 2017, 1, 328-343.	11.7	148
51	Photon Reabsorption Masks Intrinsic Bimolecular Charge-Carrier Recombination in CH₃NH₃PbI₃ Perovskite. Nano Letters, 2017, 17, 5782-5789.	4.5	147
52	Effect of Structural Phase Transition on Charge-Carrier Lifetimes and Defects in CH₃NH₃SnI₃ Perovskite. Journal of Physical Chemistry Letters, 2016, 7, 1321-1326.	2.1	135
53	Halide Segregation in Mixed-Halide Perovskites: Influence of A-Site Cations. ACS Energy Letters, 2021, 6, 799-808.	8.8	129
54	The development of terahertz sources and their applications. Physics in Medicine and Biology, 2002, 47, 3679-3689.	1.6	128

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55	Bandâ€Tail Recombination in Hybrid Lead Iodide Perovskite. Advanced Functional Materials, 2017, 27, 1700860.	7.8	127
56	Terahertz emission from lateralâ€¨photo-Dember currents. Optics Express, 2010, 18, 4939.	1.7	123
57	Polarization-sensitive terahertz detection by multicontact photoconductive receivers. Applied Physics Letters, 2005, 86, 254102.	1.5	120
58	Extreme sensitivity of graphene photoconductivity to environmental gases. Nature Communications, 2012, 3, 1228.	5.8	120
59	Enhanced Amplified Spontaneous Emission in Perovskites Using a Flexible Cholesteric Liquid Crystal Reflector. Nano Letters, 2015, 15, 4935-4941.	4.5	117
60	Large-Area, Highly Uniform Evaporated Formamidinium Lead Triiodide Thin Films for Solar Cells. ACS Energy Letters, 2017, 2, 2799-2804.	8.8	116
61	Elucidating the long-range charge carrier mobility in metal halide perovskite thin films. Energy and Environmental Science, 2019, 12, 169-176.	15.6	115
62	Radiative Monomolecular Recombination Boosts Amplified Spontaneous Emission in HC(NH₂)₂SnI₃ Perovskite Films. Journal of Physical Chemistry Letters, 2016, 7, 4178-4184.	2.1	110
63	Single Nanowire Photoconductive Terahertz Detectors. Nano Letters, 2015, 15, 206-210.	4.5	105
64	Influence of surface passivation on ultrafast carrier dynamics and terahertz radiation generation in GaAs. Applied Physics Letters, 2006, 89, 232102.	1.5	103
65	Formation Dynamics of CH₃NH₃PbI₃ Perovskite Following Two-Step Layer Deposition. Journal of Physical Chemistry Letters, 2016, 7, 96-102.	2.1	100
66	Enhanced coherent terahertz emission from indium arsenide in the presence of a magnetic field. Applied Physics Letters, 2000, 76, 2038-2040.	1.5	98
67	Low-energy vibrational modes in phenylene oligomers studied by THz time-domain spectroscopy. Chemical Physics Letters, 2003, 377, 256-262.	1.2	95
68	Efficient generation of charges via below-gap photoexcitation of polymer-fullerene blend films investigated by terahertz spectroscopy. Physical Review B, 2008, 78, .	1.1	93
69	Role of Ultrafast Torsional Relaxation in the Emission from Polythiophene Aggregates. Journal of Physical Chemistry Letters, 2010, 1, 2788-2792.	2.1	90
70	Three-dimensional carrier-dynamics simulation of terahertz emission from photoconductive switches. Physical Review B, 2005, 71, .	1.1	87
71	Raman Spectrum of the Organicâ€“Inorganic Halide Perovskite CH₃NH₃PbI₃ from First Principles and High-Resolution Low-Temperature Raman Measurements. Journal of Physical Chemistry C, 2018, 122, 21703-21717.	1.5	87
72	Metal composition influences optoelectronic quality in mixed-metal leadâ€“tin triiodide perovskite solar absorbers. Energy and Environmental Science, 2020, 13, 1776-1787.	15.6	87

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73	Ultrafast Terahertz Conductivity Dynamics in Mesoporous TiO₂: Influence of Dye Sensitization and Surface Treatment in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 1365-1371.	1.5	84
74	Ultrafast Charge Separation at a Polymerâ^'Single-Walled Carbon Nanotube Molecular Junction. Nano Letters, 2011, 11, 66-72.	4.5	81
75	Elucidating the Role of a Tetrafluoroborateâ€Based Ionic Liquid at the nâ€Type Oxide/Perovskite Interface. Advanced Energy Materials, 2020, 10, 1903231.	10.2	81
76	Three-dimensional cross-nanowire networks recover full terahertz state. Science, 2020, 368, 510-513.	6.0	81
77	Ultrafast Excited-State Localization in Cs₂AgBiBr₆ Double Perovskite. Journal of Physical Chemistry Letters, 2021, 12, 3352-3360.	2.1	81
78	Electron Mobilities Approaching Bulk Limits in â€œSurface-Freeâ€•GaAs Nanowires. Nano Letters, 2014, 14, 5989-5994.	4.5	79
79	Trap States, Electric Fields, and Phase Segregation in Mixedâ€Halide Perovskite Photovoltaic Devices. Advanced Energy Materials, 2020, 10, 1903488.	10.2	79
80	Modulation Doping of GaAs/AlGaAs Coreâ€“Shell Nanowires With Effective Defect Passivation and High Electron Mobility. Nano Letters, 2015, 15, 1336-1342.	4.5	78
81	An Ultrafast Switchable Terahertz Polarization Modulator Based on IIIâ€“V Semiconductor Nanowires. Nano Letters, 2017, 17, 2603-2610.	4.5	77
82	Hybrid Perovskites: Prospects for Concentrator Solar Cells. Advanced Science, 2018, 5, 1700792.	5.6	76
83	Temperature-Dependent Refractive Index of Quartz at Terahertz Frequencies. Journal of Infrared, Millimeter, and Terahertz Waves, 2018, 39, 1236-1248.	1.2	75
84	Terahertz Properties of Graphene. Journal of Infrared, Millimeter, and Terahertz Waves, 2012, 33, 797-815.	1.2	74
85	Control over Crystal Size in Vapor Deposited Metal-Halide Perovskite Films. ACS Energy Letters, 2020, 5, 710-717.	8.8	72
86	Phase segregation in mixed-halide perovskites affects charge-carrier dynamics while preserving mobility. Nature Communications, 2021, 12, 6955.	5.8	72
87	Conformational changes of photoactive yellow protein monitored by terahertz spectroscopy. Chemical Physics Letters, 2008, 455, 289-292.	1.2	69
88	Understanding and suppressing non-radiative losses in methylammonium-free wide-bandgap perovskite solar cells. Energy and Environmental Science, 2022, 15, 714-726.	15.6	68
89	The origin of an efficiency improving â€œlight soakingâ€•effect in SnO2 based solid-state dye-sensitized solar cells. Energy and Environmental Science, 2012, 5, 9566.	15.6	67
90	Heterogeneous Photon Recycling and Charge Diffusion Enhance Charge Transport in Quasi-2D Lead-Halide Perovskite Films. Nano Letters, 2019, 19, 3953-3960.	4.5	67

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91	Chargeâ€Carrier Trapping and Radiative Recombination in Metal Halide Perovskite Semiconductors. Advanced Functional Materials, 2020, 30, 2004312.	7.8	67
92	Theory of magnetic-field enhancement of surface-field terahertz emission. Journal of Applied Physics, 2002, 91, 2104-2106.	1.1	66
93	Influence of Interface Morphology on Hysteresis in Vaporâ€Deposited Perovskite Solar Cells. Advanced Electronic Materials, 2017, 3, 1600470.	2.6	63
94	Interplay of Structural and Optoelectronic Properties in Formamidinium Mixed Tinâ€“Lead Triiodide Perovskites. Advanced Functional Materials, 2018, 28, 1802803.	7.8	63
95	Increased Photoconductivity Lifetime in GaAs Nanowires by Controlled n-Type and p-Type Doping. ACS Nano, 2016, 10, 4219-4227.	7.3	62
96	Noncontact Measurement of Charge Carrier Lifetime and Mobility in GaN Nanowires. Nano Letters, 2012, 12, 4600-4604.	4.5	61
97	Optical Description of Mesostructured Organicâ€“Inorganic Halide Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2015, 6, 48-53.	2.1	59
98	Nearâ€Infrared and Shortâ€Wavelength Infrared Photodiodes Based on Dyeâ€“Perovskite Composites. Advanced Functional Materials, 2017, 27, 1702485.	7.8	59
99	Carrier dynamics in ion-implanted GaAs studied by simulation and observation of terahertz emission. Physical Review B, 2004, 70, .	1.1	58
100	Charge-Carrier Trapping Dynamics in Bismuth-Doped Thin Films of MAPbBr₃ Perovskite. Journal of Physical Chemistry Letters, 2020, 11, 3681-3688.	2.1	55
101	Strong Carrier Lifetime Enhancement in GaAs Nanowires Coated with Semiconducting Polymer. Nano Letters, 2012, 12, 6293-6301.	4.5	54
102	Highly Crystalline Methylammonium Lead Tribromide Perovskite Films for Efficient Photovoltaic Devices. ACS Energy Letters, 2018, 3, 1233-1240.	8.8	54
103	Generation of high-power terahertz pulses in a prism. Optics Letters, 2002, 27, 1935.	1.7	53
104	Photoconductive response correction for detectors of terahertz radiation. Journal of Applied Physics, 2008, 104, .	1.1	53
105	Excitation-density-dependent generation of broadband terahertz radiation in an asymmetrically excited photoconductive antenna. Optics Letters, 2007, 32, 2297.	1.7	52
106	Selective dielectrophoretic manipulation of surface-immobilized DNA molecules. Nanotechnology, 2003, 14, 896-902.	1.3	51
107	Impact of the Organic Cation on the Optoelectronic Properties of Formamidinium Lead Triiodide. Journal of Physical Chemistry Letters, 2018, 9, 4502-4511.	2.1	51
108	Growth modes and quantum confinement in ultrathin vapour-deposited MAPbI₃ films. Nanoscale, 2019, 11, 14276-14284.	2.8	51

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109	Fast Charge-Carrier Trapping in TiO₂ Nanotubes. Journal of Physical Chemistry C, 2015, 119, 9159-9168.	1.5	50
110	Impact of Tin Fluoride Additive on the Properties of Mixed Tinâ€Lead Iodide Perovskite Semiconductors. Advanced Functional Materials, 2020, 30, 2005594.	7.8	48
111	An ion-implanted InP receiver for polarization resolved terahertz spectroscopy. Optics Express, 2007, 15, 7047.	1.7	46
112	Broadband Phase-Sensitive Single InP Nanowire Photoconductive Terahertz Detectors. Nano Letters, 2016, 16, 4925-4931.	4.5	46
113	Chargeâ€Carrier Dynamics, Mobilities, and Diffusion Lengths of 2Dâ€“3D Hybrid Butylammoniumâ€“Cesiumâ€“Formamidinium Lead Halide Perovskites. Advanced Functional Materials, 2019, 29, 1902656.	7.8	45
114	Limits to Electrical Mobility in Lead-Halide Perovskite Semiconductors. Journal of Physical Chemistry Letters, 2021, 12, 3607-3617.	2.1	45
115	Nanotechnology for catalysis and solar energy conversion. Nanotechnology, 2021, 32, 042003.	1.3	44
116	Dual-Source Coevaporation of Low-Bandgap FA_{1â€“x}Cs_xSn_{1â€“y}Pb_yI₃ Perovskites for Photovoltaics. ACS Energy Letters, 2019, 4, 2748-2756.	8.8	43
117	Simulation and optimisation of terahertz emission from InGaAs and InP photoconductive switches. Solid State Communications, 2005, 136, 595-600.	0.9	42
118	Superfocusing of terahertz waves. Nature Photonics, 2007, 1, 14-15.	15.6	41
119	Charge-Carrier Mobility and Localization in Semiconducting Cu₂AgBiI₆ for Photovoltaic Applications. ACS Energy Letters, 2021, 6, 1729-1739.	8.8	41
120	All-Optical Full-Color Displays Using Polymer Nanofibers. ACS Nano, 2011, 5, 2020-2025.	7.3	40
121	Impurity Tracking Enables Enhanced Control and Reproducibility of Hybrid Perovskite Vapor Deposition. ACS Applied Materials & Interfaces, 2019, 11, 28851-28857.	4.0	38
122	Longitudinal electron bunch profile diagnostics at 45ÂMeV using coherent Smith-Purcell radiation. Physical Review Special Topics: Accelerators and Beams, 2006, 9, .	1.8	37
123	Colour-selective photodiodes. Nature Photonics, 2015, 9, 634-636.	15.6	37
124	Effect of Ultraviolet Radiation on Organic Photovoltaic Materials and Devices. ACS Applied Materials & Interfaces, 2019, 11, 21543-21551.	4.0	37
125	Terahertz Excitonic Response of Isolated Single-Walled Carbon Nanotubes. Journal of Physical Chemistry C, 2009, 113, 18106-18109.	1.5	36
126	Nanoengineering Coaxial Carbon Nanotubeâ€“Dual-Polymer Heterostructures. ACS Nano, 2012, 6, 6058-6066.	7.3	36

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127	An ultrafast carbon nanotube terahertz polarisation modulator. Journal of Applied Physics, 2014, 115, .	1.1	36
128	InxGa1â^'xAs nanowires with uniform composition, pure wurtzite crystal phase and taper-free morphology. Nanotechnology, 2015, 26, 205604.	1.3	36
129	Extraction of the anisotropic dielectric properties of materials from polarization-resolved terahertz time-domain spectra. Journal of Optics, 2009, 11, 105206.	1.5	34
130	Terahertz Conductivity Analysis for Highly Doped Thin-Film Semiconductors. Journal of Infrared, Millimeter, and Terahertz Waves, 2020, 41, 1431-1449.	1.2	33
131	Solvent-Free Method for Defect Reduction and Improved Performance of p-i-n Vapor-Deposited Perovskite Solar Cells. ACS Energy Letters, 2022, 7, 1903-1911.	8.8	33
132	Improved Performance of GaAs-Based Terahertz Emitters via Surface Passivation and Silicon Nitride Encapsulation. IEEE Journal of Selected Topics in Quantum Electronics, 2011, 17, 17-21.	1.9	31
133	Direct Observation of Charge-Carrier Heating at WZâ€“ZB InP Nanowire Heterojunctions. Nano Letters, 2013, 13, 4280-4287.	4.5	31
134	The influence of surfaces on the transient terahertz conductivity and electron mobility of GaAs nanowires. Journal Physics D: Applied Physics, 2017, 50, 224001.	1.3	31
135	High Electron Mobility and Insights into Temperature-Dependent Scattering Mechanisms in InAsSb Nanowires. Nano Letters, 2018, 18, 3703-3710.	4.5	31
136	Understanding Dark Current-Voltage Characteristics in Metal-Halide Perovskite Single Crystals. Physical Review Applied, 2021, 15, .	1.5	30
137	Proton irradiation-induced intermixing in InGaAs/(Al)GaAs quantum wells and quantum-well lasers. Journal of Applied Physics, 1999, 85, 6786-6789.	1.1	29
138	Dependence of Dye Regeneration and Charge Collection on the Pore-Filling Fraction in Solid-State Dye-Sensitized Solar Cells. Advanced Functional Materials, 2014, 24, 668-677.	7.8	29
139	CsPbBr₃ Nanocrystal Films: Deviations from Bulk Vibrational and Optoelectronic Properties. Advanced Functional Materials, 2020, 30, 1909904.	7.8	29
140	Light Absorption and Recycling in Hybrid Metal Halide Perovskite Photovoltaic Devices. Advanced Energy Materials, 2020, 10, 1903653.	10.2	28
141	Improved carrier collection in intermixed InGaAs/GaAs quantum wells. Applied Physics Letters, 1998, 73, 3408-3410.	1.5	26
142	Single n⁺-i-n⁺InP nanowires for highly sensitive terahertz detection. Nanotechnology, 2017, 28, 125202.	1.3	26
143	Intrinsic quantum confinement in formamidinium lead triiodide perovskite. Nature Materials, 2020, 19, 1201-1206.	13.3	26
144	Dynamic terahertz polarization in single-walled carbon nanotubes. Physical Review B, 2010, 82, .	1.1	23

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145	Photocurrent Spectroscopy of Perovskite Solar Cells Over a Wide Temperature Range from 15 to 350 K. Journal of Physical Chemistry Letters, 2018, 9, 263-268.	2.1	23
146	Carrier capture and relaxation in Stranski-KrastanowInxGa1â^'xAs/GaAs(311)Bquantum dots. Physical Review B, 2000, 62, 2737-2742.	1.1	21
147	Interdiffused quantum-well infrared photodetectors for color sensitive arrays. Applied Physics Letters, 1999, 75, 923-925.	1.5	20
148	Effects of magnetic field and optical fluence on terahertz emission in gallium arsenide. Physical Review B, 2001, 64, .	1.1	19
149	Terahertz magnetoconductivity of excitons and electrons in quantum cascade structures. Physical Review B, 2008, 77, .	1.1	19
150	Optimizing the Energy Offset between Dye and Hole-Transporting Material in Solid-State Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2013, 117, 19850-19858.	1.5	19
151	Thermally Stable Passivation toward High Efficiency Inverted Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3336-3343.	8.8	19
152	Interplay of Structure, Chargeâ€Carrier Localization and Dynamics in Copperâ€Silverâ€Bismuthâ€Halide Semiconductors. Advanced Functional Materials, 2022, 32, .	7.8	19
153	Effects of anodic oxide induced intermixing on the structural and optical properties of quantum wire structure grown on nonplanar GaAs substrate. Journal of Applied Physics, 1996, 80, 5014-5020.	1.1	18
154	Emission of collimated THz pulses from photo-excited semiconductors. Semiconductor Science and Technology, 2004, 19, S449-S451.	1.0	18
155	Charge trapping in polymer transistors probed by terahertz spectroscopy and scanning probe potentiometry. Applied Physics Letters, 2006, 89, 112101.	1.5	17
156	Terahertz photoconductivity of mobile electrons in nanoporous InP honeycombs. Physical Review B, 2008, 78, .	1.1	17
157	The application of one-dimensional nanostructures in terahertz frequency devices. Applied Physics Reviews, 2021, 8, .	5.5	17
158	Ultrafast Dynamics of Exciton Formation in Semiconductor Nanowires. Small, 2012, 8, 1725-1731.	5.2	16
159	Optoelectronic Properties of Mixed Iodideâ€“Bromide Perovskites from First-Principles Computational Modeling and Experiment. Journal of Physical Chemistry Letters, 2022, 13, 4184-4192.	2.1	16
160	Static Electrification by Nonwetting Liquids. Contact Charging and Contact Angles. Langmuir, 1995, 11, 4153-4158.	1.6	15
161	Conductivity of nanoporous InP membranes investigated using terahertz spectroscopy. Nanotechnology, 2008, 19, 395704.	1.3	15
162	Low ensemble disorder in quantum well tube nanowires. Nanoscale, 2015, 7, 20531-20538.	2.8	15

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163	Towards higher electron mobility in modulation doped GaAs/AlGaAs core shell nanowires. Nanoscale, 2017, 9, 7839-7846.	2.8	15
164	Efficient energy transfer mitigates parasitic light absorption in molecular charge-extraction layers for perovskite solar cells. Nature Communications, 2020, 11, 5525.	5.8	15
165	Airâ€Degradation Mechanisms in Mixed Leadâ€Tin Halide Perovskites for Solar Cells. Advanced Energy Materials, 2023, 13, .	10.2	15
166	Growth of Si and C Îˆâ€doped nipi doping superlattices in GaAs by metal organic vapor phase epitaxy. Applied Physics Letters, 1996, 69, 4218-4220.	1.5	14
167	Revealing Ultrafast Charge-Carrier Thermalization in Tin-Iodide Perovskites through Novel Pumpâ€“Pushâ€“Probe Terahertz Spectroscopy. ACS Photonics, 2021, 8, 2509-2518.	3.2	14
168	Magnetic-field-induced enhancement of terahertz emission from IIIâ€“V semiconductor surfaces. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 13, 896-899.	1.3	13
169	Simulation of fluence-dependent photocurrent in terahertz photoconductive receivers. Semiconductor Science and Technology, 2012, 27, 115011.	1.0	13
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