

Matthew J Crane

List of Publications by Year in descending order

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Version: 2024-02-01

20
papers

688
citations

687363

13
h-index

794594

19
g-index

20
all docs

20
docs citations

20
times ranked

1405
citing authors

#	ARTICLE	IF	CITATIONS
1	Beyond Fullerenes: Design of Nonfullerene Acceptors for Efficient Organic Photovoltaics. <i>Journal of the American Chemical Society</i> , 2014, 136, 14589-14597.	13.7	213
2	Laser refrigeration of hydrothermal nanocrystals in physiological media. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 15024-15029.	7.1	82
3	Rapid synthesis of transition metal dichalcogenide-carbon aerogel composites for supercapacitor electrodes. <i>Microsystems and Nanoengineering</i> , 2017, 3, 17032.	7.0	48
4	Photoluminescence Saturation in Quantum-Cutting Yb ³⁺ -Doped CsPb(Cl _{1-x} Br _x) ₃ Perovskite Nanocrystals: Implications for Solar Downconversion. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12474-12484.	3.1	47
5	Single-Source Vapor Deposition of Quantum-Cutting Yb ³⁺ :CsPb(Cl _{1-x} Br _x) ₃ and Other Complex Metal-Halide Perovskites. <i>ACS Applied Energy Materials</i> , 2019, 2, 4560-4565.	5.1	44
6	Detailed-balance analysis of Yb ³⁺ :CsPb(Cl _{1-x} Br _x) ₃ quantum-cutting layers for high-efficiency photovoltaics under real-world conditions. <i>Energy and Environmental Science</i> , 2019, 12, 2486-2495.	30.8	39
7	Coherent Spin Precession and Lifetime-Limited Spin Dephasing in CsPbBr ₃ Perovskite Nanocrystals. <i>Nano Letters</i> , 2020, 20, 8626-8633.	9.1	36
8	speciation and energy-transfer dynamics in quantum-cutting Yb ³⁺ -doped CsPbBr ₃ Perovskite Nanocrystals. <i>Physical Review Materials</i> , 2020, 4, .	2.4	33
9	Effect of Surface Passivation on Nanodiamond Crystallinity. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8573-8580.	3.1	24
10	Annealing temperature dependence of the efficiency and vertical phase segregation of polymer/polymer bulk heterojunction photovoltaic cells. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	22
11	Optomechanical Thermometry of Nanoribbon Cantilevers. <i>Journal of Physical Chemistry C</i> , 2018, 122, 7525-7532.	3.1	17
12	Ferromagnetism and Spin-Polarized Luminescence in Lead-Free CsEuCl ₃ Perovskite Nanocrystals and Thin Films. <i>ACS Nano</i> , 2022, 16, 2569-2576.	14.6	16
13	Photothermal Heating and Cooling of Nanostructures. <i>Chemistry - an Asian Journal</i> , 2018, 13, 2575-2586.	3.3	13
14	Photothermal effects during nanodiamond synthesis from a carbon aerogel in a laser-heated diamond anvil cell. <i>Diamond and Related Materials</i> , 2018, 87, 134-142.	3.9	12
15	Ubiquitous Near-Band-Edge Defect State in Rare-Earth-Doped Lead-Halide Perovskites. <i>Chemistry of Materials</i> , 2022, 34, 3759-3769.	6.7	11
16	Optically oriented attachment of nanoscale metal-semiconductor heterostructures in organic solvents via photonic nanosoldering. <i>Nature Communications</i> , 2019, 10, 4942.	12.8	8
17	Mass Transport in Nanowire Synthesis: An Overview of Scalable Nanomanufacturing. <i>Journal of Materials Science and Technology</i> , 2015, 31, 523-532.	10.7	7
18	Coherent Spin Dynamics in Vapor-Deposited CsPbBr ₃ Perovskite Thin Films. <i>Chemistry of Materials</i> , 2022, 34, 1937-1945.	6.7	7

#	ARTICLE	IF	CITATIONS
19	Laser-Driven Growth of Semiconductor Nanowires from Colloidal Nanocrystals. ACS Nano, 2021, 15, 8653-8662.	14.6	6
20	Single-source flash sublimation of metal-halide semiconductors. , 2019, , .		3