James M Gardner

List of Publications by Year
in descending order

41 papers	1,488 citations	279778 23 h-index	315719 38 g-index
43 all docs	43 docs citations	43 times ranked	2408 citing authors

#	Article	IF	Citations
1	Layered 2D alkyldiammonium lead iodide perovskites: synthesis, characterization, and use in solar cells. Journal of Materials Chemistry A, 2016, 4, 15638-15646.	10.3	170
2	Polymeric, Cost-Effective, Dopant-Free Hole Transport Materials for Efficient and Stable Perovskite Solar Cells. Journal of the American Chemical Society, 2019, 141, 19700-19707.	13.7	119
3	Photon Upconversion on Dye-Sensitized Nanostructured ZrO₂ Films. Journal of Physical Chemistry C, 2011, 115, 23226-23232.	3.1	99
4	Conformational and Compositional Tuning of Phenanthrocarbazole-Based Dopant-Free Hole-Transport Polymers Boosting the Performance of Perovskite Solar Cells. Journal of the American Chemical Society, 2020, 142, 17681-17692.	13.7	83
5	Integrated Photoelectrolysis of Water Implemented On Organic Metal Halide Perovskite Photoelectrode. ACS Applied Materials & Interfaces, 2016, 8, 11904-11909.	8.0	72
6	Coumarin as a Quantitative Probe for Hydroxyl Radical Formation in Heterogeneous Photocatalysis. Journal of Physical Chemistry C, 2019, 123, 6667-6674.	3.1	70
7	The impact of ligands on the synthesis and application of metal halide perovskite nanocrystals. Journal of Materials Chemistry A, 2021, 9, 23419-23443.	10.3	69
8	A facile route to grain morphology controllable perovskite thin films towards highly efficient perovskite solar cells. Nano Energy, 2018, 53, 405-414.	16.0	60
9	Enhancement of p-Type Dye-Sensitized Solar Cell Performance by Supramolecular Assembly of Electron Donor and Acceptor. Scientific Reports, 2014, 4, 4282.	3.3	59
10	Structure and function relationships in alkylammonium lead(<scp>ii</scp>) iodide solar cells. Journal of Materials Chemistry A, 2015, 3, 9201-9207.	10.3	57
11	1,1,2,2â€Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solidâ€State Dyeâ€Sensitized Solar Cells. Advanced Energy Materials, 2015, 5, 1402340.	19.5	57
12	Solution processable, cross-linked sulfur polymers as solid electrolytes in dye-sensitized solar cells. Chemical Communications, 2015, 51, 14660-14662.	4.1	37
13	Impact of synthetic routes on the structural and physical properties of butyl-1,4-diammonium lead iodide semiconductors. Journal of Materials Chemistry A, 2017, 5, 11730-11738.	10.3	37
14	Ultrasound-assisted extraction of metals from Lithium-ion batteries using natural organic acids. Green Chemistry, 2021, 23, 8519-8532.	9.0	36
15	Probing and Controlling Surface Passivation of PbS Quantum Dot Solid for Improved Performance of Infrared Absorbing Solar Cells. Chemistry of Materials, 2019, 31, 4081-4091.	6.7	34
16	Stereoselective synthesis of unnatural Î±-amino acid derivatives through photoredox catalysis. Chemical Science, 2021, 12, 5430-5437.	7.4	33
17	Electronic and Structural Effects of Inner Sphere Coordination of Chloride to a Homoleptic Copper(II) Diimine Complex. Inorganic Chemistry, 2018, 57, 4556-4562.	4.0	31
18	Electronic Structure of Two-Dimensional Lead(II) Iodide Perovskites: An Experimental and Theoretical Study. Chemistry of Materials, 2018, 30, 4959-4967.	6.7	29

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19	A crosslinked polymer as dopant-free hole-transport material for efficient n-i-p type perovskite solar cells. Journal of Energy Chemistry, 2021, 55, 211-218.	12.9	29
20	What Limits Photon Upconversion on Mesoporous Thin Films Sensitized by Solution-Phase Absorbers?. Journal of Physical Chemistry C, 2015, 119, 4550-4564.	3.1	28
21	Photon Upconversion from Chemically Bound Triplet Sensitizers and Emitters on Mesoporous ZrO₂: Implications for Solar Energy Conversion. Journal of Physical Chemistry C, 2015, 119, 25792-25806.	3.1	27
22	Flash-Quench Technique Employed To Study the One-Electron Reduction of Triiodide in Acetonitrile: Evidence for a Diiodide Reaction Product. Inorganic Chemistry, 2010, 49, 10223-10225.	4.0	25
23	Exploring the Optical and Electrochemical Properties of Homoleptic versus Heteroleptic Diimine Copper(I) Complexes. Inorganic Chemistry, 2019, 58, 12167-12177.	4.0	25
24	Organic Salts as p-Type Dopants for Efficient LiTFSI-Free Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2020, 12, 33751-33758.	8.0	24
25	Single crystal structure and opto-electronic properties of oxidized Spiro-OMeTAD. Chemical Communications, 2020, 56, 1589-1592.	4.1	24
26	Precipitation and Crystallization Used in the Production of Metal Salts for Li-Ion Battery Materials: A Review. Metals, 2020, 10, 1609.	2.3	22
27	Synthesis of Zinc Oxide Nanorods via the Formation of Sea Urchin Structures and Their Photoluminescence after Heat Treatment. Langmuir, 2018, 34, 5079-5087.	3.5	19
28	Moisture tolerant solar cells by encapsulating 3D perovskite with long-chain alkylammonium cation-based 2D perovskite. Communications Materials, 2021, 2, .	6.9	19
29	Crossâ€Linked Sulfurâ€“Selenium Polymers as Holeâ€Transporting Materials in Dyeâ€Sensitized Solar Cells and Perovskite Solar Cells. ChemPhotoChem, 2017, 1, 363-368.	3.0	13
30	The Central Role of Ligand Conjugation for Properties of Coordination Complexes as Hole-Transport Materials in Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 6768-6779.	5.1	11
31	Mechanistic Insights from Functional Group Exchange Surface Passivation: A Combined Theoretical and Experimental Study. ACS Applied Energy Materials, 2019, 2, 2723-2733.	5.1	11
32	Energetic Barriers to Interfacial Charge Transfer and Ion Movement in Perovskite Solar Cells. ChemPhysChem, 2017, 18, 3047-3055.	2.1	10
33	Effect of the Ancillary Ligand on the Performance of Heteroleptic Cu(I) Diimine Complexes as Dyes in Dye-Sensitized Solar Cells. ACS Applied Energy Materials, 2022, 5, 1460-1470.	5.1	10
34	Water-resistant 2D lead(<scp>ii</scp>) iodide perovskites: correlation between optical properties and phase transitions. Materials Advances, 2020, 1, 2395-2400.	5.4	8
35	Light-Induced Interfacial Dynamics Dramatically Improve the Photocurrent in Dye-Sensitized Solar Cells: An Electrolyte Effect. ACS Applied Materials & Interfaces, 2018, 10, 26241-26247.	8.0	7
36	Excitedâ€State Dynamics of [Ru(bpy)₃]²⁺ Thin Films on Sensitized TiO₂ and ZrO₂. ChemPhysChem, 2019, 20, 618-626.	2.1	6

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37	Electronic Structure Characterization of Crossâ€Linked Sulfur Polymers. ChemPhysChem, 2018, 19, 1041-1047.	2.1	4
38	Reply to â€œComment on â€˜Coumarin as a Quantitative Probe for Hydroxyl Radical Formation in Heterogeneous Photocatalysisâ€™â€. Journal of Physical Chemistry C, 2019, 123, 20685-20686.	3.1	4
39	The effect of ZnO particle lattice termination on the DC conductivity of LDPE nanocomposites. Materials Advances, 2020, 1, 1653-1664.	5.4	4
40	Rapid Microwave-Assisted Self-Assembly of a Carboxylic-Acid-Terminated Dye on a TiO₂ Photoanode. ACS Applied Energy Materials, 2018, 1, 202-210.	5.1	3
41	Dye-Sensitized Solar Cells: 1,1,2,2-Tetrachloroethane (TeCA) as a Solvent Additive for Organic Hole Transport Materials and Its Application in Highly Efficient Solid-State Dye-Sensitized Solar Cells (Adv.) Tj ETQq1 1 0.784314 rg BT /Overlo	19.5	2