Luisa Whittaker-Brooks

List of Publications by Year
in descending order

43	905	394421 19	477307 29
papers	citations	h-index	g-index

44	44	44	1724
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exciton and Free Charge Dynamics of Methylammonium Lead Iodide Perovskites Are Different in the Tetragonal and Orthorhombic Phases. Journal of Physical Chemistry C, 2015, 119, 19590-19595.	3.1	65
2	Face-on stacking and enhanced out-of-plane hole mobility in graphene-templated copper phthalocyanine. Chemical Communications, 2014, 50, 5319-5321.	4.1	56
3	Low temperature homoepitaxy of (010) Î² -Ga2O3 by metalorganic vapor phase epitaxy: Expanding the growth window. Applied Physics Letters, 2020, 117, .	3.3	56
4	Bi2S3 nanowire networks as electron acceptor layers in solution-processed hybrid solar cells. Journal of Materials Chemistry C, 2015, 3, 2686-2692.	5.5	53
5	Electroabsorption Spectroscopy Studies of (C₄H₉NH₃)₂PbI₄ Organicâ€“Inorganic Hybrid Perovskite Multiple Quantum Wells. Journal of Physical Chemistry Letters, 2017, 8, 4557-4564.	4.6	48
6	Understanding Hydrogen Bonding Interactions in Crosslinked Methylammonium Lead Iodide Crystals: Towards Reducing Moisture and Light Degradation Pathways. Angewandte Chemie - International Edition, 2019, 58, 13912-13921.	13.8	43
7	Self-assembled propylammonium cations at grain boundaries and the film surface to improve the efficiency and stability of perovskite solar cells. Journal of Materials Chemistry A, 2019, 7, 23739-23746.	10.3	41
8	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. ACS Energy Letters, 2021, 6, 1104-1123.	17.4	38
9	Controlling Sulfur Vacancies in TiS_{2â€“x} Cathode Insertion Hosts via the Conversion of TiS₃ Nanobelts for Energy-Storage Applications. ACS Applied Nano Materials, 2018, 1, 851-859.	5.0	37
10	Donorâ€Acceptor Interfacial Interactions Dominate Device Performance in Hybrid P3HTâ€ZnO Nanowireâ€Array Solar Cells. Advanced Energy Materials, 2014, 4, 1400585.	19.5	36
11	Distinctive Extrinsic Atom Effects on the Structural, Optical, and Electronic Properties of Bi₂S_{3-x}Se_x Solid Solutions. Chemistry of Materials, 2016, 28, 6544-6552.	6.7	36
12	Rashba splitting in organicâ€“inorganic leadâ€“halide perovskites revealed through two-photon absorption spectroscopy. Nature Communications, 2022, 13, 483.	12.8	31
13	Coulomb Screening and Coherent Phonon in Methylammonium Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2016, 7, 3284-3289.	4.6	30
14	Structureâ€“Property Relationship Study of Substitution Effects on Isoindigo-Based Model Compounds as Electron Donors in Organic Solar Cells. ACS Applied Materials & Interfaces, 2014, 6, 14533-14542.	8.0	29
15	Morphology and Optoelectronic Variations Underlying the Nature of the Electron Transport Layer in Perovskite Solar Cells. ACS Applied Energy Materials, 2018, 1, 602-615.	5.1	25
16	Catalytic growth of vertically aligned SnS/SnS₂pâ€“n heterojunctions. Materials Research Express, 2017, 4, 094002.	1.6	23
17	Origin of Rashba Spin-Orbit Coupling in 2D and 3D Lead Iodide Perovskites. Scientific Reports, 2020, 10, 4964.	3.3	23
18	Sputtered ZnO seed layer enhances photovoltaic behavior in hybrid ZnO/P3HT solar cells. Organic Electronics, 2013, 14, 3477-3483.	2.6	22

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19	Vertically oriented TiS_{2â^'x} nanobelt arrays as binder- and carbon-free intercalation electrodes for Li- and Na-based energy storage devices. Journal of Materials Chemistry A, 2018, 6, 21949-21960.	10.3	22
20	Semiconducting to Metallic Electronic Landscapes in Defectsâ€Controlled 2D Ï€â€d Conjugated Coordination Polymer Thin Films. Advanced Functional Materials, 2021, 31, 2006920.	14.9	19
21	Quantifying multiple crystallite orientations and crystal heterogeneities in complex thin film materials. CrystEngComm, 2019, 21, 5707-5720.	2.6	17
22	Charge transfer states and carrier generation in 1D organolead iodide semiconductors. Journal of Materials Chemistry A, 2021, 9, 14977-14990.	10.3	15
23	Decreasing the Ion Diffusion Pathways for the Intercalation of Multivalent Cations into One-Dimensional TiS₂ Nanobelt Arrays. ACS Applied Materials & Interfaces, 2020, 12, 21788-21798.	8.0	14
24	N-type doping of low-pressure chemical vapor deposition grown Î²-Ga2O3 thin films using solid-source germanium. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	2.1	14
25	Strong Rashbaâ€Dresselhaus Effect in Nonchiral 2D Ruddlesdenâ€Popper Perovskites. Advanced Optical Materials, 2022, 10, 2101232.	7.3	14
26	Voltage bias stress effects in metal halide perovskites are strongly dependent on morphology and ion migration pathways. Journal of Materials Chemistry A, 2020, 8, 25109-25119.	10.3	11
27	Franz-Keldysh and Stark Effects in Two-Dimensional Metal Halide Perovskites. , 2022, 1, .		9
28	WWMOD? What would metal oxides do?: Redefining their applicability in todayâ€™s energy technologies. Polyhedron, 2019, 170, 334-358.	2.2	8
29	Steric hindrance dependence on the spin and morphology properties of highly oriented self-doped organic small molecule thin films. Materials Advances, 2021, 2, 356-365.	5.4	8
30	Concepts and principles of self-n-doping in perylene diimide chromophores for applications in biochemistry, energy harvesting, energy storage, and catalysis. Materials Horizons, 2022, 9, 2026-2052.	12.2	8
31	Quantifying Exciton Heterogeneities in Mixed-Phase Organometal Halide Multiple Quantum Wells via Stark Spectroscopy Studies. ACS Applied Materials & Interfaces, 2020, 12, 52538-52548.	8.0	7
32	Traversing Excitonic and Ionic Landscapes: Reduced-Dimensionality-Inspired Design of Organometal Halide Semiconductors for Energy Applications. Accounts of Chemical Research, 2021, 54, 4371-4382.	15.6	7
33	Resolving buried optoelectronic features in metal halide perovskites via modulation spectroscopy studies. Journal of Materials Chemistry A, 2021, 9, 23746-23764.	10.3	6
34	Enhanced sensing in mixed porousâ€“solid photonic stacks. Journal of Materials Chemistry C, 2016, 4, 668-672.	5.5	5
35	Understanding Hydrogen Bonding Interactions in Crosslinked Methylammonium Lead Iodide Crystals: Towards Reducing Moisture and Light Degradation Pathways. Angewandte Chemie, 2019, 131, 14050-14059.	2.0	5
36	Promoting Bandlike Transport in Well-Defined and Highly Conducting Polymer Thin Films upon Controlling Dopant Oxidation Levels and Polaron Effects. ACS Applied Polymer Materials, 2021, 3, 2938-2949.	4.4	5

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37	Gate-tunable transport characteristics of Bi2S3 nanowire transistors. Solid State Communications, 2018, 270, 135-139.	1.9	4
38	A â€œLi-Eyeâ€•View of Diffusion Pathways in a 2D Intercalation Material from Topochemical Single-Crystal Transformation. ACS Energy Letters, 2022, 7, 1960-1962.	17.4	4
39	Multi-dimensional designer catalysts for negative emissions science (NES): bridging the gap between synthesis, simulations, and analysis. IScience, 2022, 25, 103700.	4.1	3
40	Photoactivation Properties of Self-n-Doped Perylene Diimides: Concentration-dependent Radical Anion and Dianion Formation. ACS Materials Au, 2022, 2, 482-488.	6.0	3
41	Interplay between Morphology and Electronic Structure in Emergent Organic and Ï€-d Conjugated Organometal Thin Film Materials. Industrial & Engineering Chemistry Research, 2021, 60, 15365-15379.	3.7	2
42	Solar Cells: Donorâ€Acceptor Interfacial Interactions Dominate Device Performance in Hybrid P3HTâ€ZnO Nanowireâ€Array Solar Cells (Adv. Energy Mater. 16/2014). Advanced Energy Materials, 2014, 4, .	19.5	1
43	Investigating the Optical and Electrical Properties of Two-dimensional Organic-inorganic Hybrid Perovskite Multiple Quantum Wells via Electroabsorption Spectroscopy Studies. , 2019, , .		0