Luisa Whittaker-Brooks

List of Publications by Year
in descending order

43 papers	905 citations	394421 19 h-index	477307 29 g-index
44 all docs	44 docs citations	44 times ranked	1724 citing authors

#	Article	IF	Citations
1	Strong Rashbaâ€Dresselhaus Effect in Nonchiral 2D Ruddlesdenâ€Popper Perovskites. Advanced Optical Materials, 2022, 10, 2101232.	7.3	14
2	Rashba splitting in organicâ€“inorganic leadâ€“halide perovskites revealed through two-photon absorption spectroscopy. Nature Communications, 2022, 13, 483.	12.8	31
3	Multi-dimensional designer catalysts for negative emissions science (NES): bridging the gap between synthesis, simulations, and analysis. IScience, 2022, 25, 103700.	4.1	3
4	Franz-Keldysh and Stark Effects in Two-Dimensional Metal Halide Perovskites. , 2022, 1, .		9
5	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
6	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
7	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
8	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
9	Charge transfer states and carrier generation in 1D organolead iodide semiconductors. Journal of Materials Chemistry A, 2021, 9, 14977-14990.	10.3	15
10	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
11	A Multi-Dimensional Perspective on Electronic Doping in Metal Halide Perovskites. ACS Energy Letters, 2021, 6, 1104-1123.	17.4	38
12	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
13	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
14	Resolving buried optoelectronic features in metal halide perovskites <i>via</i> modulation spectroscopy studies. Journal of Materials Chemistry A, 2021, 9, 23746-23764.	10.3	6
15	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
16	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
17	Low temperature homoepitaxy of (010) <i>Î²</i> -Ga2O3 by metalorganic vapor phase epitaxy: Expanding the growth window. Applied Physics Letters, 2020, 117, .	3.3	56
18	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

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19	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
20	Origin of Rashba Spin-Orbit Coupling in 2D and 3D Lead Iodide Perovskites. Scientific Reports, 2020, 10, 4964.	3.3	23
21	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
22	Quantifying multiple crystallite orientations and crystal heterogeneities in complex thin film materials. CrystEngComm, 2019, 21, 5707-5720.	2.6	17
23	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
24	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
25	WWMOD? What would metal oxides do?: Redefining their applicability in todayâ€™s energy technologies. Polyhedron, 2019, 170, 334-358.	2.2	8
26	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
27	Investigating the Optical and Electrical Properties of Two-dimensional Organic-inorganic Hybrid Perovskite Multiple Quantum Wells via Electroabsorption Spectroscopy Studies. , 2019, , .		0
28	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
29	Controlling Sulfur Vacancies in TiS_{2â€“<i>x</i>} Cathode Insertion Hosts via the Conversion of TiS₃ Nanobelts for Energy-Storage Applications. ACS Applied Nano Materials, 2018, 1, 851-859.	5.0	37
30	Gate-tunable transport characteristics of Bi2S3 nanowire transistors. Solid State Communications, 2018, 270, 135-139.	1.9	4
31	Vertically oriented TiS_{2âˆ’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
32	Catalytic growth of vertically aligned SnS/SnS₂pâ€“n heterojunctions. Materials Research Express, 2017, 4, 094002.	1.6	23
33	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
34	Distinctive Extrinsic Atom Effects on the Structural, Optical, and Electronic Properties of Bi₂S_{3-x}Se_{<i>x</i>} Solid Solutions. Chemistry of Materials, 2016, 28, 6544-6552.	6.7	36
35	Coulomb Screening and Coherent Phonon in Methylammonium Lead Iodide Perovskites. Journal of Physical Chemistry Letters, 2016, 7, 3284-3289.	4.6	30
36	Enhanced sensing in mixed porousâ€“solid photonic stacks. Journal of Materials Chemistry C, 2016, 4, 668-672.	5.5	5

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37	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
38	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
39	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
40	Face-on stacking and enhanced out-of-plane hole mobility in graphene-templated copper phthalocyanine. Chemical Communications, 2014, 50, 5319-5321.	4.1	56
41	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
42	Donorâ€Acceptor Interfacial Interactions Dominate Device Performance in Hybrid P3HTâ€ZnO Nanowireâ€Array Solar Cells. Advanced Energy Materials, 2014, 4, 1400585.	19.5	36
43	Sputtered ZnO seed layer enhances photovoltaic behavior in hybrid ZnO/P3HT solar cells. Organic Electronics, 2013, 14, 3477-3483.	2.6	22