Daniel M Balazs

List of Publications by Year
in descending order

25 papers	880 citations	567144 15 h-index	610775 24 g-index
25 all docs	25 docs citations	25 times ranked	1571 citing authors

#	Article	IF	Citations
1	Inkjet printing of epitaxially connected nanocrystal superlattices. Nano Research, 2022, 15, 4536-4543.	5.8	5
2	Fullerene derivatives with oligoethyleneâ€“glycol side chains: an investigation on the origin of their outstanding transport properties. Journal of Materials Chemistry C, 2021, 9, 16217-16225.	2.7	10
3	Mapping Defect Relaxation in Quantum Dot Solids upon <i>In Situ</i> Heating. ACS Nano, 2021, 15, 719-726.	7.3	12
4	News in Nanocrystals Seminar: Self-Assembly of Early Career Researchers toward Globally Accessible Nanoscience. ACS Nano, 2021, 15, 10743-10747.	7.3	0
5	Fundamental Processes and Practical Considerations of Lead Chalcogenide Mesocrystals Formed via Self-Assembly and Directed Attachment of Nanocrystals at a Fluid Interface. Chemistry of Materials, 2021, 33, 9457-9472.	3.2	6
6	Photoinitiated Transformation of Nanocrystal Superlattice Polymorphs Assembled at a Fluid Interface. Advanced Materials Interfaces, 2020, 7, 2001064.	1.9	3
7	The Role of Dimer Formation in the Nucleation of Superlattice Transformations and Its Impact on Disorder. ACS Nano, 2020, 14, 11431-11441.	7.3	9
8	Coupled Dynamics of Colloidal Nanoparticle Spreading and Self-Assembly at a Fluidâ€“Fluid Interface. Langmuir, 2020, 36, 6106-6115.	1.6	19
9	Mechanistic Insights into Superlattice Transformation at a Single Nanocrystal Level Using Nanobeam Electron Diffraction. Nano Letters, 2020, 20, 5267-5274.	4.5	20
10	Quantifying Atomic-Scale Quantum Dot Superlattice Behavior Upon in situ Heating. Microscopy and Microanalysis, 2019, 25, 1538-1539.	0.2	1
11	Controlling Superstructureâ€“Property Relationships via Critical Casimir Assembly of Quantum Dots. Journal of Physical Chemistry C, 2019, 123, 13451-13457.	1.5	18
12	PbSe Nanorod Fieldâ€Effect Transistors: Roomâ€•and Lowâ€Temperature Performance. Advanced Electronic Materials, 2018, 4, 1700580.	2.6	13
13	Colloidal Quantum Dot Inks for Single-Step-Fabricated Field-Effect Transistors: The Importance of Postdeposition Ligand Removal. ACS Applied Materials & Interfaces, 2018, 10, 5626-5632.	4.0	39
14	Comparing Halide Ligands in PbS Colloidal Quantum Dots for Field-Effect Transistors and Solar Cells. ACS Applied Nano Materials, 2018, 1, 6882-6889.	2.4	60
15	Electron Mobility of 24 cm² V^{âˆ’1} s^{âˆ’1} in PbSe Colloidalâ€Quantumâ€Dot Superlattices. Advanced Materials, 2018, 30, e1802265.	11.1	40
16	Leadâ€Chalcogenide Colloidalâ€Quantumâ€Dot Solids: Novel Assembly Methods, Electronic Structure Control, and Application Prospects. Advanced Materials, 2018, 30, 1800082.	11.1	45
17	Exciton Recombination in Formamidinium Lead Triiodide: Nanocrystals versus Thin Films. Small, 2017, 13, 1700673.	5.2	62
18	Increased efficiency in pn-junction PbS QD solar cells via NaHS treatment of the p-type layer. Applied Physics Letters, 2017, 110, .	1.5	26

#	Article	IF	Citations
19	Stoichiometric control of the density of states in PbS colloidal quantum dot solids. Science Advances, 2017, 3, eaao1558.	4.7	62
20	Free carrier generation and recombination in PbS quantum dot solar cells. Applied Physics Letters, 2016, 108, .	1.5	16
21	Temperature dependent behaviour of lead sulfide quantum dot solar cells and films. Energy and Environmental Science, 2016, 9, 2916-2924.	15.6	119
22	Temperature-Dependent Optical Properties of PbS/CdS Core/Shell Quantum Dot Thin Films: Probing the Wave Function Delocalization. Journal of Physical Chemistry C, 2015, 119, 17480-17486.	1.5	18
23	Counterion-Mediated Ligand Exchange for PbS Colloidal Quantum Dot Superlattices. ACS Nano, 2015, 9, 11951-11959.	7.3	121
24	Origin of the increased open circuit voltage in PbSâ€“CdS coreâ€“shell quantum dot solar cells. Journal of Materials Chemistry A, 2015, 3, 1450-1457.	5.2	91
25	Reducing charge trapping in PbS colloidal quantum dot solids. Applied Physics Letters, 2014, 104, .	1.5	65