Ryan W Crisp

List of Publications by Year
in descending order

28 papers	1,900 citations	430874 18 h-index	552781 26 g-index
28 all docs	28 docs citations	28 times ranked	3774 citing authors

#	Article	IF	Citations
1	Comparison of Recombination Dynamics in CH₃NH₃PbBr₃ and CH₃NH₃PbI₃ Perovskite Films: Influence of Exciton Binding Energy. Journal of Physical Chemistry Letters, 2015, 6, 4688-4692.	4.6	350
2	Metal Halide Solid-State Surface Treatment for High Efficiency PbS and PbSe QD Solar Cells. Scientific Reports, 2015, 5, 9945.	3.3	205
3	Multiple exciton generation for photoelectrochemical hydrogen evolution reactions with quantum yields exceeding 100%. Nature Energy, 2017, 2, .	39.5	172
4	Finding and Fixing Traps in IIâ€“VI and IIIâ€“V Colloidal Quantum Dots: The Importance of Z-Type Ligand Passivation. Journal of the American Chemical Society, 2018, 140, 15712-15723.	13.7	166
5	High Efficiency Solution Processed Sintered CdTe Nanocrystal Solar Cells: The Role of Interfaces. Nano Letters, 2014, 14, 670-675.	9.1	148
6	Synthetic Conditions for High-Accuracy Size Control of PbS Quantum Dots. Journal of Physical Chemistry Letters, 2015, 6, 1830-1833.	4.6	109
7	Preparation of Cd/Pb Chalcogenide Heterostructured Janus Particles via Controllable Cation Exchange. ACS Nano, 2015, 9, 7151-7163.	14.6	97
8	Role of Dopants in Long-Range Charge Carrier Transport for p-Type and n-Type Graphene Transparent Conducting Thin Films. ACS Nano, 2013, 7, 7251-7261.	14.6	83
9	Tandem Solar Cells from Solution-Processed CdTe and PbS Quantum Dots Using a ZnTeâ€“ZnO Tunnel Junction. Nano Letters, 2017, 17, 1020-1027.	9.1	71
10	Nanocrystal Grain Growth and Device Architectures for High-Efficiency CdTe Ink-Based Photovoltaics. ACS Nano, 2014, 8, 9063-9072.	14.6	67
11	Coherent Exciton Delocalization in Strongly Coupled Quantum Dot Arrays. Nano Letters, 2013, 13, 4862-4869.	9.1	56
12	Enhanced Multiple Exciton Generation in PbS | CdS Janus-like Heterostructured Nanocrystals. ACS Nano, 2018, 12, 10084-10094.	14.6	56
13	Hot-electron transfer in quantum-dot heterojunction films. Nature Communications, 2018, 9, 2310.	12.8	48
14	Highly Photoconductive InP Quantum Dots Films and Solar Cells. ACS Applied Energy Materials, 2018, 1, 6569-6576.	5.1	40
15	Quantum Dot Solar Cells: Small Beginnings Have Large Impacts. Applied Sciences (Switzerland), 2018, 8, 1867.	2.5	34
16	Transparent Ohmic Contacts for Solution-Processed, Ultrathin CdTe Solar Cells. ACS Energy Letters, 2017, 2, 270-278.	17.4	32
17	Atomic Layer Deposition of ZnO on InP Quantum Dot Films for Charge Separation, Stabilization, and Solar Cell Formation. Advanced Materials Interfaces, 2020, 7, 1901600.	3.7	23
18	Repairing Nanoparticle Surface Defects. Angewandte Chemie - International Edition, 2017, 56, 13795-13799.	13.8	21

#	Article	IF	Citations
19	Probing Excitons in Ultrathin PbS Nanoplatelets with Enhanced Near-Infrared Emission. Journal of Physical Chemistry Letters, 2021, 12, 680-685.	4.6	20
20	Photoconductivity of CdTe Nanocrystal-Based Thin Films: Te^{2â€“} Ligands Lead To Charge Carrier Diffusion Lengths Over 2 Î¼m. Journal of Physical Chemistry Letters, 2015, 6, 4815-4821.	4.6	19
21	Controlling Superstructureâ€“Property Relationships via Critical Casimir Assembly of Quantum Dots. Journal of Physical Chemistry C, 2019, 123, 13451-13457.	3.1	18
22	Electrical, optical and structural properties of Al-doped ZnO thin films grown on GaAs(111)B substrates by pulsed laser deposition. Thin Solid Films, 2013, 545, 124-129.	1.8	16
23	Asymmetric Optical Transitions Determine the Onset of Carrier Multiplication in Lead Chalcogenide Quantum Confined and Bulk Crystals. ACS Nano, 2018, 12, 4796-4802.	14.6	16
24	Repairing Nanoparticle Surface Defects. Angewandte Chemie, 2017, 129, 13983-13987.	2.0	13
25	Selective antimony reduction initiating the nucleation and growth of InSb quantum dots. Nanoscale, 2018, 10, 11110-11116.	5.6	11
26	Engineering the Band Alignment in QD Heterojunction Films via Ligand Exchange. Journal of Physical Chemistry C, 2019, 123, 29599-29608.	3.1	8
27	Nanoscale engineering of solution-processed CdTe solar cells using nanocrystalline precursors. , 2014, , .		1
28	Colloidal Two-Dimensional PbS Nanosheets and Ultrathin PbS Nanoplatelets â€“ High Mobility vs. Photoluminescence Properties. , 0, , .		0