Quinten A Akkerman

List of Publications by Year
in descending order

38 papers	8,956 citations	147801 31 h-index	345221 36 g-index
41 all docs	41 docs citations	41 times ranked	8481 citing authors

#	Article	IF	Citations
1	Stability of perovskite materials and devices. Materials Today, 2022, 58, 275-296.	14.2	35
2	Exploiting the Lability of Metal Halide Perovskites for Doping Semiconductor Nanocomposites. ACS Energy Letters, 2021, 6, 581-587.	17.4	12
3	Nanocrystals of Lead Chalcohalides: A Series of Kinetically Trapped Metastable Nanostructures. Journal of the American Chemical Society, 2020, 142, 10198-10211.	13.7	34
4	What Defines a Halide Perovskite?. ACS Energy Letters, 2020, 5, 604-610.	17.4	228
5	Nano- and microscale apertures in metal films fabricated by colloidal lithography with perovskite nanocrystals. Nanotechnology, 2020, 31, 185304.	2.6	2
6	Green-Emitting Powders of Zero-Dimensional Cs₄PbBr₆: Delineating the Intricacies of the Synthesis and the Origin of Photoluminescence. Chemistry of Materials, 2019, 31, 7761-7769.	6.7	62
7	Ultrathin Orthorhombic PbS Nanosheets. Chemistry of Materials, 2019, 31, 8145-8153.	6.7	37
8	Ultrafast THz Probe of Photoinduced Polarons in Lead-Halide Perovskites. Physical Review Letters, 2019, 122, 166601.	7.8	98
9	Fully Inorganic Ruddlesdenâ€“Popper Double Clâ€“I and Triple Clâ€“Brâ€“I Lead Halide Perovskite Nanocrystals. Chemistry of Materials, 2019, 31, 2182-2190.	6.7	60
10	Trap-Mediated Two-Step Sensitization of Manganese Dopants in Perovskite Nanocrystals. ACS Energy Letters, 2019, 4, 85-93.	17.4	92
11	Zero-Dimensional Cesium Lead Halides: History, Properties, and Challenges. Journal of Physical Chemistry Letters, 2018, 9, 2326-2337.	4.6	210
12	Genesis, challenges and opportunities for colloidal lead halide perovskite nanocrystals. Nature Materials, 2018, 17, 394-405.	27.5	1,632
13	Role of Acidâ€“Base Equilibria in the Size, Shape, and Phase Control of Cesium Lead Bromide Nanocrystals. ACS Nano, 2018, 12, 1704-1711.	14.6	395
14	The Phosphine Oxide Route toward Lead Halide Perovskite Nanocrystals. Journal of the American Chemical Society, 2018, 140, 14878-14886.	13.7	136
15	Shape-Pure, Nearly Monodispersed CsPbBr₃ Nanocubes Prepared Using Secondary Aliphatic Amines. Nano Letters, 2018, 18, 7822-7831.	9.1	132
16	Effects of Oxygen Plasma on the Chemical, Light-Emitting, and Electrical-Transport Properties of Inorganic and Hybrid Lead Bromide Perovskite Nanocrystal Films. ACS Applied Nano Materials, 2018, 1, 5396-5400.	5.0	8
17	Molecular Iodine for a General Synthesis of Binary and Ternary Inorganic and Hybrid Organicâ€“Inorganic Iodide Nanocrystals. Chemistry of Materials, 2018, 30, 6915-6921.	6.7	36
18	Anisotropic 2D Cu_{2â€“<i>x</i>}Se Nanocrystals from Dodecaneselenol and Their Conversion to CdSe and CuInSe₂ Nanoparticles. Chemistry of Materials, 2018, 30, 3836-3846.	6.7	25

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19	<i>In Situ</i> Transmission Electron Microscopy Study of Electron Beam-Induced Transformations in Colloidal Cesium Lead Halide Perovskite Nanocrystals. ACS Nano, 2017, 11, 2124-2132.	14.6	246
20	Nearly Monodisperse Insulator Cs₄PbX₆ (X = Cl, Br, I) Nanocrystals, Their Mixed Halide Compositions, and Their Transformation into CsPbX₃ Nanocrystals. Nano Letters, 2017, 17, 1924-1930.	9.1	488
21	Role of Nonradiative Defects and Environmental Oxygen on Exciton Recombination Processes in CsPbBr₃ Perovskite Nanocrystals. Nano Letters, 2017, 17, 3844-3853.	9.1	101
22	Reversible Concentration-Dependent Photoluminescence Quenching and Change of Emission Color in CsPbBr₃ Nanowires and Nanoplatelets. Journal of Physical Chemistry Letters, 2017, 8, 2725-2729.	4.6	50
23	Changing the Dimensionality of Cesium Lead Bromide Nanocrystals by Reversible Postsynthesis Transformations with Amines. Chemistry of Materials, 2017, 29, 4167-4171.	6.7	142
24	Strongly emissive perovskite nanocrystal inks for high-voltage solar cells. Nature Energy, 2017, 2, .	39.5	544
25	Fluorescent Alloy CsPb_{<i>x</i>}Mn_{1â€“<i>x</i>}I₃ Perovskite Nanocrystals with High Structural and Optical Stability. ACS Energy Letters, 2017, 2, 2183-2186.	17.4	305
26	Doped Halide Perovskite Nanocrystals for Reabsorption-Free Luminescent Solar Concentrators. ACS Energy Letters, 2017, 2, 2368-2377.	17.4	224
27	Postsynthesis Transformation of Insulating Cs₄PbBr₆ Nanocrystals into Bright Perovskite CsPbBr₃ through Physical and Chemical Extraction of CsBr. ACS Energy Letters, 2017, 2, 2445-2448.	17.4	177
28	Low-Temperature Electron Beam-Induced Transformations of Cesium Lead Halide Perovskite Nanocrystals. ACS Omega, 2017, 2, 5660-5665.	3.5	60
29	Polymer-Free Films of Inorganic Halide Perovskite Nanocrystals as UV-to-White Color-Conversion Layers in LEDs. Chemistry of Materials, 2016, 28, 2902-2906.	6.7	152
30	Nonlinear Carrier Interactions in Lead Halide Perovskites and the Role of Defects. Journal of the American Chemical Society, 2016, 138, 13604-13611.	13.7	73
31	Solution Synthesis Approach to Colloidal Cesium Lead Halide Perovskite Nanoplatelets with Monolayer-Level Thickness Control. Journal of the American Chemical Society, 2016, 138, 1010-1016.	13.7	747
32	X-ray Lithography on Perovskite Nanocrystals Films: From Patterning with Anion-Exchange Reactions to Enhanced Stability in Air and Water. ACS Nano, 2016, 10, 1224-1230.	14.6	320
33	From Binary Cu₂S to Ternary Cuâ€“Inâ€“S and Quaternary Cuâ€“Inâ€“Znâ€“S Nanocrystals with Tunable Composition <i>via</i> Partial Cation Exchange. ACS Nano, 2015, 9, 521-531.	14.6	173
34	Tuning the Optical Properties of Cesium Lead Halide Perovskite Nanocrystals by Anion Exchange Reactions. Journal of the American Chemical Society, 2015, 137, 10276-10281.	13.7	1,765
35	Solution-Processable Ultrathin Size- and Shape-Controlled Colloidal Cu2â€“xS Nanosheets. Chemistry of Materials, 2015, 27, 283-291.	6.7	76
36	Self-Assembly of Colloidal Hexagonal Bipyramid- and Bifrustum-Shaped ZnS Nanocrystals into Two-Dimensional Superstructures. Nano Letters, 2014, 14, 1032-1037.	9.1	78

#	Article	IF	Citations
37	Energy Harvesting with Redesigned Colloidal Metal Halide, Chalcogenide and Chalcohalide Nanocrystals. , 0, , .		0
38	Reaching ultimate perovskite quantum dot optical properties with a new synthetic approach. , 0, , .		0