Teck Ming Koh

List of Publications by Year
in descending order

34 papers	1,970 citations	331670 21 h-index	395702 33 g-index
35 all docs	35 docs citations	35 times ranked	3630 citing authors

#	Article	IF	Citations
1	Perovskite Solar Cells: Beyond Methylammonium Lead Iodide. Journal of Physical Chemistry Letters, 2015, 6, 898-907.	4.6	266
2	Nanostructuring Mixedâ€Dimensional Perovskites: A Route Toward Tunable, Efficient Photovoltaics. Advanced Materials, 2016, 28, 3653-3661.	21.0	251
3	A swivel-cruciform thiophene based hole-transporting material for efficient perovskite solar cells. Journal of Materials Chemistry A, 2014, 2, 6305-6309.	10.3	167
4	Enhancing moisture tolerance in efficient hybrid 3D/2D perovskite photovoltaics. Journal of Materials Chemistry A, 2018, 6, 2122-2128.	10.3	163
5	Low threshold and efficient multiple exciton generation in halide perovskite nanocrystals. Nature Communications, 2018, 9, 4197.	12.8	110
6	Efficient and Ambientâ€Airâ€Stable Solar Cell with Highly Oriented 2D@3D Perovskites. Advanced Functional Materials, 2018, 28, 1801654.	14.9	98
7	Multidimensional Perovskites: A Mixed Cation Approach Towards Ambient Stable and Tunable Perovskite Photovoltaics. ChemSusChem, 2016, 9, 2541-2558.	6.8	88
8	Bifacial, Color-Tunable Semitransparent Perovskite Solar Cells for Building-Integrated Photovoltaics. ACS Applied Materials & Interfaces, 2020, 12, 484-493.	8.0	80
9	Facile Method to Reduce Surface Defects and Trap Densities in Perovskite Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 21292-21297.	8.0	71
10	Additive Selection Strategy for High Performance Perovskite Photovoltaics. Journal of Physical Chemistry C, 2018, 122, 13884-13893.	3.1	71
11	Improved Photovoltaic Efficiency and Amplified Photocurrent Generation in Mesoporous <i>n</i> = 1 Two-Dimensional Leadâ€"Iodide Perovskite Solar Cells. Chemistry of Materials, 2019, 31, 890-898.	6.7	57
12	Cobalt Dopant with Deep Redox Potential for Organometal Halide Hybrid Solar Cells. ChemSusChem, 2014, 7, 1909-1914.	6.8	50
13	Realizing Reduced Imperfections via Quantum Dots Interdiffusion in High Efficiency Perovskite Solar Cells. Advanced Materials, 2020, 32, e2003296.	21.0	50
14	Extended Absorption Window and Improved Stability of Cesium-Based Triple-Cation Perovskite Solar Cells Passivated with Perfluorinated Organics. ACS Energy Letters, 2018, 3, 1068-1076.	17.4	44
15	Metal Coordination Sphere Deformation Induced Highly Stokesâ€Shifted, Ultra Broadband Emission in 2D Hybrid Leadâ€Bromide Perovskites and Investigation of Its Origin. Angewandte Chemie - International Edition, 2020, 59, 10791-10796.	13.8	42
16	Inducing formation of a corrugated, white-light emitting 2D lead-bromide perovskite <i>via</i> subtle changes in templating cation. Journal of Materials Chemistry C, 2020, 8, 889-893.	5.5	40
17	Alkali Additives Enable Efficient Large Area (>55 cm²) Slotâ€Die Coated Perovskite Solar Modules. Advanced Functional Materials, 2022, 32, .	14.9	39
18	Halide Perovskite Solar Cells for Building Integrated Photovoltaics: Transforming Building FaÃ§ades into Power Generators. Advanced Materials, 2022, 34, e2104661.	21.0	37

#	Article	IF	Citations
19	Inducing Panchromatic Absorption and Photoconductivity in Polycrystalline Molecular 1D Lead-Iodide Perovskites through Ï€-Stacked Viologens. Chemistry of Materials, 2018, 30, 5827-5830.	6.7	33
20	Targeted Synthesis of Trimeric Organicâ€“Bromoplumbate Hybrids That Display Intrinsic, Highly Stokes-Shifted, Broadband Emission. Chemistry of Materials, 2020, 32, 4431-4441.	6.7	25
21	Controlling the film structure by regulating 2D Ruddlesdenâ€“Popper perovskite formation enthalpy for efficient and stable tri-cation perovskite solar cells. Journal of Materials Chemistry A, 2020, 8, 5874-5881.	10.3	23
22	Photovoltage enhancement from cyanobiphenyl liquid crystals and 4-tert-butylpyridine in Co(ii/iii) mediated dye-sensitized solar cells. Chemical Communications, 2013, 49, 9101.	4.1	20
23	High Stability Bilayered Perovskites through Crystallization Driven Self-Assembly. ACS Applied Materials & Interfaces, 2017, 9, 28743-28749.	8.0	20
24	Hybrid 2D [Pb(CH₃NH₂)I₂]_{<i>n</i>} Coordination Polymer Precursor for Scalable Perovskite Deposition. ACS Energy Letters, 2020, 5, 2305-2312.	17.4	18
25	Formation of Corrugated <i>n</i> = 1 2D Tin Iodide Perovskites and Their Use as Lead-Free Solar Absorbers. ACS Nano, 2021, 15, 6395-6409.	14.6	18
26	Efficient photoluminescent thin films consisting of anchored hybrid perovskite nanoparticles. Chemical Communications, 2016, 52, 11351-11354.	4.1	15
27	Molecular Engineering of Pure 2D Leadâ€Iodide Perovskite Solar Absorbers Displaying Reduced Band Gaps and Dielectric Confinement. ChemSusChem, 2020, 13, 2693-2701.	6.8	14
28	Cesium Oleate Passivation for Stable Perovskite Photovoltaics. ACS Applied Materials & Interfaces, 2019, 11, 27882-27889.	8.0	12
29	Perturbation-Induced Seeding and Crystallization of Hybrid Perovskites over Surface-Modified Substrates for Optoelectronic Devices. ACS Applied Materials & Interfaces, 2019, 11, 27727-27734.	8.0	12
30	Suppressing the Î´-Phase and Photoinstability through a Hypophosphorous Acid Additive in Carbon-Based Mixed-Cation Perovskite Solar Cells. Journal of Physical Chemistry C, 2021, 125, 6585-6592.	3.1	9
31	Toward Efficient and Stable Perovskite Photovoltaics with Fluorinated Phosphonate Salt Surface Passivation. ACS Applied Energy Materials, 2021, 4, 2716-2723.	5.1	8
32	Metal Coordination Sphere Deformation Induced Highly Stokesâ€Shifted, Ultra Broadband Emission in 2D Hybrid Leadâ€Bromide Perovskites and Investigation of Its Origin. Angewandte Chemie, 2020, 132, 10883-10888.	2.0	7
33	Selfâ€Powered Organic Electrochemical Transistors with Stable, Lightâ€Intensity Independent Operation Enabled by Carbonâ€Based Perovskite Solar Cells. Advanced Materials Technologies, 0, , 2100565.	5.8	7
34	Effects of Allâ€Organic Interlayer Surface Modifiers on the Efficiency and Stability of Perovskite Solar Cells. ChemSusChem, 2021, 14, 1524-1533.	6.8	5