Jangwon Seo

List of Publications by Year
in descending order

45 papers	28,315 citations	126858 33 h-index	243529 44 g-index
45 all docs	45 docs citations	45 times ranked	19158 citing authors

#	ARTICLE	IF	CITATIONS
1	High-performance photovoltaic perovskite layers fabricated through intramolecular exchange. Science, 2015, 348, 1234-1237.	6.0	5,529
2	Compositional engineering of perovskite materials for high-performance solar cells. Nature, 2015, 517, 476-480.	13.7	5,478
3	Iodide management in formamidinium-lead-halideâ€“based perovskite layers for efficient solar cells. Science, 2017, 356, 1376-1379.	6.0	4,721
4	Efficient perovskite solar cells via improved carrier management. Nature, 2021, 590, 587-593.	13.7	1,972
5	Efficient, stable and scalable perovskite solar cells using poly(3-hexylthiophene). Nature, 2019, 567, 511-515.	13.7	1,867
6	A fluorene-terminated hole-transporting material for highly efficient and stable perovskite solar cells. Nature Energy, 2018, 3, 682-689.	19.8	1,856
7	Colloidally prepared La-doped BaSnO ₃ electrodes for efficient, photostable perovskite solar cells. Science, 2017, 356, 167-171.	6.0	1,045
8	<i>o</i>-Methoxy Substituents in Spiro-OMeTAD for Efficient Inorganicâ€“Organic Hybrid Perovskite Solar Cells. Journal of the American Chemical Society, 2014, 136, 7837-7840.	6.6	702
9	Voltage output of efficient perovskite solar cells with high open-circuit voltage and fill factor. Energy and Environmental Science, 2014, 7, 2614-2618.	15.6	692
10	Fabrication of Efficient Formamidinium Tin Iodide Perovskite Solar Cells through SnF₂â€“Pyrazine Complex. Journal of the American Chemical Society, 2016, 138, 3974-3977.	6.6	658
11	Benefits of very thin PCBM and LiF layers for solution-processed pâ€“iâ€“n perovskite solar cells. Energy and Environmental Science, 2014, 7, 2642-2646.	15.6	622
12	Beneficial Effects of PbI₂ Incorporated in Organoâ€Lead Halide Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1502104.	10.2	387
13	Rational Strategies for Efficient Perovskite Solar Cells. Accounts of Chemical Research, 2016, 49, 562-572.	7.6	311
14	Understanding how excess lead iodide precursor improves halide perovskite solar cell performance. Nature Communications, 2018, 9, 3301.	5.8	271
15	Engineering interface structures between lead halide perovskite and copper phthalocyanine for efficient and stable perovskite solar cells. Energy and Environmental Science, 2017, 10, 2109-2116.	15.6	169
16	Roll-to-roll gravure-printed flexible perovskite solar cells using eco-friendly antisolvent bathing with wide processing window. Nature Communications, 2020, 11, 5146.	5.8	165
17	Fabrication of metal-oxide-free CH₃NH₃PbI₃perovskite solar cells processed at low temperature. Journal of Materials Chemistry A, 2015, 3, 3271-3275.	5.2	162
18	Structural features and their functions in surfactant-armoured methylammonium lead iodide perovskites for highly efficient and stable solar cells. Energy and Environmental Science, 2018, 11, 2188-2197.	15.6	162

#	Article	IF	Citations
19	Reducing Carrier Density in Formamidinium Tin Perovskites and Its Beneficial Effects on Stability and Efficiency of Perovskite Solar Cells. ACS Energy Letters, 2018, 3, 46-53.	8.8	158
20	Sequentially Fluorinated PTAA Polymers for Enhancing <i>V</i>_{OC} of Highâ€Performance Perovskite Solar Cells. Advanced Energy Materials, 2018, 8, 1801668.	10.2	151
21	Record-efficiency flexible perovskite solar cell and module enabled by a porous-planar structure as an electron transport layer. Energy and Environmental Science, 2020, 13, 4854-4861.	15.6	137
22	A Lowâ€Temperature Thinâ€Film Encapsulation for Enhanced Stability of a Highly Efficient Perovskite Solar Cell. Advanced Energy Materials, 2018, 8, 1701928.	10.2	136
23	Gravureâ€Printed Flexible Perovskite Solar Cells: Toward Rollâ€toâ€Roll Manufacturing. Advanced Science, 2019, 6, 1802094.	5.6	115
24	Indolo[3,2-b]indole-based crystalline hole-transporting material for highly efficient perovskite solar cells. Chemical Science, 2017, 8, 734-741.	3.7	102
25	Effective Electron Blocking of CuPCâ€Doped Spiroâ€OMeTAD for Highly Efficient Inorganicâ€“Organic Hybrid Perovskite Solar Cells. Advanced Energy Materials, 2015, 5, 1501320.	10.2	84
26	Fast two-step deposition of perovskite <i>via</i> mediator extraction treatment for large-area, high-performance perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 12447-12454.	5.2	83
27	Selective Defect Passivation and Topographical Control of 4â€Dimethylaminopyridine at Grain Boundary for Efficient and Stable Planar Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2003382.	10.2	82
28	Achieving Longâ€Term Operational Stability of Perovskite Solar Cells with a Stabilized Efficiency Exceeding 20% after 1000 h. Advanced Science, 2019, 6, 1900528.	5.6	70
29	Toward Efficient Perovskite Solar Cells: Progress, Strategies, and Perspectives. ACS Energy Letters, 2022, 7, 2084-2091.	8.8	68
30	Methoxy-Functionalized Triarylamine-Based Hole-Transporting Polymers for Highly Efficient and Stable Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 3304-3313.	8.8	59
31	Highly efficient and stable flexible perovskite solar cells enabled by using plasma-polymerized-fluorocarbon antireflection layer. Nano Energy, 2021, 82, 105737.	8.2	46
32	Transparent Electrodes Consisting of a Surfaceâ€Treated Buffer Layer Based on Tungsten Oxide for Semitransparent Perovskite Solar Cells and Fourâ€Terminal Tandem Applications. Small Methods, 2020, 4, 2000074.	4.6	41
33	Defect-Tolerant Sodium-Based Dopant in Charge Transport Layers for Highly Efficient and Stable Perovskite Solar Cells. ACS Energy Letters, 2020, 5, 1198-1205.	8.8	33
34	Metalâ€Free Phthalocyanine as a Hole Transporting Material and a Surface Passivator for Efficient and Stable Perovskite Solar Cells. Small Methods, 2021, 5, e2001248.	4.6	33
35	Kinetics of light-induced degradation in semi-transparent perovskite solar cells. Solar Energy Materials and Solar Cells, 2021, 219, 110776.	3.0	29
36	Copper Oxide Buffer Layers by Pulsedâ€Chemical Vapor Deposition for Semitransparent Perovskite Solar Cells. Advanced Materials Interfaces, 2021, 8, .	1.9	23

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37	A Thermally Induced Perovskite Crystal Control Strategy for Efficient and Photostable Wideâ€Bandgap Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000033.	3.1	22
38	Molecular Engineering for Functionâ€Tailored Interface Modifier in Highâ€Performance Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	16
39	Roll-to-roll manufacturing toward lab-to-fab-translation of perovskite solar cells. APL Materials, 2021, 9, .	2.2	14
40	High-performance, large-area semitransparent and tandem perovskite solar cells featuring highly scalable a-ITO/Ag mesh 3D top electrodes. Nano Energy, 2022, 95, 106978.	8.2	14
41	Transparent Electrodes with Enhanced Infrared Transmittance for Semitransparent and Four-Terminal Tandem Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 30497-30503.	4.0	11
42	Thermally activated, light-induced electron-spin-resonance spin density reflected by photocurrents in a perovskite solar cell. Applied Physics Letters, 2019, 114, 013903.	1.5	10
43	Perspective: approaches for layers above the absorber in perovskite solar cells for semitransparent and tandem applications. Materials Today Energy, 2021, 21, 100729.	2.5	5
44	Ambient Airâ€Processed Wideâ€Bandgap Perovskite Solar Cells with Wellâ€Controlled Film Morphology for Fourâ€Terminal Tandem Application. Solar Rrl, 2022, 6, .	3.1	4
45	Influence of Photon Pump Fluence on Charge Carriers in FAPbI3 and Manganite Perovskites. Advances in Chemical Engineering and Science, 2022, 12, 54-64.	0.2	0