Jun Hong Noh

List of Publications by Year
in descending order

117 papers	41,208 citations	43973 48 h-index	23472 111 g-index
118 all docs	118 docs citations	118 times ranked	25141 citing authors

#	Article	IF	Citations
1	Solvent engineering for high-performance inorganicâ€“organic hybrid perovskite solar cells. Nature Materials, 2014, 13, 897-903.	13.3	5,796
2	High-performance photovoltaic perovskite layers fabricated through intramolecular exchange. Science, 2015, 348, 1234-1237.	6.0	5,529
3	Compositional engineering of perovskite materials for high-performance solar cells. Nature, 2015, 517, 476-480.	13.7	5,478
4	Iodide management in formamidinium-lead-halideâ€“based perovskite layers for efficient solar cells. Science, 2017, 356, 1376-1379.	6.0	4,721
5	Chemical Management for Colorful, Efficient, and Stable Inorganicâ€“Organic Hybrid Nanostructured Solar Cells. Nano Letters, 2013, 13, 1764-1769.	4.5	4,144
6	Efficient inorganicâ€“organic hybrid heterojunction solar cells containing perovskite compound and polymeric hole conductors. Nature Photonics, 2013, 7, 486-491.	15.6	2,423
7	Efficient, stable and scalable perovskite solar cells using poly(3-hexylthiophene). Nature, 2019, 567, 511-515.	13.7	1,867
8	Colloidally prepared La-doped BaSnO ₃ electrodes for efficient, photostable perovskite solar cells. Science, 2017, 356, 167-171.	6.0	1,045
9	o-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
10	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
11	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
12	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
13	Efficient Inorganicâ€“Organic Hybrid Perovskite Solar Cells Based on Pyrene Arylamine Derivatives as Hole-Transporting Materials. Journal of the American Chemical Society, 2013, 135, 19087-19090.	6.6	512
14	Efficient CH₃NH₃PbI₃ Perovskite Solar Cells Employing Nanostructured pâ€Type NiO Electrode Formed by a Pulsed Laser Deposition. Advanced Materials, 2015, 27, 4013-4019.	11.1	485
15	Highly Improved Sb₂S₃ Sensitizedâ€Inorganicâ€“Organic Heterojunction Solar Cells and Quantification of Traps by Deepâ€Level Transient Spectroscopy. Advanced Functional Materials, 2014, 24, 3587-3592.	7.8	454
16	High-performance flexible perovskite solar cells exploiting Zn2SnO4 prepared in solution below 100â€‰Â°C. Nature Communications, 2015, 6, 7410.	5.8	417
17	Beneficial Effects of PbI₂ Incorporated in Organoâ€Lead Halide Perovskite Solar Cells. Advanced Energy Materials, 2016, 6, 1502104.	10.2	387
18	Intact 2D/3D halide junction perovskite solar cells via solid-phase in-plane growth. Nature Energy, 2021, 6, 63-71.	19.8	365

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19	Rational Strategies for Efficient Perovskite Solar Cells. Accounts of Chemical Research, 2016, 49, 562-572.	7.6	311
20	Nanostructured TiO2/CH3NH3PbI3 heterojunction solar cells employing spiro-OMeTAD/Co-complex as hole-transporting material. Journal of Materials Chemistry A, 2013, 1, 11842.	5.2	301
21	Nb-Doped TiO₂: A New Compact Layer Material for TiO₂ Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2009, 113, 6878-6882.	1.5	210
22	In vitro and in vivo evaluation of the bioactivity of hydroxyapatite-coated polyetheretherketone biocomposites created by cold spray technology. Acta Biomaterialia, 2013, 9, 6177-6187.	4.1	171
23	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
24	Fabrication of metal-oxide-free CH₃NH₃PbI₃perovskite solar cells processed at low temperature. Journal of Materials Chemistry A, 2015, 3, 3271-3275.	5.2	162
25	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
26	Thermal Stability of CuSCN Hole Conductorâ€Based Perovskite Solar Cells. ChemSusChem, 2016, 9, 2592-2596.	3.6	154
27	Spontaneous interface engineering for dopant-free poly(3-hexylthiophene) perovskite solar cells with efficiency over 24%. Energy and Environmental Science, 2021, 14, 2419-2428.	15.6	152
28	Sb₂Se₃â€Sensitized Inorganicâ€“Organic Heterojunction Solar Cells Fabricated Using a Singleâ€Source Precursor. Angewandte Chemie - International Edition, 2014, 53, 1329-1333.	7.2	145
29	Synthesis of Cu₂PO₄OH Hierarchical Superstructures with Photocatalytic Activity in Visible Light. Advanced Functional Materials, 2008, 18, 2154-2162.	7.8	141
30	Al-Doped ZnO Thin Film: A New Transparent Conducting Layer for ZnO Nanowire-Based Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2010, 114, 7185-7189.	1.5	134
31	Efficient Inorganicâ€Organic Heterojunction Solar Cells Employing Sb₂(S_x/Se_{1â€x})₃ Gradedâ€Composition Sensitizers. Advanced Energy Materials, 2014, 4, 1301680.	10.2	123
32	Energy-level engineering of the electron transporting layer for improving open-circuit voltage in dye and perovskite-based solar cells. Energy and Environmental Science, 2019, 12, 958-964.	15.6	116
33	Lowâ€Temperature Hydrothermal Synthesis of Pure BiFeO₃ Nanopowders Using Triethanolamine and Their Applications as Visibleâ€Light Photocatalysts. Journal of the American Ceramic Society, 2008, 91, 3753-3755.	1.9	112
34	General Strategy for Fabricating Transparent TiO₂ Nanotube Arrays for Dye-Sensitized Photoelectrodes: Illumination Geometry and Transport Properties. ACS Nano, 2011, 5, 2647-2656.	7.3	109
35	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
36	Tailoring of Electron-Collecting Oxide Nanoparticulate Layer for Flexible Perovskite Solar Cells. Journal of Physical Chemistry Letters, 2016, 7, 1845-1851.	2.1	93

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37	Fabrication of CuInTe₂ and CuInTe_{2â€“x}Se_x Ternary Gradient Quantum Dots and Their Application to Solar Cells. ACS Nano, 2013, 7, 4756-4763.	7.3	86
38	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
39	Fast two-step deposition of perovskite via mediator extraction treatment for large-area, high-performance perovskite solar cells. Journal of Materials Chemistry A, 2018, 6, 12447-12454.	5.2	83
40	Carrier-resolved photo-Hall effect. Nature, 2019, 575, 151-155.	13.7	66
41	Spatial Distribution of Lead Iodide and Local Passivation on Organo-Lead Halide Perovskite. ACS Applied Materials & Interfaces, 2017, 9, 6072-6078.	4.0	62
42	Functional Multilayered Transparent Conducting Oxide Thin Films for Photovoltaic Devices. Journal of Physical Chemistry C, 2009, 113, 1083-1087.	1.5	60
43	Synthesis of CdSeâ^'TiO₂ Nanocomposites and Their Applications to TiO₂ Sensitized Solar Cells. Langmuir, 2009, 25, 5348-5351.	1.6	56
44	Effects of carbon content on the photocatalytic activity of C/BiVO4 composites under visible light irradiation. Materials Chemistry and Physics, 2010, 119, 106-111.	2.0	54
45	Tailoring the Morphology and Structure of Nanosized Zn₂SiO₄: Mn²⁺ Phosphors Using the Hydrothermal Method and Their Luminescence Properties. Journal of Physical Chemistry C, 2010, 114, 10330-10335.	1.5	54
46	Nanostructured Ti-doped hematite (Î±-Fe2O3) photoanodes for efficient photoelectrochemical water oxidation. International Journal of Hydrogen Energy, 2014, 39, 17501-17507.	3.8	52
47	Nanowireâ€Based Threeâ€Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection. Advanced Energy Materials, 2011, 1, 829-835.	10.2	50
48	Well-Organized Mesoporous TiO₂ Photoelectrodes by Block Copolymer-Induced Solâ€“Gel Assembly for Inorganicâ€“Organic Hybrid Perovskite Solar Cells. Journal of Physical Chemistry C, 2014, 118, 16688-16693.	1.5	49
49	Cold-spray coating of hydroxyapatite on a three-dimensional polyetheretherketone implant and its biocompatibility evaluated byin vitroandin vivominipig model. , 2017, 105, 647-657.		48
50	Highly Durable and Flexible Transparent Electrode for Flexible Optoelectronic Applications. ACS Applied Materials & Interfaces, 2018, 10, 30706-30715.	4.0	46
51	Visible-Light-Induced Photocatalytic Activity in FeNbO₄ Nanoparticles. Journal of Physical Chemistry C, 2008, 112, 18393-18398.	1.5	45
52	Controllable synthesis of single crystalline Sn-based oxides and their application in perovskite solar cells. Journal of Materials Chemistry A, 2017, 5, 79-86.	5.2	45
53	Preparation and photoluminescence properties of Î³-KCaPO4: Eu2+ phosphors for near UV-based white LEDs. Optical Materials, 2011, 33, 1036-1040.	1.7	41
54	A Simple Method To Control Morphology of Hydroxyapatite Nano- and Microcrystals by Altering Phase Transition Route. Crystal Growth and Design, 2013, 13, 3414-3418.	1.4	41

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55	Recent Progress in Metal Halide Perovskiteâ€Based Tandem Solar Cells. Advanced Materials, 2020, 32, e2002228.	11.1	39
56	Indiumâ^'Tinâ^'Oxide-Based Transparent Conducting Layers for Highly Efficient Photovoltaic Devices. Journal of Physical Chemistry C, 2009, 113, 7443-7447.	1.5	35
57	Transmittance optimized nb-doped TiO2/Sn-doped In2O3 multilayered photoelectrodes for dye-sensitized solar cells. Solar Energy Materials and Solar Cells, 2012, 96, 276-280.	3.0	35
58	Microwave dielectric properties of nanocrystalline TiO2 prepared using spark plasma sintering. Journal of the European Ceramic Society, 2007, 27, 2937-2940.	2.8	34
59	Steps toward efficient inorganicâ€“organic hybrid perovskite solar cells. MRS Bulletin, 2015, 40, 648-653.	1.7	33
60	Enhanced photovoltaic properties of overlayer-coated nanocrystalline TiO2 dye-sensitized solar cells (DSSCs). Journal of Electroceramics, 2009, 23, 422-425.	0.8	32
61	Simultaneous Ligand Exchange Fabrication of Flexible Perovskite Solar Cells using Newly Synthesized Uniform Tin Oxide Quantum Dots. Journal of Physical Chemistry Letters, 2018, 9, 5460-5467.	2.1	31
62	A Newly Designed Nb-Doped TiO₂/Al-Doped ZnO Transparent Conducting Oxide Multilayer for Electrochemical Photoenergy Conversion Devices. Journal of Physical Chemistry C, 2010, 114, 13867-13871.	1.5	30
63	3-D TiO₂nanoparticle/ITO nanowire nanocomposite antenna for efficient charge collection in solid state dye-sensitized solar cells. Nanoscale, 2014, 6, 6127-6132.	2.8	30
64	Aligned Photoelectrodes with Large Surface Area Prepared by Pulsed Laser Deposition. Journal of Physical Chemistry C, 2012, 116, 8102-8110.	1.5	29
65	Quaternary semiconductor Cu2FeSnS4 nanoparticles as an alternative to Pt catalysts. RSC Advances, 2013, 3, 24918.	1.7	29
66	SrNb2O6 nanotubes with enhanced photocatalytic activity. Journal of Materials Chemistry, 2010, 20, 3979.	6.7	28
67	Band Alignment Engineering between Planar SnO₂ and Halide Perovskites via Two-Step Annealing. Journal of Physical Chemistry Letters, 2019, 10, 6545-6550.	2.1	28
68	Reversible change in electrical and optical properties in epitaxially grown Al-doped ZnO thin films. Journal of Applied Physics, 2008, 104, .	1.1	27
69	Mobility Enhanced Photoactivity in Solâ^'Gel Grown Epitaxial Anatase TiO₂ Films. Langmuir, 2008, 24, 2695-2698.	1.6	26
70	Tin doped indium oxide coreâ€”TiO2 shell nanowires on stainless steel mesh for flexible photoelectrochemical cells. Applied Physics Letters, 2012, 100, .	1.5	25
71	Impact of Electrode Materials on Process Environmental Stability of Efficient Perovskite Solar Cells. Joule, 2019, 3, 1977-1985.	11.7	25
72	Transferable transparent electrodes of liquid metals for bifacial perovskite solar cells and heaters. Nano Energy, 2022, 93, 106857.	8.2	24

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73	Luminescent characteristics of green emitting Li2Ca2Si2O7:Eu2+ phosphor. Materials Letters, 2012, 79, 112-115.	1.3	23
74	Single-Solution Bar-Coated Halide Perovskite Films via Mediating Crystallization for Scalable Solar Cell Fabrication. ACS Applied Materials & Interfaces, 2019, 11, 11537-11544.	4.0	21
75	High-Performance Cold Cathode X-ray Tubes Using a Carbon Nanotube Field Electron Emitter. ACS Nano, 2022, 16, 10231-10241.	7.3	21
76	In2O3:Sn/TiO2/CdS heterojunction nanowire array photoanode in photoelectrochemical cells. International Journal of Hydrogen Energy, 2014, 39, 17473-17480.	3.8	20
77	Photon recycling in halide perovskite solar cells for higher efficiencies. MRS Bulletin, 2020, 45, 439-448.	1.7	20
78	Simultaneous Enhanced Efficiency and Stability of Perovskite Solar Cells Using Adhesive Fluorinated Polymer Interfacial Material. ACS Applied Materials & Interfaces, 2021, 13, 35595-35605.	4.0	20
79	Highly Efficient Large-Area Organic Photovoltaic Module with a 350 nm Thick Active Layer Using a Random Terpolymer Donor. Chemistry of Materials, 2020, 32, 3469-3479.	3.2	19
80	Correlation of anatase particle size with photocatalytic properties. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 2288-2291.	0.8	17
81	PbS Colloidal Quantumâ€Dotâ€Sensitized Inorganicâ€“Organic Hybrid Solar Cells with Radialâ€Directional Charge Transport. ChemPhysChem, 2014, 15, 1024-1027.	1.0	17
82	Transparent Sn-doped In2O3 electrodes with a nanoporous surface for enhancing the performance of perovskite solar cells. Journal of Power Sources, 2019, 418, 152-161.	4.0	17
83	Effects of photon recycling and scattering in high-performance perovskite solar cells. Science Advances, 2021, 7, eabj1363.	4.7	17
84	Preparation and characterization of nano-sized Y3Al5O12:Ce3+ phosphor by high-energy milling process. Current Applied Physics, 2013, 13, S69-S74.	1.1	16
85	Heterojunction Fe2O3-SnO2 Nanostructured Photoanode for Efficient Photoelectrochemical Water Splitting. Jom, 2014, 66, 664-669.	0.9	16
86	Synthesis and photoactivity of hetero-nanostructured SrTiO3. Journal of the Ceramic Society of Japan, 2010, 118, 876-880.	0.5	15
87	Photoluminescence and electrical properties of epitaxial Alâ€doped ZnO transparent conducting thin films. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 2133-2138.	0.8	14
88	Enhancing the Densification of Nanocrystalline TiO₂ by Reduction in Spark Plasma Sintering. Journal of the American Ceramic Society, 2010, 93, 993-997.	1.9	14
89	Ternary diagrams of the phase, optical bandgap energy and photoluminescence of mixed-halide perovskites. Acta Materialia, 2019, 181, 460-469.	3.8	14
90	Perovskite/Silicon Tandem Solar Cells with a V_{oc} of 1784 mV Based on an Industrially Feasible 25 cm² TOPCon Silicon Cell. ACS Applied Energy Materials, 2022, 5, 5449-5456.	2.5	14

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91	Waste Liquid-Crystal Display Glass-Directed Fabrication of Silicon Particles for Lithium-Ion Battery Anodes. ACS Sustainable Chemistry and Engineering, 2019, 7, 15329-15338.	3.2	13
92	TiO2 nanocrystals shell layer on highly conducting indium tin oxide nanowire for photovoltaic devices. Nanoscale, 2013, 5, 3520.	2.8	12
93	Tailoring of Ligandâ€Off Nanoparticles Inks for Thin pâ€Type Oxide Overlayers Formation with Maintaining Intact Halide Perovskite. Advanced Functional Materials, 2021, 31, 2100863.	7.8	11
94	Important role of alloyed polymer acceptor for high efficiency and stable large-area organic photovoltaics. Nano Energy, 2022, 98, 107187.	8.2	11
95	Oxide/Halide/Oxide Architecture for High Performance Semiâ€Transparent Perovskite Solar Cells. Advanced Energy Materials, 2022, 12, .	10.2	11
96	Dielectric properties of nanocrystalline TiO2 prepared using spark plasma sintering. Journal of Electroceramics, 2006, 17, 913-917.	0.8	10
97	Influence of Niobium Doping in Hierarchically Organized Titania Nanostructure on Performance of Dye-Sensitized Solar Cells. Journal of Nanoscience and Nanotechnology, 2012, 12, 5091-5095.	0.9	10
98	A Hierarchically Organized Photoelectrode Architecture for Highly Efficient CdS/CdSeâ€Sensitized Solar Cells. Advanced Energy Materials, 2014, 4, 1300395.	10.2	10
99	Facile Hydrothermal Synthesis of SrNb₂O₆Nanotubes with Rhombic Cross Sections. Crystal Growth and Design, 2010, 10, 2447-2450.	1.4	9
100	Recent Progress in the Semiconducting Oxide Overlayer for Halide Perovskite Solar Cells. Advanced Energy Materials, 2021, 11, 2003119.	10.2	9
101	Microstructural Evaluation of Phase Instability in Large Bandgap Metal Halide Perovskites. ACS Nano, 2021, 15, 20391-20402.	7.3	8
102	Transparent-conducting-oxide nanowire arrays for efficient photoelectrochemical energy conversion. Nanoscale, 2014, 6, 8649.	2.8	7
103	Efficient n-i-p Monolithic Perovskite/Silicon Tandem Solar Cells with Tin Oxide via a Chemical Bath Deposition Method. Energies, 2021, 14, 7614.	1.6	7
104	Electrical and optical properties of epitaxial and polycrystalline undoped and Al-doped ZnO thin films grown by pulsed laser deposition. Journal of Electroceramics, 2009, 23, 497-501.	0.8	6
105	Effects of stretching on the molecular packing structure of conjugated polymers with hydrogen bonding. Journal of Materials Chemistry C, 2021, 9, 15132-15140.	2.7	6
106	Solar-Driven Simultaneous Electrochemical CO2 Reduction and Water Oxidation Using Perovskite Solar Cells. Energies, 2022, 15, 270.	1.6	6
107	Optimal Solvents for Interfacial Solution Engineering of Perovskite Solar Cells. Solar Rrl, 2022, 6, .	3.1	6
108	Seed-layer mediated orientation evolution in dielectric Biâ€“Znâ€“Tiâ€“Nbâ€“O thin films. Applied Physics Letters, 2007, 91, 232903.	1.5	4

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109	Synthesis of carbon-incorporated titanium oxide nanocrystals by pulsed solution plasma: electrical, optical investigation and nanocrystals analysis. RSC Advances, 2015, 5, 9497-9502.	1.7	4
110	Suppressing Halide Segregation in Wide-Band-Gap Mixed-Halide Perovskite Layers through Post-Hot Pressing. ACS Applied Materials & Interfaces, 2022, , .	4.0	4
111	Synthesis and Characterization of Nano-Particulate BaTiO₃ for Ceramic/Polymer Composite Capacitor. Journal of Nanoscience and Nanotechnology, 2010, 10, 1361-1366.	0.9	3
112	Effects of Ta-substitution on the dielectric properties of Ba6Ti2(Nb1âˆ'xTax)8O30 thin films. Journal of the European Ceramic Society, 2007, 27, 2927-2931.	2.8	2
113	Steady-State Transporting Properties of Halide Perovskite Thin Films under 1 sun through Photo-Hall Effect Measurement. Journal of Physical Chemistry C, 0, , .	1.5	2
114	Influence of stress on structural and dielectric anomaly of Bi2(Zn1/3Ta2/3)207 thin films. Materials Research Society Symposia Proceedings, 2005, 875, 1.	0.1	0
115	Structure and dielectric properties of cubic Bi2(Zn1âˆ•3Ta2âˆ•3)2O7 thin films. Journal of Applied Physics, 2009, 106, .	1.1	0
116	3D Transparent Conducting Oxides: Nanowireâ€Based Threeâ€Dimensional Transparent Conducting Oxide Electrodes for Extremely Fast Charge Collection (Adv. Energy Mater. 5/2011). Advanced Energy Materials, 2011, 1, 702-702.	10.2	0
117	Halide Perovskites: Tailoring of Ligandâ€Off Nanoparticles Inks for Thin pâ€Type Oxide Overlayers Formation with Maintaining Intact Halide Perovskite (Adv. Funct. Mater. 31/2021). Advanced Functional Materials, 2021, 31, 2170223.	7.8	0