Yonghua Chen

List of Publications by Citations

101 papers	9,248 citations	36 h-index	96 g-index
112 ext. papers	11,356 ext. citations	11.9 avg, IF	6.38 L-index

#	Paper	IF	Citations
101	Solar cells. Low trap-state density and long carrier diffusion in organolead trihalide perovskite single crystals. *Science*, **2015**, 347, 519-22	33.3	3307
100	ELECTROCHEMISTRY. High-performance transition metal-doped PtNi octahedra for oxygen reduction reaction. *Science*, **2015**, 348, 1230-4	33.3	1307
99	Lead-Free Organic-Inorganic Hybrid Perovskites for Photovoltaic Applications: Recent Advances and Perspectives. *Advanced Materials*, **2017**, 29, 1605005	24	437
98	Stability of Perovskite Solar Cells: A Prospective on the Substitution of the A Cation and X Anion. *Angewandte Chemie - International Edition*, **2017**, 56, 1190-1212	16.4	376
97	Efficient and stable RuddlesdenPopper perovskite solar cell with tailored interlayer molecular interaction. *Nature Photonics*, **2020**, 14, 154-163	33.9	251
96	Additive engineering for highly efficient organicinorganic halide perovskite solar cells: recent advances and perspectives. *Journal of Materials Chemistry A*, **2017**, 5, 12602-12652	13	249
95	Efficiently photo-charging lithium-ion battery by perovskite solar cell. *Nature Communications*, **2015**, 6, 8103	17.4	208
94	Stabilizing black-phase formamidinium perovskite formation at room temperature and high humidity. *Science*, **2021**, 371, 1359-1364	33.3	202
93	Layer-by-layer growth of CHNHPbI(3-x)Clx for highly efficient planar heterojunction perovskite solar cells. *Advanced Materials*, **2015**, 27, 1053-9	24	192
92	Room-Temperature Molten Salt for Facile Fabrication of Efficient and Stable Perovskite Solar Cells in Ambient Air. *CheM*, **2019**, 5, 995-1006	16.2	160
91	Two-dimensional RuddlesdenPopper layered perovskite solar cells based on phase-pure thin films. *Nature Energy*, **2021**, 6, 38-45	62.3	155
90	Red-Carbon-Quantum-Dot-Doped SnO Composite with Enhanced Electron Mobility for Efficient and Stable Perovskite Solar Cells. *Advanced Materials*, **2020**, 32, e1906374	24	141
89	2D Intermediate Suppression for Efficient RuddlesdenPopper (RP) Phase Lead-Free Perovskite Solar Cells. *ACS Energy Letters*, **2019**, 4, 1513-1520	20.1	121
88	Two-dimensional light-emitting materials: preparation, properties and applications. *Chemical Society Reviews*, **2018**, 47, 6128-6174	58.5	118
87	Management of perovskite intermediates for highly efficient inverted planar heterojunction perovskite solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 3193-3202	13	82
86	Flexible, transparent nanocellulose paper-based perovskite solar cells. *Npj Flexible Electronics*, **2019**, 3,	10.7	79
85	Tailoring Component Interaction for Air-Processed Efficient and Stable All-Inorganic Perovskite Photovoltaic. *Angewandte Chemie - International Edition*, **2020**, 59, 13354-13361	16.4	78

84	Reduced-Dimensional Perovskite Enabled by Organic Diamine for Efficient Photovoltaics. *Journal of Physical Chemistry Letters*, **2019**, 10, 2349-2356	6.4	73
83	Organic semiconductor heterojunctions as charge generation layers and their application in tandem organic light-emitting diodes for high power efficiency. *Journal of Materials Chemistry*, **2012**, 22, 18718		73
82	High power efficiency tandem organic light-emitting diodes based on bulk heterojunction organic bipolar charge generation layer. *Applied Physics Letters*, **2011**, 98, 243309	3.4	71
81	Management of Crystallization Kinetics for Efficient and Stable Low-Dimensional Ruddlesden-Popper (LDRP) Lead-Free Perovskite Solar Cells. *Advanced Science*, **2019**, 6, 1800793	13.6	68
80	Rapid Crystallization for Efficient 2D Ruddlesden□Popper (2DRP) Perovskite Solar Cells. *Advanced Functional Materials*, **2019**, 29, 1806831	15.6	68
79	Emerging New-Generation Photodetectors Based on Low-Dimensional Halide Perovskites. *ACS Photonics*, **2020**, 7, 10-28	6.3	65
78	Oriented and Uniform Distribution of Dion□Jacobson Phase Perovskites Controlled by Quantum Well Barrier Thickness. *Solar Rrl*, **2019**, 3, 1900090	7.1	61
77	Enhancing Efficiency and Stability of Perovskite Solar Cells via a Self-Assembled Dopamine Interfacial Layer. *ACS Applied Materials & Interfaces*, **2018**, 10, 30607-30613	9.5	59
76	Centimeter-Sized Single Crystal of Two-Dimensional Halide Perovskites Incorporating Straight-Chain Symmetric Diammonium Ion for X-Ray Detection. *Angewandte Chemie - International Edition*, **2020**, 59, 14896-14902	16.4	58
75	Solvent Engineering of the Precursor Solution toward Large-Area Production of Perovskite Solar Cells. *Advanced Materials*, **2021**, 33, e2005410	24	57
74	Metal halide perovskites for resistive switching memory devices and artificial synapses. *Journal of Materials Chemistry C*, **2019**, 7, 7476-7493	7.1	51
73	Graphene oxide-based carbon interconnecting layer for polymer tandem solar cells. *Nano Letters*, **2014**, 14, 1467-71	11.5	51
72	Unique characteristics of 2D Ruddlesden□Popper (2DRP) perovskite for future photovoltaic application. *Journal of Materials Chemistry A*, **2019**, 7, 13860-13872	13	49
71	A-Site Cation Engineering of Metal Halide Perovskites: Version 3.0 of Efficient Tin-Based Lead-Free Perovskite Solar Cells. *Advanced Functional Materials*, **2020**, 30, 2000794	15.6	49
70	Hot-substrate deposition of all-inorganic perovskite films for low-temperature processed high-efficiency solar cells. *Journal of Materials Chemistry A*, **2019**, 7, 2773-2779	13	49
69	Diarylfluorene-based nano-molecules as dopant-free hole-transporting materials without post-treatment process for flexible p-i-n type perovskite solar cells. *Nano Energy*, **2018**, 46, 241-248	17.1	46
68	Interface Engineering for Highly Efficient Electron-Transport-Layer-Free Perovskite Solar Cells. *Nano Letters*, **2020**, 20, 5799-5806	11.5	36
67	Synergistic effect of anions and cations in additives for highly efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2018**, 6, 9264-9270	13	36

66	Improving the efficiency and stability of inverted perovskite solar cells by CuSCN-doped PEDOT:PSS. *Solar Energy Materials and Solar Cells*, **2020**, 206, 110316	6.4	36
65	Critical role of chloride in organic ammonium spacer on the performance of Low-dimensional Ruddlesden-Popper perovskite solar cells. *Nano Energy*, **2019**, 56, 373-381	17.1	36
64	Ionic Liquids-Enabled Efficient and Stable Perovskite Photovoltaics: Progress and Challenges. *ACS Energy Letters*,1453-1479	20.1	35
63	Efficient and Stable Low-Dimensional Ruddlesden-Popper Perovskite Solar Cells Enabled by Reducing Tunnel Barrier. *Journal of Physical Chemistry Letters*, **2019**, 10, 1173-1179	6.4	34
62	Flexible Perovskite Solar Cells with High Power-Per-Weight: Progress, Application, and Perspectives. *ACS Energy Letters*, **2021**, 6, 2917-2943	20.1	34
61	Two-Terminal Perovskites Tandem Solar Cells: Recent Advances and Perspectives. *Solar Rrl*, **2019**, 3, 1900080	7.8	32
60	Origin of High Efficiency and Long-Term Stability in Ionic Liquid Perovskite Photovoltaic. *Research*, **2020**, 2020, 2616345	7.8	28
59	Facet-Dependent Control of PbI2 Colloids for over 20% Efficient Perovskite Solar Cells. *ACS Energy Letters*, **2019**, 4, 358-367	20.1	27
58	Enhanced Performance of Perovskite Light-Emitting Diodes via Diamine Interface Modification. *ACS Applied Materials & Interfaces*, **2019**, 11, 29132-29138	9.5	26
57	One-dimensional (1D) [6,6]-phenyl-C61-butyric acid methyl ester (PCBM) nanorods as an efficient additive for improving the efficiency and stability of perovskite solar cells. *Journal of Materials Chemistry A*, **2016**, 4, 8566-8572	13	26
56	Architecture of p-i-n Sn-Based Perovskite Solar Cells: Characteristics, Advances, and Perspectives. *ACS Energy Letters*, **2021**, 6, 2863-2875	20.1	25
55	Stabilität von Perowskit-Solarzellen: Einfluss der Substitution von A-Kation und X-Anion. *Angewandte Chemie*, **2017**, 129, 1210-1233	3.6	24
54	Improved Performance of CHNHPbICl Resistive Switching Memory by Assembling 2D/3D Perovskite Heterostructures. *ACS Applied Materials & Interfaces*, **2020**, 12, 15439-15445	9.5	23
53	Modeling Thin Film Solar Cells: From Organic to Perovskite. *Advanced Science*, **2020**, 7, 1901397	13.6	23
52	Nanoscale hybrid multidimensional perovskites with alternating cations for high performance photovoltaic. *Nano Energy*, **2019**, 65, 104050	17.1	22
51	Recent progress on low dimensional perovskite solar cells. *Journal of Energy Chemistry*, **2018**, 27, 1091-1100	11	21
50	Carbon quantum dot additive engineering for efficient and stable carbon-based perovskite solar cells. *Journal of Alloys and Compounds*, **2021**, 859, 157784	5.7	15
49	All-inorganic Sn-based Perovskite Solar Cells: Status, Challenges, and Perspectives. *ChemSusChem*, **2020**, 13, 6477-6497	8.3	14

48	Recent progress of integrated circuits and optoelectronic chips. *Science China Information Sciences*, **2021**, 64, 1	3.4	14
47	All-Inorganic Perovskite Nanocrystals-Based Light Emitting Diodes and Solar Cells. *ChemNanoMat*, **2019**, 5, 266-277	3.5	14
46	In situ observation of δ-phase suppression by lattice strain in all-inorganic perovskite solar cells. *Nano Energy*, **2020**, 73, 104803	17.1	13
45	Crystallization Dynamics of Sn-Based Perovskite Thin Films: Toward Efficient and Stable Photovoltaic Devices. *Advanced Energy Materials*,2102213	21.8	11
44	Stable, Efficient Near-Infrared Light-Emitting Diodes Enabled by All-Phase Modulation. *Journal of Physical Chemistry Letters*, **2019**, 10, 2101-2107	6.4	10
43	Robust and Transient Write-Once-Read-Many-Times Memory Device Based on Hybrid Perovskite Film with Novel Room Temperature Molten Salt Solvent. *Advanced Electronic Materials*, **2020**, 6, 2000109	6.4	10
42	Two-dimensional Ruddlesden-Popper layered perovskite for light-emitting diodes. *APL Materials*, **2020**, 8, 040901	5.7	10
41	Lanthanide Stabilized All-Inorganic CsPbI2Br Perovskite Solar Cells with Superior Thermal Resistance. *ACS Applied Energy Materials*, **2021**, 4, 3937-3944	6.1	10
40	Emerging Organic/Hybrid Photovoltaic Cells for Indoor Applications: Recent Advances and Perspectives. *Solar Rrl*, **2021**, 5, 2100042	7.1	10
39	Air-Processed MAPbBr Perovskite Thin Film with Ultrastability and Enhanced Amplified Spontaneous Emission. *Small*, **2021**, 17, e2101107	11	10
38	Solution processed nano-ZnMgO interfacial layer for highly efficient inverted perovskite solar cells. *Journal of Energy Chemistry*, **2019**, 28, 107-110	12	10
37	Efficient and Stable Perovskite Solar Cells by Fluorinated Ionic Liquid-Induced Component Interaction. *Solar Rrl*, **2021**, 5, 2000582	7.1	10
36	Strain Engineering of Metal-Halide Perovskites toward Efficient Photovoltaics: Advances and Perspectives. *Solar Rrl*, **2021**, 5, 2000672	7.1	9
35	Microstructure and lattice strain control towards high-performance ambient green-printed perovskite solar cells. *Journal of Materials Chemistry A*,	13	9
34	Perovskite Solar Cells toward Eco-Friendly Printing. *Research*, **2021**, 2021, 9671892	7.8	8
33	Manipulating SnO2 Growth for Efficient Electron Transport in Perovskite Solar Cells. *Advanced Materials Interfaces*, **2021**, 8, 2100128	4.6	8
32	Stability of mixed-halide wide bandgap perovskite solar cells: Strategies and progress. *Journal of Energy Chemistry*, **2021**, 61, 395-415	12	8
31	Residual solvent extraction via chemical displacement for efficient and stable perovskite solar cells. *Journal of Energy Chemistry*, **2021**, 61, 8-14	12	7

30	Centimeter-Sized Single Crystal of Two-Dimensional Halide Perovskites Incorporating Straight-Chain Symmetric Diammonium Ion for X-Ray Detection. *Angewandte Chemie*, **2020**, 132, 15006-15012	3.6	7
29	Vanadium Oxide-Modified Triphenylamine-Based Hole-Transport Layer for Highly Reproducible and Efficient Inverted Perovskite Solar Cells. *Advanced Photonics Research*, **2021**, 2, 2000132	1.9	6
28	Toward Efficient and Stable Perovskite Solar Cells by 2D Interface Energy Band Alignment. *Advanced Materials Interfaces*, **2021**, 8, 2001683	4.6	6
27	Metal Halide Perovskite/2D Material Heterostructures: Syntheses and Applications.. *Small Methods*, **2021**, 5, e2000937	12.8	6
26	Toward a New Energy Era: Self-Driven Integrated Systems Based on Perovskite Solar Cells. *Solar Rrl*, **2019**, 3, 1900320	7.1	5
25	Tailoring Component Interaction for Air-Processed Efficient and Stable All-Inorganic Perovskite Photovoltaic. *Angewandte Chemie*, **2020**, 132, 13456-13463	3.6	5
24	Stability of Sn-Pb mixed organic□inorganic halide perovskite solar cells: Progress, challenges, and perspectives. *Journal of Energy Chemistry*, **2022**, 65, 371-404	12	5
23	Designing Ionic Liquids as the Solvent for Efficient and Stable Perovskite Solar Cells.. *ACS Applied Materials & Interfaces*, **2022**,	9.5	4
22	Lead Sources in Perovskite Solar Cells: Toward Controllable, Sustainable, and Large-Scalable Production. *Solar Rrl*, **2021**, 5, 2100665	7.1	4
21	Highly oriented perovskites for efficient light-emitting diodes with balanced charge transport. *Organic Electronics*, **2020**, 77, 105529	3.5	4
20	Efficient and stable Ruddlesden-Popper layered tin-based perovskite solar cells enabled by ionic liquid-bulky spacers. *Science China Chemistry*, **2021**, 64, 1577-1585	7.9	4
19	Conjugated molecule doping of triphenylamine-based hole-transport layer for high-performance perovskite solar cells. *Journal of Power Sources*, **2021**, 506, 230120	8.9	4
18	Polyacrylic Acid Grafted Carbon Nanotubes for Immobilization of Lead(II) in Perovskite Solar Cell. *ACS Energy Letters*,1577-1585	20.1	4
17	Growth and Degradation Kinetics of Organic-Inorganic Hybrid Perovskite Films Determined by In Situ Grazing-Incidence X-Ray Scattering Techniques.. *Small Methods*, **2021**, 5, e2100829	12.8	3
16	Tuning the Interactions of Methylammonium Acetate with Acetonitrile to Create Efficient Perovskite Solar Cells. *Journal of Physical Chemistry C*, **2021**, 125, 6555-6563	3.8	3
15	Hydroxyl-Rich d-Sorbitol to Address Transport Layer/Perovskite Interfacial Issues toward Highly Efficient and Stable 2D/3D Tin-Based Perovskite Solar Cells. *Advanced Optical Materials*,2100755	8.1	3
14	Phase-Pure □FAPbI for Perovskite Solar Cells.. *Journal of Physical Chemistry Letters*, **2022**, 1845-1854	6.4	3
13	Bi-Linkable Reductive Cation as Molecular Glue for One Year Stable Sn-Based Perovskite Solar Cells. *ACS Applied Energy Materials*,	6.1	3

12	Decisive Role of Elevated Mobility in X55 and X60 Hole Transport Layers for High-Performance Perovskite Solar Cells. *ACS Applied Energy Materials*, **2021**, 4, 7681-7690	6.1	2
11	Antisolvent-Free Fabrication of Efficient and Stable Sn-Pb Perovskite Solar Cells. *Solar Rrl*,2100675	7.1	2
10	In situ nanocrystal seeding perovskite crystallization toward high-performance solar cells. *Materials Today Energy*, **2021**, 22, 100855	7	2
9	A bromide-induced highly oriented low-dimensional Ruddlesden-Popper phase for efficient and stable perovskite solar cells. *Journal of Materials Chemistry A*, **2021**, 9, 15068-15075	13	1
8	Famished Two-Step Deposition for Self-Assembly Energy Cascade in the Perovskite Layer toward Efficient Photovoltaics. *ACS Applied Energy Materials*, **2021**, 4, 10163-10171	6.1	1
7	Chiral cation promoted interfacial charge extraction for efficient tin-based perovskite solar cells. *Journal of Energy Chemistry*, **2021**, 68, 789-789	12	1
6	Phase-Pure Engineering for Efficient and Stable Formamidinium-Based Perovskite Solar Cells. *Solar Rrl*,2200060	7.1	1
5	Device Physics of a Metal Halide Perovskite Diode: Decoupling of the Bulk from the Interface. *Journal of Physical Chemistry C*, **2022**, 126, 6892-6903	3.8	1
4	In Situ Polymer Network in Perovskite Solar Cells Enabled Superior Moisture and Thermal Resistance.. *Journal of Physical Chemistry Letters*, **2022**, 3754-3762	6.4	1
3	Perovskite photodetectors for flexible electronics: Recent advances and perspectives. *Applied Materials Today*, **2022**, 28, 101509	6.6	1
2	Recent Progress in AC-Driven Organic and Perovskite Electroluminescent Devices. *ACS Photonics*,	6.3	1
1	Insights into the hole transport properties of LiTFSI-doped spiro-OMeTAD films through impedance spectroscopy. *Journal of Applied Physics*, **2020**, 128, 085501	2.5	0