

Daniel Prochowicz

List of Publications by Year in Descending Order

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Version: 2024-04-23

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

92
papers

3,502
citations

31
h-index

57
g-index

104
ext. papers

4,264
ext. citations

8.8
avg, IF

5.92
L-index

#	Paper	IF	Citations
92	Is machine learning redefining the perovskite solar cells?. <i>Journal of Energy Chemistry</i> , 2022 , 66, 74-90	12	5
91	Band alignment and carrier recombination roles on the open circuit voltage of ETL-passivated perovskite photovoltaics. <i>International Journal of Energy Research</i> , 2022 , 46, 6022-6030	4.5	0
90	Recent Progress of Light Intensity-Modulated Small Perturbation Techniques in Perovskite Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2022 , 16, 2100510	2.5	1
89	Effect of bromine doping on the charge transfer, ion migration and stability of the single crystalline MAPb(Brx1I _{1-x}) ₃ photodetector. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 15189-15200	7.1	4
88	Interface Engineering of Mesoscopic Perovskite Solar Cells by Atomic Layer Deposition of Ta ₂ O ₅ . <i>ACS Applied Energy Materials</i> , 2021 , 4, 10433-10441	6.1	2
87	Mesoscopic TiO ₂ /Nb ₂ O ₅ Electron Transfer Layer for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2021 , 8, 2100177	4.6	6
86	Ambient Stable and Efficient Monolithic Tandem Perovskite/PbS Quantum Dots Solar Cells via Surface Passivation and Light Management Strategies. <i>Advanced Functional Materials</i> , 2021 , 31, 2010623 ^{15.6}	15.6	19
85	Azahomofullerenes as New n-Type Acceptor Materials for Efficient and Stable Inverted Planar Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 20296-20304	9.5	4
84	Decoupling the effects of defects on efficiency and stability through phosphonates in stable halide perovskite solar cells. <i>Joule</i> , 2021 , 5, 1246-1266	27.8	30
83	In the Quest of Low-Frequency Impedance Spectra of Efficient Perovskite Solar Cells. <i>Energy Technology</i> , 2021 , 9, 2100229	3.5	5
82	Development of all-inorganic lead halide perovskites for carbon dioxide photoreduction. <i>Renewable and Sustainable Energy Reviews</i> , 2021 , 145, 111047	16.2	12
81	Efficient, Hysteresis-Free, and Flexible Inverted Perovskite Solar Cells Using All-Vacuum Processing. <i>Solar Rrl</i> , 2021 , 5, 2000552	7.1	16
80	Role of the spacer cation in the growth and crystal orientation of two-dimensional perovskites. <i>Sustainable Energy and Fuels</i> , 2021 , 5, 1255-1279	5.8	4
79	Recent Progress in Growth of Single-Crystal Perovskites for Photovoltaic Applications. <i>ACS Omega</i> , 2021 , 6, 1030-1042	3.9	11
78	Two-dimensional halide perovskite single crystals: principles and promises. <i>Emergent Materials</i> , 2021 , 4, 865-880	3.5	5
77	Metal Halide Perovskites for Energy Storage Applications. <i>European Journal of Inorganic Chemistry</i> , 2021 , 2021, 1201-1212	2.3	6
76	A Dopant-Free Hole Transporting Layer for Efficient and Stable Planar Perovskite Solar Cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 2000147	2.5	2

75	Changes in the Electrical Characteristics of Perovskite Solar Cells with Aging Time. <i>Molecules</i> , 2020 , 25,	4.8	14
74	Reducing ion migration in methylammonium lead tri-bromide single crystal via lead sulfate passivation. <i>Journal of Applied Physics</i> , 2020 , 127, 185501	2.5	19
73	Surface Treatment of Perovskite Layer with Guanidinium Iodide Leads to Enhanced Moisture Stability and Improved Efficiency of Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2000105	4.6	24
72	Efficient Perovskite Solar Cells Based on CdSe/ZnS Quantum Dots Electron Transporting Layer with Superior UV Stability. <i>Physica Status Solidi - Rapid Research Letters</i> , 2020 , 14, 2000062	2.5	8
71	Local Structure and Dynamics in Methylammonium, Formamidinium, and Cesium Tin(II) Mixed-Halide Perovskites from Sn Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2020 , 142, 7813-7826	16.4	43
70	Interpretation of Resistance, Capacitance, Defect Density, and Activation Energy Levels in Single-Crystalline MAPbI ₃ . <i>Journal of Physical Chemistry C</i> , 2020 , 124, 3496-3502	3.8	16
69	Development of an SBU-Based Mechanochemical Approach for Drug-Loaded MOFs. <i>European Journal of Inorganic Chemistry</i> , 2020 , 2020, 796-800	2.3	5
68	Suppressing recombination in perovskite solar cells via surface engineering of TiO ₂ ETL. <i>Solar Energy</i> , 2020 , 197, 50-57	6.8	26
67	Tuning Areal Density and Surface Passivation of ZnO Nanowire Array Enable Efficient PbS QDs Solar Cells with Enhanced Current Density. <i>Advanced Materials Interfaces</i> , 2020 , 7, 1901551	4.6	14
66	Double layer mesoscopic electron contact for efficient perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2020 , 4, 843-851	5.8	17
65	A review of aspects of additive engineering in perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 27-54	13	145
64	A New Look on Octet-Compliant Macrocyclic Organoaluminum Carboxylates as Dormant Poly-Lewis Acids. <i>European Journal of Inorganic Chemistry</i> , 2020 , 2020, 119-127	2.3	4
63	Atomic Layer Deposition of an Effective Interface Layer of TiN for Efficient and Hysteresis-Free Mesoscopic Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 8098-8106	9.5	18
62	Halide Mixing and Phase Segregation in CsAgBiX (X = Cl, Br, and I) Double Perovskites from Cesium-133 Solid-State NMR and Optical Spectroscopy. <i>Chemistry of Materials</i> , 2020 , 32, 8129-8138	9.6	19
61	Gold Nanoparticles Functionalized with Fullerene Derivative as an Effective Interface Layer for Improving the Efficiency and Stability of Planar Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2020 , 7, 2001144	4.6	5
60	¹¹³ Cd Solid-State NMR at 21.1 T Reveals the Local Structure and Passivation Mechanism of Cadmium in Hybrid and All-Inorganic Halide Perovskites. <i>ACS Energy Letters</i> , 2020 , 5, 2964-2971	20.1	12
59	Elucidation of the role of guanidinium incorporation in single-crystalline MAPbI perovskite on ion migration and activation energy. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 11467-11473	3.6	12
58	Luminescence down-shifting enables UV-stable and efficient ZnO nanowire-based PbS quantum dot solar cells with JSC exceeding 33 mA cm ⁻² . <i>Sustainable Energy and Fuels</i> , 2019 , 3, 3128-3134	5.8	14

57	Charge Accumulation, Recombination, and Their Associated Time Scale in Efficient (GUA) (MA) PBI-Based Perovskite Solar Cells. <i>ACS Omega</i> , 2019 , 4, 16840-16846	3.9	18
56	Correlation of recombination and open circuit voltage in planar heterojunction perovskite solar cells. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 1273-1279	7.1	18
55	Highly efficient and stable inverted perovskite solar cells using down-shifting quantum dots as a light management layer and moisture-assisted film growth. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14753-14760	13	58
54	Mechanosynthesis, Optical, and Morphological Properties of MA, FA, Cs-SnX ₃ (X = I, Br) and Phase-Pure Mixed-Halide MASn _{1-x} Br _{3-x} Perovskites. <i>European Journal of Inorganic Chemistry</i> , 2019 , 2019, 2680-2684	2.3	16
53	Controllable Perovskite Crystallization via Antisolvent Technique Using Chloride Additives for Highly Efficient Planar Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2019 , 9, 1803587	21.8	174
52	Engineering of Perovskite Materials Based on Formamidinium and Cesium Hybridization for High-Efficiency Solar Cells. <i>Chemistry of Materials</i> , 2019 , 31, 1620-1627	9.6	77
51	Synthesis, structure and magnetic properties of a novel high-nuclearity oxo-carboxylate [ZnCo(EO)(OCPh)] cluster. <i>Dalton Transactions</i> , 2019 , 48, 12828-12831	4.3	2
50	Oxygen Plasma-Induced p-Type Doping Improves Performance and Stability of PbS Quantum Dot Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 26047-26052	9.5	25
49	Atomic-Level Microstructure of Efficient Formamidinium-Based Perovskite Solar Cells Stabilized by 5-Ammonium Valeric Acid Iodide Revealed by Multinuclear and Two-Dimensional Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2019 , 141, 17659-17669	16.4	63
48	Mechanoperovskites for Photovoltaic Applications: Preparation, Characterization, and Device Fabrication. <i>Accounts of Chemical Research</i> , 2019 , 52, 3233-3243	24.3	46
47	Effect of CsCl Additive on the Morphological and Optoelectronic Properties of Formamidinium Lead Iodide Perovskite. <i>Solar Rrl</i> , 2019 , 3, 1900294	7.1	18
46	Influence of A-site cations on the open-circuit voltage of efficient perovskite solar cells: a case of rubidium and guanidinium additives. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 8218-8225	13	31
45	Synergistic ligand exchange and UV curing of PbS quantum dots for effective surface passivation. <i>Nanoscale</i> , 2019 , 11, 22832-22840	7.7	6
44	Doping and phase segregation in Mn ²⁺ - and Co ²⁺ -doped lead halide perovskites from ¹³³ Cs and ¹ H NMR relaxation enhancement. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 2326-2333	13	48
43	Multilayer evaporation of MA _{1-x} FAPb _{3-x} Cl _x for the fabrication of efficient and large-scale device perovskite solar cells. <i>Journal Physics D: Applied Physics</i> , 2019 , 52, 034005	3	11
42	Europium-Doped CsPbI ₂ Br for Stable and Highly Efficient Inorganic Perovskite Solar Cells. <i>Joule</i> , 2019 , 3, 205-214	27.8	290
41	Straightforward Synthesis of Single-Crystalline and Redox-Active Cr(II)-carboxylate MOFs. <i>Inorganic Chemistry</i> , 2018 , 57, 4803-4806	5.1	18
40	Formation of Stable Mixed Guanidinium-Methylammonium Phases with Exceptionally Long Carrier Lifetimes for High-Efficiency Lead Iodide-Based Perovskite Photovoltaics. <i>Journal of the American Chemical Society</i> , 2018 , 140, 3345-3351	16.4	183

39	One-step mechanochemical incorporation of an insoluble cesium additive for high performance planar heterojunction solar cells. <i>Nano Energy</i> , 2018 , 49, 523-528	17.1	70
38	Blue and red wavelength resolved impedance response of efficient perovskite solar cells. <i>Sustainable Energy and Fuels</i> , 2018 , 2, 2407-2411	5.8	13
37	Surface modification of a hole transporting layer for an efficient perovskite solar cell with an enhanced fill factor and stability. <i>Molecular Systems Design and Engineering</i> , 2018 , 3, 717-722	4.6	23
36	Zinc Stannate Nanorod as an Electron Transporting Layer for Highly Efficient and Hysteresis-less Perovskite Solar Cells. <i>Engineered Science</i> , 2018 ,	3.8	21
35	Facile Mechanochemical Synthesis of the Archetypal Zn-Based Metal-Organic Frameworks. <i>Inorganic Chemistry</i> , 2018 , 57, 13437-13442	5.1	25
34	Phase Segregation in Potassium-Doped Lead Halide Perovskites from K Solid-State NMR at 21.1 T. <i>Journal of the American Chemical Society</i> , 2018 , 140, 7232-7238	16.4	106
33	Elucidation of Charge Recombination and Accumulation Mechanism in Mixed Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 15149-15154	3.8	49
32	Understanding the effect of chlorobenzene and isopropanol anti-solvent treatments on the recombination and interfacial charge accumulation in efficient planar perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 14307-14314	13	81
31	Synthesis, Structure, and Magnetic Properties of a Mononuclear Chiral (Acetato)bis(aminoalkoxido)manganese(III) Complex. <i>European Journal of Inorganic Chemistry</i> , 2017 , 2017, 1392-1395	2.3	1
30	Mechanochemical Synthesis of pure phase mixed-cation MAxFA _{1-x} PbI ₃ hybrid perovskites: photovoltaic performance and electrochemical properties. <i>Sustainable Energy and Fuels</i> , 2017 , 1, 689-693	5.8	66
29	Cation Dynamics in Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2017 , 139, 10055-10061	16.4	160
28	Structure investigations of group 13 organometallic carboxylates. <i>Dalton Transactions</i> , 2017 , 46, 669-677	4.3	8
27	Interactions of Native Cyclodextrins with Metal Ions and Inorganic Nanoparticles: Fertile Landscape for Chemistry and Materials Science. <i>Chemical Reviews</i> , 2017 , 117, 13461-13501	68.1	174
26	Phase Segregation in Cs-, Rb- and K-Doped Mixed-Cation (MA)(FA)PbI Hybrid Perovskites from Solid-State NMR. <i>Journal of the American Chemical Society</i> , 2017 , 139, 14173-14180	16.4	260
25	Reduction in the Interfacial Trap Density of Mechanochemically Synthesized MAPbI. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 28418-28425	9.5	55
24	Intrinsic and interfacial kinetics of perovskite solar cells under photo and bias-induced degradation and recovery. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 7799-7805	7.1	27
23	Assemblies Based on Schiff Base Chemistry 2017 , 279-304		1
22	Interfacial Kinetics of Efficient Perovskite Solar Cells. <i>Crystals</i> , 2017 , 7, 252	2.3	20

21	Metal complexes based on native cyclodextrins: Synthesis and structural diversity. <i>Coordination Chemistry Reviews</i> , 2016 , 306, 331-345	23.2	41
20	Molecularly Imprinted Polymer (MIP) Film with Improved Surface Area Developed by Using Metal-Organic Framework (MOF) for Sensitive Lipocalin (NGAL) Determination. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 19860-5	9.5	46
19	Trinuclear Cage-Like Zn(II) Macrocyclic Complexes: Enantiomeric Recognition and Gas Adsorption Properties. <i>Chemistry - A European Journal</i> , 2016 , 22, 598-609	4.8	45
18	Hollow microtubes made of carbon, boron and gold: novel semiconducting nanocomposite material for applications in electrochemistry and temperature sensing. <i>RSC Advances</i> , 2015 , 5, 64083-64090	3.7	2
17	Mechanosynthesis of the hybrid perovskite CH ₃ NH ₃ PbI ₃ : characterization and the corresponding solar cell efficiency. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 20772-20777	13	131
16	A mechanochemical strategy for IRMOF assembly based on pre-designed oxo-zinc precursors. <i>Chemical Communications</i> , 2015 , 51, 4032-5	5.8	94
15	Zinc hydroxides and oxides supported by organic ligands: Synthesis and structural diversity. <i>Coordination Chemistry Reviews</i> , 2014 , 270-271, 112-126	23.2	51
14	Supramolecular control over molecular magnetic materials: Cyclodextrin-templated grid of cobalt(II) single-ion magnets. <i>Inorganic Chemistry</i> , 2014 , 53, 12870-6	5.1	38
13	Toward coordination polymers based on fine-tunable group 13 organometallic phthalates. <i>Inorganic Chemistry</i> , 2014 , 53, 7270-5	5.1	4
12	Synthesis and Structure of an Arylmanganese(II) 8-Hydroxyquinolate Tetranuclear Cluster. <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2014 , 640, 2427-2430	1.3	5
11	A solvothermal and mechanochemical strategy for the construction of chiral N,N-ditopic metalloligands: oxygenation process of a Cu(I)X/quinine system. <i>Inorganic Chemistry Communication</i> , 2014 , 46, 216-218	3.1	8
10	Permanent porosity derived from the self-assembly of highly luminescent molecular zinc carbonate nanoclusters. <i>Angewandte Chemie - International Edition</i> , 2013 , 52, 13414-8	16.4	37
9	Permanent Porosity Derived From the Self-Assembly of Highly Luminescent Molecular Zinc Carbonate Nanoclusters. <i>Angewandte Chemie</i> , 2013 , 125, 13656-13660	3.6	8
8	Oxozinc carboxylates: a predesigned platform for modelling prototypical Zn-MOFs reactivity toward water and donor solvents. <i>Chemical Communications</i> , 2012 , 48, 7362-4	5.8	25
7	Oxozinc carboxylate complexes: a new synthetic approach and the carboxylate ligand effect on the noncovalent-interactions-driven self-assembly. <i>Inorganic Chemistry</i> , 2012 , 51, 7410-4	5.1	31
6	New insights into cinchonine-aluminium complexes and their application as chiral building blocks: unprecedented ligand-exchange processes in the presence of ZnR ₂ compounds. <i>Chemistry - A European Journal</i> , 2012 , 18, 13460-5	4.8	13
5	Construction of a porous homochiral coordination polymer with two types of Cu(n)I(n) alternating units linked by quinine: a solvothermal and a mechanochemical approach. <i>Chemistry - A European Journal</i> , 2012 , 18, 7367-71	4.8	40
4	Development of chiral N,N-ditopic metalloligands based on a Cinchona alkaloids backbone for constructing homochiral coordination polymers. <i>Chemical Communications</i> , 2011 , 47, 950-2	5.8	17

3	Cinchona Alkaloid-Metal Complexes: Noncovalent Porous Materials with Unique Gas Separation Properties. <i>Angewandte Chemie</i> , 2010 , 122, 7189-7193	3.6	8
2	Cinchona alkaloid-metal complexes: noncovalent porous materials with unique gas separation properties. <i>Angewandte Chemie - International Edition</i> , 2010 , 49, 7035-9	16.4	41
1	Atomic Layer Engineering of Aluminum-Doped Zinc Oxide Films for Efficient and Stable Perovskite Solar Cells. <i>Advanced Materials Interfaces</i> , 2200575	4.6	1