

# Julian A Steele

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1428695/publications.pdf>

Version: 2024-02-01

69  
papers

4,493  
citations

186265

28  
h-index

106344

65  
g-index

71  
all docs

71  
docs citations

71  
times ranked

5460  
citing authors

#	ARTICLE	IF	CITATIONS
1	Planar heterojunction boosts solar-driven photocatalytic performance and stability of halide perovskite solar photocatalyst cell. <i>Applied Catalysis B: Environmental</i> , 2022, 301, 120760.	20.2	33
2	Flexible Metal Halide Perovskite Photodetector Arrays via Photolithography and Dry Lift-Off Patterning. <i>Advanced Engineering Materials</i> , 2022, 24, 2100930.	3.5	19
3	Metal Halide Perovskite Based Heterojunction Photocatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	48
4	Metal Halide Perovskite Based Heterojunction Photocatalysts. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	11
5	Photothermal Suzuki Coupling Over a Metal Halide Perovskite/Pd Nanocube Composite Catalyst. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 17185-17194.	8.0	23
6	Solar Photocatalytic Oxidation of Methane to Methanol with Water over RuO <sub>2</sub> /ZnO/CeO <sub>2</sub> Nanorods. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16-22.	6.7	30
7	Solar-to-Chemical Fuel Conversion via Metal Halide Perovskite Solar-Driven Electrocatalysis. <i>Journal of Physical Chemistry Letters</i> , 2022, 13, 25-41.	4.6	10
8	Site-Sensitive Selective CO <sub>2</sub> Photoreduction to CO over Gold Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202204563.	13.8	33
9	Site-Sensitive Selective CO <sub>2</sub> Photoreduction to CO over Gold Nanoparticles. <i>Angewandte Chemie</i> , 2022, 134, .	2.0	5
10	Terbium-Doped and Dual-Passivated CsPb(I <sub>1-x</sub> Br <sub>x</sub> ) <sub>3</sub> Inorganic Perovskite Solar Cells with Improved Air Thermal Stability and High Efficiency. <i>Advanced Materials</i> , 2022, 34, e2203204.	21.0	27
11	Controlled graphite surface functionalization using contact and remote photocatalytic oxidation. <i>Carbon</i> , 2021, 172, 637-646.	10.3	9
12	Texture Formation in Polycrystalline Thin Films of All-Inorganic Lead Halide Perovskite. <i>Advanced Materials</i> , 2021, 33, e2007224.	21.0	18
13	Implementing Dopant-Free Hole-Transporting Layers and Metal-Incorporated CsPbI <sub>2</sub> Br for Stable All-Inorganic Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2021, 6, 778-788.	17.4	71
14	Phase transition dynamics in one-dimensional halide perovskite crystals. <i>MRS Bulletin</i> , 2021, 46, 310-316.	3.5	8
15	Dual-Channel Charge Carrier Transfer in CsPbX <sub>3</sub> Perovskite/W <sub>18</sub> O <sub>49</sub> Composites for Selective Photocatalytic Benzyl Alcohol Oxidation. <i>ACS Applied Energy Materials</i> , 2021, 4, 3460-3468.	5.1	19
16	Experimental Evidence of Chloride-Induced Trap Passivation in Lead Halide Perovskites through Single Particle Blinking Studies. <i>Advanced Optical Materials</i> , 2021, 9, 2002240.	7.3	8
17	Impact of Amine Additives on Perovskite Precursor Aging: A Case Study of Light-Emitting Diodes. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 5836-5843.	4.6	6
18	State of the Art and Prospects for Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2021, 15, 10775-10981.	14.6	705

#	ARTICLE	IF	CITATIONS
19	Tunable Luminescence from Stable Silver Nanoclusters Confined in Microporous Zeolites. <i>Advanced Optical Materials</i> , 2021, 9, 2100526.	7.3	12
20	Trojans That Flip the Black Phase: Impurity-Driven Stabilization and Spontaneous Strain Suppression in $\text{F}^{\beta}\text{-CsPbI}_3$ Perovskite. <i>Journal of the American Chemical Society</i> , 2021, 143, 10500-10508.	13.7	33
21	Kinetics of moisture-induced phase transformation in inorganic halide perovskite. <i>Matter</i> , 2021, 4, 2392-2402.	10.0	34
22	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. <i>Nature Communications</i> , 2021, 12, 4831.	12.8	56
23	Highly Mobile Large Polarons in Black Phase $\text{CsPbI}_3$ . <i>ACS Energy Letters</i> , 2021, 6, 568-573.	17.4	40
24	Ambient processed and stable all-inorganic lead halide perovskite solar cells with efficiencies nearing 20% using a spray coated $\text{ZnIn}_x\text{Cs}_x\text{O}$ electron transport layer. <i>Nano Energy</i> , 2021, 90, 106597.	16.0	13
25	Lattice Dynamics and Optoelectronic Properties of Vacancy-Ordered Double Perovskite $\text{Cs}_2\text{TeX}_6$ ( $X = \text{Cl}, \text{Br}, \text{I}$ ) Single Crystals. <i>Journal of Physical Chemistry C</i> , 2021, 125, 25126-25139.	3.1	17
26	It's a trap! On the nature of localised states and charge trapping in lead halide perovskites. <i>Materials Horizons</i> , 2020, 7, 397-410.	12.2	345
27	Silica gel solid nanocomposite electrolytes with interfacial conductivity promotion exceeding the bulk Li-ion conductivity of the ionic liquid electrolyte filler. <i>Science Advances</i> , 2020, 6, eaav3400.	10.3	51
28	Subsurface Defect Engineering in Single-Unit-Cell $\text{Bi}_2\text{WO}_6$ Monolayers Boosts Solar-Driven Photocatalytic Performance. <i>ACS Catalysis</i> , 2020, 10, 1439-1443.	11.2	138
29	Tuning the Structural and Optoelectronic Properties of $\text{Cs}_2\text{AgBiBr}_6$ Double Perovskite Single Crystals through Alkali Metal Substitution. <i>Advanced Materials</i> , 2020, 32, e2001878.	21.0	72
30	Phase Transitions and Anion Exchange in All-Inorganic Halide Perovskites. <i>Accounts of Materials Research</i> , 2020, 1, 3-15.	11.7	67
31	Managing Phase Purities and Crystal Orientation for High-Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. <i>Solar Rrl</i> , 2020, 4, 2000213.	5.8	17
32	Direct Z-Scheme Heterojunction of Semicohherent $\text{FAPbBr}_3/\text{Bi}_2\text{WO}_6$ Interface for Photoredox Reaction with Large Driving Force. <i>ACS Nano</i> , 2020, 14, 16689-16697.	14.6	167
33	Solar-Driven Metal Halide Perovskite Photocatalysis: Design, Stability, and Performance. <i>ACS Energy Letters</i> , 2020, 5, 1107-1123.	17.4	400
34	Single-Step Synthesis of Dual Phase Bright Blue-Green Emitting Lead Halide Perovskite Nanocrystal Thin Films. <i>Chemistry of Materials</i> , 2019, 31, 6824-6832.	6.7	26
35	Role of Electron-Phonon Coupling in the Thermal Evolution of Bulk Rashba-Like Spin-Split Lead Halide Perovskites Exhibiting Dual-Band Photoluminescence. <i>ACS Energy Letters</i> , 2019, 4, 2205-2212.	17.4	58
36	Low-temperature activation of carbon black by selective photocatalytic oxidation. <i>Nanoscale Advances</i> , 2019, 1, 2873-2880.	4.6	14

#	ARTICLE	IF	CITATIONS
37	Thermal unequilibrium of strained black CsPbI <sub>3</sub> thin films. <i>Science</i> , 2019, 365, 679-684.	12.6	444
38	Indirect tail states formation by thermal-induced polar fluctuations in halide perovskites. <i>Nature Communications</i> , 2019, 10, 484.	12.8	88
39	Crosslinked Polyvinylnorbornene-Based Membranes as a New Class of Solvent-Resistant Nanofiltration Membranes. <i>Journal of Polymer Science Part A</i> , 2019, 57, 1593-1600.	2.3	4
40	Polyvinylnorbornene Gas Separation Membranes. <i>Polymers</i> , 2019, 11, 704.	4.5	14
41	Tracking Structural Phase Transitions in Lead-Halide Perovskites by Means of Thermal Expansion. <i>Advanced Materials</i> , 2019, 31, e1900521.	21.0	88
42	Sunny Days for Perovskite Optoelectronics. <i>ChemNanoMat</i> , 2019, 5, 251-252.	2.8	0
43	Luminescent silver-lithium-zeolite phosphors for near-ultraviolet LED applications. <i>Journal of Materials Chemistry C</i> , 2019, 7, 14366-14374.	5.5	17
44	Reply to commentary by R Duggleby (2019). <i>Progress in Biophysics and Molecular Biology</i> , 2019, 141, 74-78.	2.9	4
45	Solid-state speciation of interlayer anions in layered double hydroxides. <i>Journal of Colloid and Interface Science</i> , 2019, 537, 151-162.	9.4	17
46	C(sp <sup>3</sup> )-H Bond Activation by Perovskite Solar Photocatalyst Cell. <i>ACS Energy Letters</i> , 2019, 4, 203-208.	17.4	114
47	Efficient and Selective Photocatalytic Oxidation of Benzylic Alcohols with Hybrid Organic-Inorganic Perovskite Materials. <i>ACS Energy Letters</i> , 2018, 3, 755-759.	17.4	222
48	Resolving the Framework Position of Organic Structure-Directing Agents in Hierarchical Zeolites via Polarized Stimulated Raman Scattering. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 1778-1782.	4.6	14
49	Cause of Cambrian Explosion - Terrestrial or Cosmic?. <i>Progress in Biophysics and Molecular Biology</i> , 2018, 136, 3-23.	2.9	34
50	Reply to editorial and commentaries on Steele, Al-Mufti, Augustyn, Chandrajith, Coghlan, Coulson et al. (2018) "Cause of Cambrian explosion - Terrestrial or Cosmic?". <i>Progress in Biophysics and Molecular Biology</i> , 2018, 136, 27-28.	2.9	5
51	Perovskite-Based Devices: Photophysical Pathways in Highly Sensitive Cs <sub>2</sub> AgBiBr <sub>6</sub> Double-Perovskite Single-Crystal X-Ray Detectors ( <i>Adv. Mater.</i> 46/2018). <i>Advanced Materials</i> , 2018, 30, 1870353.	21.0	8
52	Photophysical Pathways in Highly Sensitive Cs <sub>2</sub> AgBiBr <sub>6</sub> Double-Perovskite Single-Crystal X-Ray Detectors. <i>Advanced Materials</i> , 2018, 30, e1804450.	21.0	173
53	Giant Electron-Phonon Coupling and Deep Conduction Band Resonance in Metal Halide Double Perovskite. <i>ACS Nano</i> , 2018, 12, 8081-8090.	14.6	190
54	Shaping the Optical Properties of Silver Clusters Inside Zeolite A via Guest-Host-Guest Interactions. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 5344-5350.	4.6	28

#	ARTICLE	IF	CITATIONS
55	The power of single molecule microscopy: from nanoparticle investigations to microbiome analysis. , 2018, , .		0
56	Superconducting Ferromagnetic Nanodiamond. ACS Nano, 2017, 11, 5358-5366.	14.6	25
57	Rationalizing Acid Zeolite Performance on the Nanoscale by Correlative Fluorescence and Electron Microscopy. ACS Catalysis, 2017, 7, 5234-5242.	11.2	19
58	Form Follows Function: Warming White LEDs Using Metal Cluster-Loaded Zeolites as Phosphors. ACS Energy Letters, 2017, 2, 2491-2497.	17.4	25
59	Silver Clusters in Zeolites: From Self-Assembly to Ground-Breaking Luminescent Properties. Accounts of Chemical Research, 2017, 50, 2353-2361.	15.6	72
60	Direct Laser Writing of $\hat{\Gamma}$ - to $\hat{\Gamma}$ -Phase Transformation in Formamidinium Lead Iodide. ACS Nano, 2017, 11, 8072-8083.	14.6	66
61	Adsorption and Separation of Aromatic Amino Acids from Aqueous Solutions Using Metal-Organic Frameworks. ACS Applied Materials & Interfaces, 2017, 9, 30064-30073.	8.0	35
62	Fabrication and characterisation of GaAs nanopillars using nanosphere lithography and metal assisted chemical etching. RSC Advances, 2016, 6, 30468-30473.	3.6	15
63	Mechanism of periodic height variations along self-aligned VLS-grown planar nanostructures. Nanoscale, 2015, 7, 20442-20450.	5.6	6
64	Raman scattering reveals strong LO-phonon-hole-plasmon coupling in nominally undoped GaAsBi: optical determination of carrier concentration. Optics Express, 2014, 22, 11680.	3.4	23
65	Laser-induced oxidation kinetics of bismuth surface microdroplets on GaAsBi studied in situ by Raman microprobe analysis. Optics Express, 2014, 22, 32261.	3.4	7
66	In situ micro-Raman studies of laser-induced bismuth oxidation reveals metastability of $\hat{\Gamma}^2$ -Bi <sub>2</sub> O <sub>3</sub> microislands. Optical Materials Express, 2014, 4, 2133.	3.0	66
67	Raman scattering studies of strain effects in (100) and (311)B GaAs <sub>1-x</sub> Bi <sub>x</sub> epitaxial layers. Journal of Applied Physics, 2013, 114, 193516.	2.5	22
68	Single Perovskite or Double Perovskite: What's the Difference?. , 0, , .		1
69	Phase transition dynamics in one-dimensional halide perovskite crystals. MRS Bulletin, 0, , 1-7.	3.5	1