

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	State of the Art and Prospects for Halide Perovskite Nanocrystals. ACS Nano, 2021, 15, 10775-10981.	14.6	705
2	Thermal unequilibrium of strained black CsPbI ₃ thin films. Science, 2019, 365, 679-684.	12.6	444
3	Solar-Driven Metal Halide Perovskite Photocatalysis: Design, Stability, and Performance. ACS Energy Letters, 2020, 5, 1107-1123.	17.4	400
4	It's a trap! On the nature of localised states and charge trapping in lead halide perovskites. Materials Horizons, 2020, 7, 397-410.	12.2	345
5	Efficient and Selective Photocatalytic Oxidation of Benzylic Alcohols with Hybrid Organic-Inorganic Perovskite Materials. ACS Energy Letters, 2018, 3, 755-759.	17.4	222
6	Giant Electron-Phonon Coupling and Deep Conduction Band Resonance in Metal Halide Double Perovskite. ACS Nano, 2018, 12, 8081-8090.	14.6	190
7	Photophysical Pathways in Highly Sensitive Cs ₂ AgBiBr ₆ Double-Perovskite Single-Crystal X-Ray Detectors. Advanced Materials, 2018, 30, e1804450.	21.0	173
8	Direct Z-Scheme Heterojunction of Semicoherent FAPbBr ₃ /Bi ₂ WO ₆ Interface for Photoredox Reaction with Large Driving Force. ACS Nano, 2020, 14, 16689-16697.	14.6	167
9	Subsurface Defect Engineering in Single-Unit-Cell Bi ₂ WO ₆ Monolayers Boosts Solar-Driven Photocatalytic Performance. ACS Catalysis, 2020, 10, 1439-1443.	11.2	138
10	C(sp ³)-H Bond Activation by Perovskite Solar Photocatalyst Cell. ACS Energy Letters, 2019, 4, 203-208.	17.4	114
11	Indirect tail states formation by thermal-induced polar fluctuations in halide perovskites. Nature Communications, 2019, 10, 484.	12.8	88
12	Tracking Structural Phase Transitions in Lead-Halide Perovskites by Means of Thermal Expansion. Advanced Materials, 2019, 31, e1900521.	21.0	88
13	Silver Clusters in Zeolites: From Self-Assembly to Ground-Breaking Luminescent Properties. Accounts of Chemical Research, 2017, 50, 2353-2361.	15.6	72
14	Tuning the Structural and Optoelectronic Properties of Cs ₂ AgBiBr ₆ Double-Perovskite Single Crystals through Alkali-Metal Substitution. Advanced Materials, 2020, 32, e2001878.	21.0	72
15	Implementing Dopant-Free Hole-Transporting Layers and Metal-Incorporated CsPbI ₂ Br for Stable All-Inorganic Perovskite Solar Cells. ACS Energy Letters, 2021, 6, 778-788.	17.4	71
16	Phase Transitions and Anion Exchange in All-Inorganic Halide Perovskites. Accounts of Materials Research, 2020, 1, 3-15.	11.7	67
17	In situ micro-Raman studies of laser-induced bismuth oxidation reveals metastability of $\hat{\Gamma}^2$ -Bi ₂ O ₃ microislands. Optical Materials Express, 2014, 4, 2133.	3.0	66
18	Direct Laser Writing of $\hat{\Gamma}^-$ to $\hat{\Gamma}^\pm$ -Phase Transformation in Formamidinium Lead Iodide. ACS Nano, 2017, 11, 8072-8083.	14.6	66

#	ARTICLE	IF	CITATIONS
19	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
20	Manipulating crystallization dynamics through chelating molecules for bright perovskite emitters. <i>Nature Communications</i> , 2021, 12, 4831.	12.8	56
21	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
22	Metal Halide Perovskite Based Heterojunction Photocatalysts. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	48
23	Highly Mobile Large Polarons in Black Phase CsPbI ₃ . <i>ACS Energy Letters</i> , 2021, 6, 568-573.	17.4	40
24	Adsorption and Separation of Aromatic Amino Acids from Aqueous Solutions Using Metal-Organic Frameworks. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 30064-30073.	8.0	35
25	Cause of Cambrian Explosion - Terrestrial or Cosmic?. <i>Progress in Biophysics and Molecular Biology</i> , 2018, 136, 3-23.	2.9	34
26	Kinetics of moisture-induced phase transformation in inorganic halide perovskite. <i>Matter</i> , 2021, 4, 2392-2402.	10.0	34
27	Trojans That Flip the Black Phase: Impurity-Driven Stabilization and Spontaneous Strain Suppression in δ -CsPbI ₃ Perovskite. <i>Journal of the American Chemical Society</i> , 2021, 143, 10500-10508.	13.7	33
28	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
29	Sensitive Selective CO ₂ Photoreduction to CO over Gold Nanoparticles. <i>Angewandte Chemie - International Edition</i> , 2022, 61, e202204563.	13.8	33
30	Solar Photocatalytic Oxidation of Methane to Methanol with Water over RuO _x /ZnO/CeO ₂ Nanorods. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 16-22.	6.7	30
31	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
32	Terbium-Doped and Dual-Passivated δ -CsPb(I _{1-x} Br _x) ₃ Inorganic Perovskite Solar Cells with Improved Air Thermal Stability and High Efficiency. <i>Advanced Materials</i> , 2022, 34, e2203204.	21.0	27
33	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
34	Superconducting Ferromagnetic Nanodiamond. <i>ACS Nano</i> , 2017, 11, 5358-5366.	14.6	25
35	Form Follows Function: Warming White LEDs Using Metal Cluster-Loaded Zeolites as Phosphors. <i>ACS Energy Letters</i> , 2017, 2, 2491-2497.	17.4	25
36	Raman scattering reveals strong LO-phonon-hole-plasmon coupling in nominally undoped GaAsBi: optical determination of carrier concentration. <i>Optics Express</i> , 2014, 22, 11680.	3.4	23

#	ARTICLE	IF	CITATIONS
37	Photothermal Suzuki Coupling Over a Metal Halide Perovskite/Pd Nanocube Composite Catalyst. ACS Applied Materials & Interfaces, 2022, 14, 17185-17194.	8.0	23
38	Raman scattering studies of strain effects in (100) and (311)B GaAs $_{1-x}$ Bix epitaxial layers. Journal of Applied Physics, 2013, 114, 193516.	2.5	22
39	Rationalizing Acid Zeolite Performance on the Nanoscale by Correlative Fluorescence and Electron Microscopy. ACS Catalysis, 2017, 7, 5234-5242.	11.2	19
40	Dual-Channel Charge Carrier Transfer in CsPbX ₃ Perovskite/W ₁₈ O ₄₉ Composites for Selective Photocatalytic Benzyl Alcohol Oxidation. ACS Applied Energy Materials, 2021, 4, 3460-3468.	5.1	19
41	Flexible Metal Halide Perovskite Photodetector Arrays via Photolithography and Dry Lift-Off Patterning. Advanced Engineering Materials, 2022, 24, 2100930.	3.5	19
42	Texture Formation in Polycrystalline Thin Films of All-Inorganic Lead Halide Perovskite. Advanced Materials, 2021, 33, e2007224.	21.0	18
43	Luminescent silver-lithium-zeolite phosphors for near-ultraviolet LED applications. Journal of Materials Chemistry C, 2019, 7, 14366-14374.	5.5	17
44	Solid-state speciation of interlayer anions in layered double hydroxides. Journal of Colloid and Interface Science, 2019, 537, 151-162.	9.4	17
45	Managing Phase Purities and Crystal Orientation for High-Performance and Photostable Cesium Lead Halide Perovskite Solar Cells. Solar Rrl, 2020, 4, 2000213.	5.8	17
46	Lattice Dynamics and Optoelectronic Properties of Vacancy-Ordered Double Perovskite Cs ₂ TeX ₆ (X = Cl ⁺ , Br ⁺ , I ⁺) Single Crystals. Journal of Physical Chemistry C, 2021, 125, 25126-25139.	3.1	17
47	Fabrication and characterisation of GaAs nanopillars using nanosphere lithography and metal assisted chemical etching. RSC Advances, 2016, 6, 30468-30473.	3.6	15
48	Resolving the Framework Position of Organic Structure-Directing Agents in Hierarchical Zeolites via Polarized Stimulated Raman Scattering. Journal of Physical Chemistry Letters, 2018, 9, 1778-1782.	4.6	14
49	Low-temperature activation of carbon black by selective photocatalytic oxidation. Nanoscale Advances, 2019, 1, 2873-2880.	4.6	14
50	Polyvinylnorbornene Gas Separation Membranes. Polymers, 2019, 11, 704.	4.5	14
51	Ambient processed and stable all-inorganic lead halide perovskite solar cells with efficiencies nearing 20% using a spray coated Zn $_{1-x}$ CsxO electron transport layer. Nano Energy, 2021, 90, 106597.	16.0	13
52	Tunable Luminescence from Stable Silver Nanoclusters Confined in Microporous Zeolites. Advanced Optical Materials, 2021, 9, 2100526.	7.3	12
53	Metal Halide Perovskite Based Heterojunction Photocatalysts. Angewandte Chemie, 2022, 134, .	2.0	11
54	Solar-to-Chemical Fuel Conversion via Metal Halide Perovskite Solar-Driven Electrocatalysis. Journal of Physical Chemistry Letters, 2022, 13, 25-41.	4.6	10

#	ARTICLE	IF	CITATIONS
55	Controlled graphite surface functionalization using contact and remote photocatalytic oxidation. Carbon, 2021, 172, 637-646.	10.3	9
56	Perovskite-Based Devices: Photophysical Pathways in Highly Sensitive Cs ₂ AgBiBr ₆ Double-Perovskite Single-Crystal X-Ray Detectors (Adv. Mater. 46/2018). Advanced Materials, 2018, 30, 1870353.	21.0	8
57	Phase transition dynamics in one-dimensional halide perovskite crystals. MRS Bulletin, 2021, 46, 310-316.	3.5	8
58	Experimental Evidence of Chloride-Induced Trap Passivation in Lead Halide Perovskites through Single Particle Blinking Studies. Advanced Optical Materials, 2021, 9, 2002240.	7.3	8
59	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
60	Mechanism of periodic height variations along self-aligned VLS-grown planar nanostructures. Nanoscale, 2015, 7, 20442-20450.	5.6	6
61	Impact of Amine Additives on Perovskite Precursor Aging: A Case Study of Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2021, 12, 5836-5843.	4.6	6
62	Reply to editorial and commentaries on Steele, Al-Mufti, Augustyn, Chandrajith, Coghlan, Coulson et al. (2018) "Cause of Cambrian explosion - Terrestrial or Cosmic?". Progress in Biophysics and Molecular Biology, 2018, 136, 27-28.	2.9	5
63	Site-Sensitive Selective CO ₂ Photoreduction to CO over Gold Nanoparticles. Angewandte Chemie, 2022, 134, .	2.0	5
64	Crosslinked Polyvinylnorbornene-Based Membranes as a New Class of Solvent-Resistant Nanofiltration Membranes. Journal of Polymer Science Part A, 2019, 57, 1593-1600.	2.3	4
65	Reply to commentary by R Duggleby (2019). Progress in Biophysics and Molecular Biology, 2019, 141, 74-78.	2.9	4
66	Single Perovskite or Double Perovskite: What's the Difference?. , 0, , .		1
67	Phase transition dynamics in one-dimensional halide perovskite crystals. MRS Bulletin, 0, , 1-7.	3.5	1
68	Sunny Days for Perovskite Optoelectronics. ChemNanoMat, 2019, 5, 251-252.	2.8	0
69	The power of single molecule microscopy: from nanoparticle investigations to microbiome analysis. , 2018, , .		0