

Zewen Xiao

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71
papers

4,862
citations

35
h-index

69
g-index

78
ext. papers

6,041
ext. citations

9.2
avg, IF

6.25
L-index

| # | Paper | IF | Citations |
|----|--|------|-----------|
| 71 | Searching for promising new perovskite-based photovoltaic absorbers: the importance of electronic dimensionality. <i>Materials Horizons</i> , 2017 , 4, 206-216 | 14.4 | 406 |
| 70 | Employing Lead Thiocyanate Additive to Reduce the Hysteresis and Boost the Fill Factor of Planar Perovskite Solar Cells. <i>Advanced Materials</i> , 2016 , 28, 5214-21 | 24 | 403 |
| 69 | From Lead Halide Perovskites to Lead-Free Metal Halide Perovskites and Perovskite Derivatives. <i>Advanced Materials</i> , 2019 , 31, e1803792 | 24 | 346 |
| 68 | Parity-Forbidden Transitions and Their Impact on the Optical Absorption Properties of Lead-Free Metal Halide Perovskites and Double Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2017 , 8, 2999-3007 | 6.4 | 267 |
| 67 | Thin-Film Deposition and Characterization of a Sn-Deficient Perovskite Derivative Cs ₂ SnI ₆ . <i>Chemistry of Materials</i> , 2016 , 28, 2315-2322 | 9.6 | 252 |
| 66 | Highly Efficient Blue-Emitting Bi-Doped Cs ₂ SnCl ₆ Perovskite Variant: Photoluminescence Induced by Impurity Doping. <i>Advanced Functional Materials</i> , 2018 , 28, 1801131 | 15.6 | 239 |
| 65 | Progress in Theoretical Study of Metal Halide Perovskite Solar Cell Materials. <i>Advanced Energy Materials</i> , 2017 , 7, 1701136 | 21.8 | 197 |
| 64 | Thermodynamic Stability and Defect Chemistry of Bismuth-Based Lead-Free Double Perovskites. <i>ChemSusChem</i> , 2016 , 9, 2628-2633 | 8.3 | 195 |
| 63 | Intrinsic Instability of Cs _n (I)M(III)X (M = Bi, Sb; X = Halogen) Double Perovskites: A Combined Density Functional Theory and Experimental Study. <i>Journal of the American Chemical Society</i> , 2017 , 139, 6054-6057 | 16.4 | 186 |
| 62 | Rational Design of Halide Double Perovskites for Optoelectronic Applications. <i>Joule</i> , 2018 , 2, 1662-1673 | 27.8 | 179 |
| 61 | Additive-Modulated Evolution of HC(NH ₂) ₂ PbI ₃ Black Polymorph for Mesoscopic Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2015 , 27, 7149-7155 | 9.6 | 164 |
| 60 | Intrinsic defects in a photovoltaic perovskite variant Cs ₂ SnI ₆ . <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 18900-3 | 3.6 | 148 |
| 59 | Two-Dimensional Transition-Metal Electride Y ₂ C. <i>Chemistry of Materials</i> , 2014 , 26, 6638-6643 | 9.6 | 113 |
| 58 | Photovoltaic Properties of Two-Dimensional (CH ₃ NH ₃) ₂ Pb(SCN) ₂ I ₂ Perovskite: A Combined Experimental and Density Functional Theory Study. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 1213-8 | 6.4 | 112 |
| 57 | Rearranging Low-Dimensional Phase Distribution of Quasi-2D Perovskites for Efficient Sky-Blue Perovskite Light-Emitting Diodes. <i>ACS Nano</i> , 2020 , 14, 11420-11430 | 16.7 | 104 |
| 56 | Ligand-Hole in [SnI ₆] Unit and Origin of Band Gap in Photovoltaic Perovskite Variant Cs ₂ SnI ₆ . <i>Bulletin of the Chemical Society of Japan</i> , 2015 , 88, 1250-1255 | 5.1 | 83 |
| 55 | Bandgap Optimization of Perovskite Semiconductors for Photovoltaic Applications. <i>Chemistry - A European Journal</i> , 2018 , 24, 2305-2316 | 4.8 | 76 |

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|----|--|------|----|
| 54 | Lead-Free Perovskite Variant Solid Solutions Cs Sn Te Cl : Bright Luminescence and High Anti-Water Stability. <i>Advanced Materials</i> , 2020 , 32, e2002443 | 24 | 74 |
| 53 | Chemical Origin of the Stability Difference between Copper(I)- and Silver(I)-Based Halide Double Perovskites. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 12107-12111 | 16.4 | 67 |
| 52 | Slot-die coating large-area formamidinium-cesium perovskite film for efficient and stable parallel solar module. <i>Science Advances</i> , 2021 , 7, | 14.3 | 66 |
| 51 | Unraveling the Near-Unity Narrow-Band Green Emission in Zero-Dimensional Mn-Based Metal Halides: A Case Study of (CHN)ZnMnBr Solid Solutions. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 5956-5962 | 6.4 | 59 |
| 50 | Viability of Lead-Free Perovskites with Mixed Chalcogen and Halogen Anions for Photovoltaic Applications. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 6435-6441 | 3.8 | 59 |
| 49 | Layered Halide Double Perovskites CsM(II)SbX (M = Sn, Ge) for Photovoltaic Applications. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 43-48 | 6.4 | 59 |
| 48 | Chemical Origin of the Stability Difference between Copper(I)- and Silver(I)-Based Halide Double Perovskites. <i>Angewandte Chemie</i> , 2017 , 129, 12275-12279 | 3.6 | 57 |
| 47 | Distant-Atom Mutation for Better Earth-Abundant Light Absorbers: A Case Study of Cu ₂ BaSnSe ₄ . <i>ACS Energy Letters</i> , 2017 , 2, 29-35 | 20.1 | 57 |
| 46 | Bandgap Engineering of Barium Bismuth Niobate Double Perovskite for Photoelectrochemical Water Oxidation. <i>Advanced Energy Materials</i> , 2017 , 7, 1602260 | 21.8 | 49 |
| 45 | Material Design and Optoelectronic Properties of Three-Dimensional Quadruple Perovskite Halides. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 5219-5225 | 6.4 | 47 |
| 44 | Stable single platinum atoms trapped in sub-nanometer cavities in 12CaO \cdot 7AlO for chemoselective hydrogenation of nitroarenes. <i>Nature Communications</i> , 2020 , 11, 1020 | 17.4 | 47 |
| 43 | Electron Confinement in Channel Spaces for One-Dimensional Electride. <i>Journal of Physical Chemistry Letters</i> , 2015 , 6, 4966-71 | 6.4 | 46 |
| 42 | Crystal Structure of AgBiI ₃ Thin Films. <i>Journal of Physical Chemistry Letters</i> , 2016 , 7, 3903-3907 | 6.4 | 46 |
| 41 | n-type conversion of SnS by isovalent ion substitution: Geometrical doping as a new doping route. <i>Scientific Reports</i> , 2015 , 5, 10428 | 4.9 | 44 |
| 40 | Band alignment of PbSn mixed triple cation perovskites for inverted solar cells with negligible hysteresis. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 9154-9162 | 13 | 42 |
| 39 | Intralayer A-Site Compositional Engineering of Ruddlesden-Popper Perovskites for Thermostable and Efficient Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 1216-1224 | 20.1 | 41 |
| 38 | Circularly Polarized Luminescence from Chiral Tetranuclear Copper(I) Iodide Clusters. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 1255-1260 | 6.4 | 40 |
| 37 | Material exploration via designing spatial arrangement of octahedral units: a case study of lead halide perovskites. <i>Frontiers of Optoelectronics</i> , 2021 , 14, 252-259 | 2.8 | 40 |

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|----|---|------|----|
| 36 | Route to n-type doping in SnS. <i>Applied Physics Letters</i> , 2015 , 106, 152103 | 3.4 | 35 |
| 35 | Superconductivity in noncentrosymmetric ternary equiatomic pnictides LaMP (M = Ir and Rh; P = P and As). <i>Physical Review B</i> , 2014 , 89, | 3.3 | 32 |
| 34 | Electride and superconductivity behaviors in Mn ₅ Si ₃ -type intermetallics. <i>Npj Quantum Materials</i> , 2017 , 2, | 5 | 28 |
| 33 | Defect properties of the two-dimensional (CH ₃ NH ₃) ₂ Pb(SCN) ₂ I ₂ perovskite: a density-functional theory study. <i>Physical Chemistry Chemical Physics</i> , 2016 , 18, 25786-90 | 3.6 | 27 |
| 32 | Growth of high-quality SnS epitaxial films by H ₂ S flow pulsed laser deposition. <i>Applied Physics Letters</i> , 2014 , 104, 072106 | 3.4 | 27 |
| 31 | Narrow bandgap in BaZnAs_2 and its chemical origins. <i>Journal of the American Chemical Society</i> , 2014 , 136, 14959-65 | 16.4 | 25 |
| 30 | Roles of Pseudo-Closed s Orbitals for Different Intrinsic Hole Generation between Tl-Bi and In-Bi Bromide Double Perovskites. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 258-262 | 6.4 | 23 |
| 29 | Palladium-bearing intermetallic electride as an efficient and stable catalyst for Suzuki cross-coupling reactions. <i>Nature Communications</i> , 2019 , 10, 5653 | 17.4 | 23 |
| 28 | Identifying quasi-2D and 1D electriles in yttrium and scandium chlorides via geometrical identification. <i>Npj Computational Materials</i> , 2018 , 4, | 10.9 | 19 |
| 27 | Effects of Pb Doping on Hole Transport Properties and Thin-Film Transistor Characteristics of SnO Thin Films. <i>ECS Journal of Solid State Science and Technology</i> , 2015 , 4, Q26-Q30 | 2 | 17 |
| 26 | B-Site Columnar-Ordered Halide Double Perovskites: Theoretical Design and Experimental Verification. <i>Journal of the American Chemical Society</i> , 2021 , 143, 10275-10281 | 16.4 | 15 |
| 25 | Bournonite CuPbSbS ₃ : An electronically-3D, defect-tolerant, and solution-processable semiconductor for efficient solar cells. <i>Nano Energy</i> , 2020 , 71, 104574 | 17.1 | 14 |
| 24 | Designing Two-Dimensional Properties in Three-Dimensional Halide Perovskites via Orbital Engineering. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 6688-6694 | 6.4 | 14 |
| 23 | Manipulation of Cl/Br transmutation in zero-dimensional Mn ²⁺ -based metal halides toward tunable photoluminescence and thermal quenching behaviors. <i>Journal of Materials Chemistry C</i> , 2021 , 9, 2047-2053 | 7.1 | 13 |
| 22 | First-Principles Insights into the Stability Difference between ABX ₃ Halide Perovskites and Their A ₂ BX ₆ Variants. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 9688-9694 | 3.8 | 12 |
| 21 | p-Type Transparent Quadruple Perovskite Halide Conductors: Fact or Fiction?. <i>Advanced Functional Materials</i> , 2020 , 30, 1909906 | 15.6 | 11 |
| 20 | Reversible Release and Fixation of Bromine in Vacancy-Ordered Bromide Perovskites. <i>Energy and Environmental Materials</i> , 2020 , 3, 535-540 | 13 | 11 |
| 19 | SnS thin films prepared by H ₂ S-free process and its p-type thin film transistor. <i>AIP Advances</i> , 2016 , 6, 015112 | 1.5 | 11 |

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|----|---|------|----|
| 18 | Epitaxial growth and electronic structure of a layered zinc pnictide semiconductor, BaZn_2As_2 . <i>Thin Solid Films</i> , 2014 , 559, 100-104 | 2.2 | 10 |
| 17 | Difficulty of carrier generation in orthorhombic PbO. <i>Journal of Applied Physics</i> , 2016 , 119, 165701 | 2.5 | 9 |
| 16 | Photoluminescence Behavior of Zero-Dimensional Manganese Halide Tetrahedra Embedded in Conjugated Organic Matrices. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 7394-7399 | 6.4 | 9 |
| 15 | Exploration of Nontoxic Cs_3CeBr_6 for Violet Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2021 , 4, 4245-4254 | 20.1 | 8 |
| 14 | CsFeSe: A Compound Closely Related to Alkali-Intercalated FeSe Superconductors. <i>Inorganic Chemistry</i> , 2018 , 57, 4502-4509 | 5.1 | 7 |
| 13 | Multiple states and roles of hydrogen in p-type SnS semiconductors. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 20952-20956 | 3.6 | 6 |
| 12 | Preparation and Mechanism of Interconnected Mesoporous Carbon Monoliths from Phenolic Resin/Ethylene Glycol Mixtures. <i>Key Engineering Materials</i> , 2012 , 512-515, 403-406 | 0.4 | 6 |
| 11 | Intrinsic and Extrinsic Defects in Layered Nitride Semiconductor SrTiN_2 . <i>Journal of Physical Chemistry C</i> , 2019 , 123, 19307-19314 | 3.8 | 5 |
| 10 | Zero-dimensional hybrid iodobismuthate derivatives: from structure study to photovoltaic application. <i>Dalton Transactions</i> , 2020 , 49, 5815-5822 | 4.3 | 5 |
| 9 | B-Site Columnar-Ordered Halide Double Perovskites $\text{A}_2\text{B}(\text{II})_2\text{O}_5\text{B}(\text{II})\text{X}_5$ with B(II)/Vacancy Disorder. <i>Chemistry of Materials</i> , 2021 , 33, 7106-7112 | 9.6 | 5 |
| 8 | Apparent high mobility $\sim 30 \text{ cm}^2/\text{Vs}$ of amorphous InGaZnO thin-film transistor and its origin. <i>Journal of the Ceramic Society of Japan</i> , 2013 , 121, 295-298 | 1 | 4 |
| 7 | Lead chloride perovskites for p-type transparent conductors: A critical theoretical reevaluation. <i>Physical Review Materials</i> , 2020 , 4, | 3.2 | 4 |
| 6 | Phase transition pathway of hybrid halide perovskites under compression: Insights from first-principles calculations. <i>Physical Review Materials</i> , 2021 , 5, | 3.2 | 3 |
| 5 | Bandgap engineering and thermodynamic stability of oxyhalide and chalcogenide antiperovskites. <i>Ceramics International</i> , 2021 , 47, 32634-32634 | 5.1 | 3 |
| 4 | Superconductivity in non-centrosymmetric sulfide YxS_4 . <i>Europhysics Letters</i> , 2018 , 121, 57001 | 1.6 | 2 |
| 3 | Amorphous pnictide semiconductor BaZn_2As_2 exhibiting high hole mobility. <i>Applied Physics Letters</i> , 2016 , 109, 242105 | 3.4 | 1 |
| 2 | Facile Synthesis of Hierarchically Macro/Mesoporous Carbons by Polymerization-Induced Phase Separation Combined with Starch Template. <i>Key Engineering Materials</i> , 2012 , 512-515, 1641-1646 | 0.4 | |
| 1 | Defect Properties of Halide Perovskites for Photovoltaic Applications 2022 , 107-126 | | |

