

Subodh Mhaisalkar

List of Publications by Year in Descending Order

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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.

522
papers

42,051
citations

90
h-index

192
g-index

552
ext. papers

46,640
ext. citations

8.3
avg, IF

7.61
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 522 | Reversible Photochromism in <110> Oriented Layered Halide Perovskite.. <i>ACS Nano</i> , 2022 , | 16.7 | 2 |
| 521 | Effect of interface strength on electromigration-induced inlaid copper interconnect degradation: Experiment and simulation. <i>International Journal of Materials Research</i> , 2022 , 96, 966-971 | 0.5 | |
| 520 | Recent advancements and perspectives on light management and high performance in perovskite light-emitting diodes. <i>Nanophotonics</i> , 2021 , 10, 2103-2143 | 6.3 | 11 |
| 519 | Halide Perovskite Solar Cells for Building Integrated Photovoltaics: Transforming Building Façades Into Power Generators. <i>Advanced Materials</i> , 2021 , e2104661 | 24 | 5 |
| 518 | Molecular design of two-dimensional perovskite cations for efficient energy cascade in perovskite light-emitting diodes. <i>Applied Physics Letters</i> , 2021 , 119, 154101 | 3.4 | 1 |
| 517 | Precise Control of CsPbBr ₃ Perovskite Nanocrystal Growth at Room Temperature: Size Tunability and Synthetic Insights. <i>Chemistry of Materials</i> , 2021 , 33, 2387-2397 | 9.6 | 14 |
| 516 | Diffusive and Drift Halide Perovskite Memristive Barristors as Nociceptive and Synaptic Emulators for Neuromorphic Computing. <i>Advanced Materials</i> , 2021 , 33, 2007851 | 24 | 16 |
| 515 | Suppressing the EPhase and Photoinstability through a Hypophosphorous Acid Additive in Carbon-Based Mixed-Cation Perovskite Solar Cells. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 6585-6592 ^{3,8} | | 3 |
| 514 | Vacuum-Processed Metal Halide Perovskite Light-Emitting Diodes: Prospects and Challenges. <i>ChemPlusChem</i> , 2021 , 86, 558-573 | 2.8 | 4 |
| 513 | Formation of Corrugated = 1 2D Tin Iodide Perovskites and Their Use as Lead-Free Solar Absorbers. <i>ACS Nano</i> , 2021 , 15, 6395-6409 | 16.7 | 6 |
| 512 | Adaptive Latent Inhibition in Associatively Responsive Optoelectronic Synapse. <i>Advanced Functional Materials</i> , 2021 , 31, 2100807 | 15.6 | 7 |
| 511 | Dual Role of Cu-Chalcogenide as Hole-Transporting Layer and Interface Passivator for p-i-n Architecture Perovskite Solar Cell. <i>Advanced Functional Materials</i> , 2021 , 31, 2103807 | 15.6 | 3 |
| 510 | Deterministic Light Yield, Fast Scintillation, and Microcolumn Structures in Lead Halide Perovskite Nanocrystals. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 14082-14088 | 3.8 | 10 |
| 509 | Halide perovskite memristors as flexible and reconfigurable physical unclonable functions. <i>Nature Communications</i> , 2021 , 12, 3681 | 17.4 | 29 |
| 508 | Unveiling the role of carbon black in printable mesoscopic perovskite solar cells. <i>Journal of Power Sources</i> , 2021 , 501, 230019 | 8.9 | 5 |
| 507 | The Physics of Interlayer Exciton Delocalization in Ruddlesden-Popper Lead Halide Perovskites. <i>Nano Letters</i> , 2021 , 21, 405-413 | 11.5 | 12 |
| 506 | Improving the Performance of Carbon-Based Perovskite Solar Modules (70 cm ²) by Incorporating Cesium Halide in Mesoporous TiO ₂ . <i>ACS Applied Energy Materials</i> , 2021 , 4, 249-258 | 6.1 | 2 |

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|-----|--|------|----|
| 505 | Room temperature synthesis of low-dimensional rubidium copper halide colloidal nanocrystals with near unity photoluminescence quantum yield. <i>Nanoscale</i> , 2021 , 13, 59-65 | 7.7 | 7 |
| 504 | Toward Efficient and Stable Perovskite Photovoltaics with Fluorinated Phosphonate Salt Surface Passivation. <i>ACS Applied Energy Materials</i> , 2021 , 4, 2716-2723 | 6.1 | 0 |
| 503 | Effects of All-Organic Interlayer Surface Modifiers on the Efficiency and Stability of Perovskite Solar Cells. <i>ChemSusChem</i> , 2021 , 14, 1524-1533 | 8.3 | 2 |
| 502 | Excellent Intrinsic Long-Term Thermal Stability of Co-Evaporated MAPbI ₃ Solar Cells at 85 °C. <i>Advanced Functional Materials</i> , 2021 , 31, 2100557 | 15.6 | 18 |
| 501 | Tunable Electroluminescence for Pure White Emission From a Perovskite-Based LED. <i>Advanced Electronic Materials</i> , 2021 , 7, 2001227 | 6.4 | 1 |
| 500 | One-Pot Synthesis and Structural Evolution of Colloidal Cesium Lead Halide-Lead Sulfide Heterostructure Nanocrystals for Optoelectronic Applications. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 9569-9578 | 6.4 | 2 |
| 499 | Dual Role of Cu-Chalcogenide as Hole-Transporting Layer and Interface Passivator for p-i-n Architecture Perovskite Solar Cell (Adv. Funct. Mater. 38/2021). <i>Advanced Functional Materials</i> , 2021 , 31, 2170282 | 15.6 | |
| 498 | Slot-die coated methylammonium-free perovskite solar cells with 18% efficiency. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 230, 111189 | 6.4 | 10 |
| 497 | Inducing thermoreversible optical transitions in urethane-acrylate systems via ionic liquid incorporation for stretchable smart devices. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 13615-13624 | 13 | 3 |
| 496 | Colorful Perovskite Solar Cells: Progress, Strategies, and Potentials. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 1321-1329 | 6.4 | 23 |
| 495 | . <i>IEEE Electron Device Letters</i> , 2020 , 41, 852-855 | 4.4 | 3 |
| 494 | Stabilizing the Electroluminescence of Halide Perovskites with Potassium Passivation. <i>ACS Energy Letters</i> , 2020 , 5, 1804-1813 | 20.1 | 29 |
| 493 | Direct Band Gap Mixed-Valence Organic-Inorganic Gold Perovskite as Visible Light Absorbers. <i>Chemistry of Materials</i> , 2020 , 32, 6318-6325 | 9.6 | 11 |
| 492 | Hybrid 2D [Pb(CH ₃ NH ₂)I ₂] _n Coordination Polymer Precursor for Scalable Perovskite Deposition. <i>ACS Energy Letters</i> , 2020 , 5, 2305-2312 | 20.1 | 10 |
| 491 | Hot Carriers in Halide Perovskites: How Hot Truly?. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 2743-2750 | 15.0 | 16 |
| 490 | Energy band and optical modeling of charge transport mechanism and photo-distribution of MoO ₃ /Al-doped MoO ₃ in organic tandem cells. <i>Functional Materials Letters</i> , 2020 , 13, 2051003 | 1.2 | 2 |
| 489 | Molecular Engineering of Pure 2D Lead-Iodide Perovskite Solar Absorbers Displaying Reduced Band Gaps and Dielectric Confinement. <i>ChemSusChem</i> , 2020 , 13, 2693-2701 | 8.3 | 6 |
| 488 | Controlling the film structure by regulating 2D Ruddlesden-Popper perovskite formation enthalpy for efficient and stable tri-cation perovskite solar cells. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 5874-5881 | 13.1 | 16 |

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|-----|---|-------|-----|
| 487 | Solvent selection for highly reproducible carbon-based mixed-cation hybrid lead halide perovskite solar cells via adduct approach. <i>Solar Energy</i> , 2020 , 199, 761-771 | 6.8 | 7 |
| 486 | Mixed-Dimensional Naphthylmethylammonium-Methylammonium Lead Iodide Perovskites with Improved Thermal Stability. <i>Scientific Reports</i> , 2020 , 10, 429 | 4.9 | 29 |
| 485 | Cesium Lead Halide Perovskite Nanocrystals Prepared by Anion Exchange for Light-Emitting Diodes. <i>ACS Applied Nano Materials</i> , 2020 , 3, 1766-1774 | 5.6 | 15 |
| 484 | Targeted Synthesis of Trimeric OrganicBromoplumbate Hybrids That Display Intrinsic, Highly Stokes-Shifted, Broadband Emission. <i>Chemistry of Materials</i> , 2020 , 32, 4431-4441 | 9.6 | 14 |
| 483 | Metal Coordination Sphere Deformation Induced Highly Stokes-Shifted, Ultra Broadband Emission in 2D Hybrid Lead-Bromide Perovskites and Investigation of Its Origin. <i>Angewandte Chemie</i> , 2020 , 132, 10883-10888 | 3.6 | 1 |
| 482 | Metal Coordination Sphere Deformation Induced Highly Stokes-Shifted, Ultra Broadband Emission in 2D Hybrid Lead-Bromide Perovskites and Investigation of Its Origin. <i>Angewandte Chemie - International Edition</i> , 2020 , 59, 10791-10796 | 16.4 | 15 |
| 481 | Highly Efficient Thermally Co-evaporated Perovskite Solar Cells and Mini-modules. <i>Joule</i> , 2020 , 4, 1035-1053 | 10.53 | 145 |
| 480 | Cubic NaSbS as an Ionic-Electronic Coupled Semiconductor for Switchable Photovoltaic and Neuromorphic Device Applications. <i>Advanced Materials</i> , 2020 , 32, e1906976 | 24 | 15 |
| 479 | Perovskite nanostructures: Leveraging quantum effects to challenge optoelectronic limits. <i>Materials Today</i> , 2020 , 33, 122-140 | 21.8 | 16 |
| 478 | Highly stable and efficient planar perovskite solar cells using ternary metal oxide electron transport layers. <i>Journal of Power Sources</i> , 2020 , 448, 227362 | 8.9 | 14 |
| 477 | Inducing formation of a corrugated, white-light emitting 2D lead-bromide perovskite via subtle changes in templating cation. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 889-893 | 7.1 | 26 |
| 476 | Four-Terminal Perovskite on Silicon Tandem Solar Cells Optimal Measurement Schemes. <i>Energy Technology</i> , 2020 , 8, 1901267 | 3.5 | 11 |
| 475 | Bifacial, Color-Tunable Semitransparent Perovskite Solar Cells for Building-Integrated Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 484-493 | 9.5 | 44 |
| 474 | Interlayer Engineering for Flexible Large-Area Planar Perovskite Solar Cells. <i>ACS Applied Energy Materials</i> , 2020 , 3, 777-784 | 6.1 | 5 |
| 473 | Design of Perovskite Thermally Co-Evaporated Highly Efficient Mini-Modules with High Geometrical Fill Factors. <i>Solar Rrl</i> , 2020 , 4, 2000473 | 7.1 | 19 |
| 472 | Potassium Acetate-Based Treatment for Thermally Co-Evaporated Perovskite Solar Cells. <i>Coatings</i> , 2020 , 10, 1163 | 2.9 | 5 |
| 471 | Performance Enhanced Light-Emitting Diodes Fabricated from Nanocrystalline CsPbBr ₃ with In Situ Zn ²⁺ Addition. <i>ACS Applied Electronic Materials</i> , 2020 , 2, 4002-4011 | 4 | 16 |
| 470 | Investigating the structurefunction relationship in triple cation perovskite nanocrystals for light-emitting diode applications. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 11805-11821 | 7.1 | 17 |

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|-----|---|------|----|
| 469 | Hybrid organic/inorganic halide perovskites for scaled-in neuromorphic devices. <i>MRS Bulletin</i> , 2020 , 45, 641-648 | 3.2 | 12 |
| 468 | White Electroluminescence from Perovskite/Organic Heterojunction. <i>ACS Energy Letters</i> , 2020 , 5, 2690-2697 | 9.1 | 9 |
| 467 | Disordered Polymer Antireflective Coating for Improved Perovskite Photovoltaics. <i>ACS Photonics</i> , 2020 , 7, 1971-1977 | 6.3 | 8 |
| 466 | Lead Halide Perovskite Nanocrystals: Room Temperature Syntheses toward Commercial Viability. <i>Advanced Energy Materials</i> , 2020 , 10, 2001349 | 21.8 | 29 |
| 465 | Design of 2D Templating Molecules for Mixed-Dimensional Perovskite Light-Emitting Diodes. <i>Chemistry of Materials</i> , 2020 , 32, 8097-8105 | 9.6 | 12 |
| 464 | Realizing Reduced Imperfections via Quantum Dots Interdiffusion in High Efficiency Perovskite Solar Cells. <i>Advanced Materials</i> , 2020 , 32, e2003296 | 24 | 33 |
| 463 | Halide Perovskite Quantum Dots Photosensitized-Amorphous Oxide Transistors for Multimodal Synapses. <i>Advanced Materials Technologies</i> , 2020 , 5, 2000514 | 6.8 | 15 |
| 462 | Enhanced stability and photovoltaic performance of planar perovskite solar cells through anilinium thiobenzoate interfacial engineering. <i>Journal of Power Sources</i> , 2020 , 479, 228811 | 8.9 | 4 |
| 461 | Designing the Perovskite Structural Landscape for Efficient Blue Emission. <i>ACS Energy Letters</i> , 2020 , 5, 1593-1600 | 20.1 | 36 |
| 460 | Broadband emission from zero-dimensional CsPbI perovskite nanocrystals.. <i>RSC Advances</i> , 2020 , 10, 13431-13435 | 13.7 | 35 |
| 459 | Large area, high efficiency and stable perovskite solar cells enabled by fine control of intermediate phase. <i>Solar Energy Materials and Solar Cells</i> , 2019 , 201, 110113 | 6.4 | 8 |
| 458 | Indirect tail states formation by thermal-induced polar fluctuations in halide perovskites. <i>Nature Communications</i> , 2019 , 10, 484 | 17.4 | 58 |
| 457 | Effects of energetics with {001} facet-dominant anatase TiO ₂ scaffold on electron transport in CH ₃ NH ₃ PbI ₃ perovskite solar cells. <i>Electrochimica Acta</i> , 2019 , 300, 445-454 | 6.7 | 11 |
| 456 | Completely Solvent-free Protocols to Access Phase-Pure, Metastable Metal Halide Perovskites and Functional Photodetectors from the Precursor Salts. <i>iScience</i> , 2019 , 16, 312-325 | 6.1 | 46 |
| 455 | Evolution of Perovskite Crystallization in Printed Mesoscopic Perovskite Solar Cells. <i>Energy Technology</i> , 2019 , 7, 1900343 | 3.5 | 12 |
| 454 | Comprehensive energy poverty index: Measuring energy poverty and identifying micro-level solutions in South and Southeast Asia. <i>Energy Policy</i> , 2019 , 132, 379-391 | 7.2 | 28 |
| 453 | Role of Water in Suppressing Recombination Pathways in CH ₃ NH ₃ PbI Perovskite Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 25474-25482 | 9.5 | 21 |
| 452 | Self-assembly of a robust hydrogen-bonded octylphosphonate network on cesium lead bromide perovskite nanocrystals for light-emitting diodes. <i>Nanoscale</i> , 2019 , 11, 12370-12380 | 7.7 | 42 |

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| 451 | Perovskites for Next-Generation Optical Sources. <i>Chemical Reviews</i> , 2019 , 119, 7444-7477 | 68.1 | 391 |
| 450 | Improved photovoltaic performance of triple-cation mixed-halide perovskite solar cells with binary trivalent metals incorporated into the titanium dioxide electron transport layer. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 5028-5036 | 7.1 | 32 |
| 449 | Stable Sn doped FAPbI nanocrystals for near-infrared LEDs. <i>Chemical Communications</i> , 2019 , 55, 5451-5458 | 4.8 | 13 |
| 448 | Localized Traps Limited Recombination in Lead Bromide Perovskites. <i>Advanced Energy Materials</i> , 2019 , 9, 1803119 | 21.8 | 17 |
| 447 | Si photocathode with Ag-supported dendritic Cu catalyst for CO ₂ reduction. <i>Energy and Environmental Science</i> , 2019 , 12, 1068-1077 | 35.4 | 58 |
| 446 | Importance of Functional Groups in Cross-Linking Methoxysilane Additives for High-Efficiency and Stable Perovskite Solar Cells. <i>ACS Energy Letters</i> , 2019 , 4, 2192-2200 | 20.1 | 80 |
| 445 | Ultrafast long-range spin-funneling in solution-processed Ruddlesden-Popper halide perovskites. <i>Nature Communications</i> , 2019 , 10, 3456 | 17.4 | 22 |
| 444 | Highly Efficient Semitransparent Perovskite Solar Cells for Four Terminal Perovskite-Silicon Tandems. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 34178-34187 | 9.5 | 43 |
| 443 | High-throughput Computational Study of Halide Double Perovskite Inorganic Compounds. <i>Chemistry of Materials</i> , 2019 , 31, 5392-5401 | 9.6 | 46 |
| 442 | Cesium Oleate Passivation for Stable Perovskite Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 27882-27889 | 9.5 | 8 |
| 441 | Perturbation-Induced Seeding and Crystallization of Hybrid Perovskites over Surface-Modified Substrates for Optoelectronic Devices. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 27727-27734 | 9.5 | 6 |
| 440 | Heterogeneous electron transporting layer for reproducible, efficient and stable planar perovskite solar cells. <i>Journal of Power Sources</i> , 2019 , 437, 226907 | 8.9 | 7 |
| 439 | Cesium Copper Iodide Tailored Nanoplates and Nanorods for Blue, Yellow, and White Emission. <i>Chemistry of Materials</i> , 2019 , 31, 9003-9011 | 9.6 | 65 |
| 438 | Cu-doped nickel oxide interface layer with nanoscale thickness for efficient and highly stable printable carbon-based perovskite solar cell. <i>Solar Energy</i> , 2019 , 182, 225-236 | 6.8 | 32 |
| 437 | Small-area Passivated Contact monoPolyTM Silicon Solar Cells for Tandem Device Integration 2019 , | | 1 |
| 436 | Hot carrier extraction in CH ₃ NH ₃ PbI ₃ unveiled by pump-push-probe spectroscopy. <i>Science Advances</i> , 2019 , 5, eaax3620 | 14.3 | 37 |
| 435 | Regulating Vertical Domain Distribution in Ruddlesden-Popper Perovskites for Electroluminescence Devices. <i>Journal of Physical Chemistry Letters</i> , 2019 , 10, 7949-7955 | 6.4 | 3 |
| 434 | Improved Photovoltaic Efficiency and Amplified Photocurrent Generation in Mesoporous n = 1 Two-Dimensional LeadIodide Perovskite Solar Cells. <i>Chemistry of Materials</i> , 2019 , 31, 890-898 | 9.6 | 39 |

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| 433 | Perovskite Nanoparticles: Synthesis, Properties, and Novel Applications in Photovoltaics and LEDs. <i>Small Methods</i> , 2019 , 3, 1800231 | 12.8 | 51 |
| 432 | Precursor non-stoichiometry to enable improved CH ₃ NH ₃ PbBr ₃ nanocrystal LED performance. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 5918-5925 | 3.6 | 5 |
| 431 | Crown Ethers Enable Room-Temperature Synthesis of CsPbBr ₃ Quantum Dots for Light-Emitting Diodes. <i>ACS Energy Letters</i> , 2018 , 3, 526-531 | 20.1 | 77 |
| 430 | Perovskite templating via a bathophenanthroline additive for efficient light-emitting devices. <i>Journal of Materials Chemistry C</i> , 2018 , 6, 2295-2302 | 7.1 | 11 |
| 429 | Limitations of CsBiI ₃ as Lead-Free Photovoltaic Absorber Materials. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 35000-35007 | 9.5 | 85 |
| 428 | One-Step Inkjet Printed Perovskite in Air for Efficient Light Harvesting. <i>Solar Rrl</i> , 2018 , 2, 1700217 | 7.1 | 68 |
| 427 | Enhancing moisture tolerance in efficient hybrid 3D/2D perovskite photovoltaics. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 2122-2128 | 13 | 123 |
| 426 | Spinel CoO nanomaterials for efficient and stable large area carbon-based printed perovskite solar cells. <i>Nanoscale</i> , 2018 , 10, 2341-2350 | 7.7 | 70 |
| 425 | Grain Size Modulation and Interfacial Engineering of CH ₃ NH ₃ PbBr ₃ Emitter Films through Incorporation of Tetraethylammonium Bromide. <i>ChemPhysChem</i> , 2018 , 19, 1075-1080 | 3.2 | 11 |
| 424 | Enhanced Exciton and Photon Confinement in Ruddlesden-Popper Perovskite Microplatelets for Highly Stable Low-Threshold Polarized Lasing. <i>Advanced Materials</i> , 2018 , 30, e1707235 | 24 | 73 |
| 423 | Extended Absorption Window and Improved Stability of Cesium-Based Triple-Cation Perovskite Solar Cells Passivated with Perfluorinated Organics. <i>ACS Energy Letters</i> , 2018 , 3, 1068-1076 | 20.1 | 38 |
| 422 | Additive Selection Strategy for High Performance Perovskite Photovoltaics. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 13884-13893 | 3.8 | 46 |
| 421 | Self-assembled hierarchical nanostructured perovskites enable highly efficient LEDs via an energy cascade. <i>Energy and Environmental Science</i> , 2018 , 11, 1770-1778 | 35.4 | 113 |
| 420 | Influence of size and shape of sub-micrometer light scattering centers in ZnO-assisted TiO ₂ photoanode for dye-sensitized solar cells. <i>Physica B: Condensed Matter</i> , 2018 , 532, 225-229 | 2.8 | 10 |
| 419 | Coherent Spin and Quasiparticle Dynamics in Solution-Processed Layered 2D Lead Halide Perovskites. <i>Advanced Science</i> , 2018 , 5, 1800664 | 13.6 | 38 |
| 418 | Inducing Panchromatic Absorption and Photoconductivity in Polycrystalline Molecular 1D Lead-Iodide Perovskites through π -Stacked Viologens. <i>Chemistry of Materials</i> , 2018 , 30, 5827-5830 | 9.6 | 21 |
| 417 | Effect of Cation Composition on the Mechanical Stability of Perovskite Solar Cells. <i>Advanced Energy Materials</i> , 2018 , 8, 1702116 | 21.8 | 84 |
| 416 | Ab Initio and First Principles Studies of Halide Perovskites 2018 , 25-53 | | |

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| 415 | Excitronics in 2D Perovskites 2018 , 55-79 | | 2 |
| 414 | Working Principles of Perovskite Solar Cells 2018 , 81-99 | | 1 |
| 413 | The Photophysics of Halide Perovskite Solar Cells 2018 , 101-130 | | 0 |
| 412 | Charge-Selective Contact Materials for Perovskite Solar Cells (PSCs) 2018 , 131-153 | | |
| 411 | Beyond Methylammonium Lead Iodide Perovskite 2018 , 155-181 | | |
| 410 | Halide Perovskite Tandem Solar Cells 2018 , 183-197 | | |
| 409 | Perovskite Light-Emitting Devices [Fundamentals and Working Principles 2018 , 199-221 | | |
| 408 | Toward Electrically Driven Perovskite Lasers [Prospects and Obstacles 2018 , 223-247 | | |
| 407 | Novel Spin Physics in Organic-Inorganic Perovskites 2018 , 249-271 | | 1 |
| 406 | Perovskite Solar Cells for Photoelectrochemical Water Splitting and CO ₂ Reduction 2018 , 273-292 | | 1 |
| 405 | Ultrafast THz photophysics of solvent engineered triple-cation halide perovskites. <i>Journal of Applied Physics</i> , 2018 , 124, 215106 | 2.5 | 4 |
| 404 | Highly Efficient Perovskite Solar Cells with Ba(OH) ₂ Interface Modification of Mesoporous TiO ₂ Electron Transport Layer. <i>ACS Applied Energy Materials</i> , 2018 , 1, 5847-5852 | 6.1 | 9 |
| 403 | Carrier cascade: Enabling high performance perovskite light-emitting diodes (PeLEDs). <i>Current Opinion in Electrochemistry</i> , 2018 , 11, 91-97 | 7.2 | 6 |
| 402 | Low threshold and efficient multiple exciton generation in halide perovskite nanocrystals. <i>Nature Communications</i> , 2018 , 9, 4197 | 17.4 | 74 |
| 401 | Ultralow Power Dual-Gated Subthreshold Oxide Neuristors: An Enabler for Higher Order Neuronal Temporal Correlations. <i>ACS Nano</i> , 2018 , 12, 11263-11273 | 16.7 | 50 |
| 400 | Superior Performance of Silver Bismuth Iodide Photovoltaics Fabricated via Dynamic Hot-Casting Method under Ambient Conditions. <i>Advanced Energy Materials</i> , 2018 , 8, 1802051 | 21.8 | 48 |
| 399 | Ionotronic Halide Perovskite Drift-Diffusive Synapses for Low-Power Neuromorphic Computation. <i>Advanced Materials</i> , 2018 , 30, e1805454 | 24 | 91 |
| 398 | Efficient and Ambient-Air-Stable Solar Cell with Highly Oriented 2D@3D Perovskites. <i>Advanced Functional Materials</i> , 2018 , 28, 1801654 | 15.6 | 76 |

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| 397 | Recovery of Shallow Charge-Trapping Defects in CsPbX ₃ Nanocrystals through Specific Binding and Encapsulation with Amino-Functionalized Silanes. <i>ACS Energy Letters</i> , 2018 , 3, 1409-1414 | 20.1 | 44 |
| 396 | Nitrogen doped cuprous oxide as low cost hole-transporting material for perovskite solar cells. <i>Scripta Materialia</i> , 2018 , 153, 104-108 | 5.6 | 13 |
| 395 | Novel Plasma-Assisted Low-Temperature-Processed SnO ₂ Thin Films for Efficient Flexible Perovskite Photovoltaics. <i>ACS Energy Letters</i> , 2018 , 3, 1482-1491 | 20.1 | 56 |
| 394 | Inducing Isotropic Growth in Multidimensional Cesium Lead Halide Perovskite Nanocrystals. <i>ChemPlusChem</i> , 2018 , 83, 514-520 | 2.8 | 8 |
| 393 | Doping and Switchable Photovoltaic Effect in Lead-Free Perovskites Enabled by Metal Cation Transmutation. <i>Advanced Materials</i> , 2018 , 30, e1802080 | 24 | 21 |
| 392 | Bistable Amphoteric Native Defect Model of Perovskite Photovoltaics. <i>Journal of Physical Chemistry Letters</i> , 2018 , 9, 3878-3885 | 6.4 | 11 |
| 391 | Designing Efficient Energy Funneling Kinetics in Ruddlesden-Popper Perovskites for High-Performance Light-Emitting Diodes. <i>Advanced Materials</i> , 2018 , 30, e1800818 | 24 | 57 |
| 390 | Over 20% Efficient CIGS/Perovskite Tandem Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 807-812 | 20.1 | 109 |
| 389 | Slow cooling and highly efficient extraction of hot carriers in colloidal perovskite nanocrystals. <i>Nature Communications</i> , 2017 , 8, 14350 | 17.4 | 196 |
| 388 | Polaron self-localization in white-light emitting hybrid perovskites. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 2771-2780 | 7.1 | 155 |
| 387 | Rational Design: A High-Throughput Computational Screening and Experimental Validation Methodology for Lead-Free and Emergent Hybrid Perovskites. <i>ACS Energy Letters</i> , 2017 , 2, 837-845 | 20.1 | 142 |
| 386 | Temperature and Electrical Poling Effects on Ionic Motion in MAPbI ₃ Photovoltaic Cells. <i>Advanced Energy Materials</i> , 2017 , 7, 1700265 | 21.8 | 19 |
| 385 | Giant five-photon absorption from multidimensional core-shell halide perovskite colloidal nanocrystals. <i>Nature Communications</i> , 2017 , 8, 15198 | 17.4 | 124 |
| 384 | Rapid Crystallization of All-Inorganic CsPbBr Perovskite for High-Brightness Light-Emitting Diodes. <i>ACS Omega</i> , 2017 , 2, 2757-2764 | 3.9 | 26 |
| 383 | Facile Method to Reduce Surface Defects and Trap Densities in Perovskite Photovoltaics. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 21292-21297 | 9.5 | 54 |
| 382 | Morphology-Independent Stable White-Light Emission from Self-Assembled Two-Dimensional Perovskites Driven by Strong Exciton-Phonon Coupling to the Organic Framework. <i>Chemistry of Materials</i> , 2017 , 29, 3947-3953 | 9.6 | 146 |
| 381 | Enhanced Efficiency of Dye-Sensitized Solar Cells with Mesoporous/Macroporous TiO ₂ Photoanode Obtained Using ZnO Template. <i>Journal of Electronic Materials</i> , 2017 , 46, 3801-3807 | 1.9 | 11 |
| 380 | Ruddlesden-Popper Perovskite Solar Cells. <i>Chem</i> , 2017 , 2, 326-327 | 16.2 | 24 |

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|-----|--|------|-----|
| 379 | 2D black phosphorous nanosheets as a hole transporting material in perovskite solar cells. <i>Journal of Power Sources</i> , 2017 , 371, 156-161 | 8.9 | 37 |
| 378 | Highly efficient Cs-based perovskite light-emitting diodes enabled by energy funnelling. <i>Chemical Communications</i> , 2017 , 53, 12004-12007 | 5.8 | 71 |
| 377 | Modulating Excitonic Recombination Effects through One-Step Synthesis of Perovskite Nanoparticles for Light-Emitting Diodes. <i>ChemSusChem</i> , 2017 , 10, 3818-3824 | 8.3 | 12 |
| 376 | Highly Selective Solar Thermal Sprayable Coating Based on Carbon Nanotubes. <i>Solar Rrl</i> , 2017 , 1, 17000801 | 9.1 | 10 |
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