

# Hong Li

## List of Publications by Year in descending order

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Version: 2024-02-01

44  
papers

7,986  
citations

249298

26  
h-index

263392

45  
g-index

48  
all docs

48  
docs citations

48  
times ranked

16135  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Engineering of flat bands and Dirac bands in two-dimensional covalent organic frameworks (COFs): relationships among molecular orbital symmetry, lattice symmetry, and electronic-structure characteristics. <i>Materials Horizons</i> , 2022, 9, 88-98. | 6.4  | 33        |
| 2  | Evolution of the Nature of Excitons and Electronic Couplings in Hybrid 2D Perovskites as a Function of Organic Cation $\pi$ -Conjugation. <i>Advanced Functional Materials</i> , 2022, 32, 2108662.  | 7.8  | 15        |
| 3  | Controlled $n$ -Doping of Naphthalene-Imide-Based 2D Polymers. <i>Advanced Materials</i> , 2022, 34, e2101932.   | 11.1 | 13        |
| 4  | Engineering Surface Orientations for Efficient and Stable Hybrid Perovskite Single-Crystal Solar Cells. <i>ACS Energy Letters</i> , 2022, 7, 1544-1552.  | 8.8  | 24        |
| 5  | Organic self-assembled monolayers on superconducting NbSe <sub>2</sub> : interfacial electronic structure and energetics*. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 294003.  | 0.7  | 2         |
| 6  | Thermally conductive ultra-low- $k$ dielectric layers based on two-dimensional covalent organic frameworks. <i>Nature Materials</i> , 2021, 20, 1142-1148.   | 13.3 | 158       |
| 7  | Impact of Imine Bond Orientations on the Geometric and Electronic Structures of Imine-based Covalent Organic Frameworks. <i>Chemistry - an Asian Journal</i> , 2021, 16, 3781-3789.  | 1.7  | 14        |
| 8  | Revealing the Local Electronic Structure of a Single-Layer Covalent Organic Framework through Electronic Decoupling. <i>Nano Letters</i> , 2020, 20, 963-970.  | 4.5  | 28        |
| 9  | Humidity Sensing through Reversible Isomerization of a Covalent Organic Framework. <i>Journal of the American Chemical Society</i> , 2020, 142, 783-791.   | 6.6  | 190       |
| 10 | Doping Modulation of the Charge Injection Barrier between a Covalent Organic Framework Monolayer and Graphene. <i>Chemistry of Materials</i> , 2020, 32, 9228-9237.  | 3.2  | 18        |
| 11 | Mechanism of Formation of Benzotrithiophene-Based Covalent Organic Framework Monolayers on Coinage-Metal Surfaces: C-C Coupling Selectivity and Monomer-Metal Interactions. <i>Chemistry of Materials</i> , 2020, 32, 10688-10696.                       | 3.2  | 6         |
| 12 | Electronically Coupled 2D Polymer/MoS <sub>2</sub> Heterostructures. <i>Journal of the American Chemical Society</i> , 2020, 142, 21131-21139.   | 6.6  | 25        |
| 13 | Structural and Electronic Impact of an Asymmetric Organic Ligand in Diammonium Lead Iodide Perovskites. <i>Advanced Energy Materials</i> , 2020, 10, 1903900.  | 10.2 | 17        |
| 14 | Pathway Complexity in the Stacking of Imine-Linked Macrocycles Related to Two-Dimensional Covalent Organic Frameworks. <i>Chemistry of Materials</i> , 2019, 31, 7104-7111.  | 3.2  | 22        |
| 15 | Dynamically Switching the Electronic and Electrostatic Properties of Indium-Tin Oxide Electrodes with Photochromic Monolayers: Toward Photoswitchable Optoelectronic Devices. <i>ACS Applied Nano Materials</i> , 2019, 2, 1102-1110.                    | 2.4  | 20        |
| 16 | Quantum Well Energetics of an $n = 2$ Ruddlesden-Popper Phase Perovskite. <i>Advanced Energy Materials</i> , 2019, 9, 1901005.   | 10.2 | 25        |
| 17 | Design and synthesis of two-dimensional covalent organic frameworks with four-arm cores: prediction of remarkable ambipolar charge-transport properties. <i>Materials Horizons</i> , 2019, 6, 1868-1876.   | 6.4  | 62        |
| 18 | Emergence of an Antiferromagnetic Mott Insulating Phase in Hexagonal $\pi$ -Conjugated Covalent Organic Frameworks. <i>Advanced Materials</i> , 2019, 31, e1900355.  | 11.1 | 37        |

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|----|---|------|-----------|
| 19 | Electronic Structure of Two-Dimensional $\pi$ -Conjugated Covalent Organic Frameworks. <i>Chemistry of Materials</i> , 2019, 31, 3051-3065.   | 3.2  | 105       |
| 20 | Local Electronic Structure of Molecular Heterojunctions in a Single-Layer 2D Covalent Organic Framework. <i>Advanced Materials</i> , 2019, 31, e1805941.  | 11.1 | 74        |
| 21 | Impact of Organic Spacers on the Carrier Dynamics in 2D Hybrid Lead-Halide Perovskites. <i>ACS Energy Letters</i> , 2019, 4, 17-25.   | 8.8  | 44        |
| 22 | Quantitative relations between interaction parameter, miscibility and function in organic solar cells. <i>Nature Materials</i> , 2018, 17, 253-260.   | 13.3 | 556       |
| 23 | Characterization of the Valence and Conduction Band Levels of $n = 1$ 2D Perovskites: A Combined Experimental and Theoretical Investigation. <i>Advanced Energy Materials</i> , 2018, 8, 1703468.                                 | 10.2 | 76        |
| 24 | Local Electronic Structure of a Single-Layer Porphyrin-Containing Covalent Organic Framework. <i>ACS Nano</i> , 2018, 12, 385-391.  | 7.3  | 68        |
| 25 | Layer-Dependent Rashba Band Splitting in 2D Hybrid Perovskites. <i>Chemistry of Materials</i> , 2018, 30, 8538-8545.  | 3.2  | 92        |
| 26 | Excitonic and Polaronic Properties of 2D Hybrid Organic-Inorganic Perovskites. <i>ACS Energy Letters</i> , 2017, 2, 417-423.  | 8.8  | 140       |
| 27 | Reduction of the Work Function of Gold by N-Heterocyclic Carbenes. <i>Chemistry of Materials</i> , 2017, 29, 3403-3411.   | 3.2  | 76        |
| 28 | Impact of interfacial molecular orientation on radiative recombination and charge generation efficiency. <i>Nature Communications</i> , 2017, 8, 79.  | 5.8  | 198       |
| 29 | Comparison of the Impact of Zinc Vacancies on Charge Separation and Charge Transfer at ZnO/Hexithienyl and ZnO/Fullerene Interfaces. <i>Advanced Materials</i> , 2016, 28, 3928-3936.   | 11.1 | 26        |
| 30 | Phosphonic Acids for Interfacial Engineering of Transparent Conductive Oxides. <i>Chemical Reviews</i> , 2016, 116, 7117-7158.  | 23.0 | 189       |
| 31 | Effect of Molecular Packing and Charge Delocalization on the Nonradiative Recombination of Charge-Transfer States in Organic Solar Cells. <i>Advanced Energy Materials</i> , 2016, 6, 1601325.                                    | 10.2 | 103       |
| 32 | Defect-Driven Interfacial Electronic Structures at an Organic/Metal-Oxide Semiconductor Heterojunction. <i>Advanced Materials</i> , 2014, 26, 4711-4716.  | 11.1 | 46        |
| 33 | Tailoring Electron-Transfer Barriers for Zinc Oxide/ $C_{60}$ Fullerene Interfaces. <i>Advanced Functional Materials</i> , 2014, 24, 7381-7389.   | 7.8  | 54        |
| 34 | Competing Effects of Fluorination on the Orientation of Aromatic and Aliphatic Phosphonic Acid Monolayers on Indium Tin Oxide. <i>Journal of Physical Chemistry C</i> , 2013, 117, 15139-15147.                                   | 1.5  | 40        |
| 35 | Orientation of Phenylphosphonic Acid Self-Assembled Monolayers on a Transparent Conductive Oxide: A Combined NEXAFS, PM-IRRAS, and DFT Study. <i>Langmuir</i> , 2013, 29, 2166-2174.  | 1.6  | 61        |
| 36 | Work-Function Modification of Au and Ag Surfaces upon Deposition of Self-Assembled Monolayers: Influence of the Choice of the Theoretical Approach and the Thiol Decomposition Scheme. <i>ChemPhysChem</i> , 2013, 14, 2939-2946. | 1.0  | 14        |

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|----|--|------|-----------|
| 37 | Binding Modes of Fluorinated Benzylphosphonic Acids on the Polar ZnO Surface and Impact on Work Function. <i>Journal of Physical Chemistry C</i> , 2012, 116, 19125-19133.   | 1.5  | 56        |
| 38 | Single-Layer MoS <sub>2</sub> Phototransistors. <i>ACS Nano</i> , 2012, 6, 74-80.  | 7.3  | 3,103     |
| 39 | A Universal Method to Produce Low-Work Function Electrodes for Organic Electronics. <i>Science</i> , 2012, 336, 327-332.   | 6.0  | 1,878     |
| 40 | Surface Modification of Indium-Tin Oxide Via Self-Assembly of a Donor-Acceptor Complex: A Density Functional Theory Study. <i>Advanced Materials</i> , 2012, 24, 687-693.  | 11.1 | 10        |
| 41 | Theoretical study of the surface modification of indium tin oxide with trifluorophenyl phosphonic acid molecules: impact of coverage density and binding geometry. <i>Journal of Materials Chemistry</i> , 2010, 20, 2630.   | 6.7  | 76        |
| 42 | Modification of the Surface Properties of Indium Tin Oxide with Benzylphosphonic Acids: A Joint Experimental and Theoretical Study. <i>Advanced Materials</i> , 2009, 21, 4496-4501.   | 11.1 | 152       |
| 43 | Electronic structure of the pentacene-gold interface: A density-functional theory study. <i>Organic Electronics</i> , 2009, 10, 1571-1578.   | 1.4  | 25        |
| 44 | Electronic structure of self-assembled (fluoro)methylthiol monolayers on the Au(111) surface: Impact of fluorination and coverage density. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2009, 174, 70-77. | 0.8  | 12        |