

# Zeyu Deng

## List of Publications by Year in descending order

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Version: 2024-02-01

25  
papers

1,782  
citations

471509

17  
h-index

642732

23  
g-index

33  
all docs

33  
docs citations

33  
times ranked

2251  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Synthesis and Properties of a Lead-Free Hybrid Double Perovskite: $(\text{CH}_3\text{NH}_3)_2\text{AgBiBr}_6$ . Chemistry of Materials, 2017, 29, 1089-1094.   | 6.7  | 290       |
| 2  | The synthesis, structure and electronic properties of a lead-free hybrid inorganic-organic double perovskite $(\text{MA})_2\text{KBiCl}_6$ (MA = methylammonium). Materials Horizons, 2016, 3, 328-332.  | 12.2 | 284       |
| 3  | Exploring the properties of lead-free hybrid double perovskites using a combined computational-experimental approach. Journal of Materials Chemistry A, 2016, 4, 12025-12029.  | 10.3 | 250       |
| 4  | Improving the Acidic Stability of Zeolitic Imidazolate Frameworks by Biofunctional Molecules. Chem, 2019, 5, 1597-1608.  | 11.7 | 148       |
| 5  | Enhanced visible light absorption for lead-free double perovskite $\text{Cs}_2\text{AgSbBr}_6$ . Chemical Communications, 2019, 55, 3721-3724.   | 4.1  | 117       |
| 6  | Elastic properties and thermal expansion of lead-free halide double perovskite $\text{Cs}_2\text{AgBiBr}_6$ . Computational Materials Science, 2018, 141, 49-58.   | 3.0  | 87        |
| 7  | Halogenated Metal-Organic Framework Glasses and Liquids. Journal of the American Chemical Society, 2020, 142, 3880-3890.   | 13.7 | 83        |
| 8  | Factors Influencing the Mechanical Properties of Formamidinium Lead Halides and Related Hybrid Perovskites. ChemSusChem, 2017, 10, 3740-3745.  | 6.8  | 80        |
| 9  | Synthesis and Characterization of the Rare-Earth Hybrid Double Perovskites: $(\text{CH}_3\text{NH}_3)_2\text{KGdCl}_6$ and $(\text{CH}_3\text{NH}_3)_2\text{KYCl}_6$ . Journal of Physical Chemistry Letters, 2017, 8, 5015-5020.                            | 4.6  | 68        |
| 10 | Phase Behavior in Rhombohedral NaSiCON Electrolytes and Electrodes. Chemistry of Materials, 2020, 32, 7908-7920.   | 6.7  | 58        |
| 11 | Metal-free perovskites for non linear optical materials. Chemical Science, 2019, 10, 8187-8194.  | 7.4  | 46        |
| 12 | Variable temperature and high-pressure crystal chemistry of perovskite formamidinium lead iodide: a single crystal X-ray diffraction and computational study. Chemical Communications, 2017, 53, 7537-7540.  | 4.1  | 43        |
| 13 | The competition between mechanical stability and charge carrier mobility in MA-based hybrid perovskites: insight from DFT. Journal of Materials Chemistry C, 2018, 6, 12252-12259.   | 5.5  | 42        |
| 14 | Slow carrier relaxation in tin-based perovskite nanocrystals. Nature Photonics, 2021, 15, 696-702.   | 31.4 | 40        |
| 15 | Crystal Structure of $\text{Na}_2\text{V}_2(\text{PO}_4)_3$ , an Intriguing Phase Spotted in the $\text{Na}_3\text{V}_2(\text{PO}_4)_3$ "Na <sub>1</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> " System. Chemistry of Materials, 2022, 34, 451-462. | 6.7  | 31        |
| 16 | Phase stability and sodium-vacancy orderings in a NaSiCON electrode. Journal of Materials Chemistry A, 2021, 10, 209-217.  | 10.3 | 24        |
| 17 | Octahedral connectivity and its role in determining the phase stabilities and electronic structures of low-dimensional, perovskite-related iodoplumbates. APL Materials, 2018, 6, .  | 5.1  | 23        |
| 18 | Towards autonomous high-throughput multiscale modelling of battery interfaces. Energy and Environmental Science, 2022, 15, 579-594.  | 30.8 | 17        |

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 19 | Polymorphism in $M(H_{2}PO_{3})_{3}$ ( $M = V, Al, Ga$ ) compounds with the perovskite-related $ReO_{3}$ structure. <i>Chemical Communications</i> , 2019, 55, 2964-2967.           | 4.1  | 15        |
| 20 | <i>Ab initio</i> computation for solid-state $^{31}P$ NMR of inorganic phosphates: revisiting X-ray structures. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 10070-10074. | 2.8  | 10        |
| 21 | Understanding the Structural and Electronic Properties of Bismuth Trihalides and Related Compounds. <i>Inorganic Chemistry</i> , 2020, 59, 3377-3386.                               | 4.0  | 9         |
| 22 | Superionic Conduction in the Plastic Crystal Polymorph of $Na_{4}P_{2}S_{6}$ . <i>ACS Energy Letters</i> , 2022, 7, 1403-1411.  | 17.4 | 9         |
| 23 | Unlocking the origin of compositional fluctuations in InGaN light emitting diodes. <i>Physical Review Materials</i> , 2021, 5, .  | 2.4  | 7         |
| 24 | Factors Influencing the Mechanical Properties of Formamidinium Lead Halides and Related Hybrid Perovskites. <i>ChemSusChem</i> , 2017, 10, 3683-3683.                               | 6.8  | 0         |
| 25 | (Invited) Revisiting the Structure-Property Relationships in NaSICON Electrode and Electrolytes. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 456-456.                           | 0.0  | 0         |