

## List of Publications – Jaejun Yu

1. "Synthesis and Magnetic Properties of the Multiferroic  $[C(NH_2)_3]Cr(HCOO)_3$  Metal-Organic Framework: The Role of Spin-Orbit Coupling and Jahn-Teller Distortions," K. Yananose, E. R. Clark, P. J. Saines, P. Barone, A. Stroppa, and Jaejun Yu, *Inorganic Chemistry* 62, 17299 (2023). doi: <https://doi.org/10.1021/acs.inorgchem.3c02557>
2. "Origin of morphotropic phase boundary in thin-film  $Hf_{0.5}Zr_{0.5}O_2$  on the TiN electrode," I. Young Lee and Jaejun Yu, *Journal of Applied Physics* 134, 074102 (2023). doi: <https://doi.org/10.1063/5.0159496>
3. "Efficient discovery of multiple minimum action pathways using Gaussian process," J. Shim, J. Lee, and Jaejun Yu, *Journal of Physics Communications* 7, 025004 (2023). doi: <https://dx.doi.org/10.1088/2399-6528/acba83>
4. "Field-controlled quantum anomalous Hall effect in electron-doped  $CrSiTe_3$  monolayer," S. Kang, S. Kang, H.-S. Kim, and Jaejun Yu, *npj 2D Materials and Applications* 7, 13 (2023). doi: <https://doi.org/10.1038/s41699-023-00375-3>
5. "Activating magnetoelectric optical properties by twisting antiferromagnetic bilayers," K. Yananose, P. G. Radaelli, M. Cuoco, Jaejun Yu, and A. Stroppa, *Phys. Rev. B* 106, 184408 (2022). doi: <https://doi.org/10.1103/PhysRevB.106.184408>
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7. "Growth of bilayer  $MoTe_2$  single crystals with strong non-linear Hall effect," T. Ma, H. Chen, K. Yananose, X. Zhou, L. Wang, R. Li, Z. Zhu, Z. Wu, Q.-H. Xu, Jaejun Yu, C. W. Qiu, A. Stroppa, and K. P. Loh, *Nature Communications* 13, 5465 (2022). doi: <https://doi.org/10.1038/s41467-022-33201-3>
8. "Structure and disorder in  $MgSiO_3$  glasses above megabar pressures via nuclear magnetic resonance: DFT calculations," S. K. Lee, J.-H. Park, Y. S. Yi, S. Lee, H.-I. Kim, S.-M. Lee, and Jaejun Yu, *Journal of the American Ceramic Society* 105, 5151 (2022). doi: <https://doi.org/10.1111/jace.18481>
9. "Band gap narrowing of  $TiO_2$  nanoparticles: A passivated Co-doping approach for enhanced photocatalytic activity," S. Na-Phattalung, D. J. Harding, P. Pattanasattayavong, H. Kim, J. Lee, D.-W. Hwang, T. D. Chung, and Jaejun Yu, *Journal of Physics and Chemistry of Solids* 162, 110503 (2022). doi: <https://doi.org/10.1016/j.jpcs.2021.110503>
10. "Chirality-induced spin texture switching in twisted bilayer graphene," K. Yananose, G. Cantele, P. Lucignano, S.-W. Cheong, Jaejun Yu, and A. Stroppa, *Phys. Rev. B* 104, 075407 (2021). doi: <https://link.aps.org/doi/10.1103/PhysRevB.104.075407>
11. "Inevitable high density of oxygen vacancies at the surface of polar-nonpolar perovskite heterostructures  $LaAlO_3/SrTiO_3$ ," Y. Li, X. Wei, and Jaejun Yu, *Journal of Applied Physics* 127, 205302 (2020). doi: <https://doi.org/10.1063/1.5128080>
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13. "Superstructures of Se adsorbates on  $Au(111)$ : Scanning tunneling microscopy and spectroscopy study," M. Lee, S. Kang, M. Oh, J. Chae, Jaejun Yu, and Y. Kuk, *Surface Science* 685, 19 (2019). doi: <https://doi.org/10.1016/j.susc.2019.03.002>
14. "A Room-Temperature Ferroelectric Ferromagnet in a 1D Tetrahedral Chain Network," K. T. Kang, C. J. Roh, J. Lim, T. Min, J. H. Lee, K. Lee, T. Y. Lee, S. Kang, D. Seol, J. Kim, H. Ohta, A. Khare, S. Park,

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  24. "Magnetic states and intervalence charge transfer of Ti and Fe defects in  $\alpha\text{-Al}_2\text{O}_3$ : The origin of the blue in sapphire", Sutassana Na-Phattalung, Sukit Limpijumnong, Jiraroj T-Thienprasert, and Jaejun Yu, *Acta Materialia* 143, 248 - 256 (2018.Jan). doi: <https://doi.org/10.1016/j.actamat.2017.10.006>
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  29. "Ab Initio Study of Elastic Properties of High-Pressure Polymorphs of CO<sub>2</sub> Phases II and V", Jae-Hyeon Parq, Sung Keun Lee, Sang-Mook Lee, and Jaejun Yu, *The Journal of Physical Chemistry C* **120**, 23152 (2016.Sep). doi: [10.1021/acs.jpcc.6b07833](https://doi.org/10.1021/acs.jpcc.6b07833)
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