

## List of Publications – Jaejun Yu

1. "Strain-tuned ferroelectric transitions in HfO<sub>2</sub>: role of  $X_2^-$  mode in ferroelectric instabilities", I. Lee, W. Lee, and Jaejun Yu, npj Quantum Materials 11, 34 (2026).  
doi: <https://doi.org/10.1038/s41535-025-00841-9>
2. "Pressure-induced large anomalous Hall effects in a layered ferromagnet CrSiTe<sub>3</sub>", Y. Lee, C.B. Park, M. Diware, J. Yan, S. Kang, Jaejun Yu, J. Kim, and K.H. Kim, npj 2D Materials and Applications 9, 45 (2025).  
doi: <https://doi.org/10.1038/s41699-025-00567-z>
3. "Nuclear magnetic resonance properties of silica glass under pressure up to 2 Mbar: A view from ab initio calculations", Jae-Hyeon Parq, Yoo Soo Yi, Sang-Mook Lee, Jaejun Yu, and Sung Keun Lee, Journal of the American Ceramic Society 108:e20474 (2025).  
doi: <https://doi.org/10.1111/jace.20474>
4. "Synthesis and Magnetic Properties of the Multiferroic [C(NH<sub>2</sub>)<sub>3</sub>]Cr(HCOO)<sub>3</sub> 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).  
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5. "Origin of morphotropic phase boundary in thin-film Hf<sub>0.5</sub>Zr<sub>0.5</sub>O<sub>2</sub> on the TiN electrode," I. Young Lee and Jaejun Yu, Journal of Applied Physics 134, 074102 (2023).  
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6. "Efficient discovery of multiple minimum action pathways using Gaussian process," J. Shim, J. Lee, and Jaejun Yu, Journal of Physics Communications 7, 025004 (2023).  
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7. "Field-controlled quantum anomalous Hall effect in electron-doped CrSiTe<sub>3</sub> monolayer," S. Kang, S. Kang, H.-S. Kim, and Jaejun Yu, npj 2D Materials and Applications 7, 13 (2023).  
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9. "Electronic structure and magnetic properties of transition metal Kagome metal-organic frameworks," S. Kang and Jaejun Yu, Phys. Chem. Chem. Phys. 24, 22168 (2022).  
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10. "Growth of bilayer MoTe<sub>2</sub> 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>
11. "Structure and disorder in MgSiO<sub>3</sub> glasses above megabar pressures via nuclear magnetic resonance: DFT calculations," S. K. Lee, J.-H. Parq, Y. S. Yi, S. Lee, H.-I. Kim, S.-M. Lee, and Jaejun Yu, Journal of the American Ceramic Society 105, 5151 (2022).  
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13. "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).  
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14. "Inevitable high density of oxygen vacancies at the surface of polar--nonpolar perovskite heterostructures  $\text{LaAlO}_3/\text{SrTiO}_3$ ," Y. Li, X. Wei, and Jaejun Yu, *Journal of Applied Physics* 127, 205302 (2020).  
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25. "Band gap and mobility of epitaxial perovskite  $\text{BaSn}_{1-x}\text{Hf}_x\text{O}_3$  thin films", Juyeon Shin, Jinyoung Lim, Taewoo Ha, Young Mo Kim, Chulkwon Park, Jaejun Yu, Jae Hoon Kim, and Kookrin Char, *Phys. Rev. Materials* 2, 021601 (2018.Feb).  
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