

## Bai Yang Wang

Ph.D. Student in Physics, admitted Autumn 2016

### Publications

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#### PUBLICATIONS

- **Isotropic Pauli-limited superconductivity in the infinite-layer nickelate Nd<sub>0.775</sub>Sr<sub>0.225</sub>NiO<sub>2</sub>** *NATURE PHYSICS*  
Wang, B., Li, D., Goodge, B. H., Lee, K., Osada, M., Harvey, S. P., Kourkoutis, L. F., Beasley, M. R., Hwang, H. Y.  
2021
- **Superconducting Dome in Nd<sub>1-x</sub>Sr<sub>x</sub>NiO<sub>2</sub> Infinite Layer Films** *PHYSICAL REVIEW LETTERS*  
Li, D., Wang, B., Lee, K., Harvey, S. P., Osada, M., Goodge, B. H., Kourkoutis, L. F., Hwang, H. Y.  
2020; 125 (2)
- **Superconductivity in an infinite-layer nickelate.** *Nature*  
Li, D., Lee, K., Wang, B. Y., Osada, M., Crossley, S., Lee, H. R., Cui, Y., Hikita, Y., Hwang, H. Y.  
2019; 572 (7771): 624–27
- **Stabilization of Sr<sub>3</sub>Al<sub>2</sub>O<sub>6</sub> Growth Templates for Ex Situ Synthesis of Freestanding Crystalline Oxide Membranes.** *Nano letters*  
Li, D., Adamo, C., Wang, B. Y., Yoon, H., Chen, Z., Hong, S. S., Lu, D., Cui, Y., Hikita, Y., Hwang, H. Y.  
2021
- **Epitaxial Stabilization and Oxygen Evolution Reaction Activity of Metastable Columbite Iridium Oxide** *ACS APPLIED ENERGY MATERIALS*  
Lee, K., Flores, R. A., Liu, Y., Wang, B., Hikita, Y., Sinclair, R., Bajdich, M., Hwang, H. Y.  
2021; 4 (4): 3074-3082
- **Universal behavior of the bosonic metallic ground state in a two-dimensional superconductor** *NPJ QUANTUM MATERIALS*  
Chen, Z., Wang, B., Swartz, A. G., Yoon, H., Hikita, Y., Raghu, S., Hwang, H. Y.  
2021; 6 (1)
- **Doping evolution of the Mott-Hubbard landscape in infinite-layer nickelates.** *Proceedings of the National Academy of Sciences of the United States of America*  
Goodge, B. H., Li, D., Lee, K., Osada, M., Wang, B. Y., Sawatzky, G. A., Hwang, H. Y., Kourkoutis, L. F.  
2021; 118 (2)
- **Phase diagram of infinite layer praseodymium nickelate Pr<sub>1-x</sub>Sr<sub>x</sub>NiO<sub>2</sub> thin films** *PHYSICAL REVIEW MATERIALS*  
Osada, M., Wang, B., Lee, K., Li, D., Hwang, H. Y.  
2020; 4 (12)
- **A Superconducting Praseodymium Nickelate with Infinite Layer Structure.** *Nano letters*  
Osada, M., Wang, B. Y., Goodge, B. H., Lee, K., Yoon, H., Sakuma, K., Li, D., Miura, M., Kourkoutis, L. F., Hwang, H. Y.  
2020
- **Aspects of the synthesis of thin film superconducting infinite-layer nickelates** *APL MATERIALS*  
Lee, K., Goodge, B. H., Li, D., Osada, M., Wang, B., Cui, Y., Kourkoutis, L. F., Hwang, H. Y.  
2020; 8 (4)
- **Superconducting Dome in Nd<sub>1-x</sub>Sr<sub>x</sub>NiO<sub>2</sub> Infinite Layer Films.** *Physical review letters*  
Li, D. n., Wang, B. Y., Lee, K. n., Harvey, S. P., Osada, M. n., Goodge, B. H., Kourkoutis, L. F., Hwang, H. Y.  
2020; 125 (2): 027001
- **Extreme tensile strain states in La<sub>0.7</sub>Ca<sub>0.3</sub>MnO<sub>3</sub> membranes.** *Science (New York, N.Y.)*  
Hong, S. S., Gu, M. n., Verma, M. n., Harbola, V. n., Wang, B. Y., Lu, D. n., Vailionis, A. n., Hikita, Y. n., Pentcheva, R. n., Rondinelli, J. M., Hwang, H. Y.

2020; 368 (6486): 71–76

● **Strain-induced room-temperature ferroelectricity in SrTiO<sub>3</sub> membranes.** *Nature communications*

Xu, R. n., Huang, J. n., Barnard, E. S., Hong, S. S., Singh, P. n., Wong, E. K., Jansen, T. n., Harbola, V. n., Xiao, J. n., Wang, B. Y., Crossley, S. n., Lu, D. n., Liu, et al

2020; 11 (1): 3141

● **Freestanding crystalline YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-x</sub> heterostructure membranes** *PHYSICAL REVIEW MATERIALS*

Chen, Z., Wang, B., Goodge, B. H., Lu, D., Hong, S., Li, D., Kourkoutis, L. F., Hikita, Y., Hwang, H. Y.

2019; 3 (6)