

## Motoki Osada

Postdoctoral Scholar, Applied Physics

### Bio

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#### STANFORD ADVISORS

- Harold Hwang, Postdoctoral Faculty Sponsor

### Publications

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#### PUBLICATIONS

- **Insulator-to-metal crossover near the edge of the superconducting dome in Nd<sub>1-x</sub>Sr<sub>x</sub>NiO<sub>2</sub>** *PHYSICAL REVIEW RESEARCH*  
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- **Nickelate Superconductivity without Rare-Earth Magnetism: (La,Sr)NiO<sub>2</sub>**. *Advanced materials (Deerfield Beach, Fla.)*  
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2021; e2104083
- **Highly Efficient Surface Charge Transfer in Fe<sub>2</sub>TiO<sub>5</sub> Epitaxial Thin Film Photoanodes** *ACS APPLIED ENERGY MATERIALS*  
Osada, M., Nishio, K., Lee, K., Colletta, M., Goodge, B. H., Kim, W., Kourkoutis, L. F., Hwang, H. Y., Hikita, Y.  
2021; 4 (3): 2098-2106
- **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.  
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- **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*  
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- **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*  
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2020; 4 (12)
- **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.  
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- **A Superconducting Praseodymium Nickelate with Infinite Layer Structure.** *Nano letters*  
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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)
- **Electronic structure of the parent compound of superconducting infinite-layer nickelates.** *Nature materials*  
Hepting, M., Li, D., Jia, C. J., Lu, H., Paris, E., Tseng, Y., Feng, X., Osada, M., Been, E., Hikita, Y., Chuang, Y., Hussain, Z., Zhou, et al  
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- **Oxygen Evolution Reaction Activity in IrO<sub>x</sub>/SrIrO<sub>3</sub> Catalysts: Correlations between Structural Parameters and the Catalytic Activity.** *The journal of physical chemistry letters*  
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- **Synthesis and electronic properties of Fe<sub>2</sub>TiO<sub>5</sub> epitaxial thin films** *APL MATERIALS*  
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