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Publications

PUBLICATIONS

- **Crossing the Oxo-Peroxo Wall for Selective Electrochemical Epoxidation.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*
Basera, P., Mandal, S. C., Abild-Pedersen, F., Bajdich, M.
2025: e17229
- **The Role of Cu³⁺ in the Oxygen Evolution Activity of Copper Oxides.** *Journal of the American Chemical Society*
Basera, P., Zhao, Y., Garcia-Esparza, A. T., Babbe, F., Bothra, N., Vinson, J., Sokaras, D., Yano, J., Boettcher, S. W., Bajdich, M.
2025
- **Rationalizing the Superior Catalytic Efficiency of Nickel Nitride vs Nickel Sulfide for Alkaline Hydrogen Evolution Reaction from Bubble Dynamics Study and Density Functional Theory (DFT) Calculations** *ACS CATALYSIS*
Tyagi, C., Basera, P., Lagrost, C., Bouquet, V., Tessier, F., Jullien, M., Fabre, B.
2025
- **Bidentate Lewis Base Ligand-Mediated Surface Stabilization and Modulation of the Electronic Structure of CsPbBr₃ Perovskite Nanocrystals.** *Journal of the American Chemical Society*
Hassan, M. S., Basera, P., Khan, B., Portniagin, A. S., Vighnesh, K., Wu, Y., Rusanov, D. A., Babak, M., He, J. H., Bajdich, M., Rogach, A. L.
2024
- **Trace Ru Incorporation Boosted Co₂P Nanorods for Superior Water Electrolysis and Substrate-Paired Electrolysis Toward Value-Added Chemicals in Alkaline Medium.** *Small (Weinheim an der Bergstrasse, Germany)*
Ganguly, S., Basera, P., Ahmed, S., Saha, S., Dutta, A., Loha, C., Ghosh, S.
2024: e2405056
- **Oxidizing Role of Cu Cocatalysts in Unassisted Photocatalytic CO₂ Reduction Using p-GaN/Al₂O₃/Au/Cu Heterostructures.** *ACS nano*
Zoric, M. R., Basera, P., Palmer, L. D., Aitbekova, A., Powers-Riggs, N., Lim, H., Hu, W., Garcia-Esparza, A. T., Sarker, H., Abild-Pedersen, F., Atwater, H. A., Cushing, S. K., Bajdich, et al
2024
- **A-Site Modulation of Co-Ir Based Double Perovskite Oxides (A₂CoIrO₆, A = Sr, Nd, Pr, and Sm) for Maximization of Water Oxidation and Hybrid Electrolysis Derived Isopropanol Upconversion in Acid Medium** *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*
Ganguly, S., Datta, R., Basera, P., De, S., Mistry, K., Loha, C., Ghosh, S.
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