

# Stanford

---

## Joseph Perryman

Postdoctoral Scholar, Chemical Engineering

### Bio

---

#### STANFORD ADVISORS

- Thomas Jaramillo, Postdoctoral Research Mentor
- Thomas Jaramillo, Postdoctoral Faculty Sponsor

### Publications

---

#### PUBLICATIONS

- **Design Principles for Multinary Metal Chalcogenides: Toward Programmable Reactivity in Energy Conversion** *CHEMISTRY OF MATERIALS*  
Perryman, J. T., Velazquez, J. M.  
2021; 33 (18): 7133-7147
- **Direct solid-state nucleation and charge-transport dynamics of alkali metal-intercalated M<sub>2</sub>Mo<sub>6</sub>S<sub>6</sub> (M = K, Rb, Cs) nanorods** *JOURNAL OF MATERIALS CHEMISTRY C*  
Perryman, J. T., Kulkarni, A. R., Velazquez, J. M.  
2020; 8 (31): 10742-10748
- **Metal-promoted Mo<sub>6</sub>S<sub>8</sub> clusters: a platform for probing ensemble effects on the electrochemical conversion of CO<sub>2</sub> and CO to methanol** *MATERIALS HORIZONS*  
Perryman, J. T., Ortiz-Rodriguez, J. C., Jude, J. W., Hyler, F. P., Davis, R. C., Mehta, A., Kulkarni, A. R., Patridge, C. J., Velazquez, J. M.  
2020; 7 (1): 193-202
- **X-ray absorption spectroscopy study of the electronic structure and local coordination of 1st row transition metal-promoted Chevrel-phase sulfides** *JOURNAL OF COORDINATION CHEMISTRY*  
Perryman, J. T., Hyler, F. P., Ortiz-Rodriguez, J. C., Mehta, A., Kulkarni, A. R., Velazquez, J. M.  
2019; 72 (8): 1322-35