

# Stanford

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## Xinjian Shi

Postdoctoral Research Fellow, Mechanical Engineering

### Bio

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#### STANFORD ADVISORS

- Xiaolin Zheng, Postdoctoral Research Mentor

### Publications

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#### PUBLICATIONS

- **Enhancing Mo:BiVO<sub>4</sub> Solar Water Splitting with Patterned Au Nanospheres by Plasmon-Induced Energy Transfer** *ADVANCED ENERGY MATERIALS*  
Kim, J., Shi, X., Jeong, M., Park, J., Han, H., Kim, S., Guo, Y., Heinz, T. F., Fan, S., Lee, C., Park, J., Zheng, X.  
2018; 8 (5)
- **Understanding activity trends in electrochemical water oxidation to form hydrogen peroxide** *NATURE COMMUNICATIONS*  
Shi, X., Siahrostami, S., Li, G., Zhang, Y., Chakhranont, P., Studt, F., Jaramillo, T. F., Zheng, X., Norskov, J. K.  
2017; 8: 701
- **Unassisted photoelectrochemical water splitting exceeding 7% solar-to-hydrogen conversion efficiency using photon recycling** *NATURE COMMUNICATIONS*  
Shi, X., Jeong, H., Oh, S. J., Ma, M., Zhang, K., Kwon, J., Choi, I. T., Choi, I. Y., Kim, H. K., Kim, J. K., Park, J. H.  
2016; 7
- **Understanding the synergistic effect of WO<sub>3</sub>-BiVO<sub>4</sub> heterostructures by impedance spectroscopy** *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*  
Shi, X., Herraiz-Cardona, I., Bertoluzzi, L., Lopez-Varo, P., Bisquert, J., Park, J. H., Gimenez, S.  
2016; 18 (13): 9255-9261
- **Understanding the synergistic effect of WO<sub>3</sub>-BiVO<sub>4</sub> heterostructures by impedance spectroscopy.** *Physical chemistry chemical physics*  
Shi, X., Herraiz-Cardona, I., Bertoluzzi, L., Lopez-Varo, P., Bisquert, J., Park, J. H., Gimenez, S.  
2016; 18 (13): 9255-9261
- **A 3D triple-deck photoanode with a strengthened structure integrality: enhanced photoelectrochemical water oxidation** *NANOSCALE*  
Ma, M., Shi, X., Zhang, K., Kwon, S., Li, P., Kim, J. K., Thanh Tran Phu, T. T., Yi, G., Park, J. H.  
2016; 8 (6): 3474-3481
- **General Characterization Methods for Photoelectrochemical Cells for Solar Water Splitting** *CHEMSUSCHEM*  
Shi, X., Cai, L., Ma, M., Zheng, X., Park, J. H.  
2015; 8 (19): 3192-3203