

## Alan Dai

Ph.D. Student in Chemical Engineering, admitted Autumn 2016

### Publications

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#### PUBLICATIONS

- **Nanoscale and ultrafast *in situ* techniques to probe plasmon photocatalysis** *CHEMICAL PHYSICS REVIEWS*  
Carlin, C. C., Dai, A. X., Al-Zubeidi, A., Simmerman, E. M., Oh, H., Gross, N., Lee, S. A., Link, S., Landes, C. F., da Jornada, F. H., Dionne, J. A.  
2023; 4 (4)
- **Linking Atomic and Reactor Scale Plasmon Photocatalysis in Acetylene Hydrogenation with Optically Coupled ETEM.** *Microscopy and microanalysis : the official journal of Microscopy Society of America, Microbeam Analysis Society, Microscopical Society of Canada*  
Bourgeois, B., Carlin, C., Angell, D., Swearer, D., Cheng, W. H., Dai, A., Yuan, L., Dionne, J.  
2023; 29 (Supplement\_1): 1298-1299
- **LiH formation and its impact on Li batteries revealed by cryogenic electron microscopy.** *Science advances*  
Vilá, R. A., Boyle, D. T., Dai, A., Zhang, W., Sayavong, P., Ye, Y., Yang, Y., Dionne, J. A., Cui, Y.  
2023; 9 (12): eadf3609
- **Driving energetically unfavorable dehydrogenation dynamics with plasmonics.** *Science (New York, N.Y.)*  
Sytwu, K. n., Vadai, M. n., Hayee, F. n., Angell, D. K., Dai, A. n., Dixon, J. n., Dionne, J. A.  
2021; 371 (6526): 280–83
- **Unraveling the origin of chirality from plasmonic nanoparticle-protein complexes.** *Science (New York, N.Y.)*  
Zhang, Q. n., Hernandez, T. n., Smith, K. W., Hosseini Jebeli, S. A., Dai, A. X., Warning, L. n., Baiyasi, R. n., McCarthy, L. A., Guo, H. n., Chen, D. H., Dionne, J. A., Landes, C. F., Link, et al  
2019; 365 (6460): 1475–78
- **Highly tunable platform for biomimetic catalysts from nanocrystal-polymer composites**  
Riscoe, A., Wrasman, C., Menon, A., Hilbert, M., Dai, A., Vargas, M., Goodman, E., Yang, A., Beck, A., Wu, L., Cargnello, M.  
AMER CHEMICAL SOC.2018