

SANGWOOK PARK

Postdoctoral Scholar, Mechanical Engineering

Bio

STANFORD ADVISORS

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Publications

PUBLICATIONS

- **Ultralow-Overpotential Acidic Oxygen Evolution Reaction Over Bismuth Telluride-Carbon Nanotube Heterostructure with Organic Framework.** *Small (Weinheim an der Bergstrasse, Germany)*
Arbab, A. A., Cho, S., Jung, E., Han, H. S., Park, S., Lee, H.
2023: e2307059
- **Local Structure of Sulfur Vacancies on the Basal Plane of Monolayer MoS₂.** *ACS nano*
Garcia-Esparza, A. T., Park, S., Abroshan, H., Paredes Mellone, O. A., Vinson, J., Abraham, B., Kim, T. R., Nordlund, D., Gallo, A., Alonso-Mori, R., Zheng, X., Sokaras, D.
2022
- **Operando Study of Thermal Oxidation of Monolayer MoS₂.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*
Park, S., Garcia-Esparza, A. T., Abroshan, H., Abraham, B., Vinson, J., Gallo, A., Nordlund, D., Park, J., Kim, T. R., Vallez, L., Alonso-Mori, R., Sokaras, D., Zheng, et al
2021; 8 (9): 2002768
- **Operando Study of Thermal Oxidation of Monolayer MoS₂** *ADVANCED SCIENCE*
Park, S., Garcia-Esparza, A. T., Abroshan, H., Abraham, B., Vinson, J., Gallo, A., Nordlund, D., Park, J., Kim, T., Vallez, L., Alonso-Mori, R., Sokaras, D., Zheng, et al
2021
- **Effect of Adventitious Carbon on Pit Formation of Monolayer MoS₂.** *Advanced materials (Deerfield Beach, Fla.)*
Park, S., Siahrostami, S., Park, J., Mostaghimi, A. H., Kim, T. R., Vallez, L., Gill, T. M., Park, W., Goodson, K. E., Sinclair, R., Zheng, X.
2020: e2003020
- **Profitable Production of Stable Electrical Power Using Wind-battery Hybrid Power Systems: A Case Study from Mt. Taegi, South Korea** *INTERNATIONAL JOURNAL OF PRECISION ENGINEERING AND MANUFACTURING-GREEN TECHNOLOGY*
Park, S., Hang, G., Koo, J., Choi, H., Shim, J.
2019; 6 (5): 919–30
- **Profitable Production of Stable Electrical Power Using Wind-battery Hybrid Power Systems: A Case Study from Mt. Taegi, South Korea (vol 6, pg 1, 2019)** *INTERNATIONAL JOURNAL OF PRECISION ENGINEERING AND MANUFACTURING-GREEN TECHNOLOGY*
Park, S., Han, G., Koo, J., Choi, H., Shim, J.
2019; 6 (3): 667
- **Rapid Flame-Annealed CuFe₂O₄ as Efficient Photocathode for Photoelectrochemical Hydrogen Production** *ACS SUSTAINABLE CHEMISTRY & ENGINEERING*
Park, S., Baek, J., Zhang, L., Lee, J., Stone, K. H., Cho, I., Guo, J., Jung, H., Zheng, X.
2019; 7 (6): 5867–74
- **Selective and Efficient Gd-Doped BiVO₄ Photoanode for Two-Electron Water Oxidation to H₂O₂** *ACS ENERGY LETTERS*
Baek, J., Gill, T., Abroshan, H., Park, S., Shi, X., Norskoy, J., Jung, H., Siahrostami, S., Zheng, X.

2019; 4 (3): 720–28

- **Enhancing Catalytic Activity of MoS₂ Basal Plane S-Vacancy by Co Cluster Addition** *ACS ENERGY LETTERS*
Park, S., Park, J., Abroshan, H., Zhang, L., Kim, J., Zhang, J., Guo, J., Siahrostami, S., Zheng, X.
2018; 3 (11): 2685–93
- **Wafer-recyclable, environment-friendly transfer printing for large-scale thin-film nanoelectronics** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Wie, D., Zhang, Y., Kim, M., Kim, B., Park, S., Kim, Y., Irazoqui, P. P., Zheng, X., Xu, B., Lee, C.
2018; 115 (31): E7236–E7244
- **Ultrafast Flame Annealing of TiO₂ Paste for Fabricating Dye-Sensitized and Perovskite Solar Cells with Enhanced Efficiency** *SMALL*
Kim, J., Chai, S., Cho, Y., Cai, L., Kim, S., Park, S., Park, J., Zheng, X.
2017; 13 (42)
- **Ultrafast Flame Annealing of TiO₂ Paste for Fabricating Dye-Sensitized and Perovskite Solar Cells with Enhanced Efficiency.** *Small (Weinheim an der Bergstrasse, Germany)*
Kim, J. K., Chai, S. U., Cho, Y., Cai, L., Kim, S. J., Park, S., Park, J. H., Zheng, X.
2017; 13 (42)
- **for hydrogen evolution.** *Nature communications*
Tsai, C., Li, H., Park, S., Park, J., Han, H. S., Nørskov, J. K., Zheng, X., Abild-Pedersen, F.
2017; 8: 15113-?
- **Electrochemical generation of sulfur vacancies in the basal plane of MoS₂ for hydrogen evolution** *NATURE COMMUNICATIONS*
Tsai, C., Li, H., Park, S., Park, J., Han, H. S., Nørskov, J. K., Zheng, X., Abild-Pedersen, F.
2017; 8
- **Molybdenum disulfide catalyzed tungsten oxide for on-chip acetone sensing** *APPLIED PHYSICS LETTERS*
Li, H., Ahn, S. H., Park, S., Cai, L., Zhao, J., He, J., Zhou, M., Park, J., Zheng, X.
2016; 109 (13)