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**Hsiao-Tsu Wang: 2 Papers Published in World Famous Journals**

**Campus focus**

Assistant Professor Hsiao-Tsu Wang, from Bachelor’s Program in Advanced Materials Science, has 2 academic papers published in world famous journals as co-author and joint first author respectively : 1) “A single-atom library for guided monometallic and concentration-complex multimetallic designs” in Nature Materials whose impact factor is 47.7, and 2) “Bandgap Shrinkage and Charge Transfer in 2D Layered SnS2 Doped with V for Photocatalytic Efficiency Improvement” in Small with impact factor 15.5.

Asst. Professor Hsiao-Tsu Wang is an alumnus of Department and Graduate Institute of Physics of Tamkang University. He received his Ph.D. degree from National Tsing Hua University. He has been instructed by Chair Professor Way-faung Pong of Department of Physics, Tamkang University and Maw-Kuen Wu, an alumnus of Department of Physics of Tamkang University, former president of National Dong Hwa University, and member of the Institute of Physics at Academia Sinica. Hsiao-Tsu Wang collaborates with numerous international research teams. He stated that the authors of the first paper mentioned above include researchers from Chinese Academy of Sciences, Professor Huolin L. Xin from University of California, Irvine, and others from Canada, The United States, Taiwan and so forth. The second paper stems from the cooperation among researchers from Taiwan, India and South Africa.

Hsiao-Tsu Wang explained that the first paper is a research on single-atom system. The research applies 37 kinds of elements from the periodic table of elements, their synthesis can be used in various catalytic reactions, though was quite difficult. Besides, a series of pioneering research have been conducted and have achieved a breakthrough that will be great help for future studies. The data gained from the research can be referred to like a textbook.

Hsiao-Tsu Wang pointed out that the second paper discusses the application of 2D material in catalytic reactions. He also collaborated with Hung-Chung Hsueh, Dean of the Office of Research and Development, Tamkang University to theoretically prove the results of the experiment through simulation. He remarked that the research can be applied to improve the reaction rate of water splitting to produce considerable hydrogen, which is of significant breakthrough for the application of clean energy in the future.





