

■

Controlling energy bandgap of semiconducting materials for energy and environment

A

3. Anand P. Tiwari, Doyoung Kim, Yongshin Kim, Om Prakash, and Hyoyoung Lee* (2016) Highly Active and Stable Layered Ternary Transition Metal Chalcogenide for Hydrogen Evolution Reaction. *Nano Energy*, 28, 366–372.
4. Anand P. Tiwari, Doyoung Kim, Yongshin Kim, and Hyoyoung Lee* (2017) Bi-functional oxygen electrocatalysis through chemical bonding of transition metal chalcogenides on conductive carbons. *Advanced Energy Materials*, 1602217.
5. Ngoc Quang Tran, Quoc Viet Bui, Minh Hung Le, Yoshiyuki Kawazoe and Hyoyoung Lee* (2017) Anion-Cation Double Substitution in Transition Metal Dichalcogenide to Accelerate Water Dissociation Kinetic for Electrocatalysis. *Advanced Energy Materials*, In-revision.

Biography

Hyoyoung Lee has completed his PhD at Department of Chemistry, University of Mississippi, USA in 1997. He did his Postdoctoral studies at North Carolina State University. He worked at Electronics and Telecommunications Research Institute and then moved to Department of Chemistry, Sungkyunkwan University as a full Professor. He served as a Director of National Creative Research Initiatives. Currently, he has served as an Associate Director of Centre for Integrated Nanostructure Physics, Institute of Basic Science. His current research area is 0-2D semiconducting materials and their devices. He has written more than 140 journal articles in top-tier journals and has been serving as an Editorial Board Member of *6 F L H Q W L & F 5 H S R U W V*

hyoyoung@skku.edu