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Authors: Soumen Dutta, Arindam Indra, Yi Feng, HyukSu Han, Taeseup Song

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Promoting Electrocatalytic Overall Water Splitting with Nanohybrid of Transition Metal Nitride-Oxynitride

Soumen Dutta,[a,b] Arindam Indra,[b] Yi Feng,[a] HyukSu Han[c] and Taeseup Song[a,*]

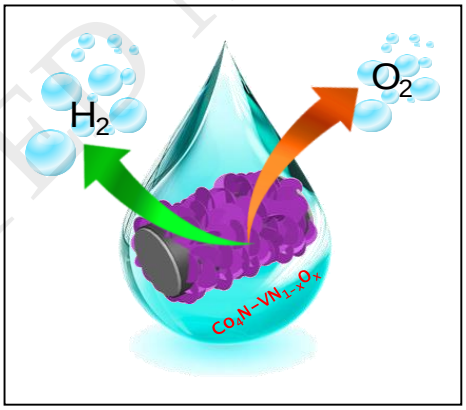
[a]Department of Energy Engineering, Hanyang University, Seoul, 133-791, Korea

[b]The Research Institute of Industrial Science, Hanyang University, Seoul, 133-791, Korea

[c]Korea Institute of Industrial Technology, 137-41 Gwahakdanji-ro, Gangneung-si, Gangwon 25440, Republic of Korea

E-mail: tssong@hanyang.ac.kr

Graphical Abstract



Highlights

- First report on metal nitride-oxynitride nanohybrid for water splitting
- Fabrication of transition metal nitride without direct use of ammonia gas
- Only 263 and 118 mV overpotential at 10 mA cm^{-2} current density for OER and HER, respectively for the nanohybrid
- Superior performance and stability than commercial RuO_2 and Pt-C couple in two-electrode alkaline water splitting reaction