

CURRICULUM VITAE

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EDUCATION

Hanyang University

Ph.D Materials Sci. and Eng.

2012

Hanyang University

BS Ceramic Engineering

2006

PROFESSIONAL ACTIVITIES

- Assistant professor, Hanyang University, Korea (2017 – Present)
- Assistant professor, Yeungnam University, Korea (2015 – 2017)
- Post doctoral researcher, University of Maryland, USA (2013 – 2015)
- Post doctoral researcher, University of Waterloo, Canada (2012–2013)
- Post doctoral researcher, Hanyang University, Korea (2012 – 2012)

Selected Publications

[1] **Song, T.**; Xia, J.; Lee, J. H.; Lee, D. H.; Kwon, M. S.; Choi, J. M.; Wu, J.; Doo, S. K.; Chang, H.; Park, W. I.; Zang, D. S.; Kim, H.; Huang, Y.; Hwang, K. C.; Rogers, J. A.; Paik, U. Arrays of sealed silicon nanotubes as anodes for lithium ion batteries, ***Nano letters***, 2010, 10, 1710. **Citation >600**

[2] **Song, T.**; Cheng, H.; Choi, H.; Han, H.; Lee, D.; Yoo, D.; Kwon, M.; Choi, J.; Doo, S.; Chang, H.; Huang, Y.; Park, W.; Chung, Y.; Kim, H.; Rogers, J. A.; Paik, U. Si/Ge Double Layered Nanotube Array as Lithium Ion Battery Anode, ***ACS Nano***, 2012, 6 (1), 303–309

[3] **Song, T.***; Jeon, Y.*; Samal, M.; Han, H.; Park, H.; Yi, D. K.; Choi, J. M.; Choi Y.; Paik, U., Ge inverse opal with porous wall as an anode for lithium ion batteries, ***Energy & Environmental science***, 2012, 5, 9028-9033 (*equally contributed)

[4] Xu, S.; Zhang, Y.; Cho, J.; Lee, J.; Huang, X.; Jia, L.; Fan, J.; Su, Y.; Su, J.; Zhang, H.; Cheng, H.; Lu, B.; Yu, C.; Chuang, C.; Kim, T.-I.; **Song, T.**; Shigeta, K.; Kang, S.; Dagdeviren, C.; Petrov, I.; Braun, P.; Huang, Y.*; Paik, U.; Rogers, J.*; Stretchable batteries with self-similar serpentine interconnects and integrated wireless recharging systems, *Nature Communications*, 2013, 4, 1543

[5] Choi, H., Shin, D., Yeo, B.C., **Song, T.**, Han, S.S., Park, N., Kim, S.* , Simultaneously

controllable doping sites and the activity of a W-N co-doped TiO₂ photocatalyst, ACS Catalysis, 2016, 6, 2745–2753

[6] S. Khan, H. Cho, D. Kim, S. S. Han, K. H. Lee, S. Cho*, **T. Song***, H. Choi*, Defect engineering toward strong photocatalysis of Nb-doped anatase TiO₂: Computational predictions and experimental verifications, Applied Catalysis B: Environmental, 2017, 206, 520-530

[7] S. Dutta, A. Indra, Y. Feng, **T. Song**, U. Paik*, Self-Supported Nickel Iron Layered Double Hydroxide-Nickel Selenide Electrocatalyst for Superior Water Splitting Activity. ACS Applied Materials & Interfaces, 2017, 9, 33766-33774

[8] H. Park, J. Kwon, H. Choi, **T. Song***, U. Paik*, Microstructural control of new intercalation layered titanoniobates with large and reversible d-spacing for easy Na⁺ ion uptake. Science Advances, 2017, 3, 1-10.

[9] S Dutta, A Indra, Y Feng, HS Han, **T. Song***. Promoting Electrocatalytic Overall Water Splitting with Nanohybrid of Transition Metal Nitride-Oxynitride. Applied Catalysis B: Environmental. 2018, 241, p521-527

[10] HS Han, KM Kim, H Choi*, G Ali, KY Chung, YR Hong, J Choi, J Kwon, S. Lee, J. Lee, J. Ryu, **T. song***, S.Mhim*. Parallelized Reaction Pathway and Stronger Internal Band Bending by Partial Oxidation of Metal Sulfide–Graphene Composites: Important Factors of Synergistic Oxygen Evolution Reaction Enhancement. ACS Catalysis. 2018, 8 (5), p4091-4102