



**Highlighting a study by a group of researchers led by Dr. Yong-Tae Kim and Prof. Jinsub Choi from Inha University, South Korea.**

Ultrathin electrochemical layer tailoring of lithiophilic materials with 3D hierarchical configuration for lithium metal batteries: Sn/Cu<sub>6</sub>Sn<sub>5</sub>@Cu<sub>2+1</sub>O nanowires on Cu foam

Lithium metal is considered as a key part of the next generation batteries due to its high specific energy density and low redox potential. To overcome the challenges towards practical applications such as hyperactivity and infinite volume expansion leading to uncontrollable formation of dendrites and inactive lithium, we propose a hierarchical lithiophilic host on copper foam *via* a straightforward electrochemical wet process. An insightful study on the fabrication of a three-dimensional scaffold host capable of uniformly depositing lithium in a simple way will advance the commercialization of lithium metal anode.

**As featured in:**



See Yong-Tae Kim, Jinsub Choi *et al.*, *J. Mater. Chem. A*, 2023, **11**, 6144.