

Regulating Zinc Deposition via Zincophilic 2D-Cu₂Te as the Current Collector to Suppress Dendrite Formation toward High Performance Aqueous Zinc-Ion Batteries



Group photo of all members in Nano Horizons Lab. Prof. Yu-Ze Chen (Corresponding Author, Left 3 in the first row), Mr. Ming-Hsuan Tsai (First Author, Left 4 in the second row), Mr. Tuan-Yue Lin (First Author, Right 1 in the second row), Mr. Tian-Shun Su (Left 2 in the fourth row).



Invited for this month's cover is the group of Nano Horizons Lab hosted by Prof. Yu-Ze Chen. The cover picture shows the lateral deposition of Zn guided by zincophilic Cu₂Te flakes, resulting in the suppression of dendrite growth. Read the full text of the Research Article at 10.1002/batt.202300107.

What is the most significant result of this study?

The synthesis of zincophilic Cu₂Te with the standing structure *via* the post-tellurization process and served as the current collector for AZIBs.

Does the research open other avenues that you would like to investigate?

Yes, thanks to the important findings in this research, we devoted ourselves into the dendrite-free anode with the improved ZUR.

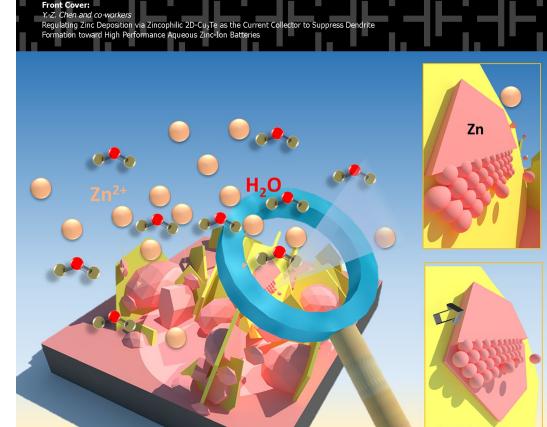
Who pays the bill for the research highlighted in the cover?

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 Y.-Z. Chen and co-workers
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 A 3D schematic diagram illustrating the zinc deposition process. It shows a porous Cu₂Te current collector (represented by a pink mesh) where zinc ions (Zn²⁺) are being reduced to form a thin film of zinc (Zn). A magnifying glass highlights the interface between the porous Cu₂Te and the deposited Zn film. The diagram also shows water molecules (H₂O) and hydroxide ions (OH⁻) in the electrolyte. An inset shows a close-up of the (002) Cu₂Te surface.

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