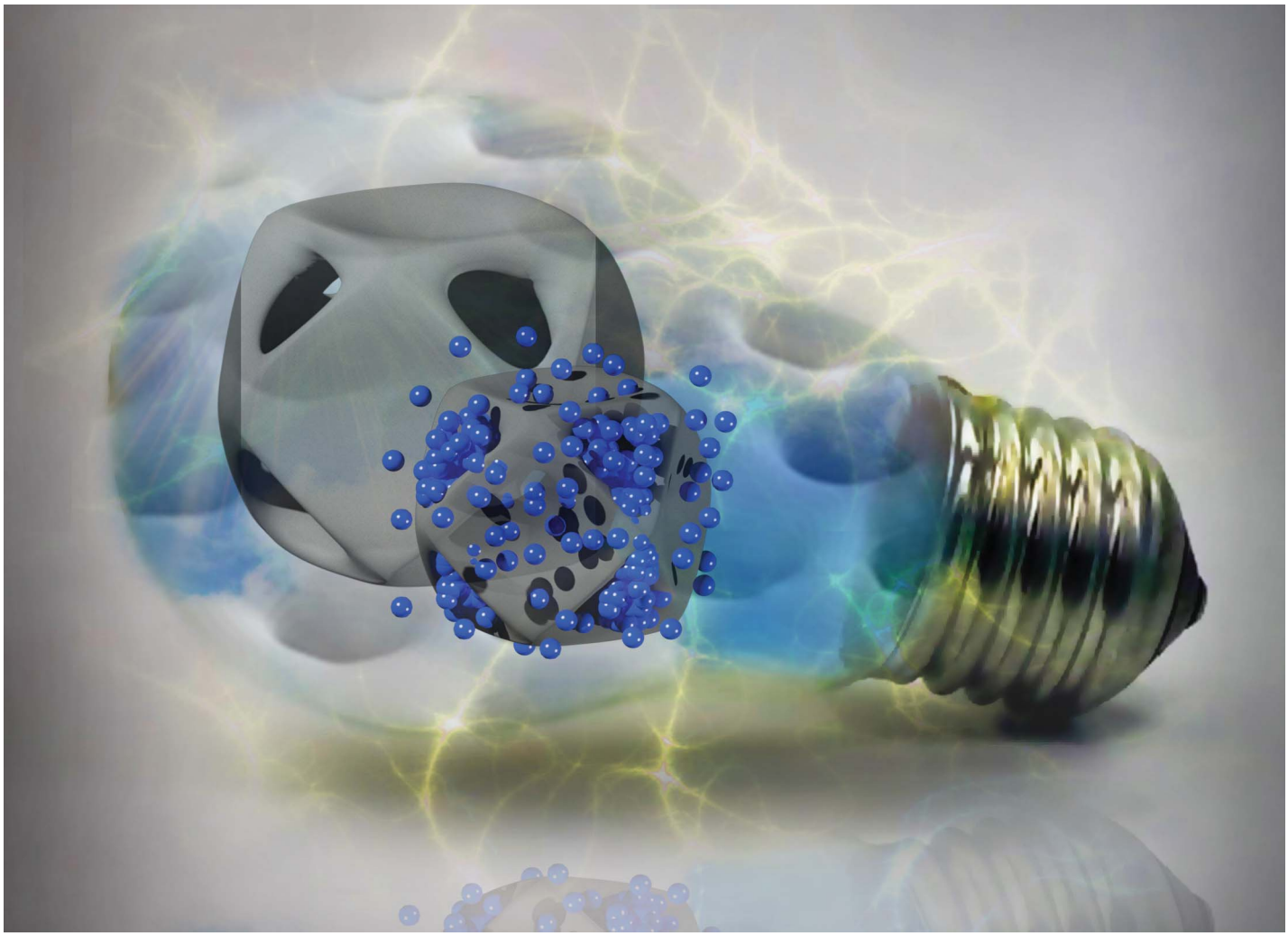
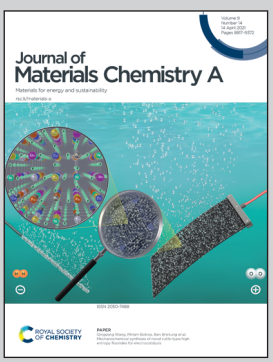


Highlighting research from Prof. Shih-Yuan Lu's group of the National Tsing Hua University, Taiwan (ROC).

Triple functionalization of carved N-doped carbon nanoboxes with synergistic trimetallic sulphide for high performance lithium–sulphur batteries

An advantageous carved N-doped carbon nanobox structure triply functionalized with an FeCoNi trimetallic sulfide is developed as a high-performance sulfur host for lithium-sulfur batteries (LSB). The LSB thus assembled delivers a high capacity of 1238 mA h g^{-1} at 0.1 C and maintains a decent capacity of 655 mA h g^{-1} at 2 C. It exhibits excellent stability with a low capacity decay rate of 0.049 % per cycle over 200 cycle operations at 1 C, indicating the success of the sulfur host in suppressing the detrimental shuttle effect.

As featured in:



See Shih-Yuan Lu *et al.*, *J. Mater. Chem. A*, 2021, **9**, 9028.

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