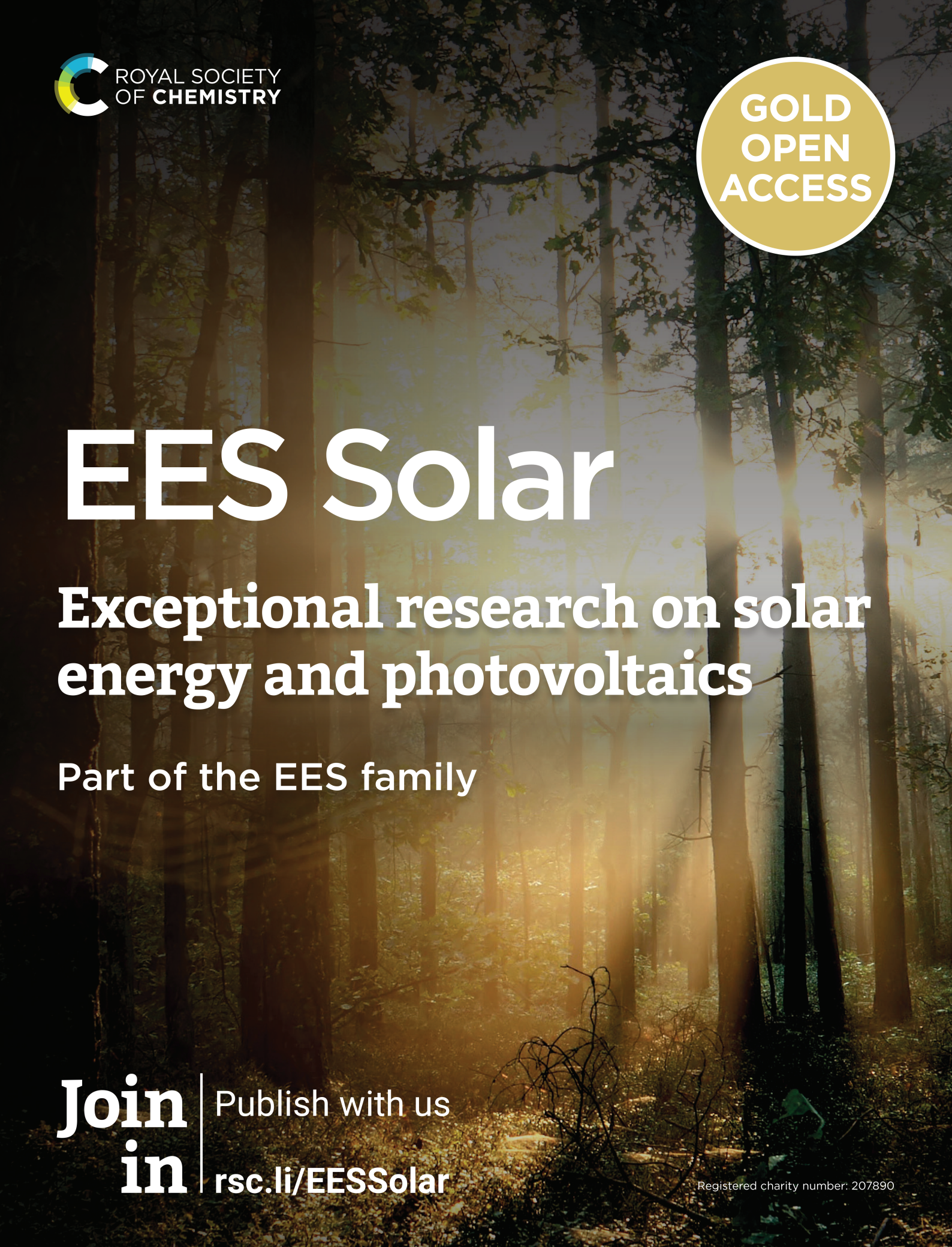
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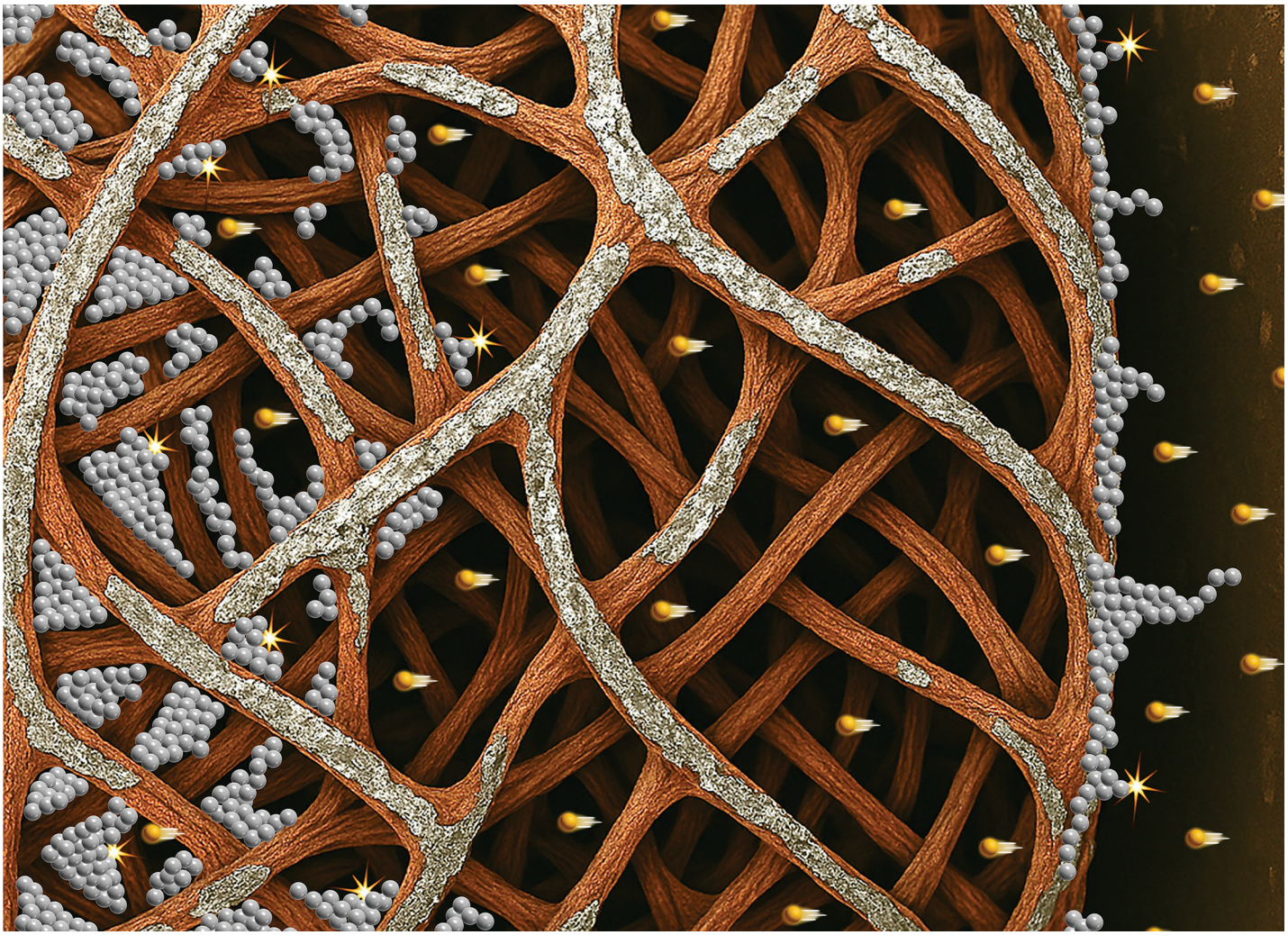

Showcasing research from Professor Arnulf Latz's group, Institute of Engineering Thermodynamics, Department Computational Electrochemistry, German Aerospace Center (DLR), Ulm, Germany.

Strategies to spatially guide Li deposition in porous electrodes for high-performance lithium metal batteries

Porous architectures potentially enable safe and stable anode-free Li metal anodes. However, infilling of the pores with Li is always competing with undesired plating on top of the structure, which can lead to problematic dendrite formation. Several sophisticated design strategies aim at a spatial control of Li nucleation and growth. Comprehensive continuum simulations reveal the most effective approaches to ensure a reliable bottom-up infilling of the porous architecture with Li metal during charge. These insights enable to systematically optimize the design of porous architectures and realize practical Li metal anodes.

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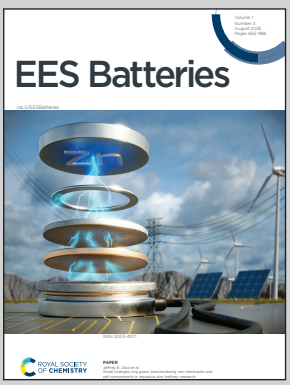

See Janina Drews *et al.*, *EES Batteries*, 2025, **1**, 774.

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