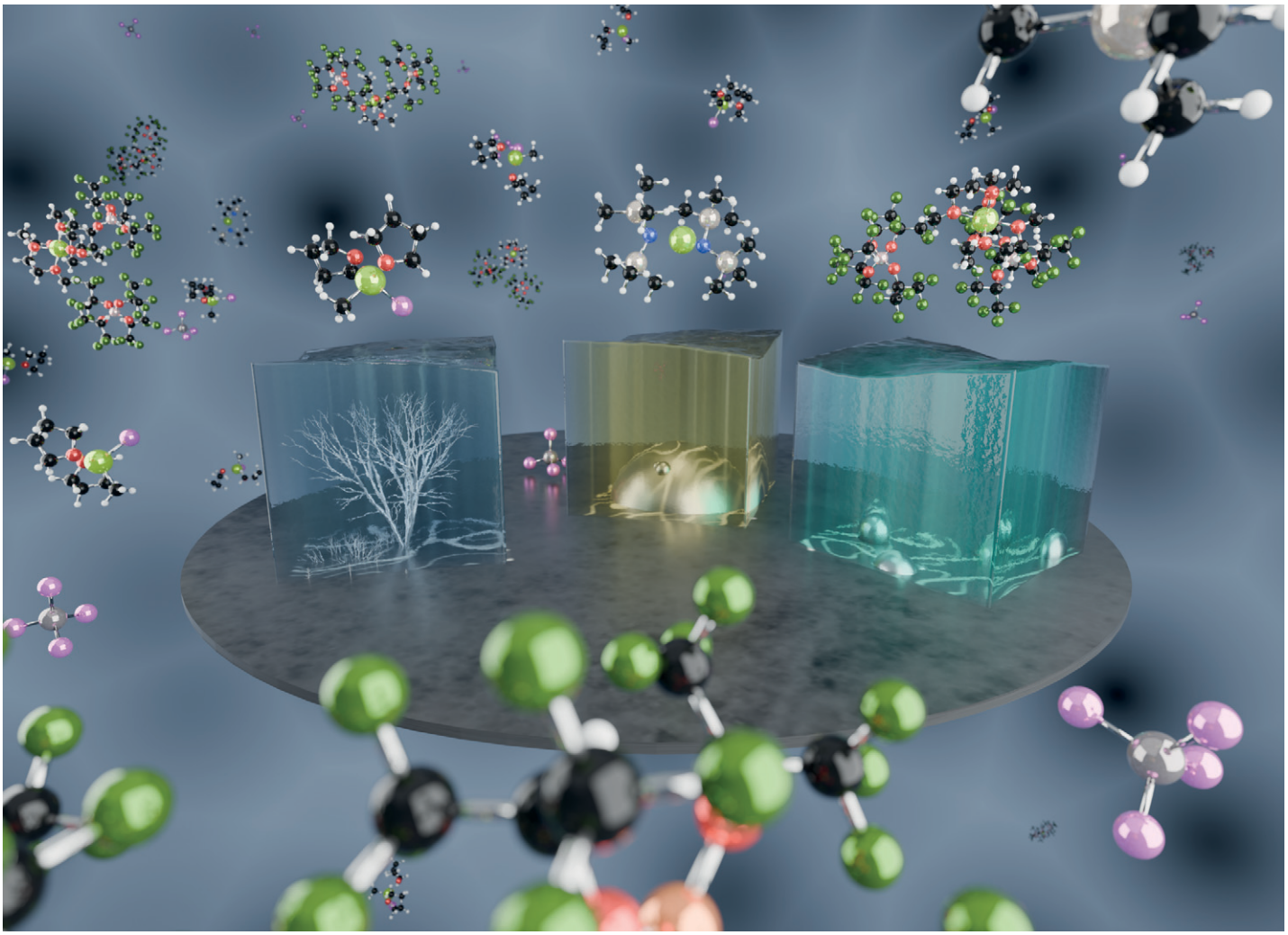
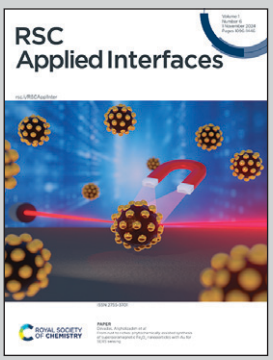


Showcasing research from Professor Fichtner's group, Cluster of Excellence - Post-Lithium Storage (POLiS), University of Ulm, Ulm, Germany.

Electrolyte dependent deposition morphology on magnesium metal utilizing MeMgCl, $Mg[B(hfip)_4]_2$ and $Mg(HMDS)_2$-$2AlCl_3$ electrolytes

Mg deposition study of state-of-the-art $Mg[B(hfip)_4]_2$ and $Mg(HMDS)_2$–$2AlCl_3$ electrolytes regarding dendrite formation for beyond-lithium magnesium batteries utilizing *in-situ* microscope photography and *ex-situ* SEM & EDX imaging, XPS spectra as well as ionic conductivity and Karl Fischer titration measurements. Both electrolytes were compared with MeMgCl as a benchmark system, which showed dendritic behaviour under the applied parameters in previous reports. Additionally, morphology changes for solvent variation (DME vs. THF), additive effects ($Mg(BH_4)_2$) and different residual water concentrations were studied and compared.

As featured in:



See Adam Reupert, Maximilian Fichtner *et al.*, *RSC Appl. Interfaces*, 2024, **1**, 1142.

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