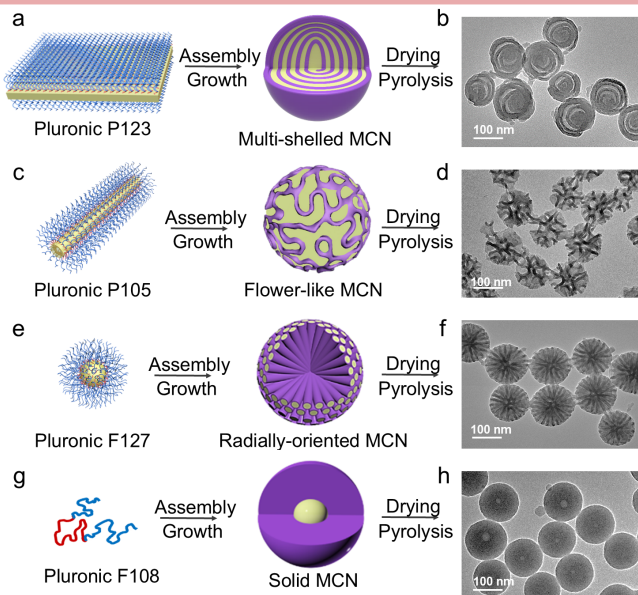


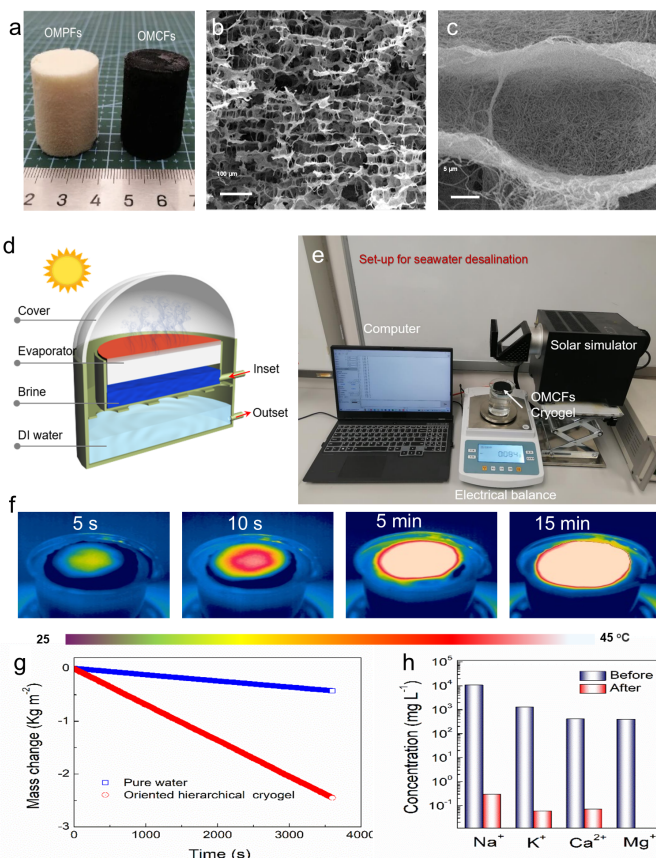


Synthesis of Mesoporous Nanomaterials



Monomicellar assembly to synthesize structured and functional mesoporous carbonaceous nanomaterials (MCN)

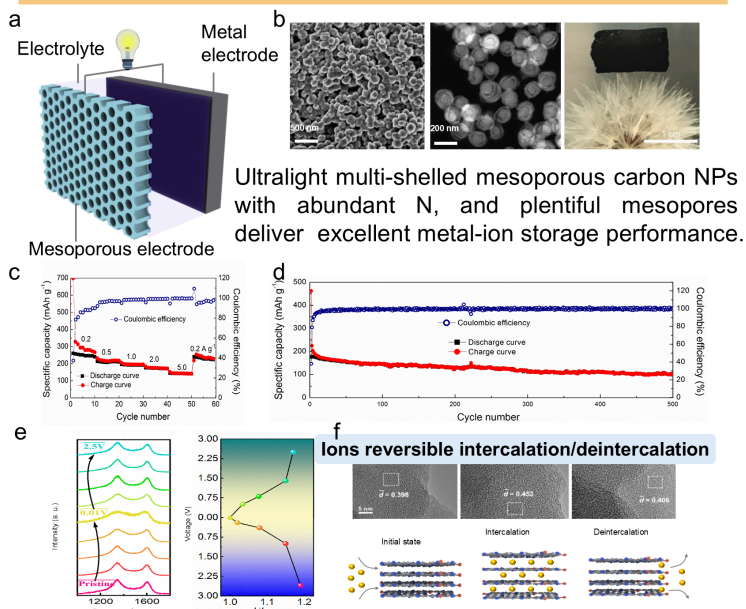
Seawater Desalination



Ordered mesoporous carbonaceous nanofibers (OMCFs) solar evaporator (>99.9% salt rejection & high flux for desalination)

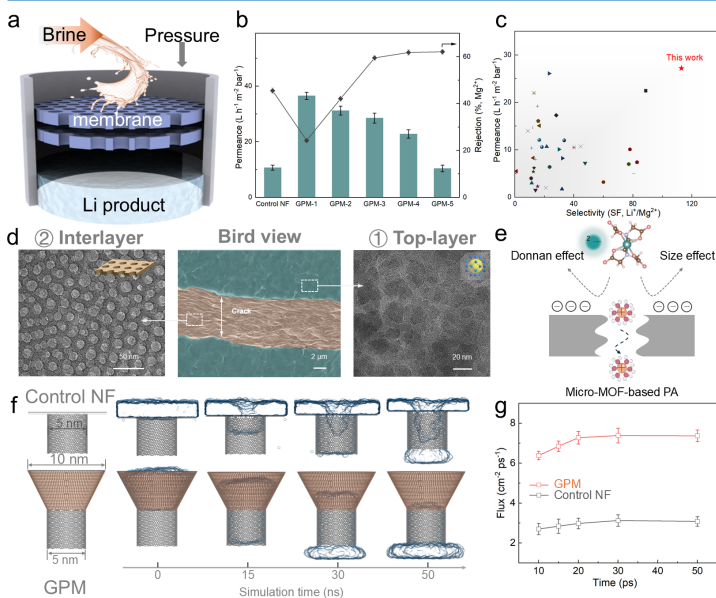
Organizers

Energy Storage Technology



Mesoporous carbon frameworks undergo reversible expansion/contraction to secure stable insertion/extraction of metal ions.

Membrane Technology



Gradient porous membranes for efficient Li recovery via trade-off breakthrough (>98% Li recovery with 3× permeability)

References

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3. H.R. Peng, D. Voiri*, Z.Y. Zeng*. **Matter** 2023, 6 (1), 59-96.
4. L. Peng†, H.R. Peng†, D.Y. Zhao*, **Nat. Protocols**, 2023, 18, 1155-1178.
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