

Artificial ionic and water channels

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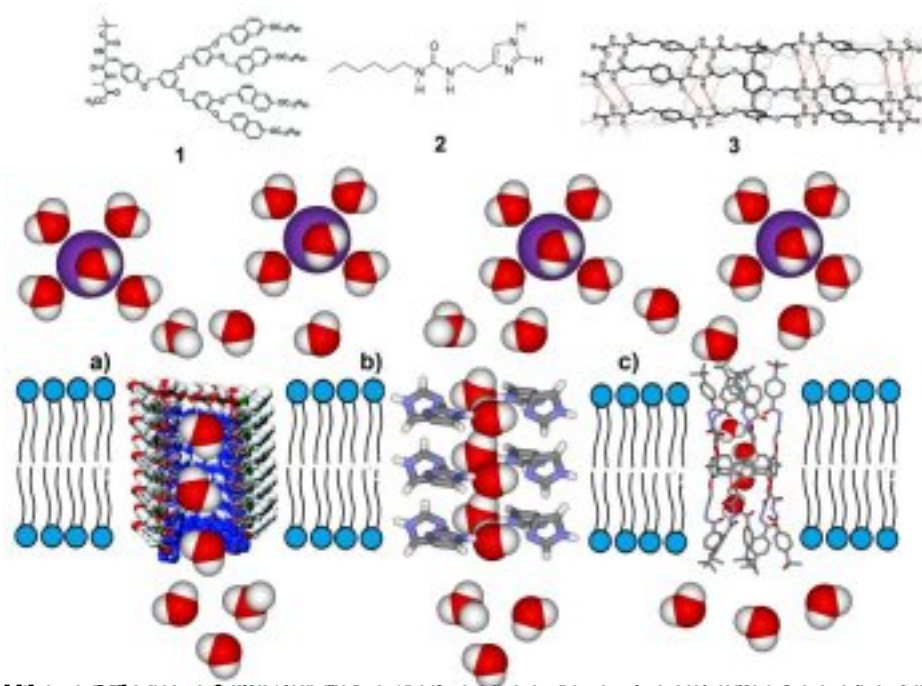
Angew. Chem. Int. Ed. 2011, 50(48), 11366-11372

Angew. Chem. Int. Ed. 2012, 51 11674-11676

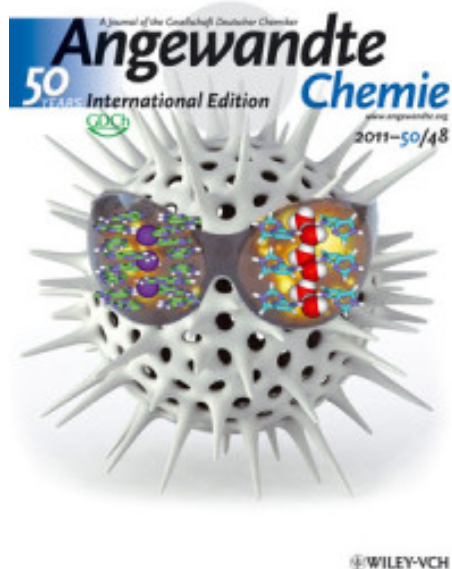
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Water is fundamental to life, playing a variety of functions related to its complex dynamic behaviours at the supramolecular level. Most of the physiological processes depend on selective exchanges of ions or molecules between a cell and its environment and water play a crucial role on their translocation events. Artificial ion-channels have been extensively studied with the hope to facilitate the ionic conduction in the bilayer membranes. However, there has been less progress in the area of synthetic water channels.





Water molecules are shown as red and white spheres, and the polymer chain is shown as a red and blue structure.



The cover of the journal *Angewandte Chemie International Edition* is shown, featuring a large, stylized, spiky structure in the center.