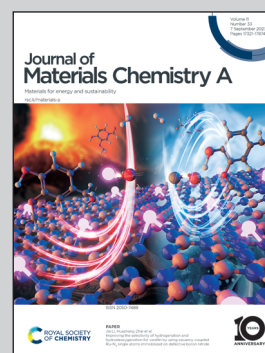


Highlighting the conformational distortion of the anion exchange ionomer backbone for reinforcing the catalyst layer from a group of researchers led by Prof. Michael D. Guiver, Prof. Yan Yin and Prof. Junfeng Zhang from Tianjin University, China.

Conformational distortion of the ionomer backbone for reinforcing the catalyst layer under dynamic operation

Anion exchange ionomers act as “transport bridges” for electrochemical reactions involving water, vapor, gas, ions and electrons within the catalyst layer (CL), and play a crucial role in the CL stability and AEMFC performance. Adjusting the chain conformation of ionomers decrease the dimensional swelling under dynamic conditions, resulting in a robust CL structure. The insights in this work are critical for ionomer design and its application in fuel cells.

As featured in:



See Junfeng Zhang, Yan Yin, Michael D. Guiver *et al.*, *J. Mater. Chem. A*, 2023, **11**, 17542.