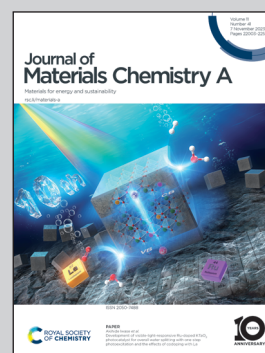


Highlighting work on in-situ constructed all-siloxane bottlebrush liquid-like slippery surfaces by Dr Yunjiao Gu, Prof. Weiping Wu from Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences and Prof. Shuxue Zhou from Fudan University.

A fluffy all-siloxane bottlebrush architecture for liquid-like slippery surfaces

Gu, Wu and Zhou et. al pioneered a bottlebrush molecular architecture as the first non-linear liquid-like slippery surfaces, with soft polysiloxanes for both the backbone and side chains using a simple sequential approach. This design multiplies surface grafting density, significantly improving sliding capabilities. Additionally, these materials possess low adhesion, offer broad optical transparency, and maintain an ultra-thin profile, making them ideal for self-cleaning optical devices.

As featured in:



See Shuxue Zhou, Weiping Wu *et al.*,
J. Mater. Chem. A, 2023, **11**, 22167.