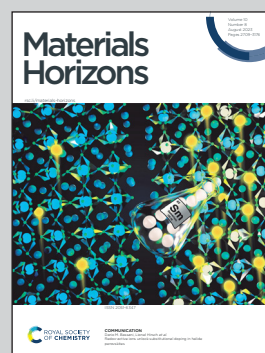


Showcasing research from the Soft Matter Group at the Chemical Sciences Division in Oak Ridge National Laboratory, Oak Ridge, Tennessee, USA.

Puncture-resistant self-healing polymers with multi-cycle adhesion and rapid healability

The hydrogen bonding-rich poly(dimethylsiloxane)-based elastomers in this study enable exceptional puncture-resistance, rapid self-healing, and reusable adhesion. Such design provides a new pathway for healable and puncture-resistant soft materials such as membranes and coatings with significantly improved lifetimes.

As featured in:



See Peng-Fei Cao,
Tomonori Saito *et al.*,
Mater. Horiz., 2023, **10**, 2868.