



**Showcasing research from Prof. Bin Sheng's FlexicS Laboratory, University of Shanghai for Science and Technology, China**

**Recyclable EGaIn/TPU sheath-core fibres for superelastic electronics and sensing applications**

A novel recyclable conductive fibre, composed of TPU core wire and EGaIn/TPU sheath by dip coating, can transform from insulator to conductor by mechanical sintering, and can also be easily integrated with fabrics to generate an underwater emergency SOS signal. We also successfully demonstrate multifunctional applications of this flexible fibre in human motion monitoring, stretchable electrodes, and wearable textiles, as well as excellent recyclability.

**As featured in:**



See Bin Sheng *et al.*,  
*J. Mater. Chem. C*, 2023, **11**, 12163.