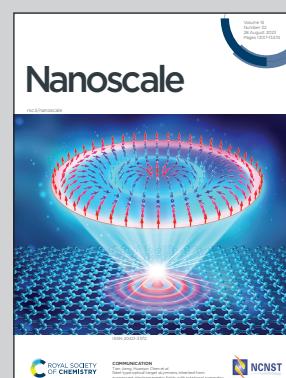


Showcasing research from Prof. Shaojuan Li's group at State Key Laboratory of Luminescence and Applications, Changchun Institute of Optics Fine Mechanics and Physics, Chinese Academy of Sciences Changchun, Jilin, China.

Mechanistic understanding of the interfacial properties of metal-PtSe₂ contacts

The interfacial properties of the contacts between a promising 2D semiconductor and a sequence of metal electrodes are systematically investigated. Strong interfacial interactions in metal-2D contacts lead to significant interfacial dipole and FLP effect, which can be effectively weakened by introducing *h*-BN as buffer layer. These results reveal the underlying mechanism of the interfacial properties of metal-2D contacts and provide useful guidelines for designing high-performance 2D electronics.

As featured in:



See Shaojuan Li *et al.*, *Nanoscale*, 2023, 15, 13252.