A novel method to manufacture ultra-thin 2D flexible devices

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This study successfully transferred angstrom scale 2D materials onto flexible substrates using liquid polydimethylsiloxane as a medium. It is the first study demonstrating the direct transfer of 2D materials from Silicon substrates to flexible substrates without chemical contaminations. This represents a significant step forward in addressing the challenges associated with the fabrication of 2D flexible devices. 2D flexible thermal and electronic devices have been manufactured, and characterizations present a high-quality of the devices. This successful manufacturing method shed light on the next-generation wearable electronics.