

ADVANCED FUNCTIONAL MATERIALS

MICROSTRUCTURES

On page 3453 Congrui Jin, Anand Jagota, and Chung-Yuen Hui report that patterns of interfacial dislocations between two elastomeric sheets, each with shape-complementary surface ridges and channels, allow the sheets to adhere strongly to each other despite some relative misorientation. The system may provide an experimental tool to assist in research on geometry-controlled adhesion and also provides a test bed for stability theories of interacting dislocations and crack fronts.