

Abstract Submitted  
for the MAR16 Meeting of  
The American Physical Society

**Vertical electronic transport in van de waals heterostructures**

ZHENHUA QIAO, University of Science and Technology of China, ZHENHUA QIAO'S GROUP TEAM — In this work, we will introduce the theoretical investigation of the vertical electronic transport in various heterostructures by using both tight-binding method and first-principles calculations. Counterintuitively, we find that the maximum electronic transport is achieved at very limited scattering regions but not at large overlapped catering regions. Based on this finding, we design a special setup to measure the tunneling effect in rotated bilayer systems.

Zhenhua Qiao  
University of Science and Technology of China

Date submitted: 06 Nov 2015

Electronic form version 1.4