



Showcasing research from the group of Prof. Weifeng Jin,  
College of Optoelectronic Engineering, Chongqing University,  
China

Drift velocity saturation in field-effect transistors based on  
single CdSe nanowires

The group of Prof. Weifeng Jin focuses on semiconductor device physics. In this work, the experimental investigation of high electric field transport characteristics in CdSe nanowire FETs was reported for the first time. Current saturation phenomena at high electric field caused by drift velocity saturation were observed. The saturation drift velocity values in CdSe nanowire FETs were obtained. This work may provide valuable guidance for the design of novel nanoelectronic and optoelectronic devices based on CdSe nanowires in the future.

As featured in:



See Weifeng Jin and Xinyang Yang,  
*Phys. Chem. Chem. Phys.*,  
2023, **25**, 26455.