

Supporting information

NO₂ adsorption sensitivity adjustment of As/Sb lateral heterojunctions through strain: First principles calculations

Li Yang¹, Dengkui Wang^{1,*}, Dan Fang^{1,*}, Hao Yan¹, Yingjiao Zhai¹, Xueying Chu¹,
Jinhua Li¹, Xuan Fang¹

1. State Key Laboratory of High Power Semiconductor Lasers, School of Physics, Changchun University of Science and Technology, 7089 Wei-Xing Road, Changchun 130022, PR China

*Corresponding author: wccwss@foxmail.com fangdan19822011@163.com

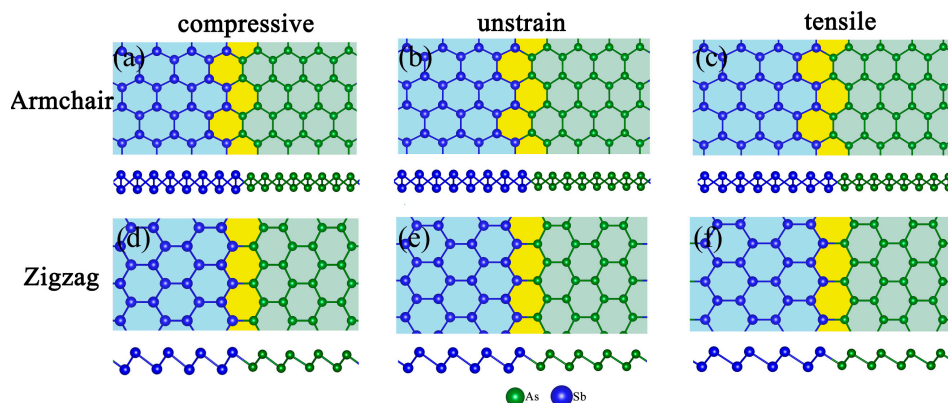


Figure S1. Top and side view of the As/Sb AC- LHS without adsorbed NO₂ under (a) compressive strain, (b) unstrained, and (c) tensile strain and that of the As/Sb ZZ-LHS adsorbed NO₂ under (d) compressive strain, (e) unstrained, and (f) tensile strain.

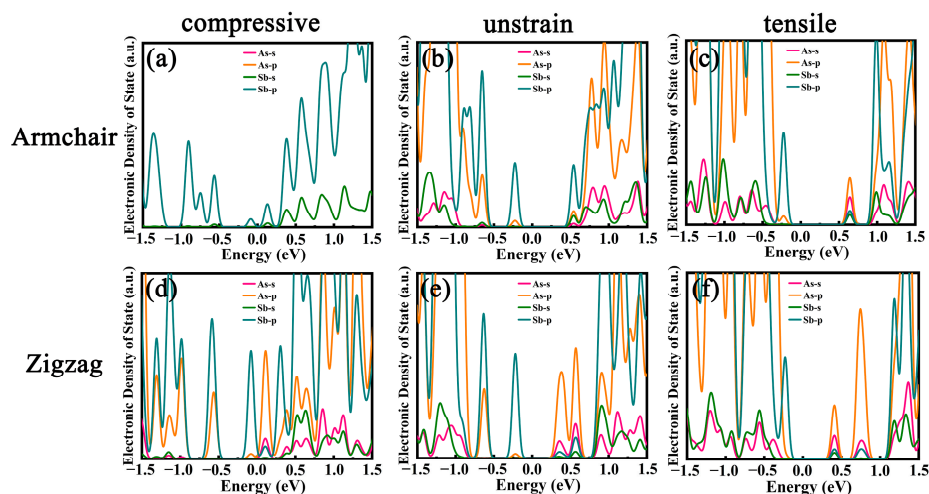


Figure S2. (a-c) PDOS of armchair As/Sb LHS without adsorbed NO₂ under (a) -4% compressive

strain, (b) unstrained (c) 4% tensile strain, (d-f) PDOS of zigzag As/Sb LHS without adsorbed NO₂ under (d) - 4% compressive strain (e) unstrained (f) 4% tensile strain.