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## First-principles investigations of oxygen interaction with hydrogen/helium/vacancy irradiation defects in Ti<sub>3</sub>AlC<sub>2</sub>

Zhaocang Meng<sup>a,b,c</sup>, Canglong Wang<sup>\*a,c,d</sup>, Jitao Liu<sup>a,c</sup>, Yinlong Wang<sup>e</sup>, Xiaolu Zhu<sup>f</sup>, Lei Yang<sup>\*a,c,d</sup>, and Liang Huang<sup>b</sup>

<sup>a</sup> Institute of Modern Physics, Chinese Academy of Sciences, Lanzhou 730000, China. clwang@impcas.ac.cn, lyang@impcas.ac.cn

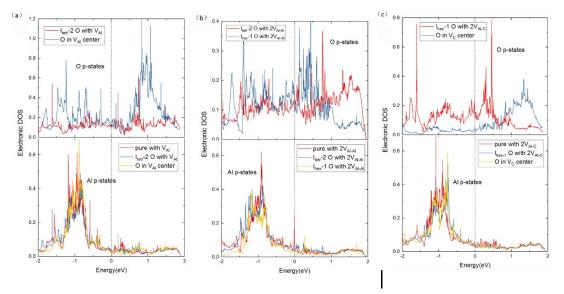
<sup>b</sup> School of Physical Science and Technology, Lanzhou University, Lanzhou 730000, China

<sup>c</sup> School of Nuclear Science and Technology, University of Chinese Academy of Sciences, Beijing 100049, China

<sup>d</sup> Advanced Energy Science and Technology Guangdong Laboratory, Huizhou 516000, China

<sup>e</sup> School of Nuclear Science and Technology, Lanzhou University, Lanzhou 730000, China

<sup>f</sup>College of Electrical Engineering, Longdong University, qingyang 745000, China



**Fig. S1** Local DOS for vacancy nearest-neighbor Al atom and interstitial O atom within (a)  $V_{Al}$  monovacancy; (b)  $2V_{Al-Al}$  divacancy; (c)  $2V_{Al-C}$  divacancy.