

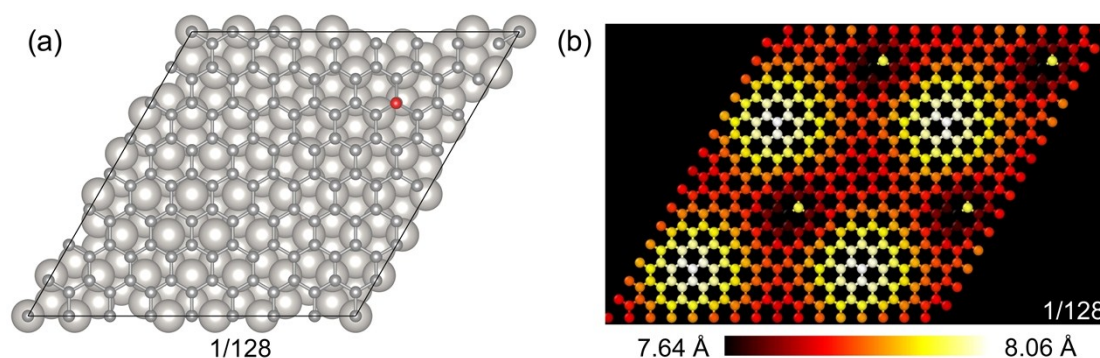
## Supplementary Information

### Effects of substrate and tip characteristics on the surface friction of fluorinated graphene

Yuan Ma,<sup>a</sup> Zugang Liu,<sup>a</sup> Lei Gao,<sup>\*a</sup> Yu Yan,<sup>a</sup> Lijie Qiao<sup>a</sup>

<sup>a</sup> Beijing Advanced Innovation Center for Materials Genome Engineering, Institute for Advanced Materials and Technology, University of Science and Technology Beijing, Beijing 100083, China.

\*Corresponding author: gaolei@ustb.edu.cn



**Fig. S1** (a) Atomic structure of FGr/Pt(111) (1/128 coverage). (b) Geometrical corrugation of graphene sheet with 1/128 fluorine coverage presented in (a),  $\Delta H=0.42$  Å.