Supplementary Information

for

A Bifunctional Two Dimensional TM₃(HHTP)₂ monolayer and its variations for Oxygen Electrode Reactions

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Figure S1. The partially density of states of $Ni_3(HHTP)_2$ and its variations. (a) is the un-adsorbed NiX₄. (b)-(c) are OOH, O and OH adsorption systems, respectively.



Figure S2. The partially density of states of $Fe_3(HHTP)_2$ and its variations. (a) is the un-adsorbed FeX_4 . (b)-(c) are OOH, O and OH adsorption systems, respectively.