Supplementary Information

The Magnetism of 1T-MX$_2$ (M = Zr, Hf; X = S, Se) Monolayers by Hole Doping

Hui xiang,*abc Bo Xu,d Weiqian Zhao,a Yidong Xia,b Jiang Yin,b Xiaofei Zhang,a and Zhiguo Liu*b

a School of Mathematics and Physics, Hubei Polytechnic University, Huangshi, 435003, China
b National Laboratory of Solid State Microstructures and Department of Materials Science and Engineering, Nanjing University, Nanjing, 210093, China
c School of Chemistry and Chemical Engineering, Wuhan University of Science and Technology, Wuhan, 430081, China
d School of Sciences, Key Laboratory of Biomedical Functional Materials, China Pharmaceutical University, Nanjing, 211198, China

Electronic mail: hxiang0717@163.com, and liuzg@nju.edu.cn.

Fig. S1 The band structures and DOS of MX$_2$ (M=Zr, Hf; X=S, Se) monolayers. The red and blue lines in the right image represent the contribution of the $p$ orbital of the S (Se) atoms and the $d$ orbital of the Zr (Hf) atoms, respectively.