

Electronic Supplementary Information

To

Structural and electronic properties of KY(BH₄)₄: DFT + U study

Chuan Liu^{*a}, Ting Zhang^a, Xiangju Ye^a, Xuemei Zhang^a, Shengli Zhang^b

^a College of Chemistry and Materials Engineering, Anhui Science and Technology University, Fengyang, Anhui Province, 233100, China

^b Institute of Optoelectronics & Nanomaterials Herbert Gleiter Institute of Nanoscience, College of Materials Science and Engineering, Nanjing University of Science and Technology, Nanjing, 210094, China

E-mail: liuxc@ahstu.edu.cn

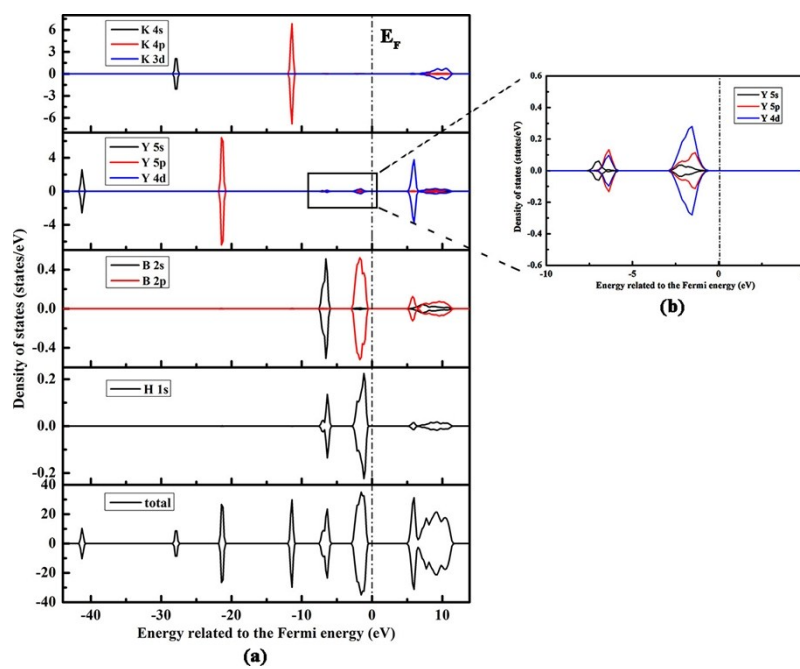


Fig. S1 The calculated total and partial density of states of KY(BH₄)₄ by the PBE + U method at U = 3 eV, and the Fermi energy is set to zero.

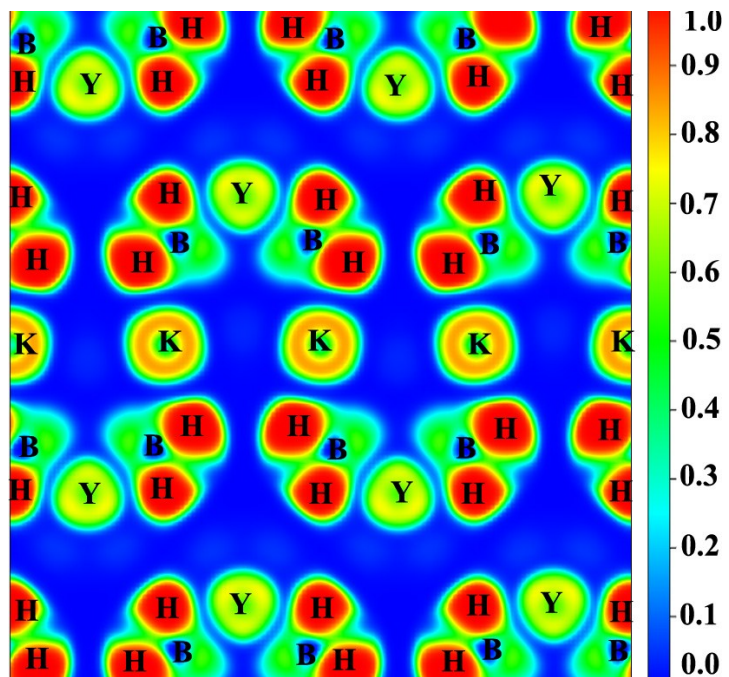


Fig. S2 The calculated ELF of KY(BH₄)₄ by the PBE + U method at U = 3 eV.

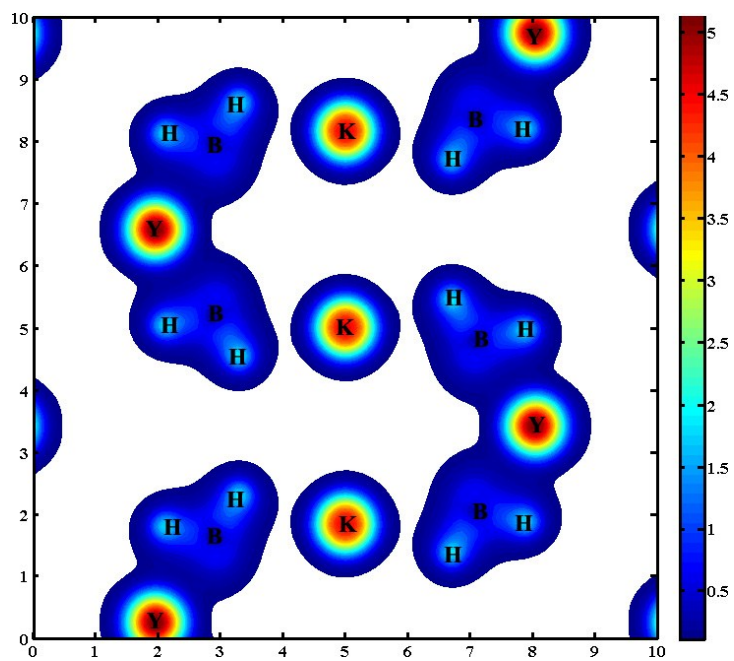


Fig. S3 The calculated total charge density of $\text{KY}(\text{BH}_4)_4$ by the PBE + U method at $U = 3 \text{ eV}$.