Electronic Supplementary Material (ESI) for New Journal of Chemistry. This journal is © The Royal Society of Chemistry and the Centre National de la Recherche Scientifique 2020

Supporting Information

Coralline-like CoP₃@Cu as an efficient electrocatalyst for hydrogen evolution reaction in acidic and alkaline solutions

Mengyu Hou^{a,1}, Ying Xu^{a,1}, Xi Li^{a,*}, Yongzhi Dong^a, Fengke Sun^a, Dan Tang^a, Minkun Cai^a,

Chenglong Jin^a, Yulin Dong^a, Deyu Qu^a, Zhizhong Xie^a, Yawei Lin^a, Chaocan Zhang^{b,*}

^aSchool of Chemistry, Chemical Engineering and Life Science, Wuhan University of Technology,

Wuhan 430070, PR China

^bSchool of Materials Science and Engineering, Wuhan University of Technology, Wuhan 430070,

PR China

¹*These authors contributed equally to this work.*

*Corresponding authors

E-mail: chemlixi@whut.edu.cn (Xi Li); polymers@whut.edu.cn (Chaocan Zhang).

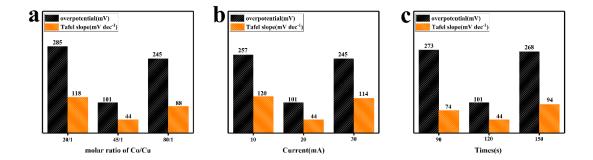


Figure S1. The optimized plot of overpotential ($j=10 \text{ mA cm}^{-2}$) and Tafel slope and deposition conditions of CoP₃@Cu/Cu: (a) molar ratio of Co/Cu, (b) deposition current, (c) deposition time.

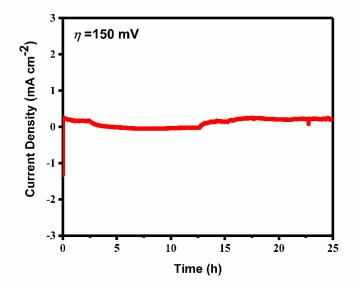


Figure S2. The i-t curve of Cu plate in $0.5 \text{ M} \text{ H}_2\text{SO}_4$.

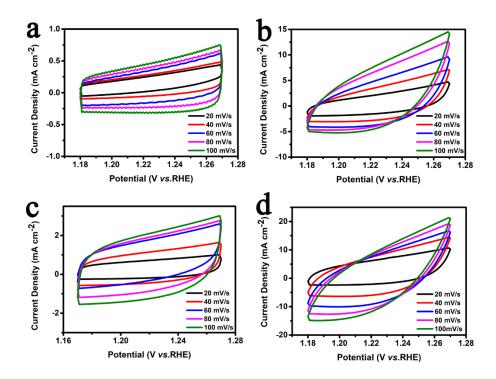


Fig. S3 The CV curves of (a) Cu-P, (b) Cu-D, (c) CoP₃/Cu, and (d) CoP₃@Cu /Cu in 1 M KOH.