Electronic Supplementary Material (ESI) for CrystEngComm.

Supporting Information

Controllable design of macroporous PBA as an efficient non-enzymatic electrochemical sensor for glucose detection

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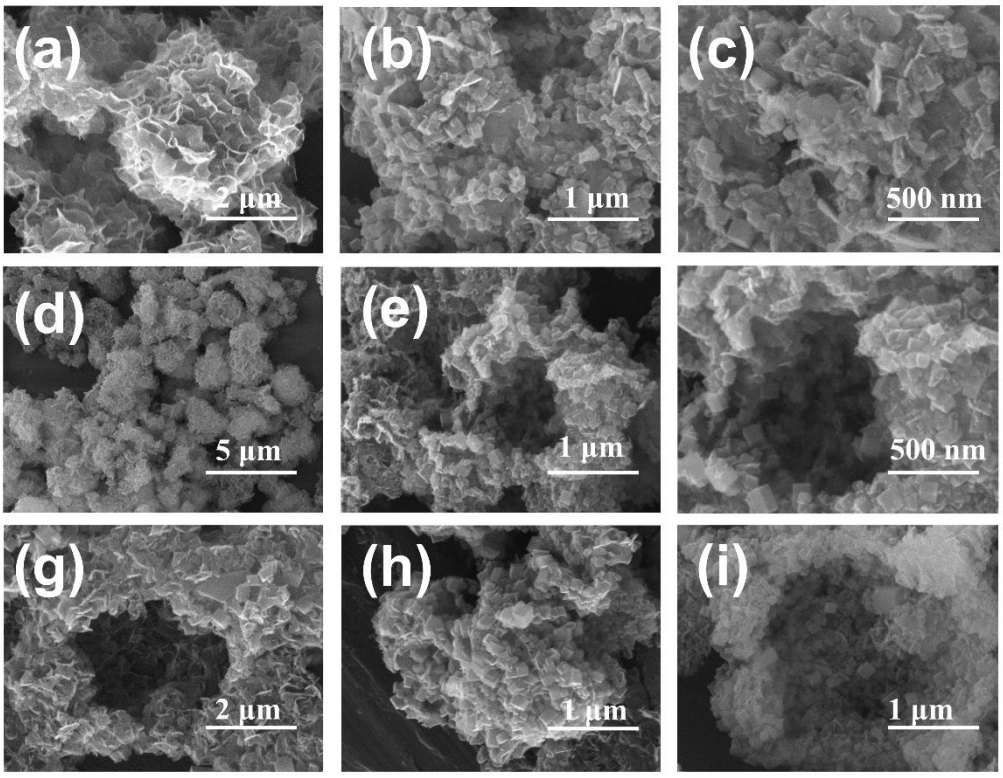

Fig. S1 SEM of 0.03 HN-CoFePBA (a-c), 0.05 HN-CoFePBA(d-f), and 0.07 HN-CoFePBA(g-i).

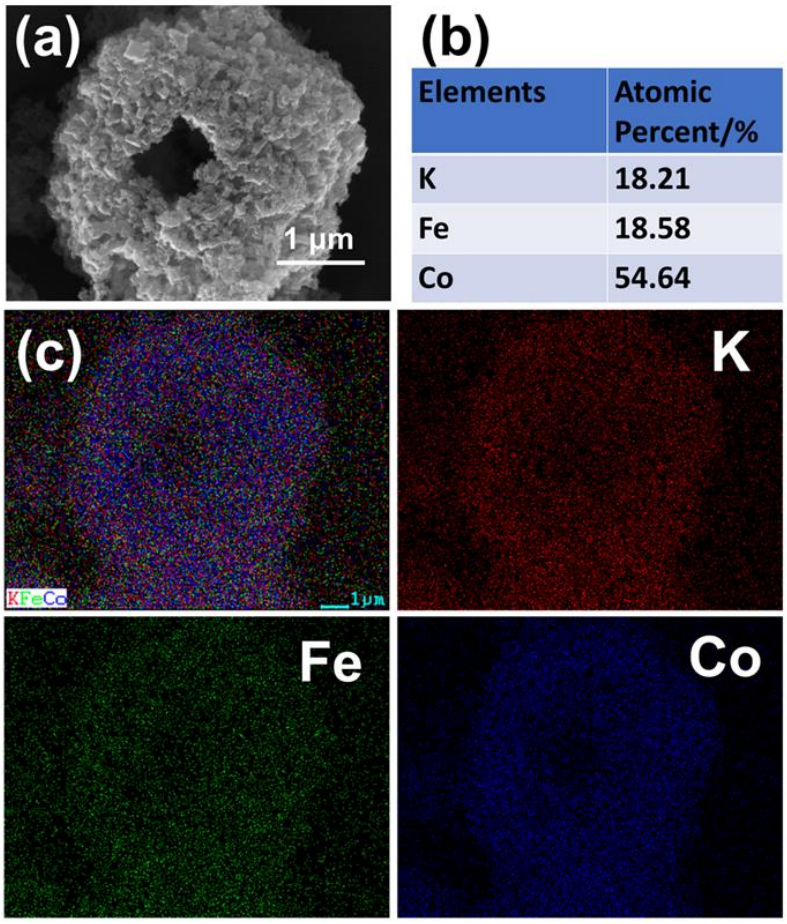

Fig. S2 EDS elemental mapping images of K, Fe and Co of HN-CoFePBA.

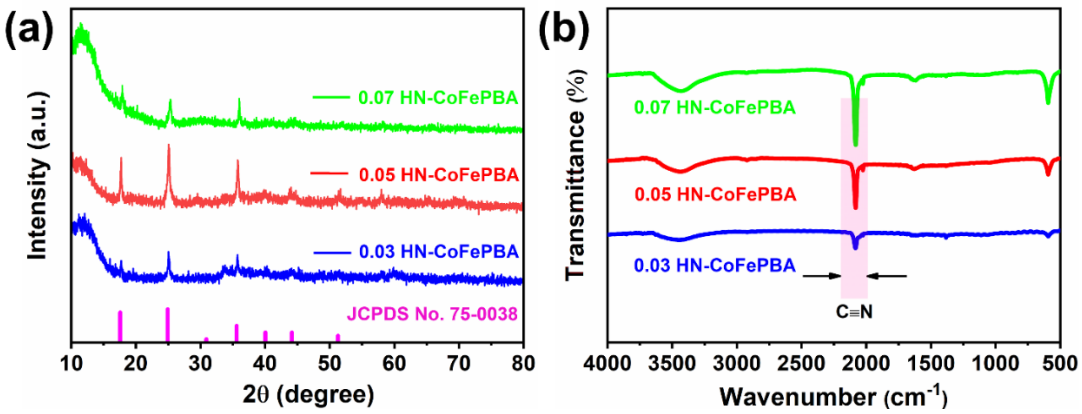

Fig. S3 (a) XRD patterns of 0.03 HN-CoFePBA, 0.05 HN-CoFePBA and 0.07 HN-CoFePBA composites, (b) FT-IR spectra of 0.03 HN-CoFePBA, 0.05 HN-CoFePBA and 0.07 HN-CoFePBA composites.

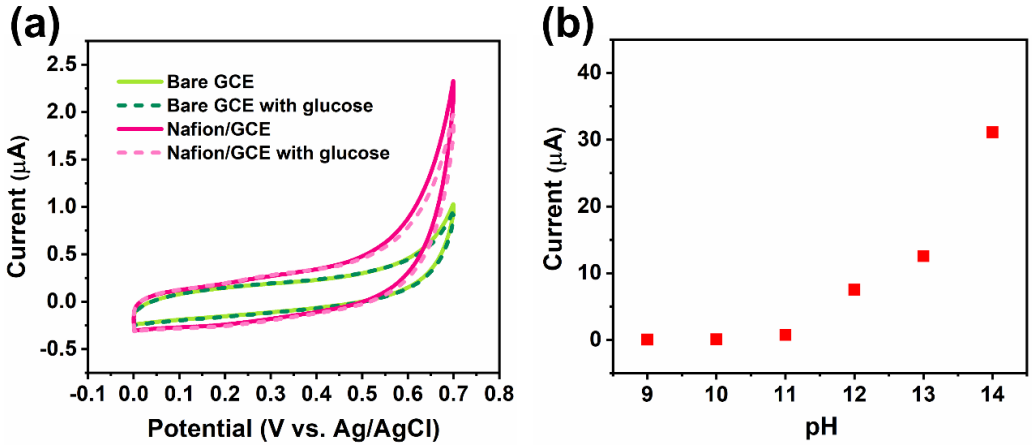

Fig. S4 (a) CV curves of bare GCE, nafion/GCE in 0.1 M NaOH solution with or without 20 μM glucose. (b) Plot of current vs. pH values for HN-CoFePBA electrode with 50 μM glucose.

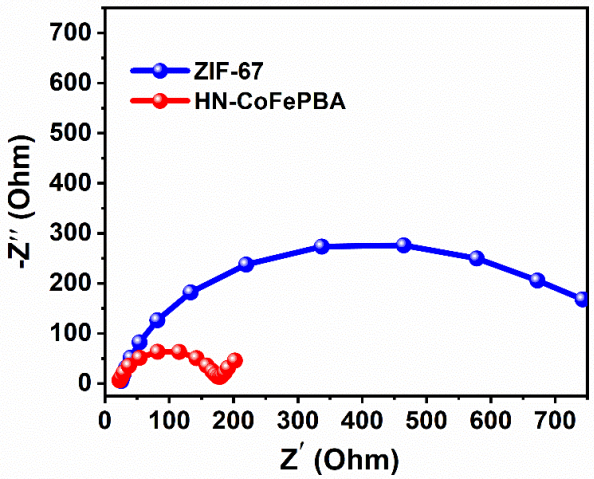

Fig. S5 EIS Nyquist plots recorded.

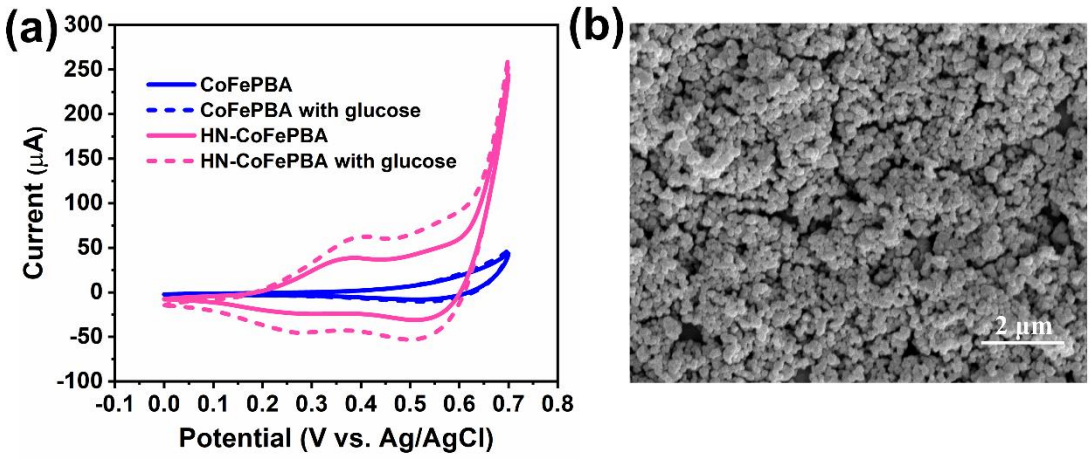

Fig. S6 (a) CV curves of CoFePBA, HN-CoFePBA of 20 μM glucose in 0.1 M NaOH solution at 20 mV s^{-1}. (b) SEM image of CoFePBA nanoparticles.

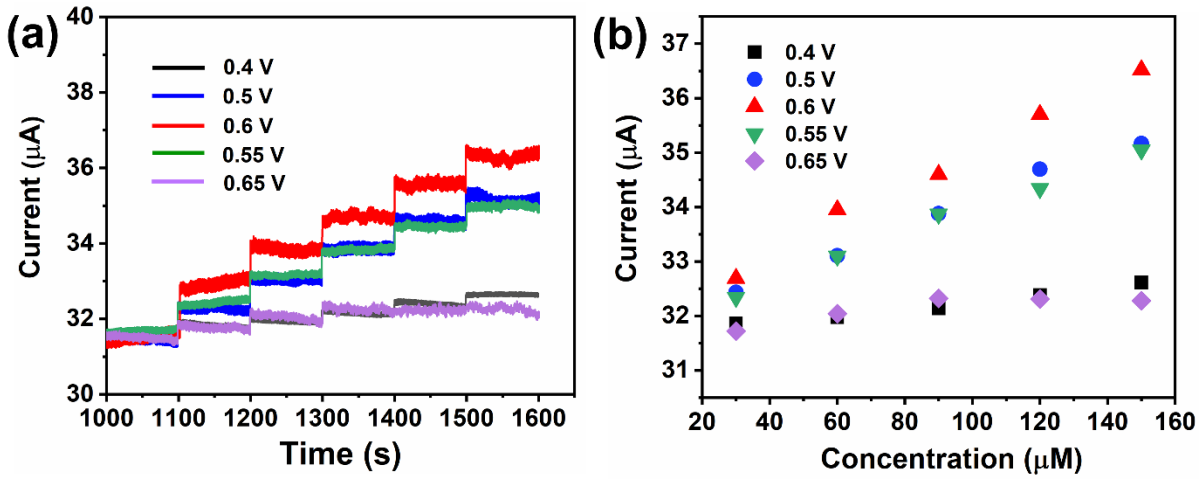

Fig. S7 (a) Chronoamperometric response of 0.05 HN-CoFePBA under different applied potentials. (b) Plots of peak current vs glucose concentration.

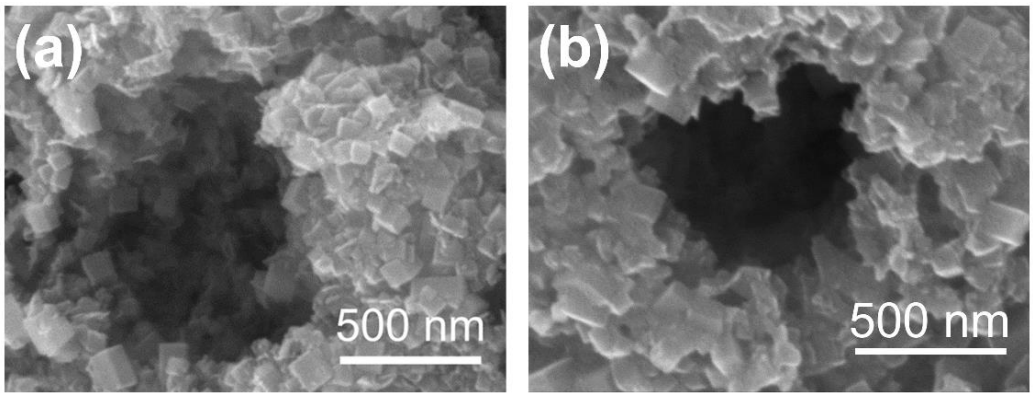

Fig. S8 (a) SEM of 0.05 HN-CoFePBA, (b) SEM of 0.05 HN-CoFePBA after stability test.

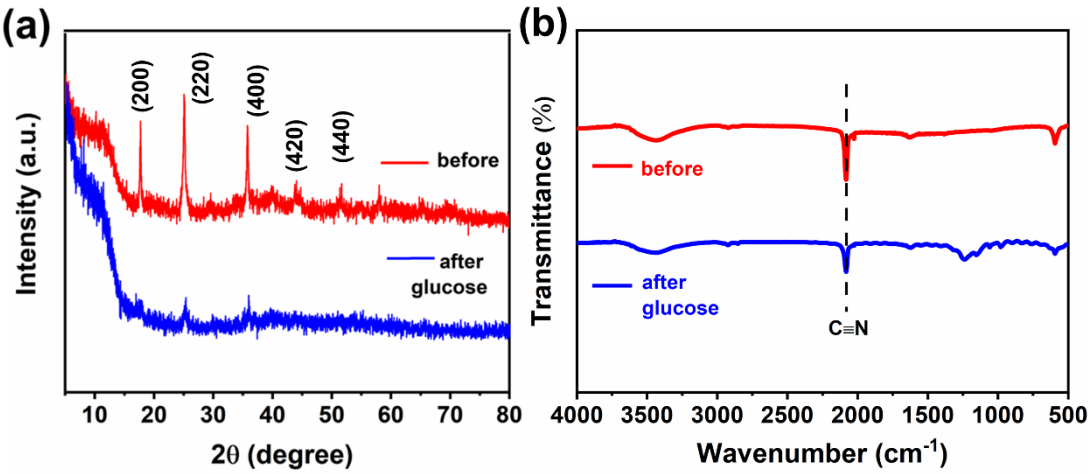

Fig. S9 (a) XRD of 0.05 HN-CoFePBA. (b) FT-IR of 0.05 HN-CoFePBA after stability test.