## One-step Potentiostatic Electrodeposition of NiS- NiS<sub>2</sub> on

## Sludge-based Biochar and its Application for Non-enzymatic

## **Glucose Sensor**

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Figure S1 SEM images of sludge-based biochar.





EDS Layered Image 8



**Figure S2** Elemental mapping results of (A) Ni(OH)<sub>2</sub>-NiS<sub>2</sub>/ sludge-based biochar/GCE, (B) NiS-NiS<sub>2</sub>/ sludge-based biochar/GCE, (C) NiS<sub>2</sub> sludge-based /biochar/GCE



Figure S3 Current response of glucose and the interfering species on NiS-NiS<sub>2</sub>/sludge-based biochar/GCE in 0.5 mM glucose.