Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Single-atomic cobalt fused biomolecule-derived nitrogen-doped carbon nanosheets for selective oxidation reaction

*Miao Xia, Haitao Huang, Xuefei Zhang, Qiao-Hua Wei and Zailai Xie**

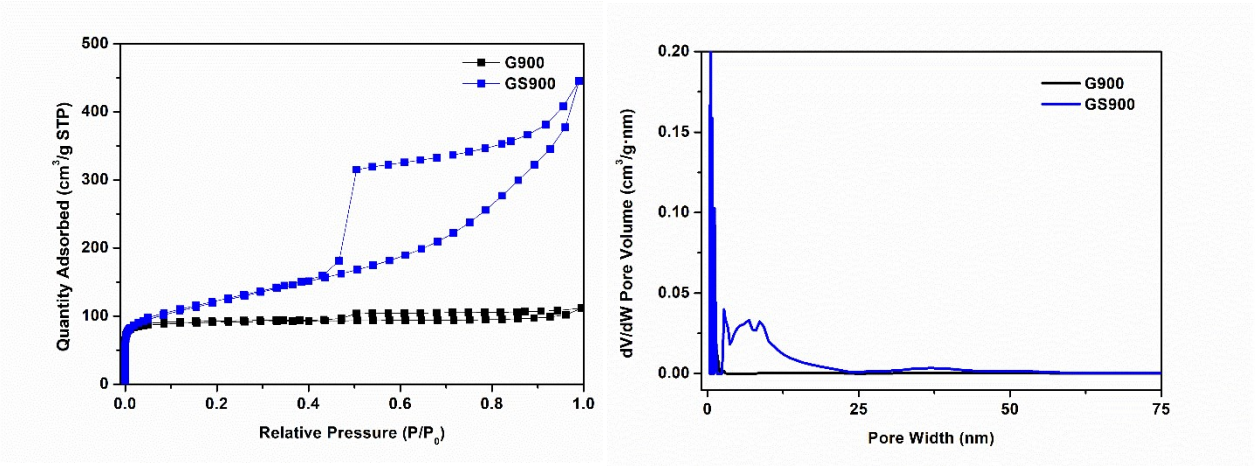

Fig. S1. The N_2 isotherm and pore distribution of carbons G900 and GS900.

Table S1. The porosity data of carbocatalysts G900 and GS900.

sample	S_{total}(m^2g^{-1})	Pore volume ($cm^3\ g^{-1}$)		
		V_{total}	V_{micro}	V_{meco}
G900	278.42	0.15	0.12	0.02
GS900	419.54	0.46	0.07	0.37

S_{total}: total BET specific surface area; V_{total}: total pore volume; V_{micro}: micropore volume; V_{meso}: mesopore volume.

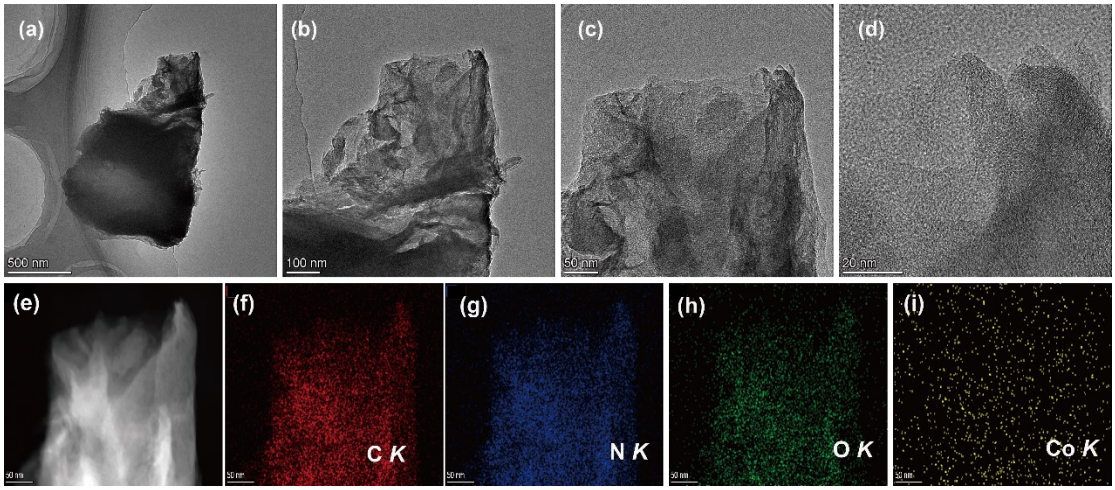

Fig S2 **Microstructure and morphology characterizations of Co-G-900 catalysts**. **a-d** TEM images **e** HADDF-STEM image **f-i** EDS elemental mapping.

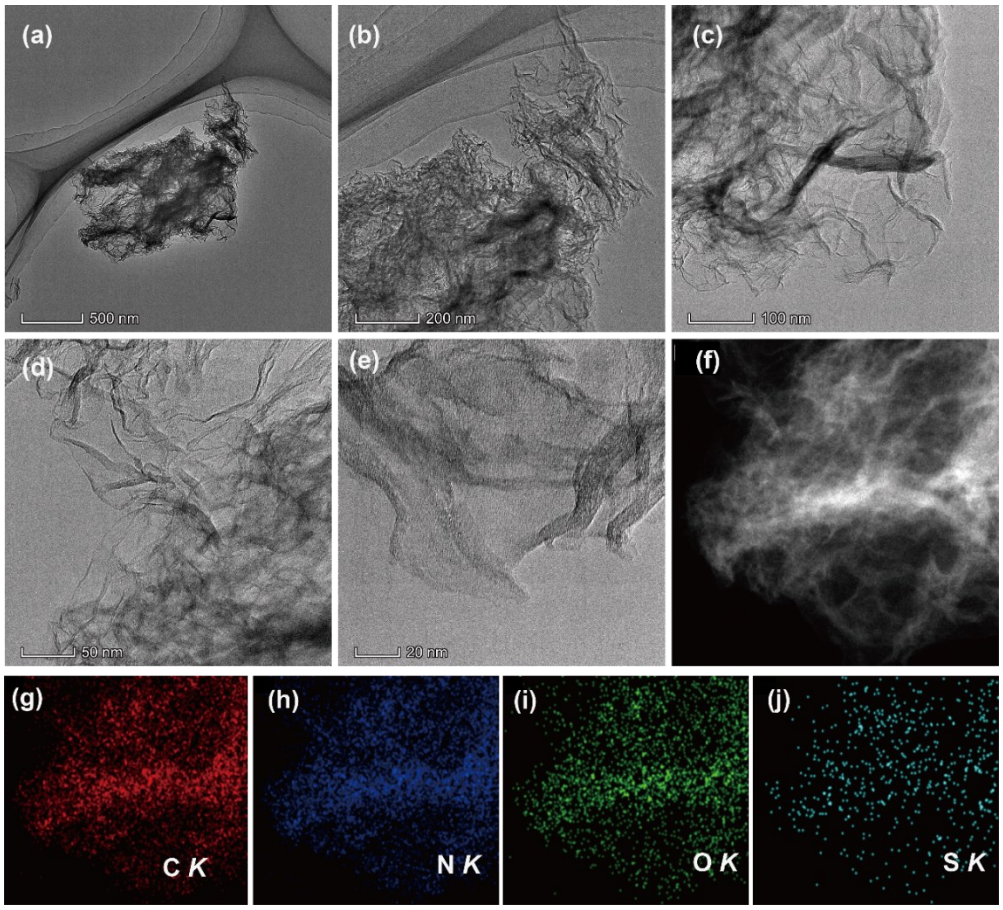

Fig S3 **Microstructure and morphology characterizations of GS-900 catalysts**. **a-e** TEM images **f** HADDF-STEM image **g-j** EDS elemental mapping.

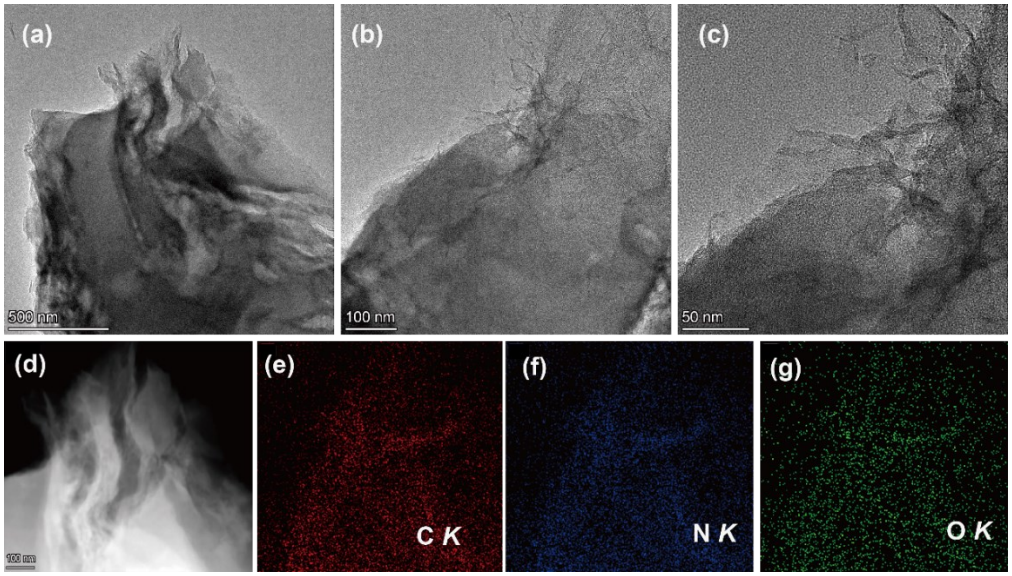

Fig S4 **Microstructure and morphology characterizations of G-900 catalysts**. **a-c** TEM images **d** HADDF-STEM image **e-g** EDS elemental mapping.

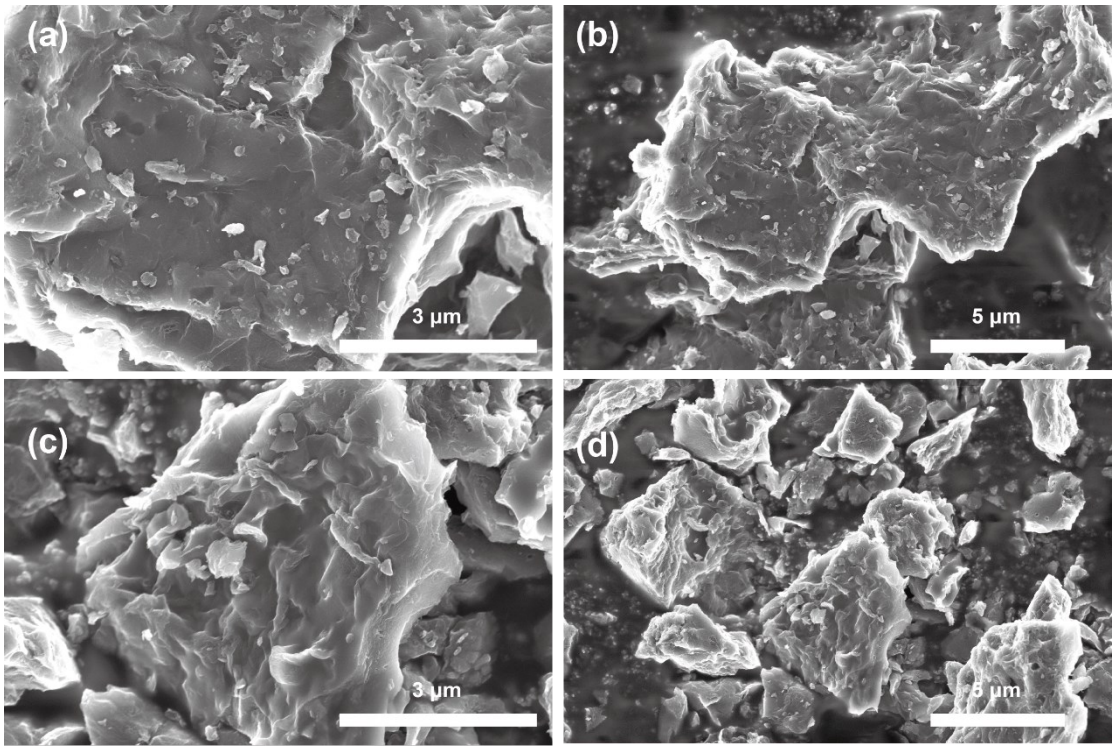

Fig S5 **a-b** The SEM images of Co-G-900 **c-d** The SEM images of G900