

Figure S1. SEM micromorphology of GO

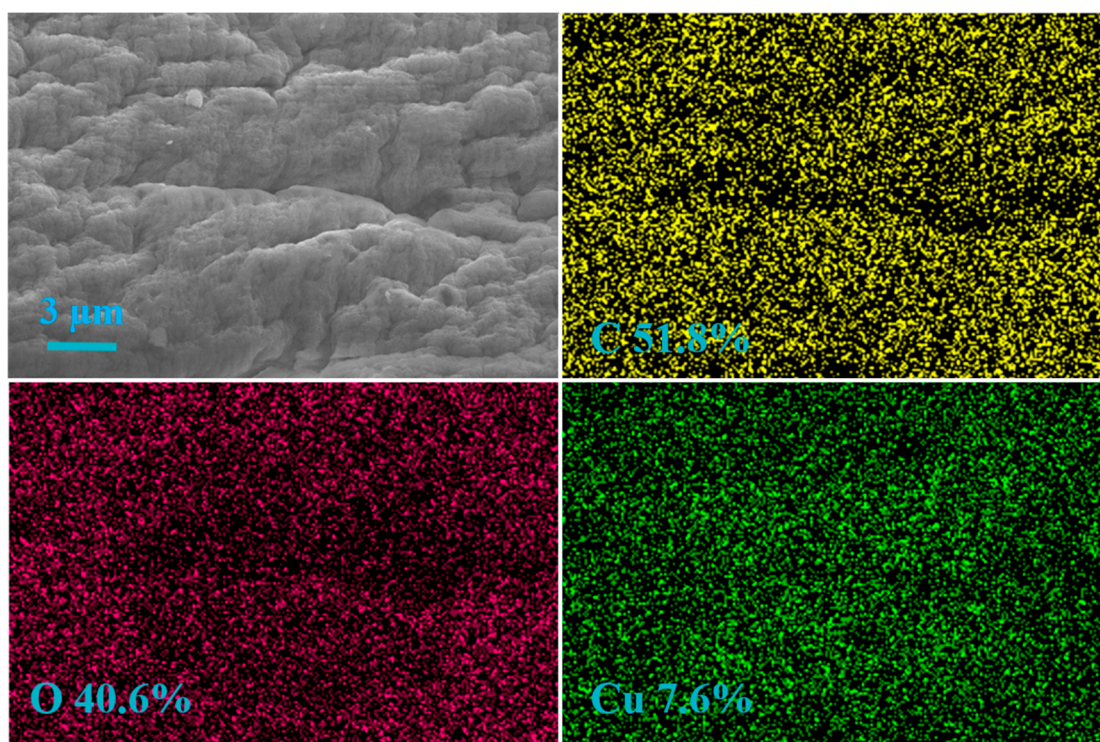


Figure S2. SEM images of Alg-Cu and the elemental distributions of C, O and Cu.

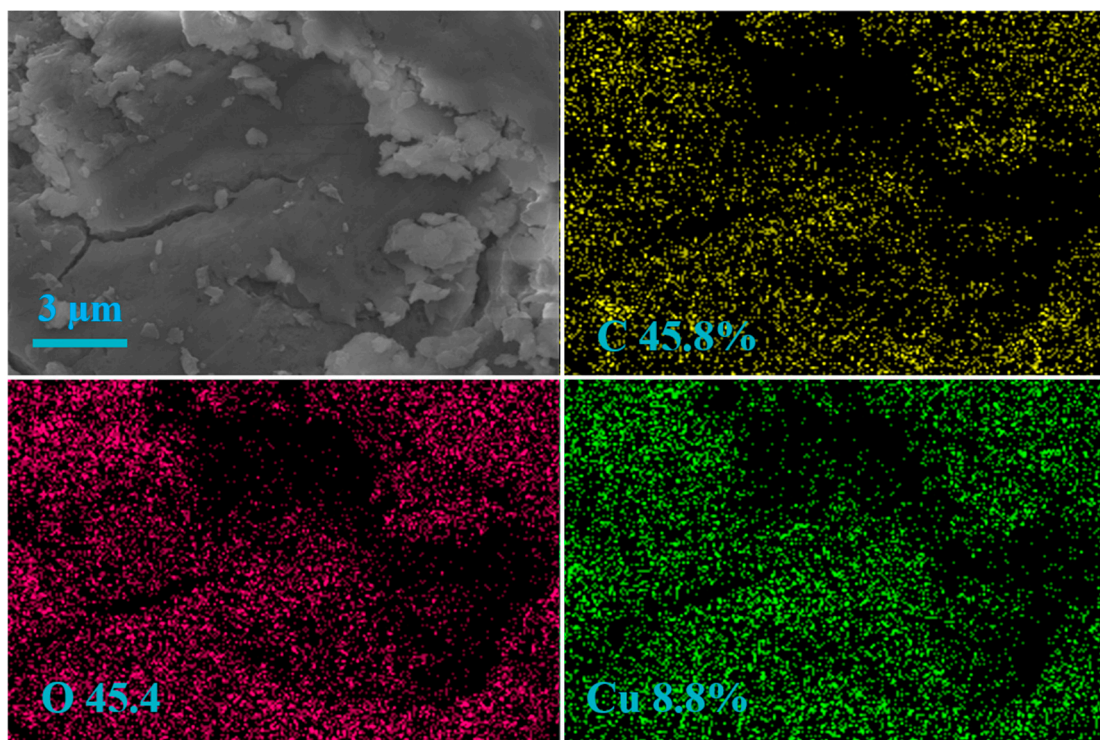


Figure S3. SEM images of Alg-Cu@GO and the elemental distributions of C, O and Cu.

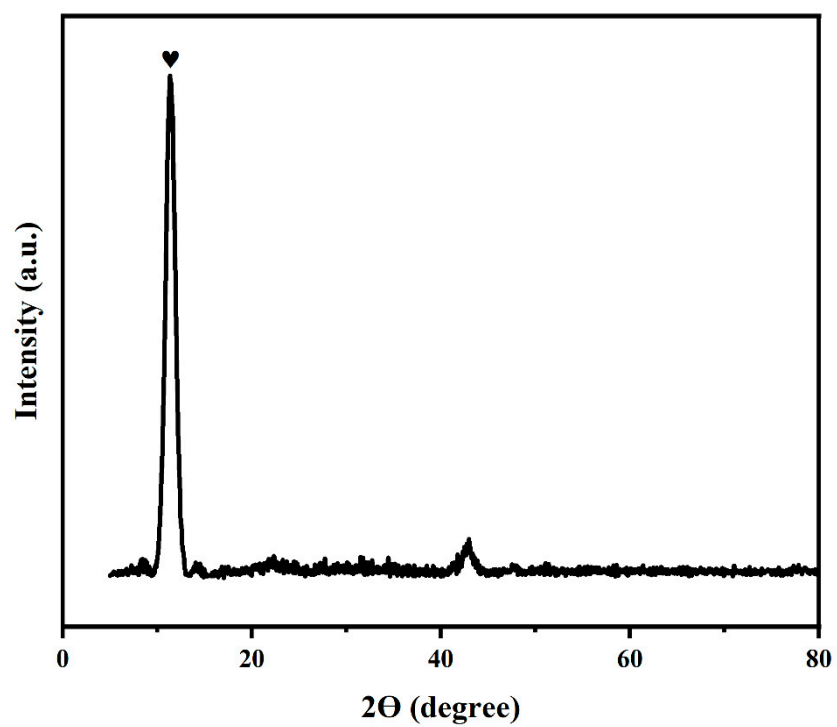


Figure S4. XRD patterns of GO.

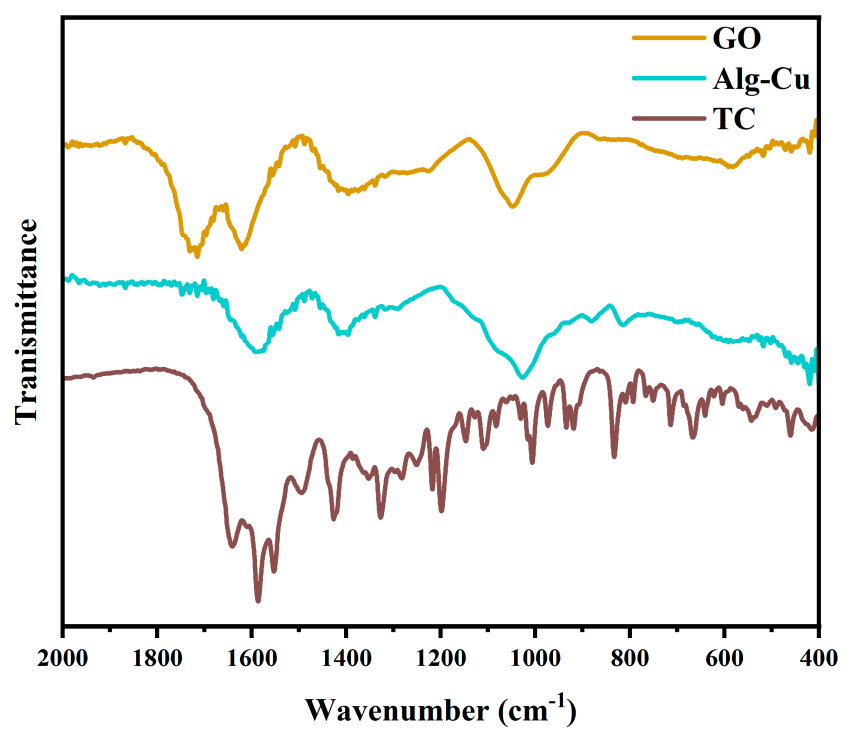
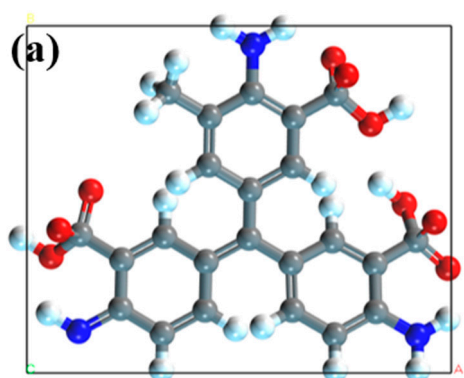
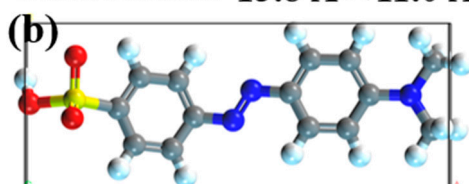


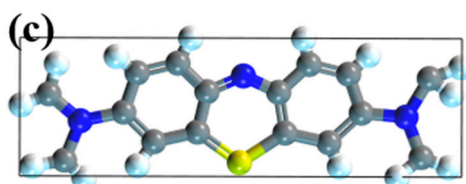
Figure S5. FTIR spectra of GO, Alg-Cu and TC.



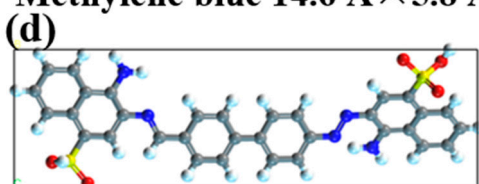
Acid fuchsin $13.8 \text{ \AA} \times 11.0 \text{ \AA}$



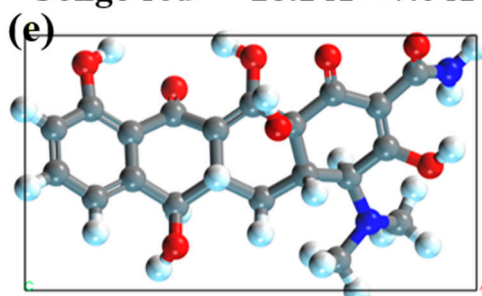
Methyl orange $15.6 \text{ \AA} \times 6.0 \text{ \AA}$



Methylene blue $14.6 \text{ \AA} \times 5.8 \text{ \AA}$



Congo red $28.1 \text{ \AA} \times 7.6 \text{ \AA}$



Tetracycline $15.0 \text{ \AA} \times 8.0 \text{ \AA}$

Figure S6. Molecular size of different pollutants optimized by Martials studio.