

Supplementary data

SILAR-Deposited CuO Nanostructured Films Doped with Zinc and Sodium for Improved CO₂ Gas Detection

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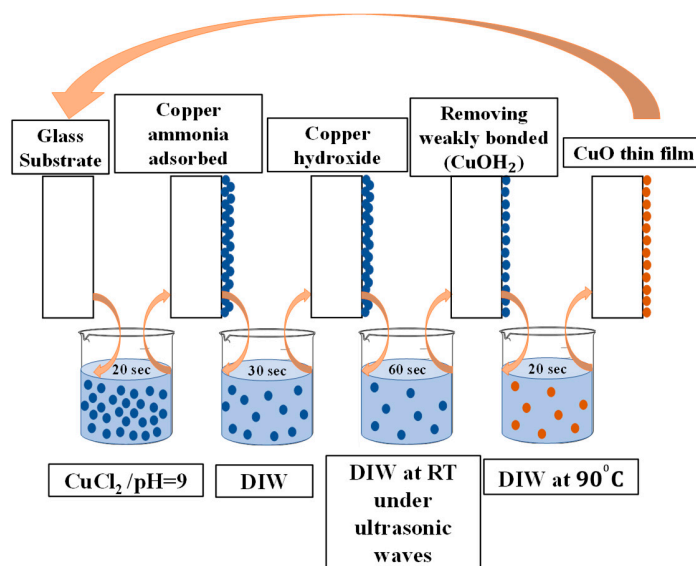


Figure S1. Schematic representation of the used modified SILAR technique to produce pure and doped CuO films.

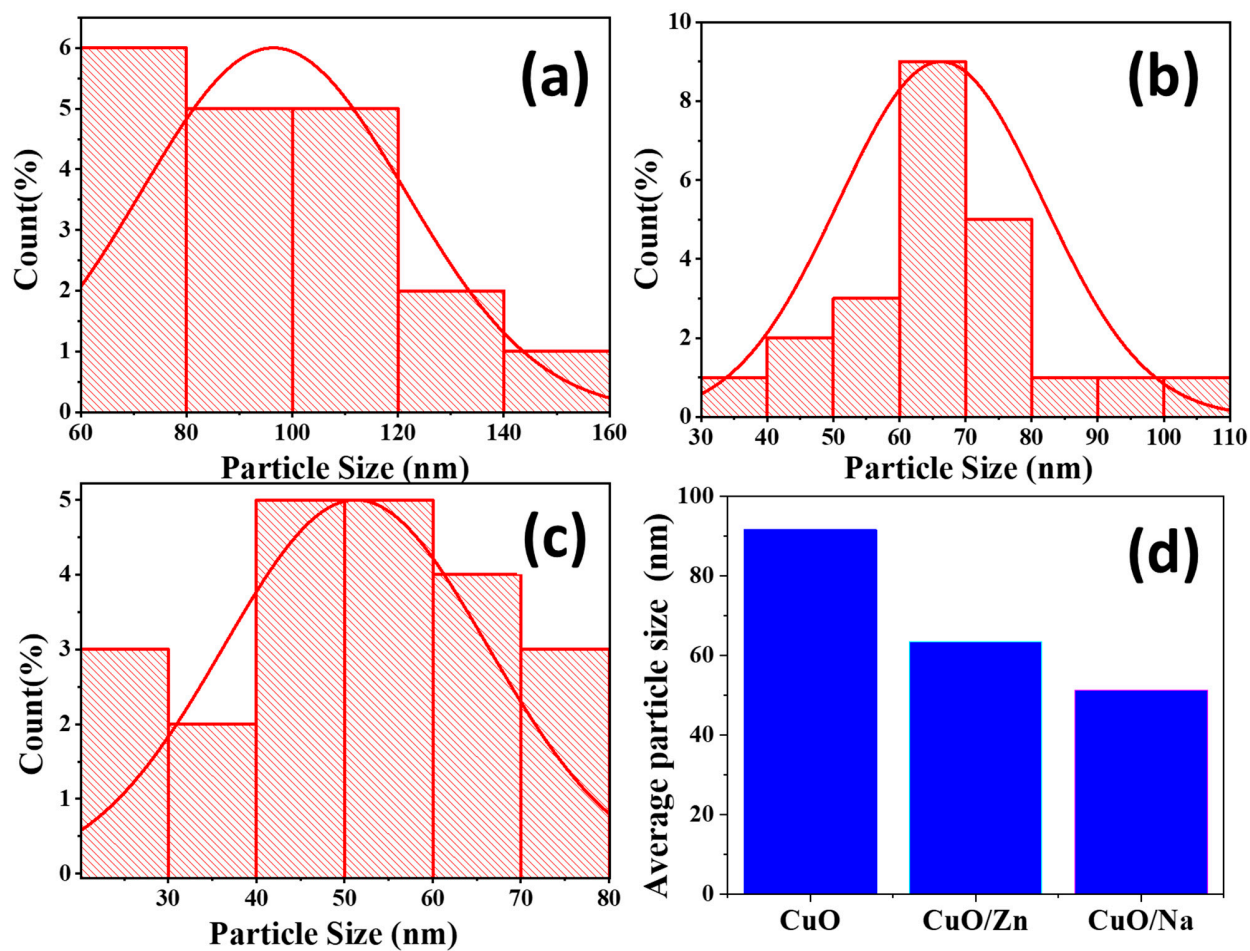


Figure S2. The particle size histogram for (a) CuO, (b) CuO/Zn, and (c) CuO/Na films.

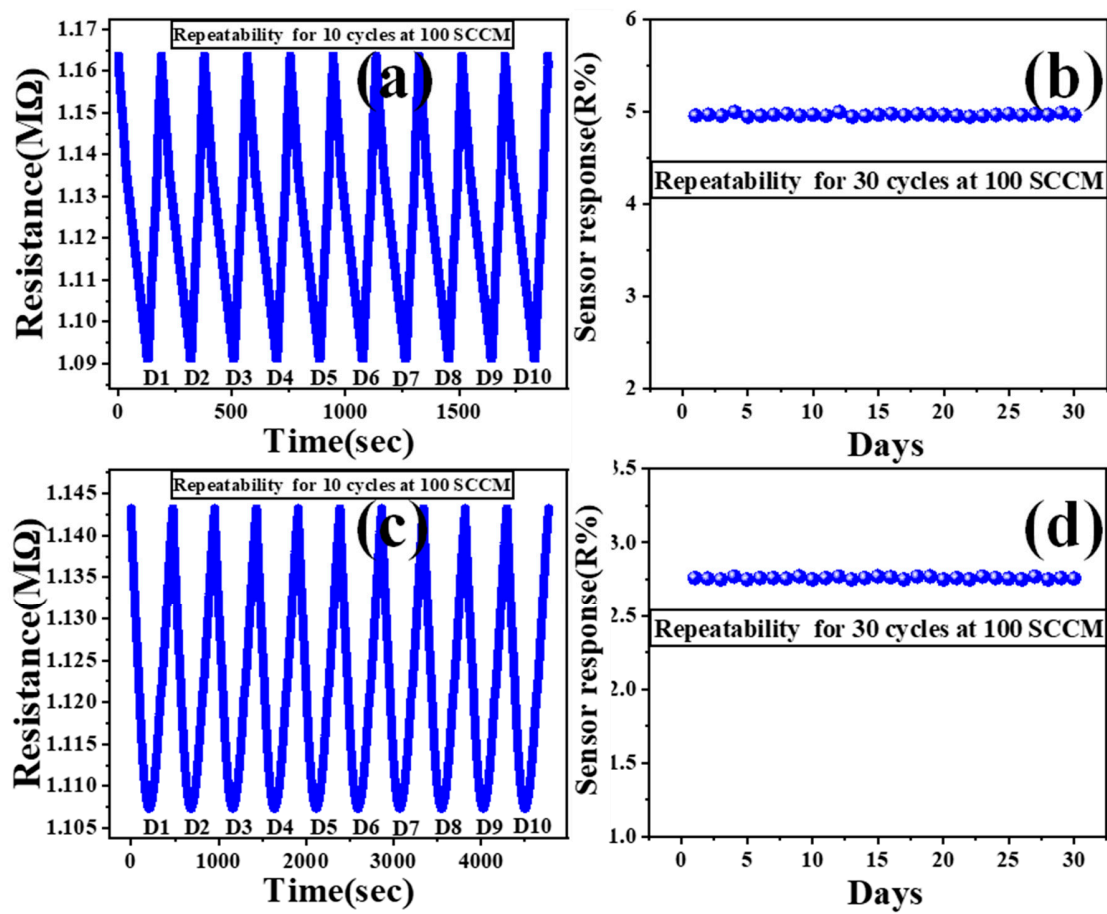


Figure S3. The repeatability of the CuO/Na when exposed to 100 SCCM flow rate of (a,b) CH₃OH and (c,d) NH₃ at room temperature in terms of (a,c) sensor resistance and (b,d) sensor response (R%).

Table S1. The oxidation state, ionic radius, and electronegativity for Cu, Zn, and Na.

	Oxidation state	Ionic radius	Electronegativity
Cu	+ 2	Cu ²⁺ (0.072 nm)	1.90
Zn	+ 2	Zn ²⁺ (0.074 nm)	1.65
Na	+ 1	Na ⁺ (0.102 nm)	0.93