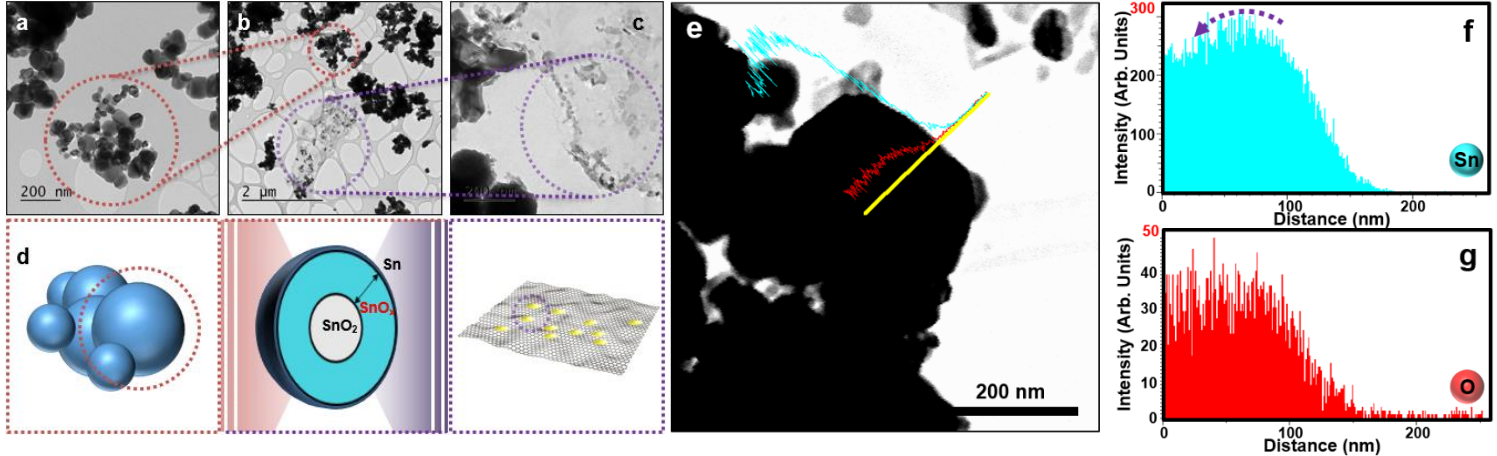


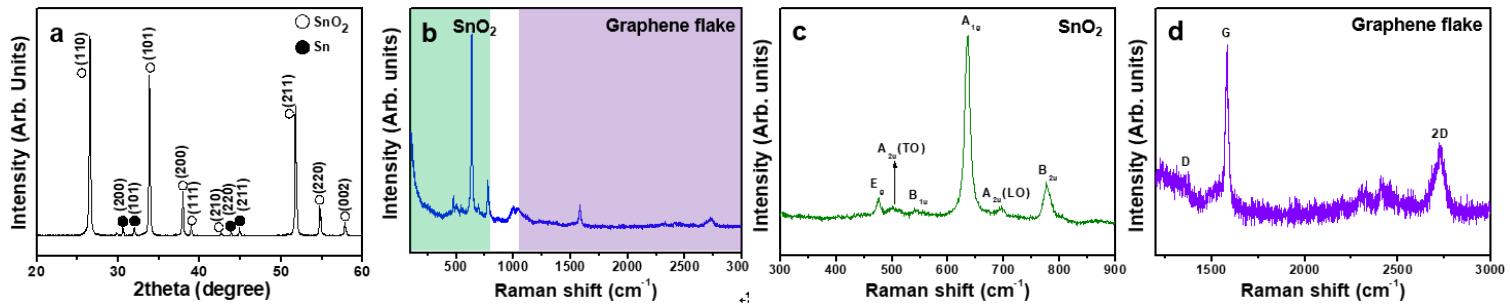
Product Name: SnO₂ for gas sensors

1. Changes in the morphology and composition after high-energy irradiating the mixed raw powders.

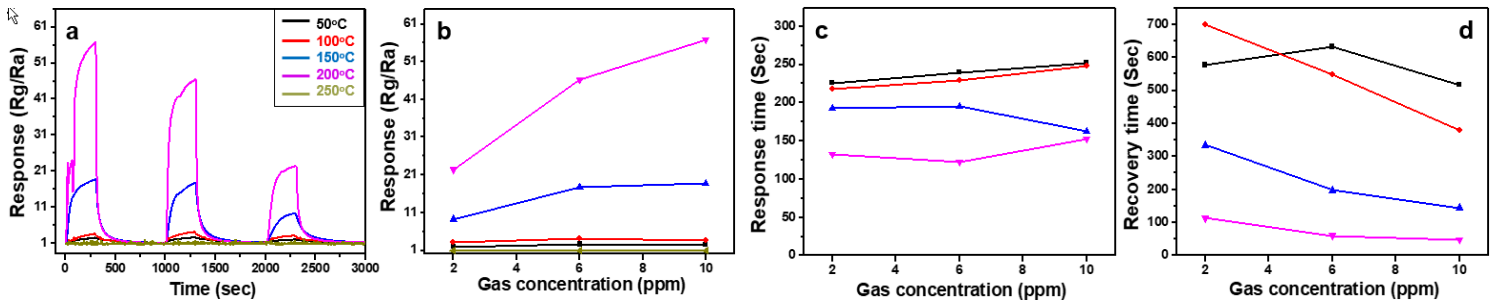
Typical transmission electron microscopy (TEM) images of (a) aggregated SnO₂ particles at different reduction degrees, (b) SnO₂ with/without graphene, and (c) several SnO₂-based particles adsorbed in graphene. (d) Schematic diagram of the formation of the SnO₂ core-Sn shell observed in a and c, according to the degree of the high-energy reduction. (e) Concentration distribution of Sn and O near the surface. Line mapping profiles of the concentration distributions of (f) Sn and (g) O, indicating the higher Sn concentration on the surface than on the inside.



2. XRD & Raman analysis



3. Comparison of the initial resistance values at (a) 50°C, (b) 100°C, (c) 150°C, and (d) 200°C for SnO₂



4. Particle size analysis

