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

Supporting Information.

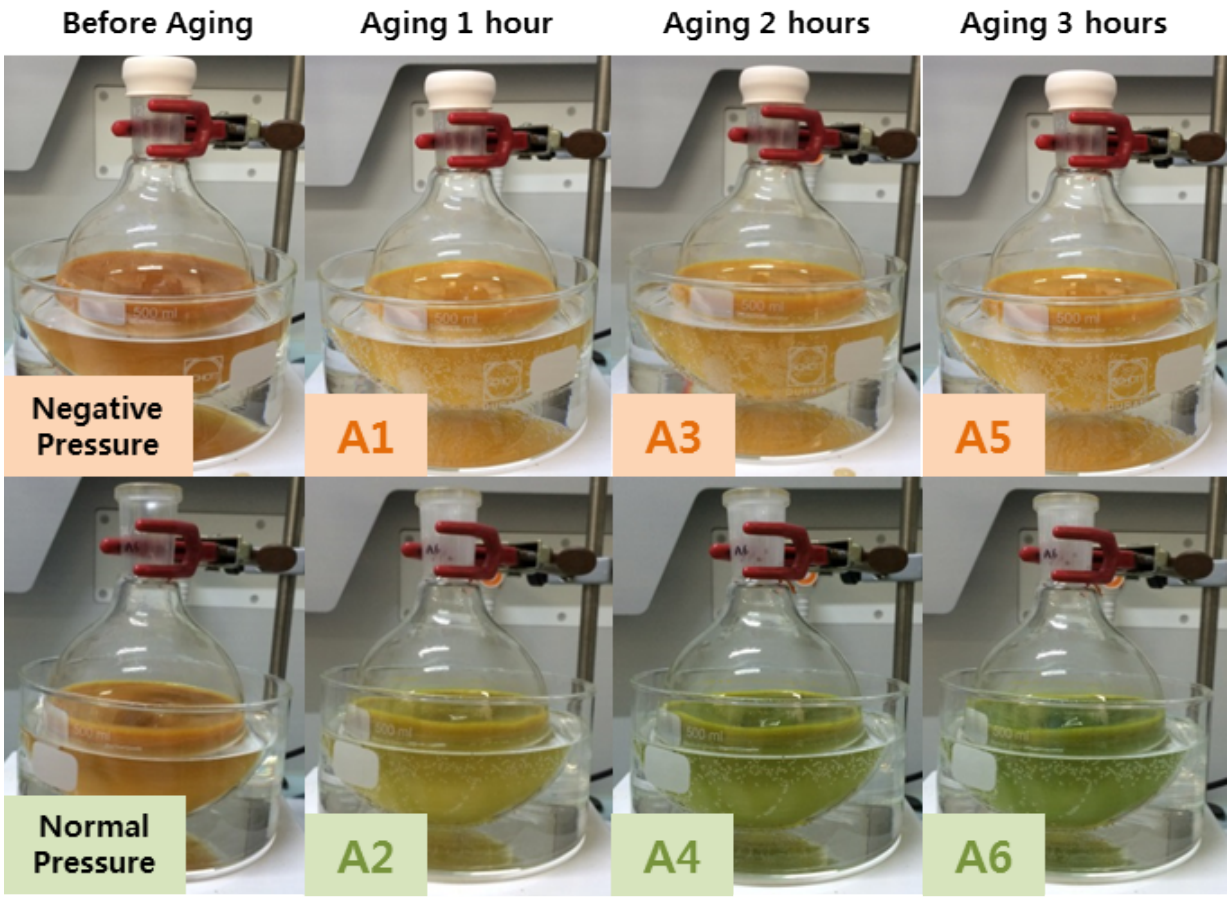


Fig. S1. Effect of aging period of negative pressure and normal pressure according to the differences in aging periods. (A1, A2: After 1 hour of aging. A3, A4: After 2 hours of aging. A5, A6: After 3 hours of aging.).

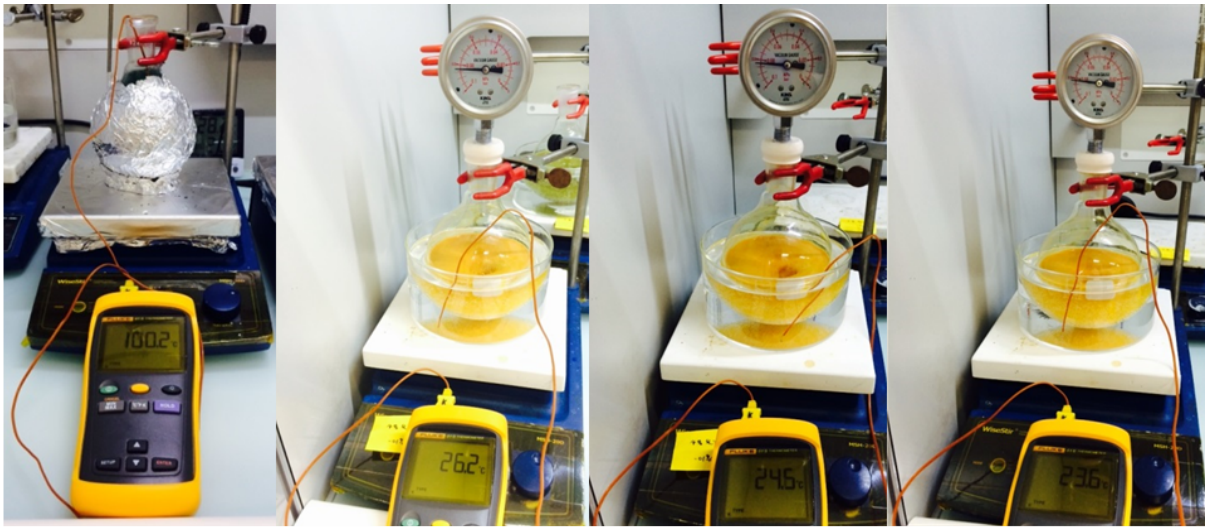


Fig. S2. Measurements of temperature and negative pressure during the reaction of copper(I) oxide synthesis using a k-type temperature sensor and a vacuum pressure gauge.

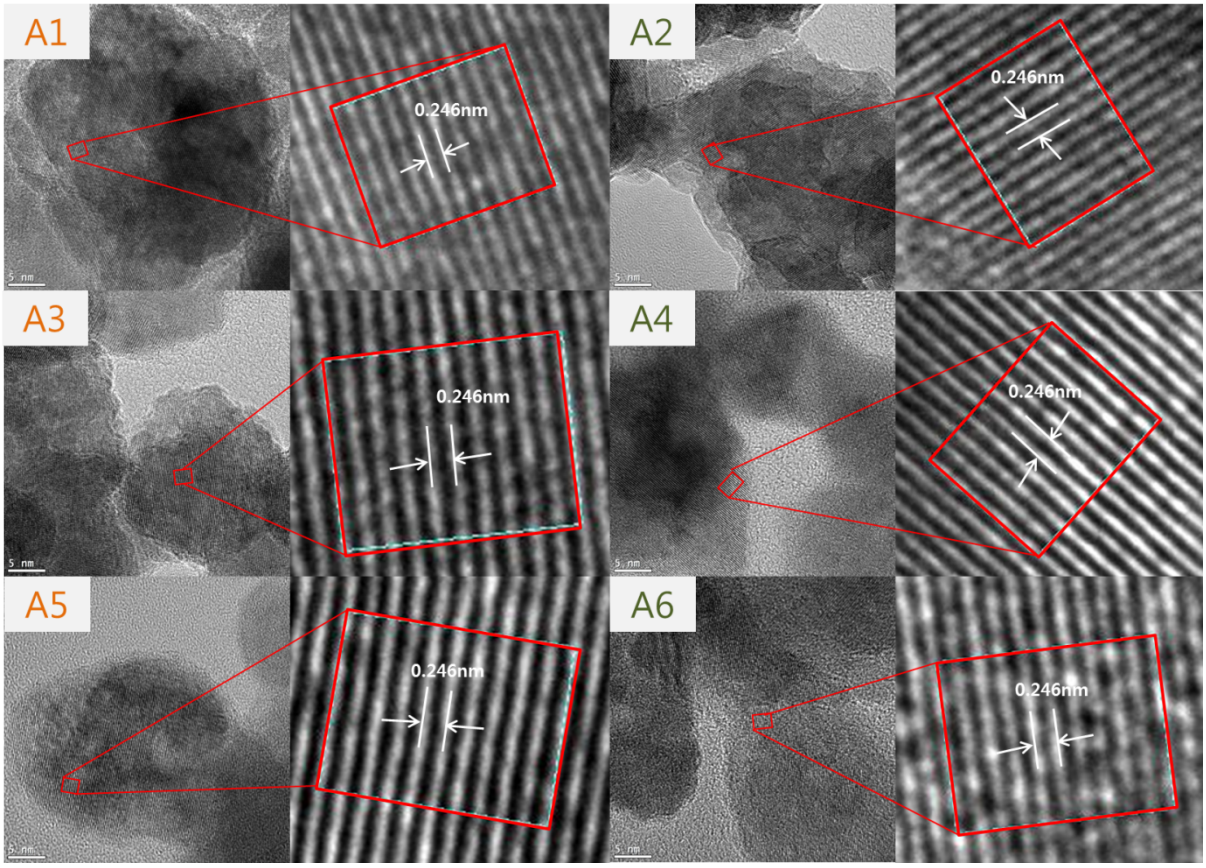
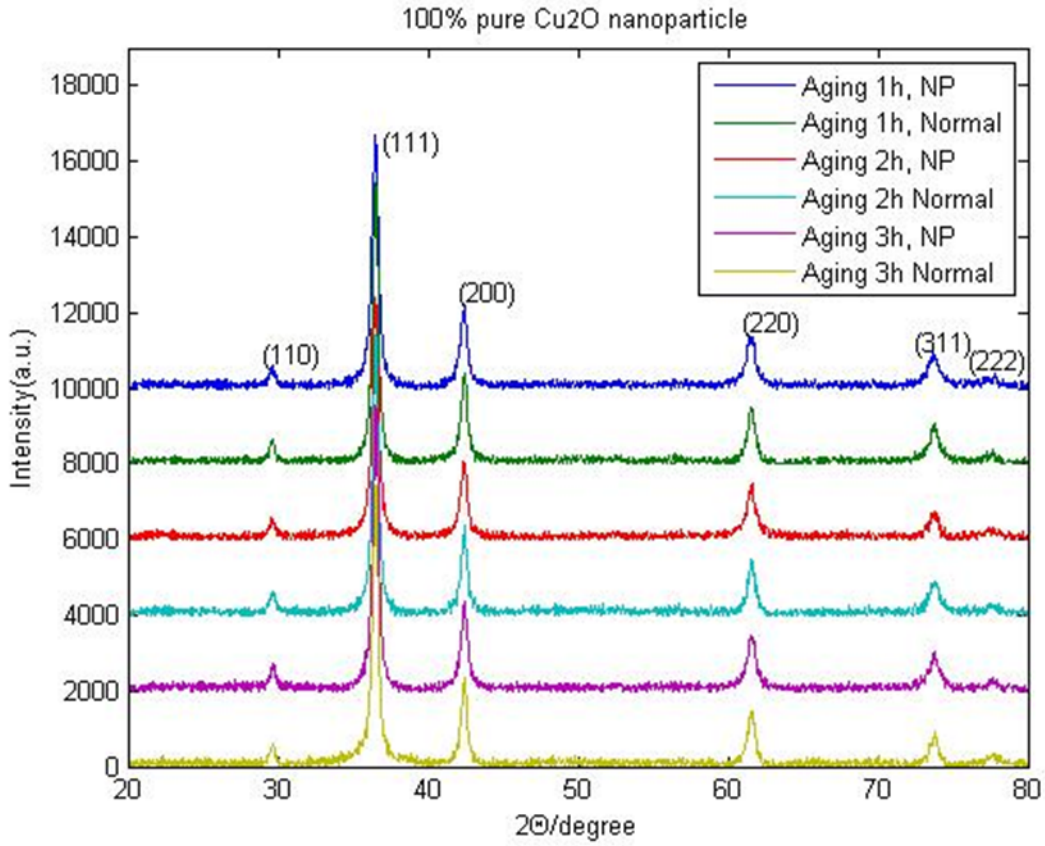


Fig. S3. HRTEM image of each of the sample which have d-spacing of (111) of copper oxide.



FWHM(θ) at the d-spacing of (111)	aging 1h	aging 2h	aging 3h
Negative pressure	0.52	0.53	0.46
Normal pressure	0.45	0.46	0.45

Fig. S4. XRD patterns and FWHM(θ) of the synthesized copper(I) oxide nanoparticle according to aging period and aging pressure.