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Electronic Supplementary Information for

## Direct fabrication of bimetallic AuPt nanobrick spherical nanoarchitectonics for oxygen reduction reaction

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**Fig. S1** (a) Low-magnification SEM image of the AuPt NSNs and (b) corresponding histogram of the particle size distribution.



**Fig. S2** Digital photographs of reaction vials for the AuPt NSNs at different time intervals at 90 °C and room temperature.



**Fig. S3** SEM images of the AuPt samples prepared at different reaction times: (a) 15 min, (b) 30 min, (c) 2 h, (d) 4 h, (e) 6 h, and (f) 8 h.



**Fig. S4** SEM images of the samples prepared without (a) Pt precursor and (b) KI under the identical synthesis conditions.



**Fig. S5** Digital photographs of the solutions prepared with the presence of KI (a) and the absence of KI (b).



**Fig. S6** SEM images of samples prepared with (a) KBr and (b) KCl under the identical synthesis conditions.



**Fig. S7** SEM images of the samples prepared with (a) Brij 58 and (b) PVP under identical synthesis conditions.



**Fig. S8** (a) ORR polarization curves of Pt black at different rotating speeds. (b) The electron transfer numbers of Pt black at different potentials.