

Supporting Information

Side-to-side Cold Welding for Controllable Nanogap Formation from “Dumbbell” Ultrathin Gold Nanorods

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SUPPORTING FIGURES

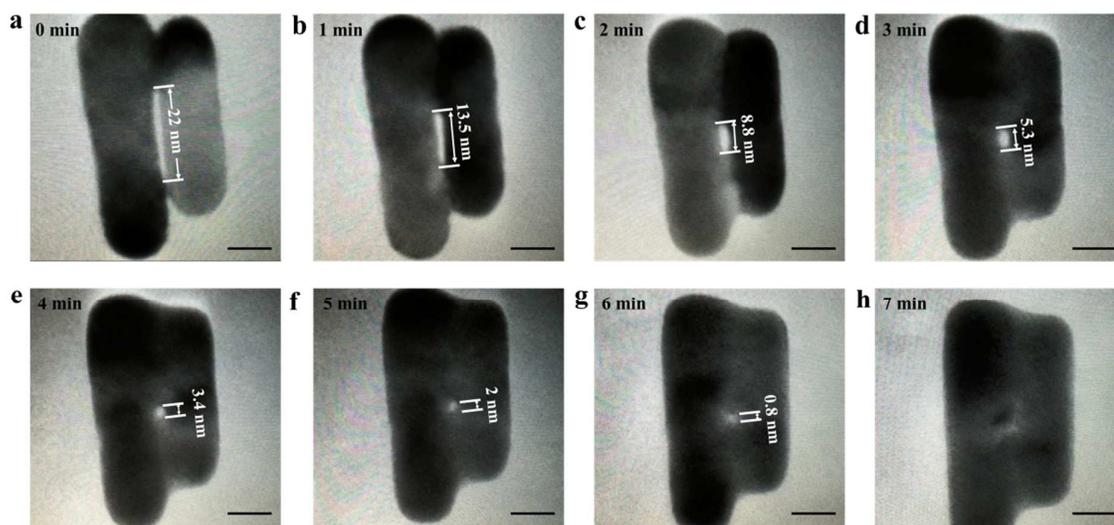


Figure s1 Sequential real time TEM images of the nanogap formation by cold welding of two “dumbbell” AuNRs versus time and the electronic beam intensity is $1.71 \text{ e}^6\text{A/m}^2$. a) The initial gap length is 22 nm, b-g) Dynamic shape evolution of the gap. h) Final geometry of the coalesced AuNRs. The scale bar is 10nm.

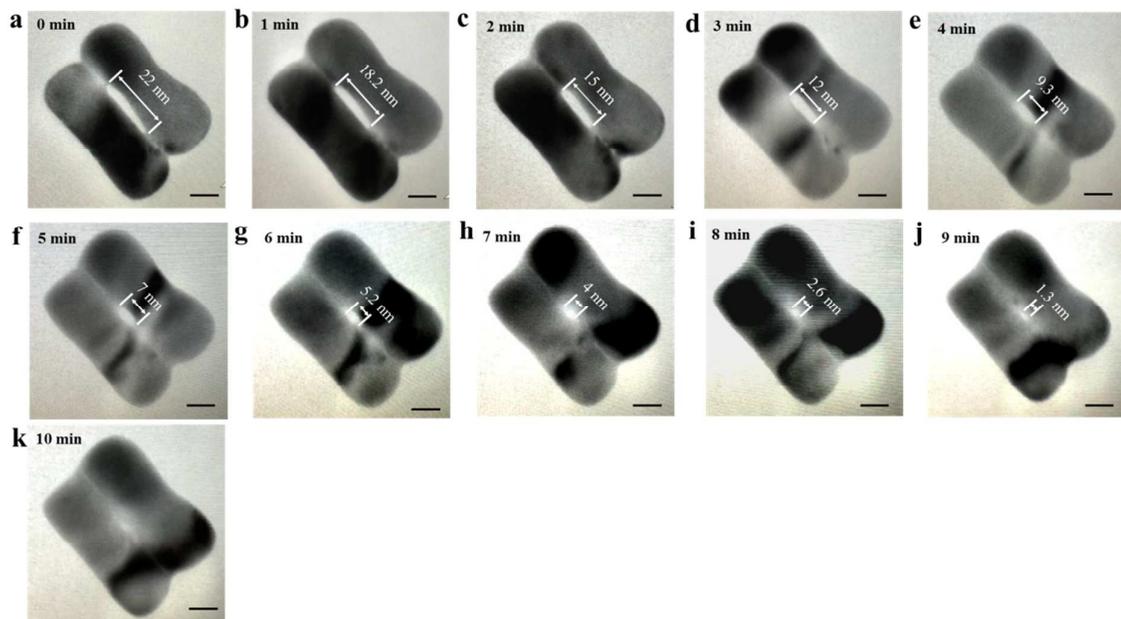


Figure s2 Sequential real time TEM images of the nanogap formation by cold welding of two “dumbbell” AuNRs versus time and the electronic beam intensity is $6.77 \text{ e}^5\text{A}/\text{m}^2$. a) The initial gap length is 22 nm, b-j) Dynamic shape evolution of the gap. k) Final geometry of the coalesced AuNRs. The scale bar is 10nm.

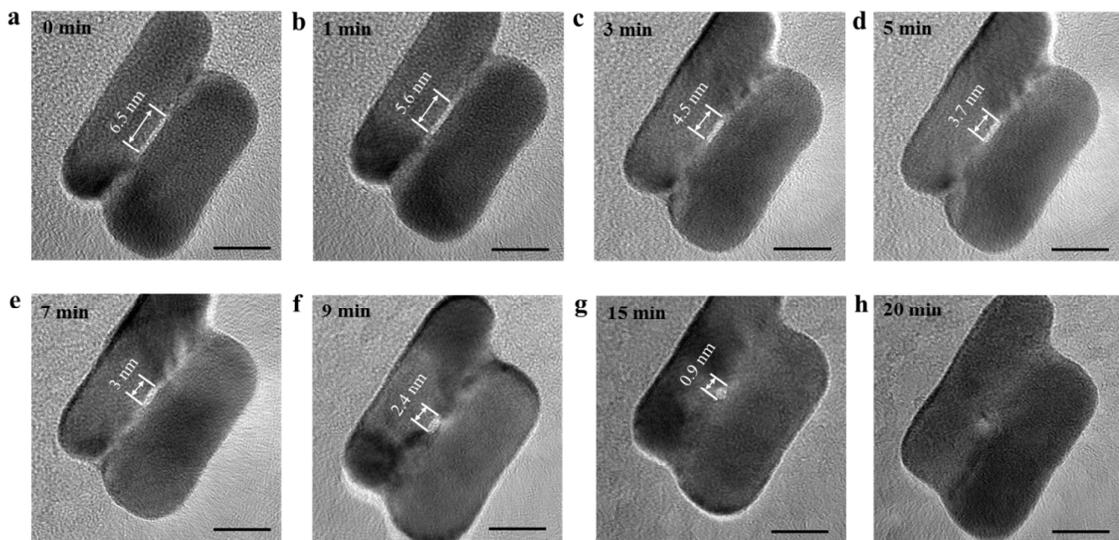


Figure s3 Sequential real time TEM images of the nanogap formation by cold welding of two “dumbbell” AuNRs versus time and the electronic beam intensity is $5.42 \text{ e}^4\text{A/m}^2$. a) The initial gap length is 6.5 nm, b-g) Dynamic shape evolution of the gap. h) Final geometry of the coalesced AuNRs. The scale bar is 10nm.