

Electronic supplementary information

Formation of Au@Pd@Cu core–shell nanorods from Au@Pd nanorods through a new stepwise growth mode

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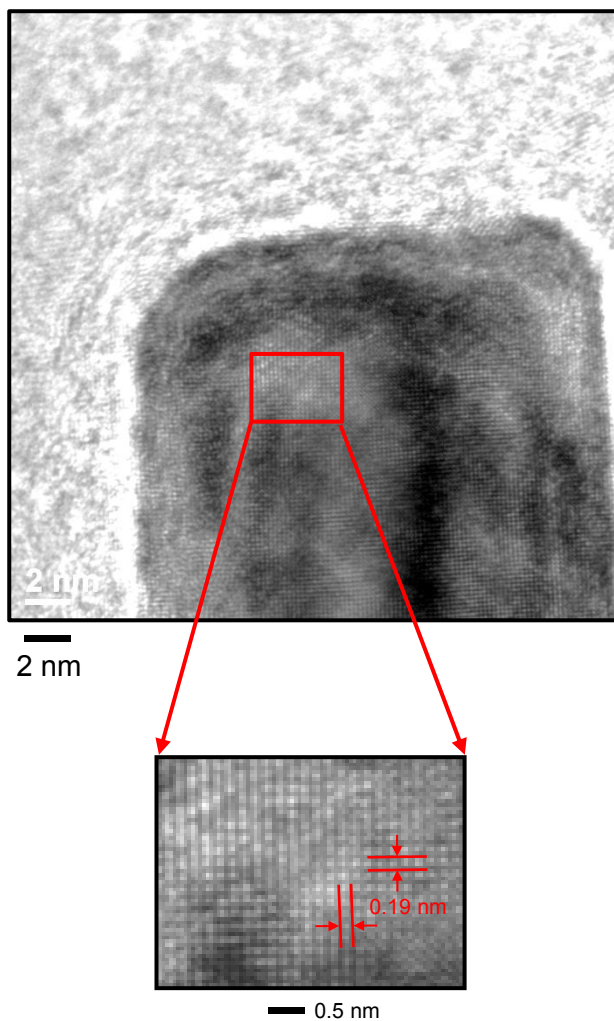
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(a) Au@Pd rod



(b) Au@Pd@Cu rod

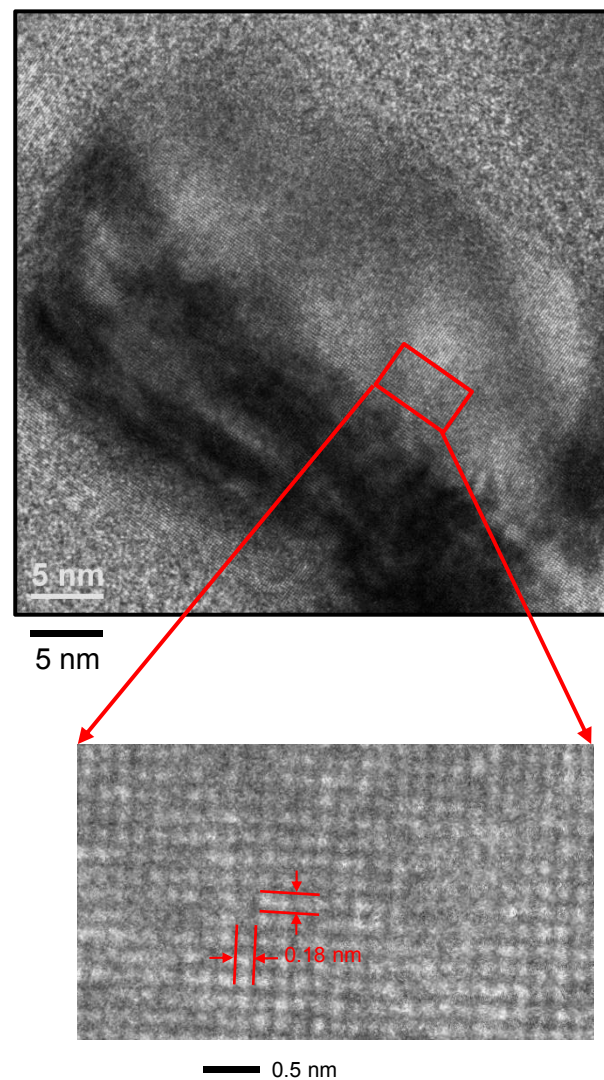


Fig. S1. High-resolution TEM images of (a) Au@Pd and (b) Au@Pd@Cu NRs.

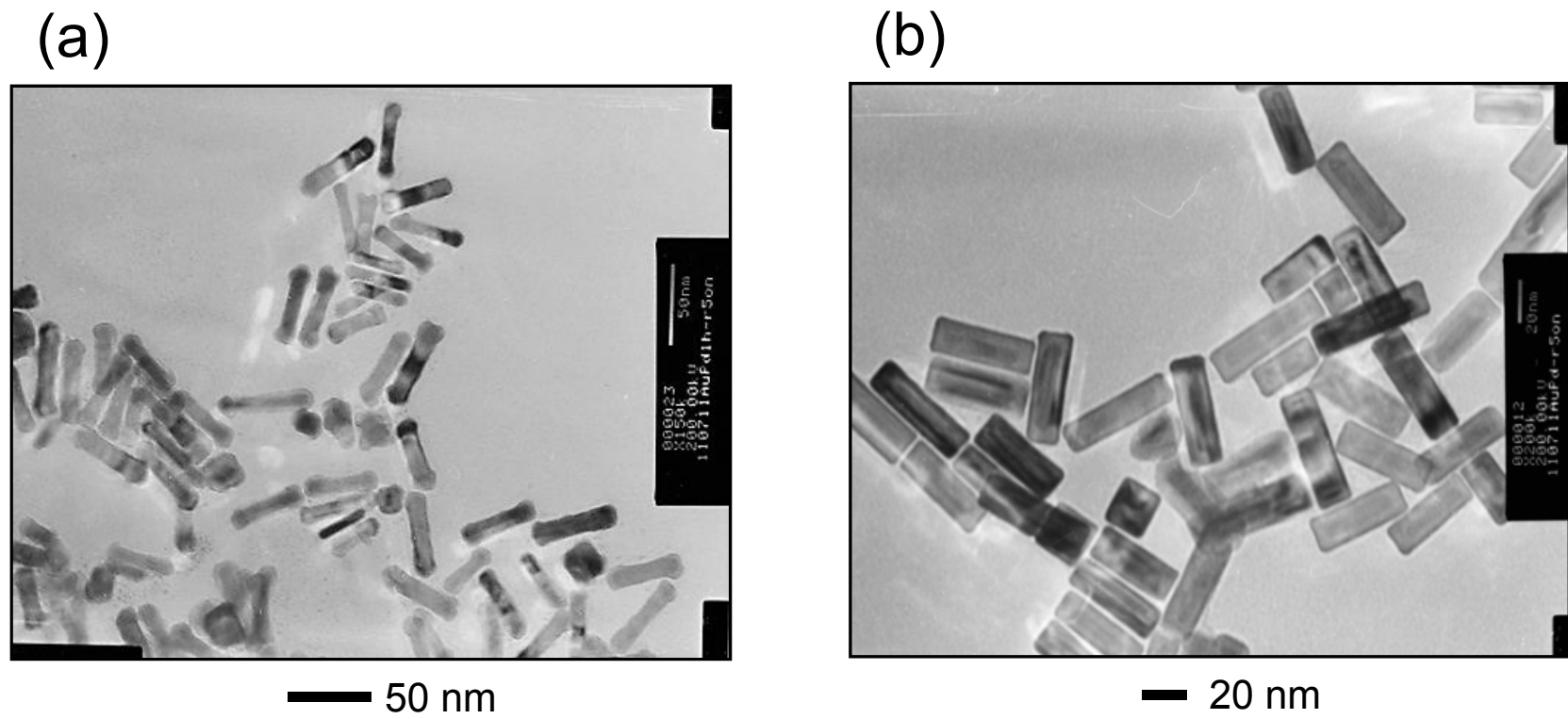


Fig. S2. Au@Pd NRs prepared at Pd/Au molar ratio of 5 after (a) 1 and (b) 24 h.

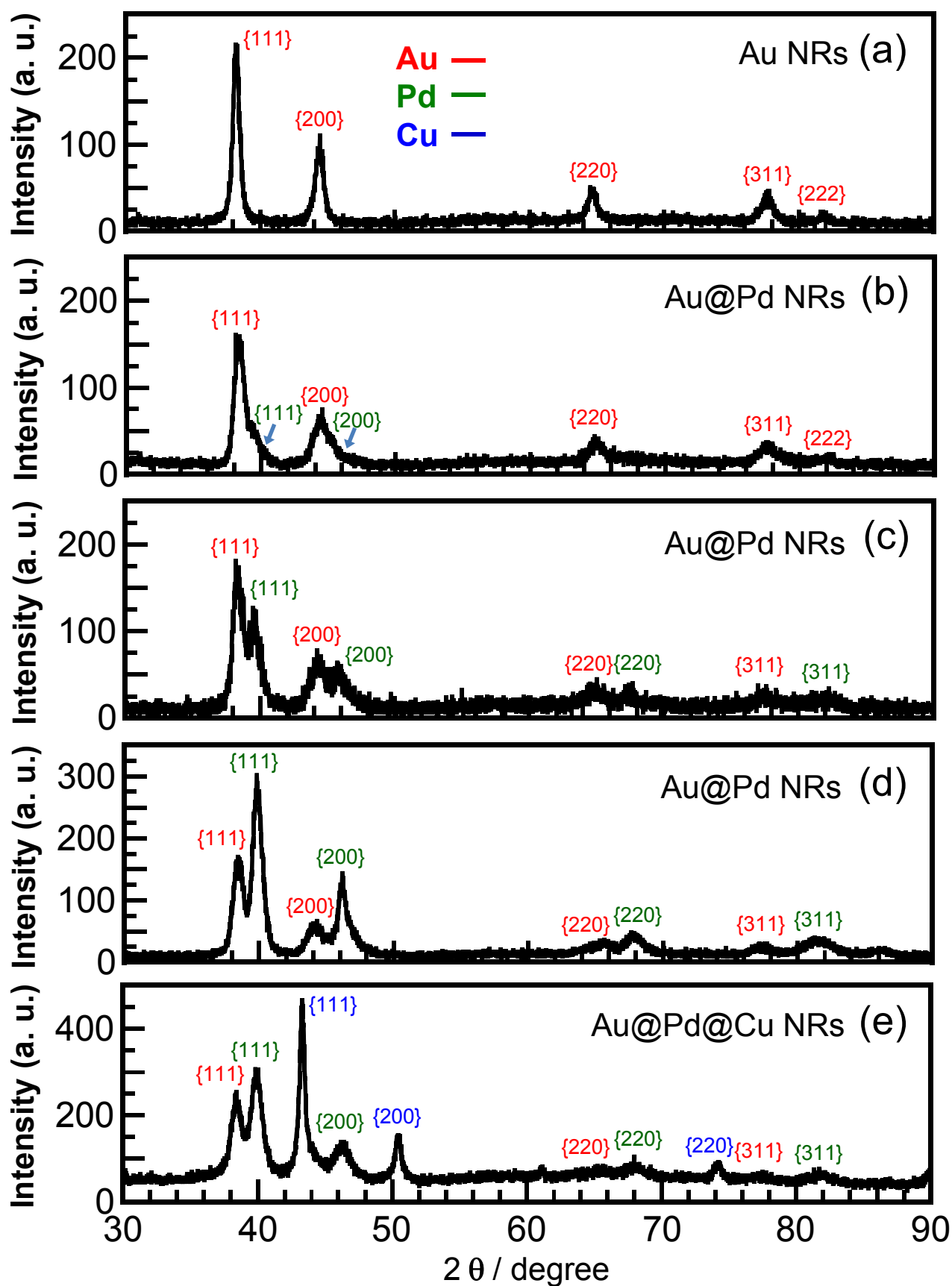


Fig. S3. XRD patterns of (a) Au NRs, (b)-(d) Au@Pd NRs prepared at Pd/Au molar ratios of 1, 2.5, and 10, respectively, and (e) Au@Pd@Cu NRs prepared at Cu/Pd/Au molar ratios of 25/5/1.