Role of Substrate in Au Nanoparticle Decoration by Electroless Deposition

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Figure S1. EDX spectrum for Ni sample obtained by Au ELD for 90 s. Presence of Ni and Au is indicated by labels on respective peaks.



Figure S2. Plan-view SEM images of Si-*p* sample obtained by Au ELD for 90 s.



Figure S3. RBS spectra of (a) Si-*p* samples after immersion in ELD solution for different immersion times (Si signal is not reported), (b) NiO NWLs_90 and (c) NiO_90. The inset in (c) shows Au peak in the region between 1.6 MeV and 1.9 MeV.



Figure S4. Linear fit of Au RBS doses for (a) Ni, (b) Si-*n* and Si-*p* sample. The intercept was fixed to zero in all cases, while slopes represent the rates of deposition of Au.



Figure S5. RBS of Ni sample: (a) Ni and (b) Au peaks at different immersion time (from 30 s to 150 s).



Figure 6. RBS spectrum of Au deposited by ELD on NiO NWLs grown on Graphene Paper (GP).