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**Electronic Supplementary Information for:**

# Highly-Facile Template-Based Selective Electroless Metallization of Micro- and Nanopatterns for Plastic Electronics and Plasmonics

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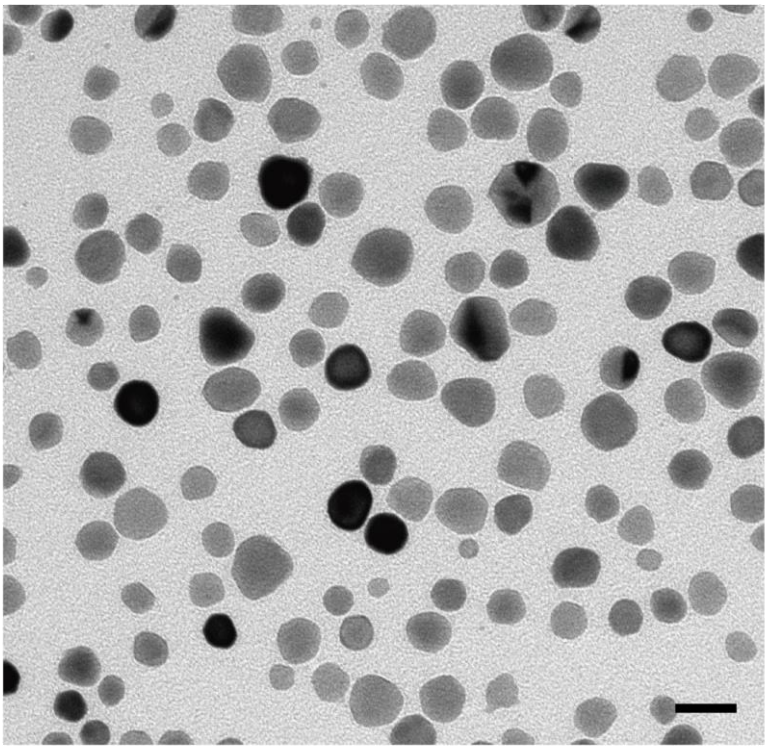

**Figure S1.** Tunneling electron microscopy (TEM) image of the catalytic palladium nanoparticles (PdNPs). The scale bar represents 20 nm. Reproduced with permission.[1] Copyright 2018, American Chemical Society.

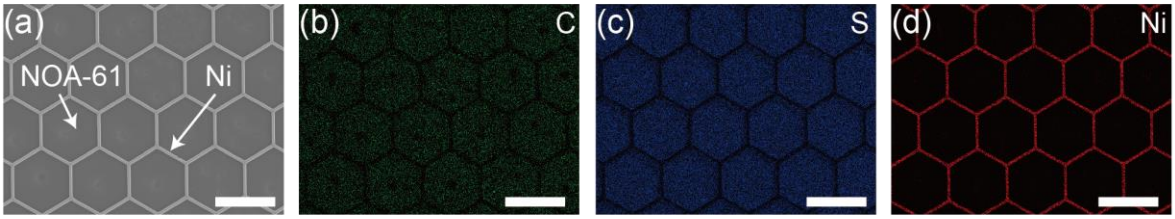


**Figure S2.** Scanning electron microscopy (SEM) and energy-dispersive X-ray spectroscopy (EDS) analysis for a Ni mold before SACN process. (a) The SEM image with corresponding elemental mappings for (b) carbon, (c) sulfur, and (d) nickel. The scale bars represent 50 μm.

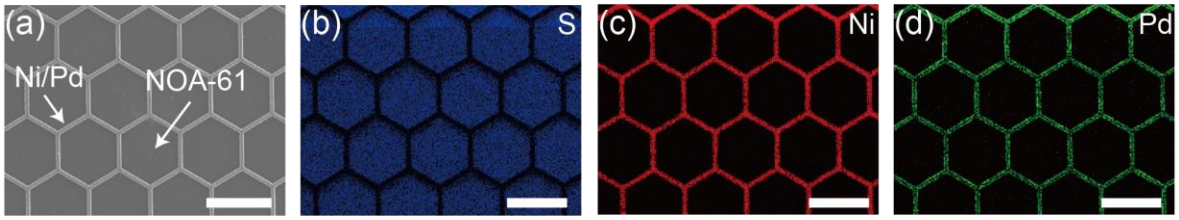


**Figure S3.** SEM and EDS analysis for a SACN-mold. (a) The SEM image with corresponding elemental mappings for (b) sulfur, (c) nickel, and (d) palladium. The scale bars represent 50 μm.

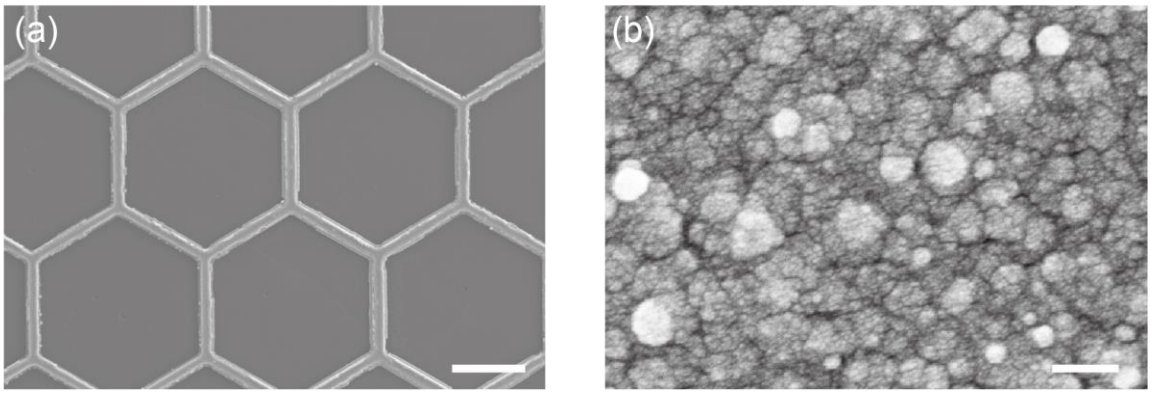


**Figure S4.** (a) SEM images of a SACN-mold and (b) zoom-in image showing the morphology of the adsorbed PdNPs. The scale bars represent 20 μm in (a) and 100 nm in (b).

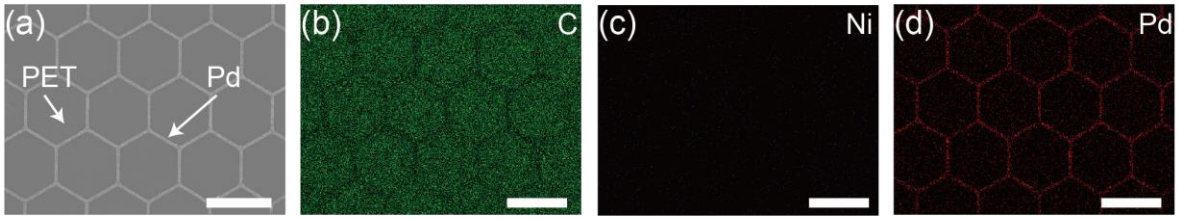


**Figure S5.** SEM and EDS analysis for the typical imprint-transferred PdNPs on a polyethylene terephthalate (PET) film. (a) The SEM image with corresponding elemental mappings for (b) carbon, (c) nickel and (d) palladium. The scale bars represent 50 μm.

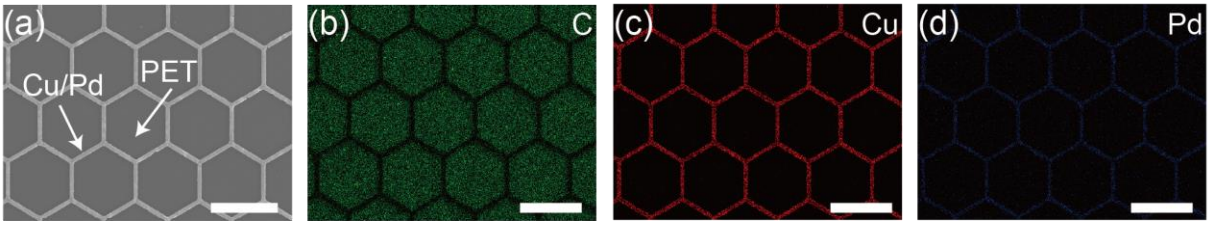


**Figure S6.** SEM and EDS analysis for a Cu TE. (a) The SEM image with corresponding elemental mappings for (b) carbon, (c) copper, and (d) palladium. The scale bars represent 50 μm.

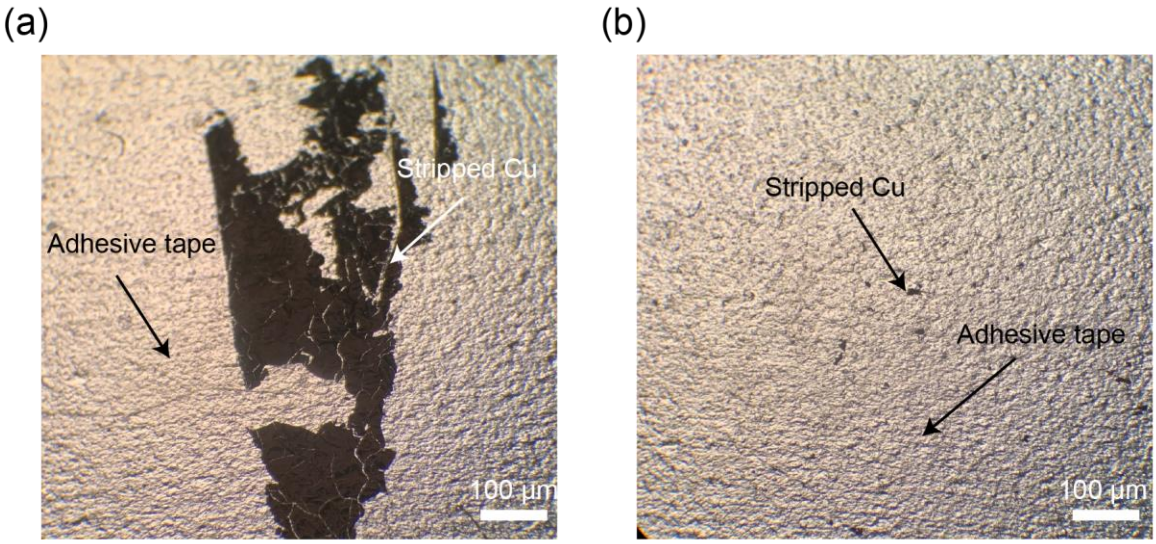


**Figure S7.** Optical microscopy characterizations of the stripped Cu from electroless deposited ‘HK‘ word pattern fabricated on (a) photolithographically patterned conditioned PET substrate with directly deposited PdNPs, and (b) PET substrate with embedded PdNPs through the presented method.

References

1. J. Cai, C. Zhang, A. Khan, L. Wang and W.-D. Li, *ACS Appl. Mater. Interfaces*, 2018, **10**, 28754-28763.