

Supporting Information

for

Ordered arrays of nanoporous gold nanoparticles

Dong Wang^{*1,§}, Ran Ji², Arne Albrecht³ and Peter Schaaf^{*1,¶}

Address: ¹Chair Materials for Electronics, Institute of Materials Engineering and Institute of Micro- and Nanotechnologies MacroNano[®], Ilmenau University of Technology, POB 10 05 65, 98684 Ilmenau, Germany, ²SÜSS MicroTec Lithography GmbH, Schleissheimer Str. 90, 85748 Garching, Germany and ³Center for Micro- and Nanotechnologies, Ilmenau University of Technology, POB 10 05 65, 98684 Ilmenau, Germany

Email: Dong Wang* - dong.wang@tu-ilmenau.de;

Peter Schaaf* - peter.schaaf@tu-ilmenau.de

*Corresponding author

[§]Tel.: +49 3677 69 3170, Fax: + 3677 69 3171;

[¶]Tel.: +49 3677 69 3611, Fax: + 3677 69 3171

Additional SEM images

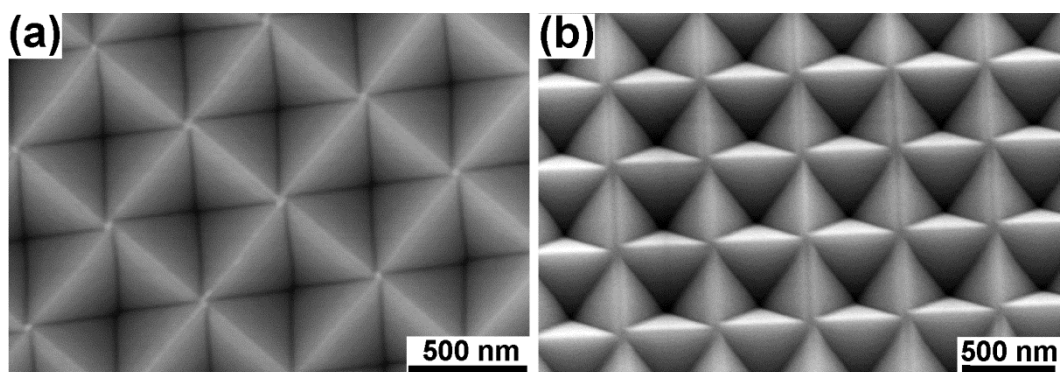


Figure S1: SEM images of the pre-patterned substrate showing the periodic array of pyramidal pits: (a) plan view, and (b) at tilt of 25°.

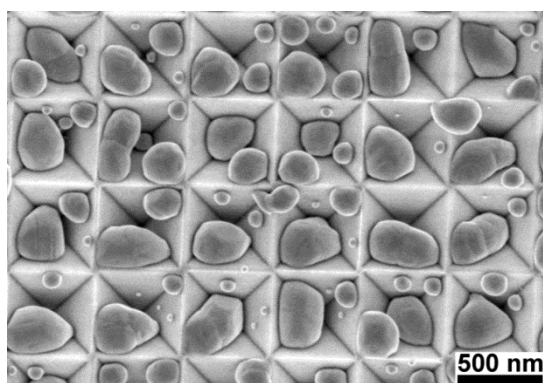


Figure S2: SEM image of the Au–Ag alloy nanoparticles dewetted from 10 nm Au/20 nm Ag bilayers on the pre-patterned substrate via annealing at 700 °C in Ar for 15 min.

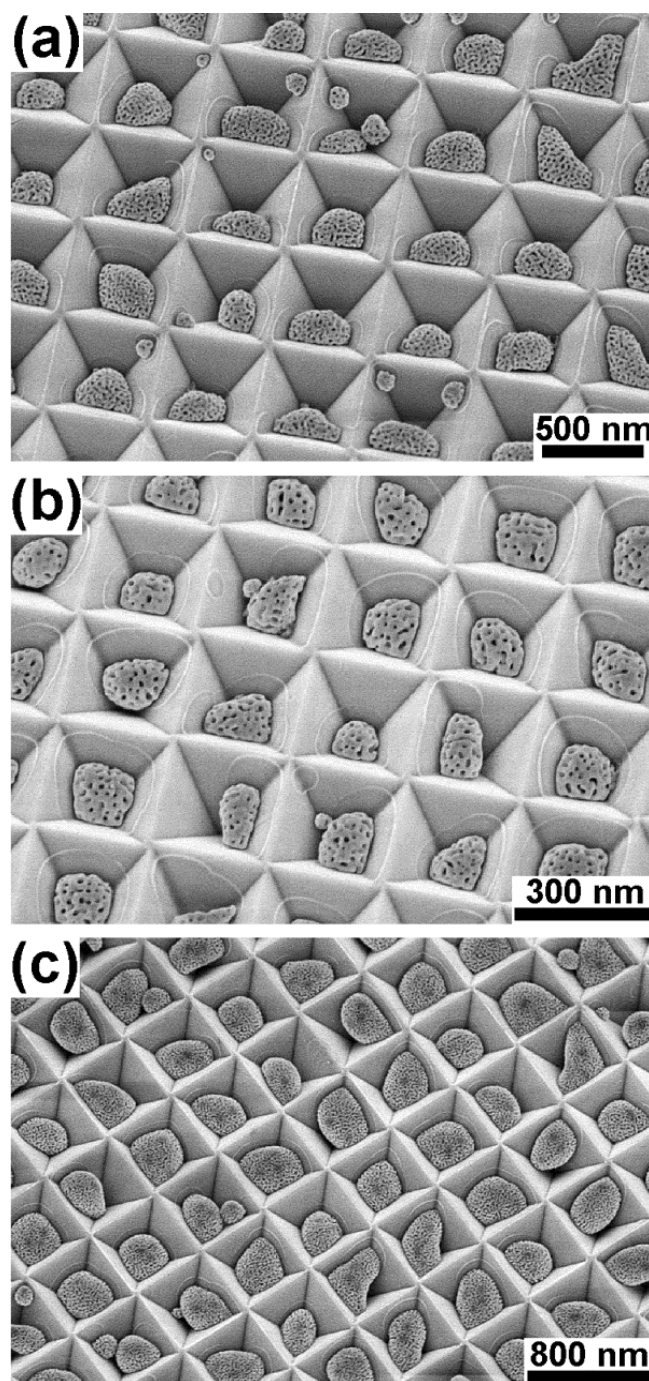


Figure S3: SEM images (at tilt of 25°) of arrays of nanoporous gold nanoparticles induced via annealing at 700 °C in Ar for 15 min and then dealloying from: (a) 10 nm Au/25 nm Ag bilayers, (b) 10 nm Au/30 nm Ag bilayers, and (c) 15 nm Au/25 nm Ag bilayers.