

Supporting materials (CrystEngComm):

Unusual silver nanostructures prepared by Aerosol Spray Pyrolysis

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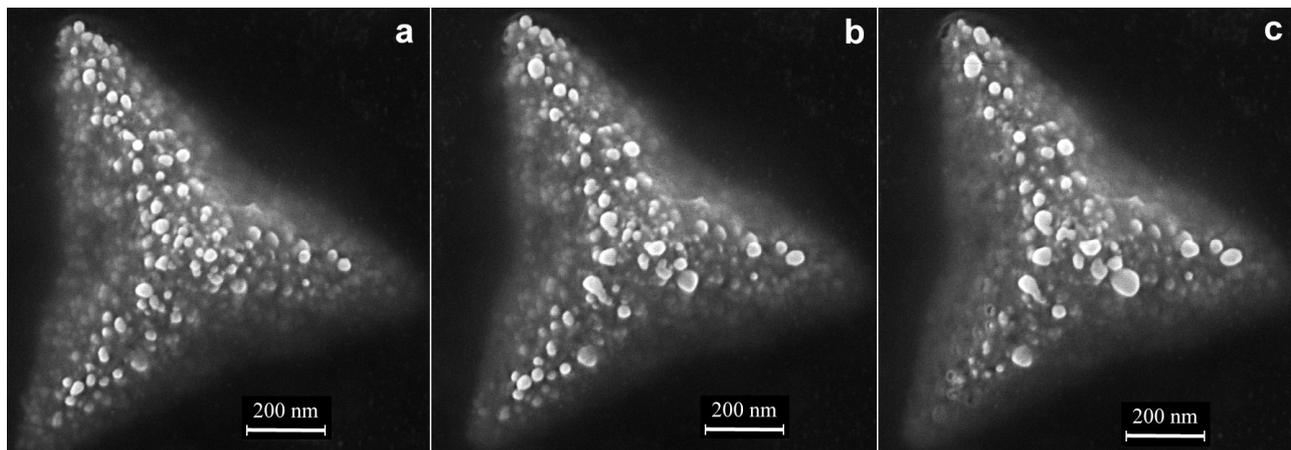


Fig.S1. Micrographs of a starfish nanoparticle held under the beam of electron microscope, a – original image, b, c – the same after 10 and 20 sec. of holding in the view field of the SEM microscope, respectively.

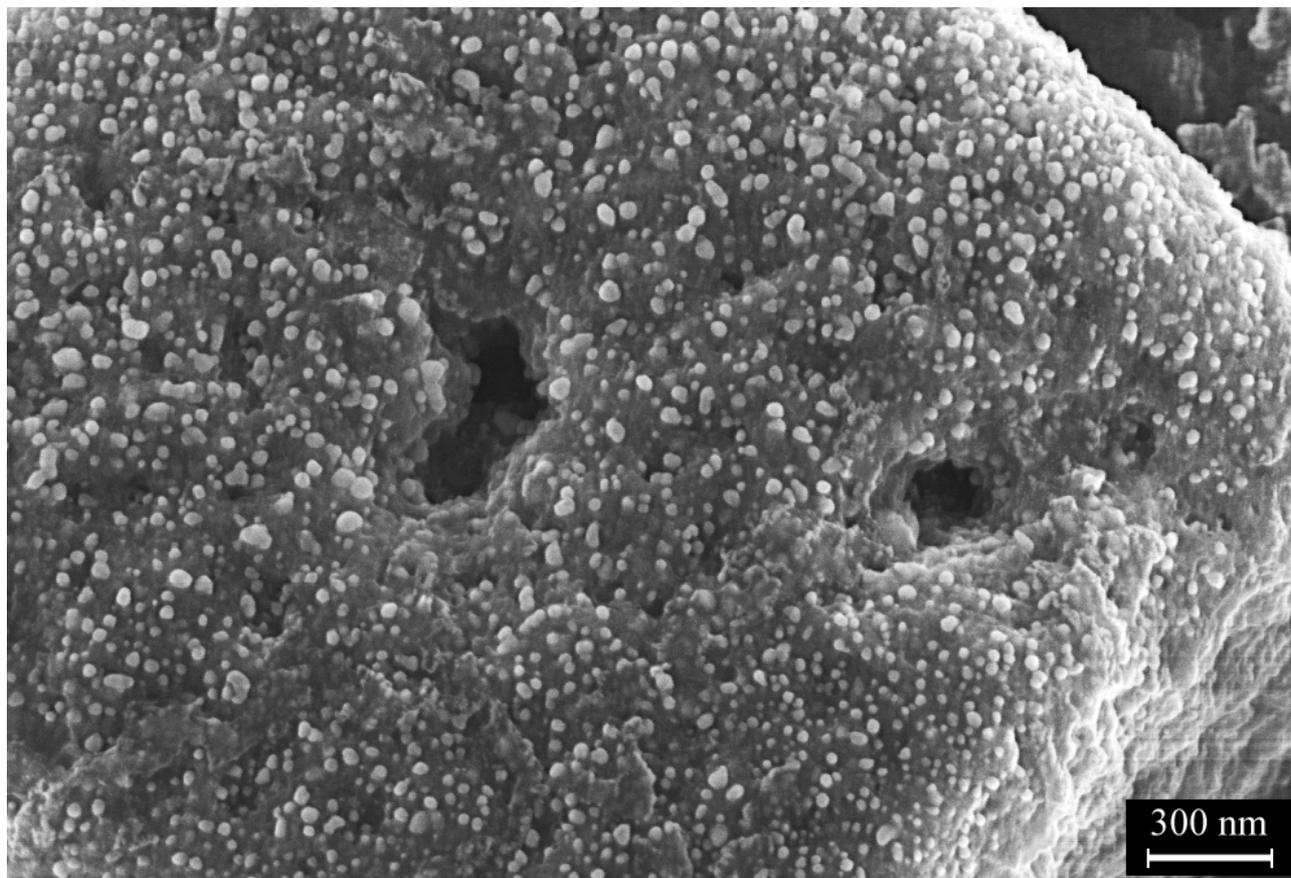


Fig.S2. A magnified view of a cuboid superficially decorated with silver nanoparticles.

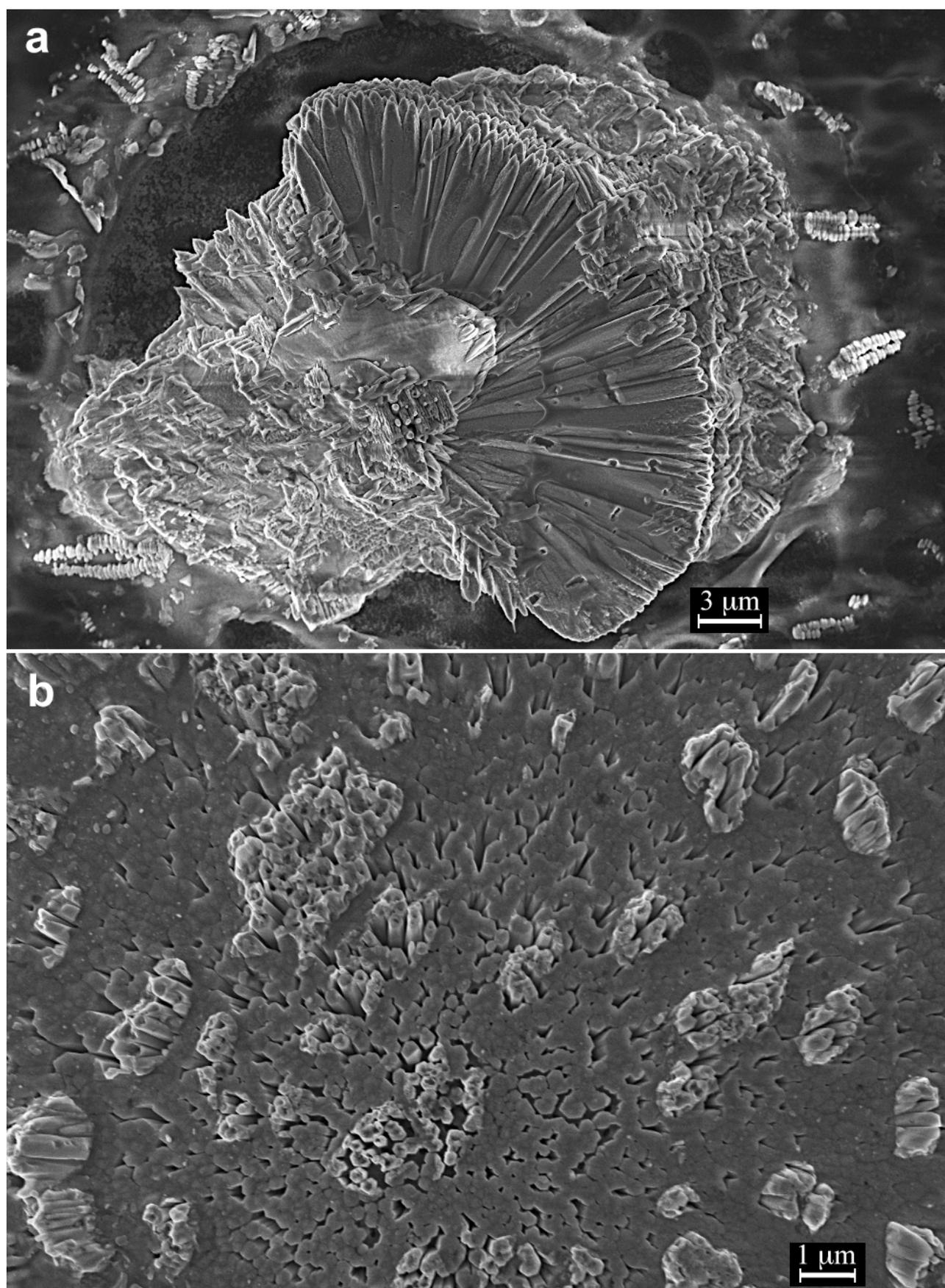


Fig.S3. Columnal growth of particles in the condensation zone. a – the resulting structure, b – a magnified view of the beginning of growth.

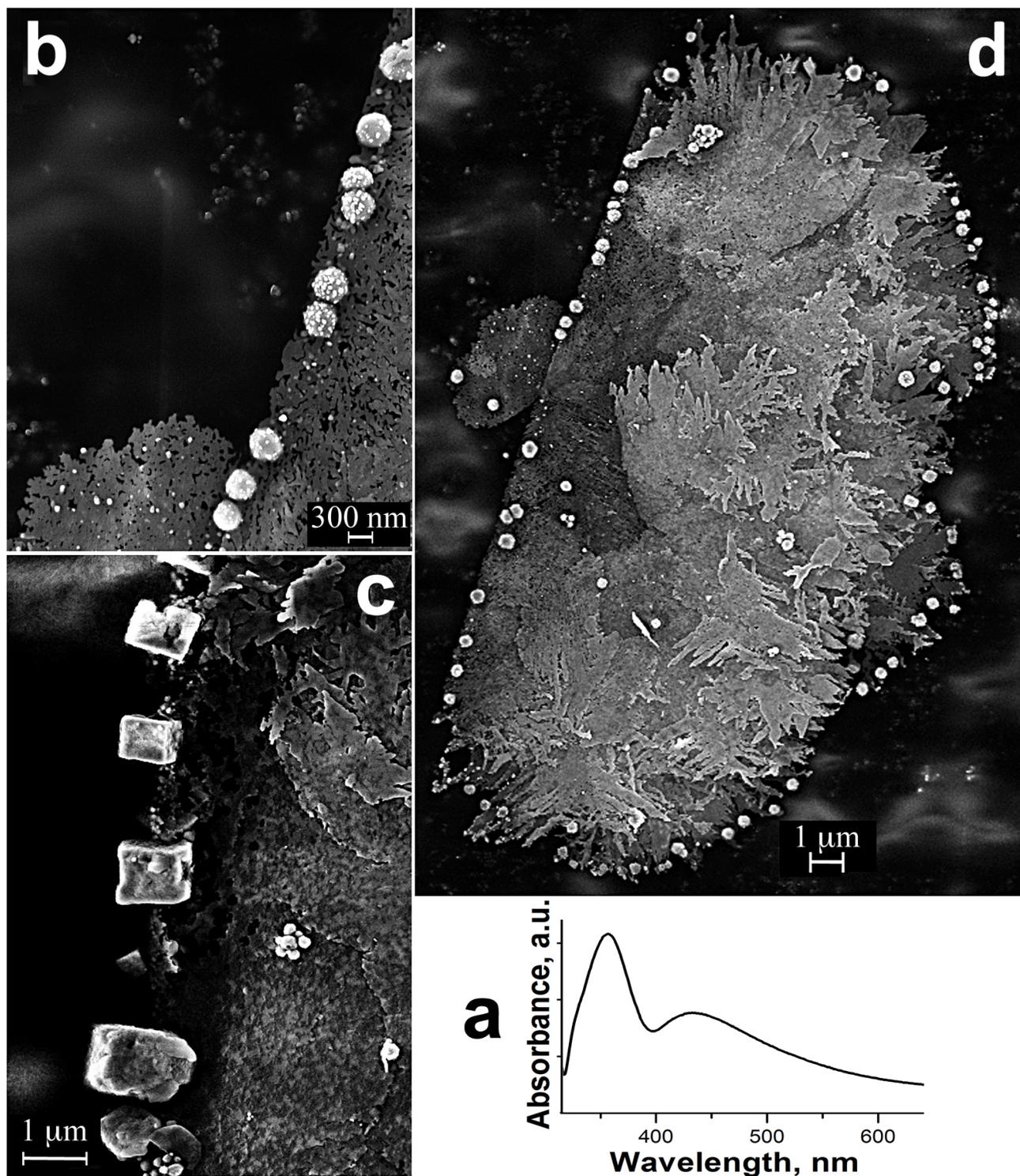


Fig.S4. Decomposition of ultrasonic mist of aqueous diamminesilver hydroxide in air at 750 – 950°C. (a) typical plasmonic peaks for a mixture of silver nanoparticles produced from the mist at 950°C (taken from the condensation zone), (b - d) a hierarchic self – assembled planar structure found in a condensed product after mist pyrolysis decorated around its perimeter with AgNPs of spherical (b) or cubic (c) shapes, covered, in turn with smaller AgNPs.