

ADVANCED FUNCTIONAL MATERIALS

Supporting Information

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Platinum Nanoparticle Loading of Boron Nitride Aerogel
and Its Use as a Novel Material for Low-Power Catalytic Gas
Sensing

*Anna Harley-Trochimczyk, Thang Pham, Jiyoung Chang,
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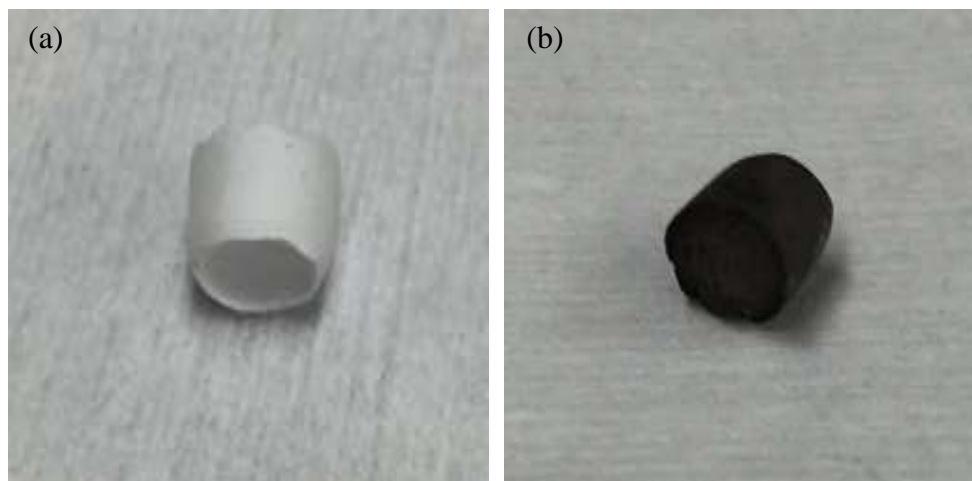


Figure S1. Optical images of the boron nitride aerogel (a) before and (b) after platinum nanoparticle loading. The cylinder is roughly 6 mm tall and 6 mm in diameter.

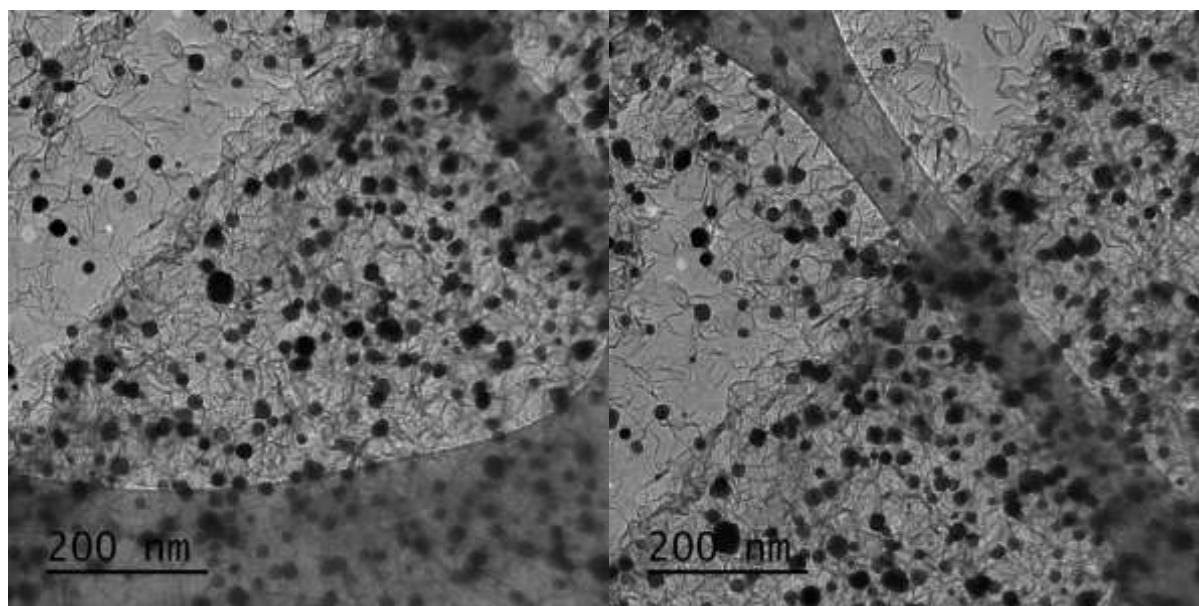


Figure S2. Additional TEM images of Pt-BN used for platinum nanoparticle size analysis.

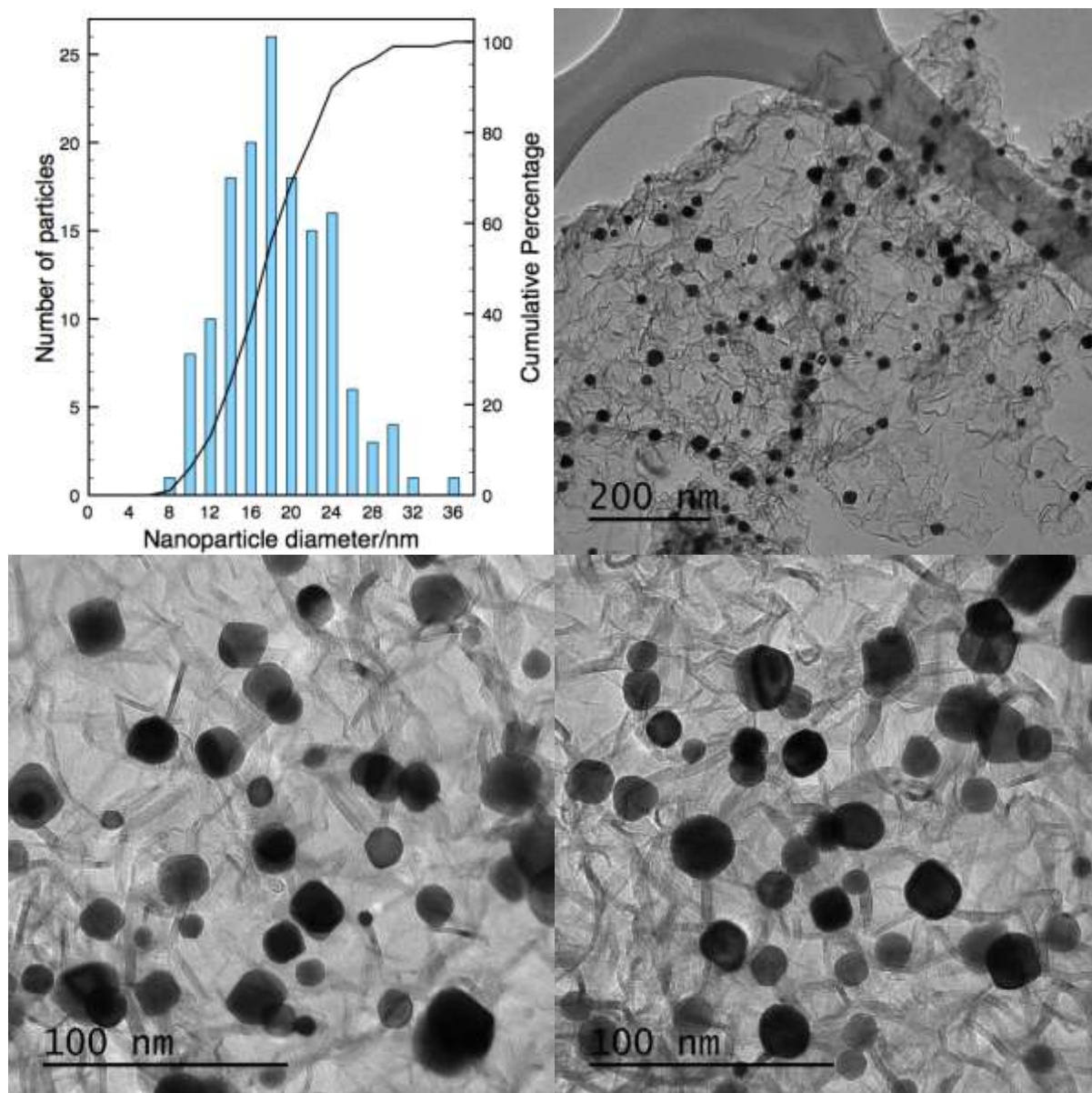


Figure S3. Platinum nanoparticle size distribution and additional TEM images for Pt-BN after high temperature testing used for nanoparticle size analysis.

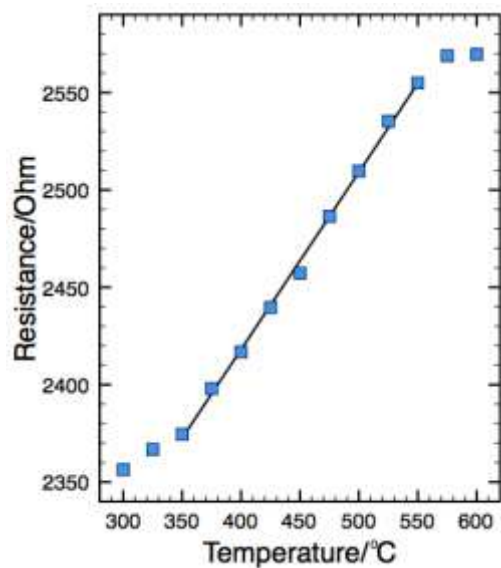


Figure S4. Microheater resistance versus temperature showing a linear range between 350 and 550 °C with thermal coefficient of resistance of 290 ppm K⁻¹. Line is linear fit for the data points between 350 and 550 °C ($R^2 = 0.9978$) and the slope is used to calculate the thermal coefficient of resistance.