

Electronic Supporting Information

Structural Evolution and Mechanical Behavior of Pt Nanoparticle Superlattices at High Pressure

J. Zhu,^{a‡*} Z. Quan,^b C. Wang,^c X. Wen,^{d‡} Y. Jiang,^e J. Fang,^{c*} Z. Wang,^f Y. Zhao^a and H. Xu^{b*}

^aDepartment of Physics and Astronomy, the University of Nevada, Las Vegas, Nevada 89154, USA.

^bEarth and Environmental Sciences Division, Los Alamos National Laboratory, Los Alamos, New Mexico 87545, USA.

^cDepartment of Chemistry, State University of New York at Binghamton, Binghamton, New York 13902, USA.

^dInstitute of Coal Chemistry, Chinese Academy of Science, Taiyuan, Shanxi 030001, China.

^eTEM Laboratory, University of New Mexico, Albuquerque, New Mexico 87131, USA.

^fCornell High Energy Synchrotron Source, Cornell University, Ithaca, New York 14853, USA.

‡ This work was conducted when J. Zhu and X. Wen were at the Los Alamos National Laboratory.

* Corresponding authors: hxu@lanl.gov (H. Xu); jlzhu04@physics.unlv.edu (J. Zhu); jfang@binghamton.edu (J. Fang).

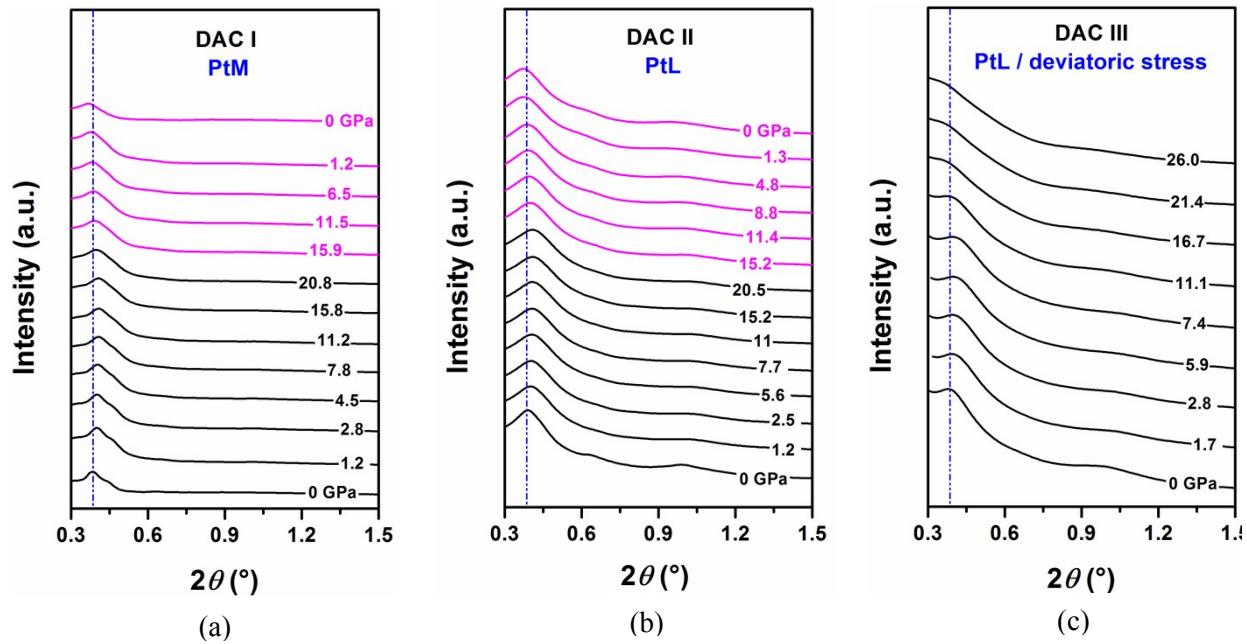


Figure S1 Representative synchrotron SAXS patterns of (a) Pt NP superlattices with more ligands (“PtM”), (b) Pt NP superlattices with less ligands (“PtL”), and (c) the “PtL” sample under large deviatoric stress, at different pressures.