Supporting Information

Assembly of anisotropic one dimensional Ag nanostructures through orientated attachment: on-axis or off-axis growth?

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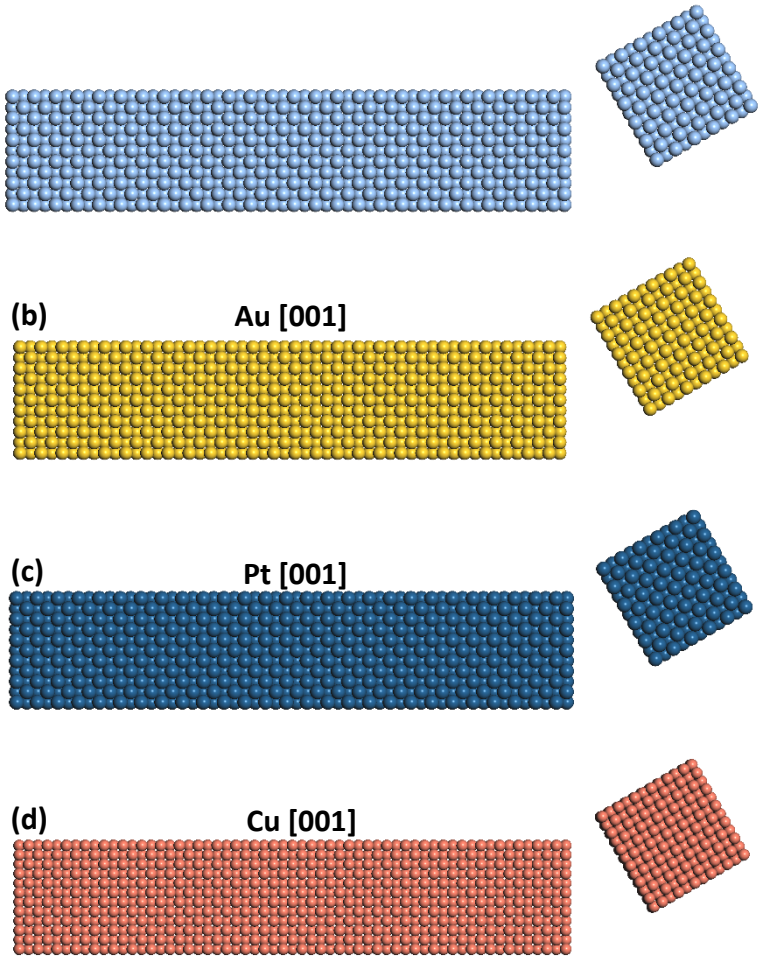

Figure S1 NR- NP attachment modes of off-axis growth for (a) an anatase Ag nanorod along [001] and a Ag nanoparticle; (b) an Au nanorod along [001] and a Au nanoparticle; (c) a Pt nanorod along [100] and a Pt nanoparticle. The diameters of all nanorods and nanoparticles are 2.0 nm. The aspect ratios of all nanorods are 5.

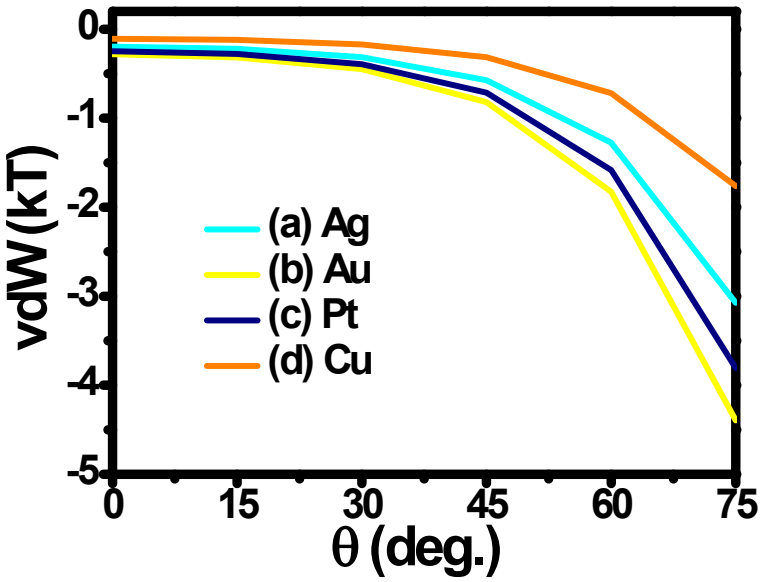

Figure S2 Calculated vdW interaction *versus* approaching angle of off-axis growth between (a) an Ag nanorod along [100] and an Ag nanoparticle; (b) a Au nanorod along [100] and an Au nanoparticle; (c) a Pt nanorod along [100] and a Pt nanoparticle. (d) a Cu nanorod along [100] and a Cu nanoparticle. The diameters of all nanorods and nanoparticles are approximately 2.0 nm. The aspect ratios of all nanorods are 5. The temperature is 293 K.

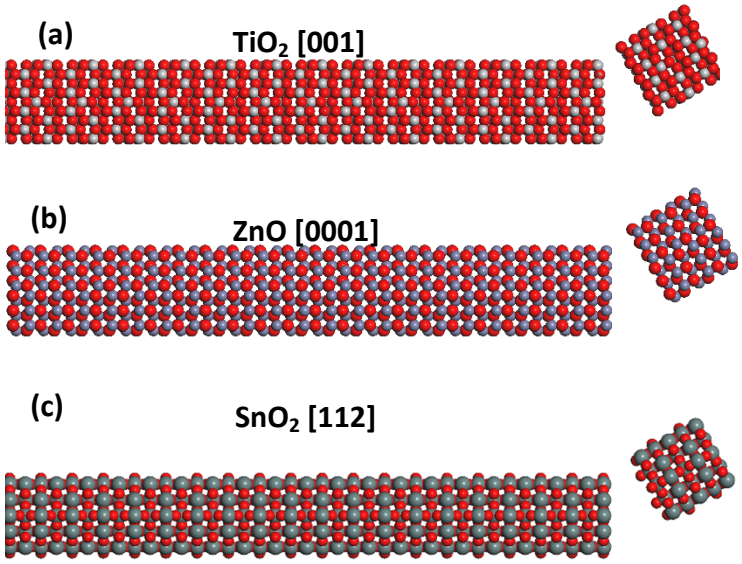

Figure S3 NR- NP attachment modes of off-axis growth for (a) an anatase TiO_2 nanorod along [001] and a TiO_2 nanoparticle; (b) a ZnO nanorod along [0001] and a ZnO nanoparticle; (c) a SnO_2 nanorod along [110] and a SnO_2 nanoparticle. The diameters of all nanorods and nanoparticles are 1.6 nm. The aspect ratios of all nanorods are 10.

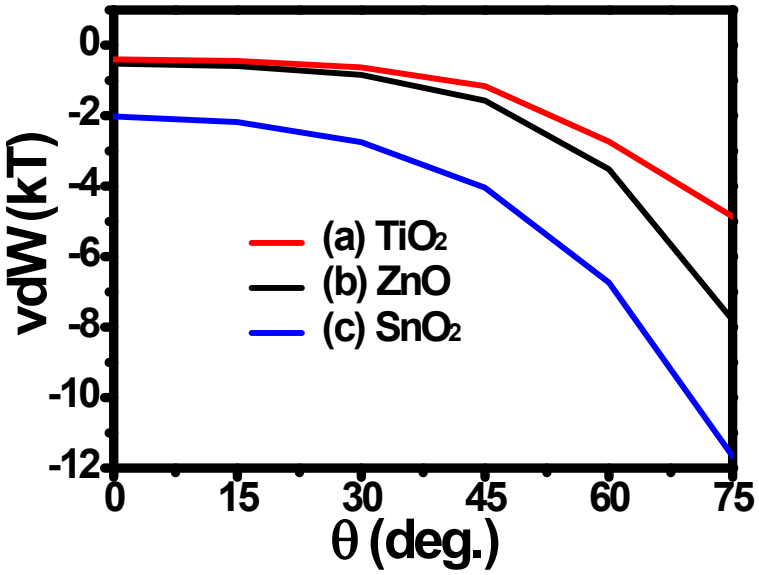

Figure S4 Calculated vdW interaction *versus* approaching angle of off-axis growth between (a) an anatase TiO_2 nanorod along [001] and a TiO_2 nanoparticle; (b) a ZnO nanorod along [0001] and a ZnO nanoparticle; (c) a SnO_2 nanorod along [110] and a SnO_2 nanoparticle. The diameters of all nanorods and nanoparticles are approximately 1.6 nm. The aspect ratios of all nanorods are 10. The temperature is 293 K.