

Supporting Information of:

**DFT study of the structure, chemical ordering and  
molecular adsorption of Pd-Ir nanoalloys**

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Table 1. Detailed comparison of the lattice constant, cohesive energy, and bulk modulus for bulk Pd (fcc) and Ir (fcc) with experimental and theoretical data.

		This method	Reference (PBE)	Experiment
Lattice parameter	Pd	3.940	3.95 <sup>[3]</sup>	3.88 <sup>[1]</sup>
(Å)	Ir	3.872	3.89 <sup>[5]</sup>	3.84 <sup>[6]</sup>
Cohesive energy	Pd	3.743	3.63 <sup>[3]</sup>	3.89 <sup>[2]</sup>
(eV/atom)	Ir	7.351	8.96 <sup>[5]</sup>	6.94 <sup>[2]</sup>
Bulk modulus	Pd	168.96	166 <sup>[4]</sup>	181 <sup>[2]</sup>
(GPa)	Ir	345.78	340 <sup>[5]</sup>	355 <sup>[7]</sup>

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