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Supporting information for article:

Structural transformations and interfacial iron reduction in heterostructures with epitaxial layers of 3d metals and ferrimagnetic oxides

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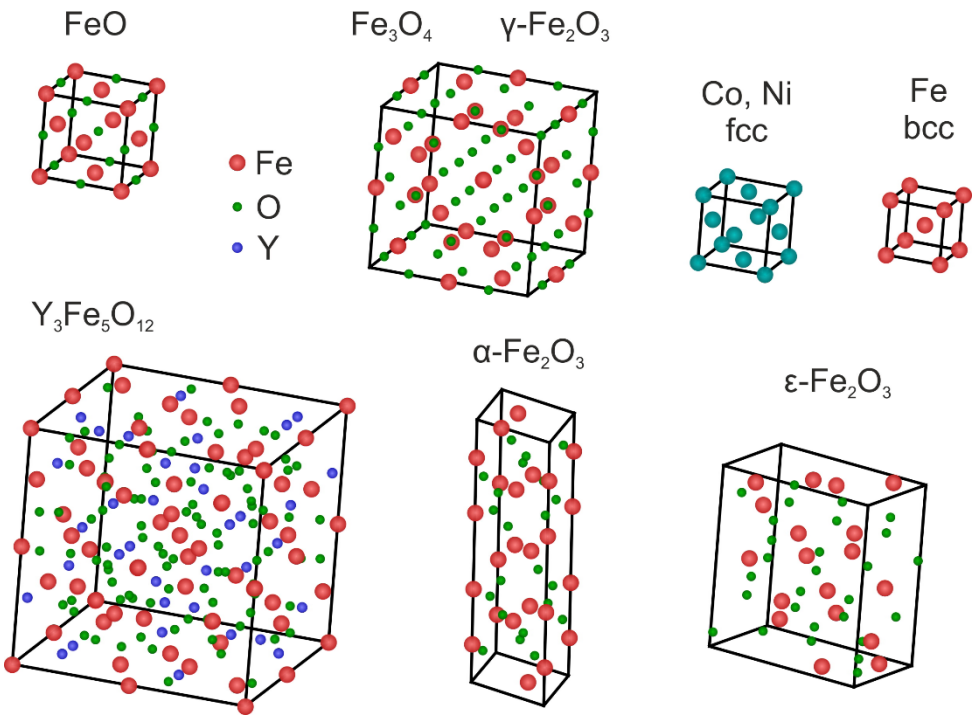

Figure S1 Unit cells of the Fe_3O_4, γFe_2O_3, FeO, $Y_3Fe_5O_{12}$, α-Fe_2O_3, Co, Ni and Fe lattices shown in the same scale.

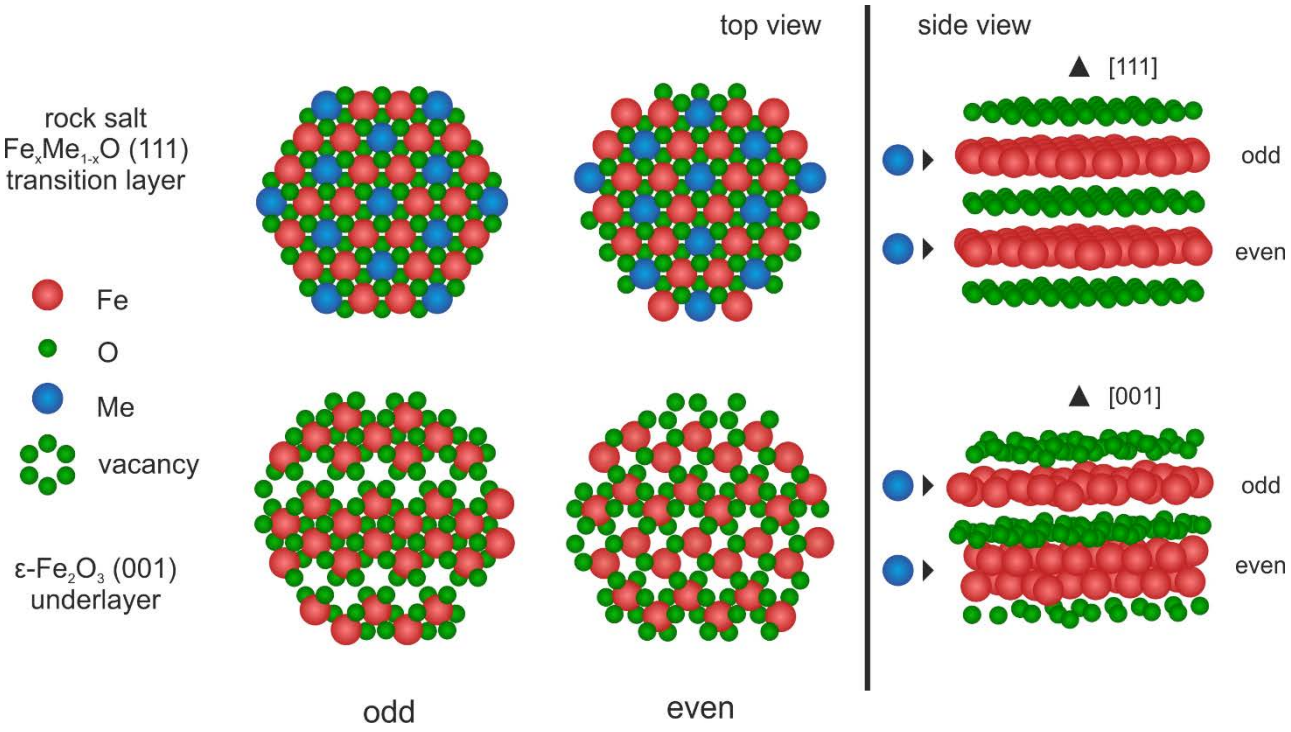

Figure S2 Crystal structure of εFe_2O_3 (001) and FeO(111) layers. When cation vacancies in Fe_2O_3 (111) layers are filled with Me, the crystal structure is transformed to the rock salt structure of MeO.

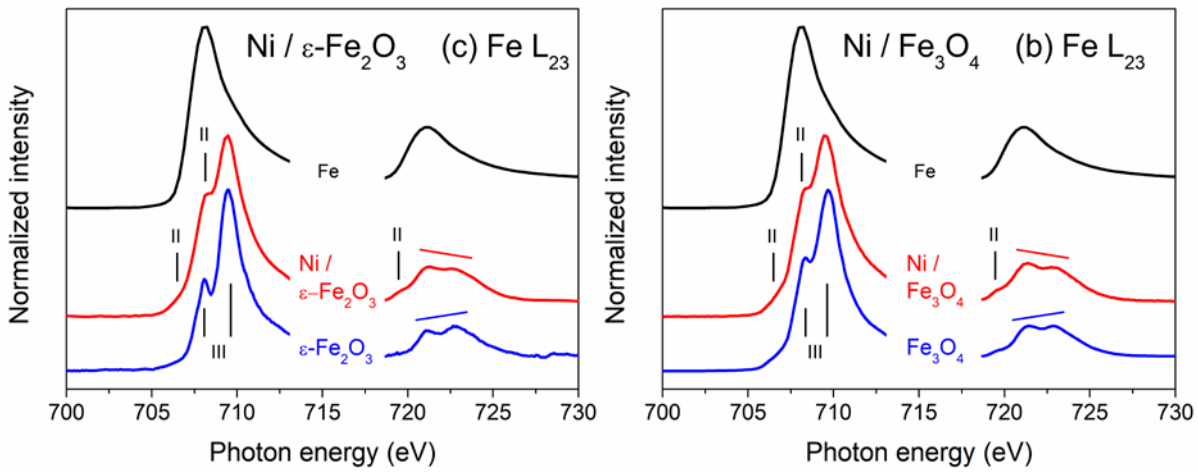

Figure S3 X-ray absorption spectra of iron L_{23} edge measured by total electron yield for Ni 4 nm 100°C / ε-Fe_2O_3 and Ni 4 nm 100°C / Fe_3O_4 systems. Reference spectra of metallic Fe is shown for comparison. The spectral features characteristic of 2+ and 3+ cations are marked with roman numerals.