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Supporting information

Fast production of β-$Ni(OH)_2$ nanostructures with (001) and (100) planes exposure via a fluoride anion–assisted microwave process

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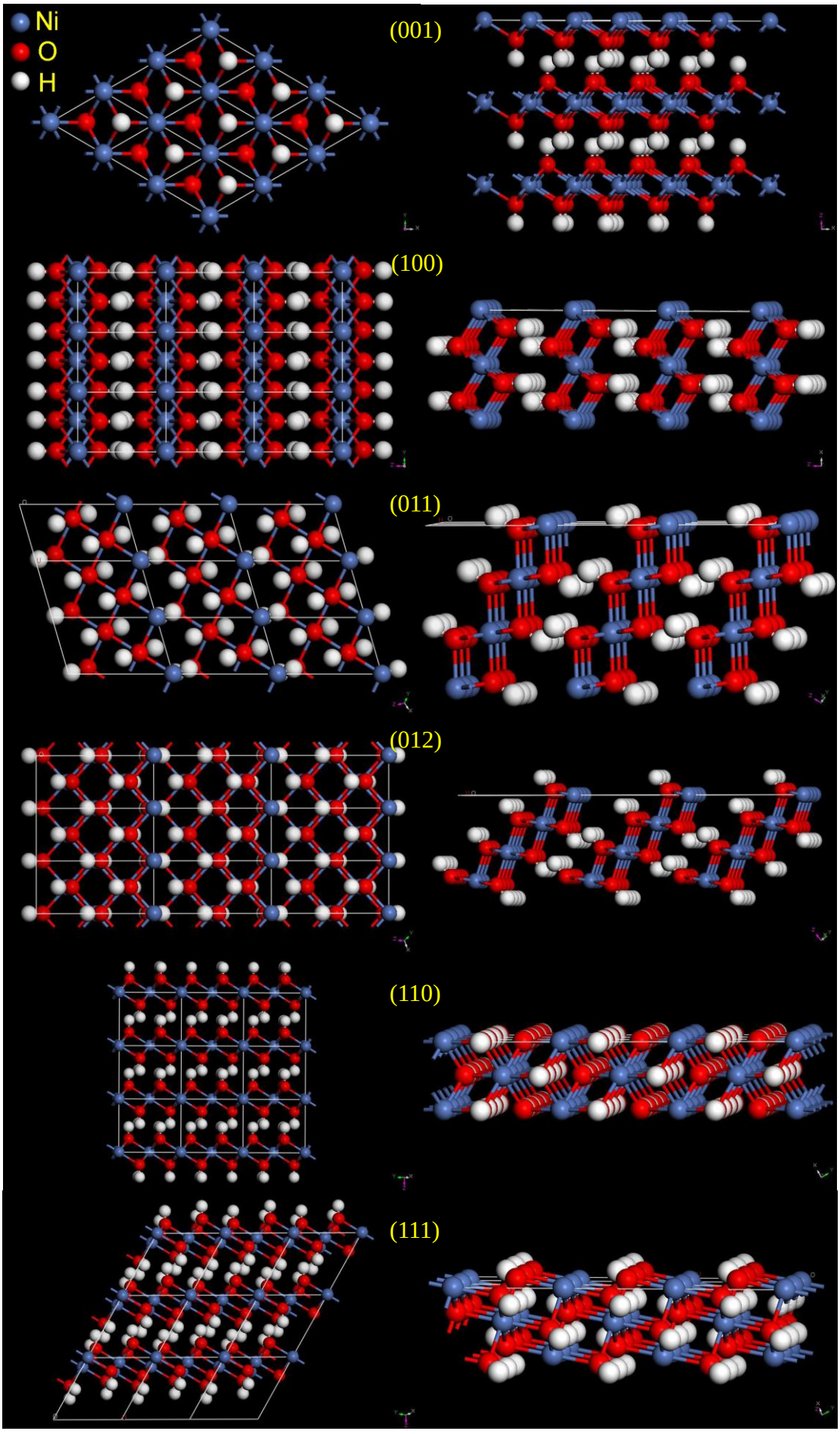

Fig. S1 Crystal structures of some low-index planes of α-Fe_2O_3: the left structures are the top view and the right structures are the side view.

The Ni^{2+} concentration of facets in Table 1 was calculated as follow: At first, the CIF file of β-$Ni(OH)_2$ crystal was imported into the MS software and all the facets shown in Table 1 could be cleaved out. Then, for a given crystal plane, adjust its facets to Ni terminated situation, otherwise search the facet situation with highest Ni atom concentration if Ni terminated situation cannot be obtained. After that, confirm the number of the exposed Ni atoms on each cleaved facet, calculate the area of the crystal cell, and finally obtain the Ni atom concentration.