## Preparation of Nd-Fe-B by nitrate-citrate auto-combustion

## followed by reduction-diffusion process

Haoxuan Ma,<sup>a</sup> Chang Woo Kim,<sup>a</sup> Dong Soo Kim,<sup>b</sup> Ji Hun Jeong,<sup>a</sup> In Ho Kim<sup>a</sup> and Young Soo Kang<sup>a,\*</sup>

## **Supporting information**

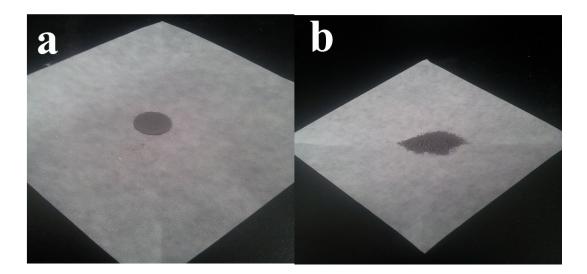


Fig. S1 The real stuff pictures of metal oxides mixed with  $CaH_2$  of pellet (a) and random powders (b) types.

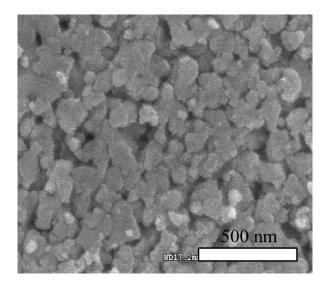
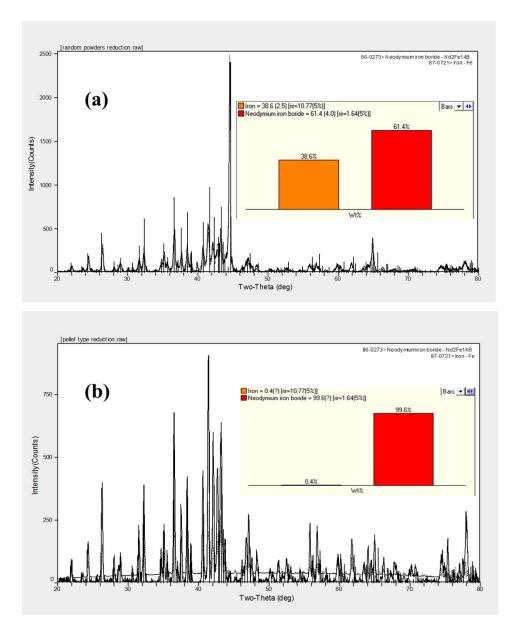
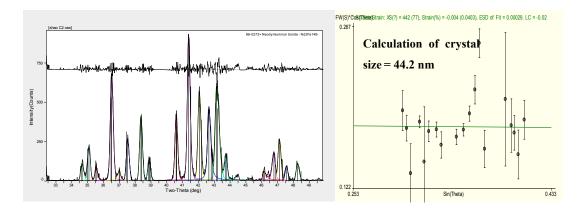


Fig. S2 SEM image of the solid metal oxides with compact pellet style.



**Fig. S3** The quantitative analysis of (a) the washed random powders type reduction product and (b) the washed pellet type reduction product which come from MDI Jade software calculation



**Fig. S4** The crystal size calculation from the XRD pattern in Fig 4 (b) by MDI Jade software.