

## Electronic Supplementary Information

### Shape Evolution of Parallelogrammic Magnesium Oxalate Controlled by Phosphate Species

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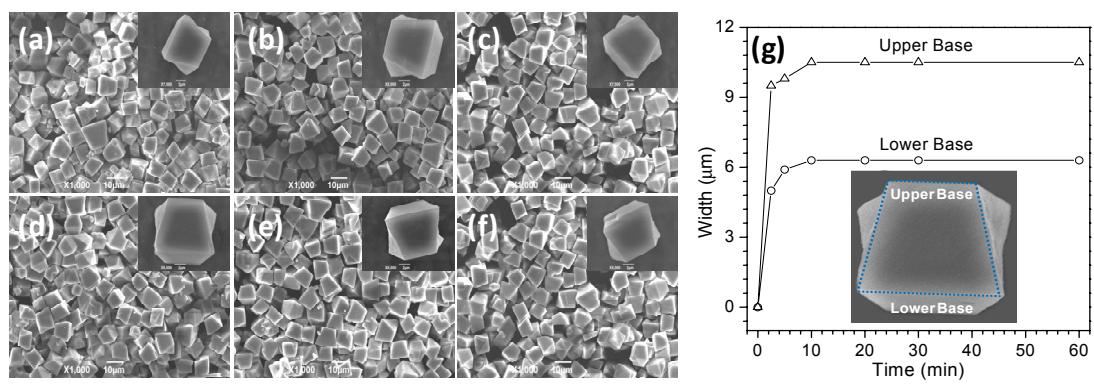
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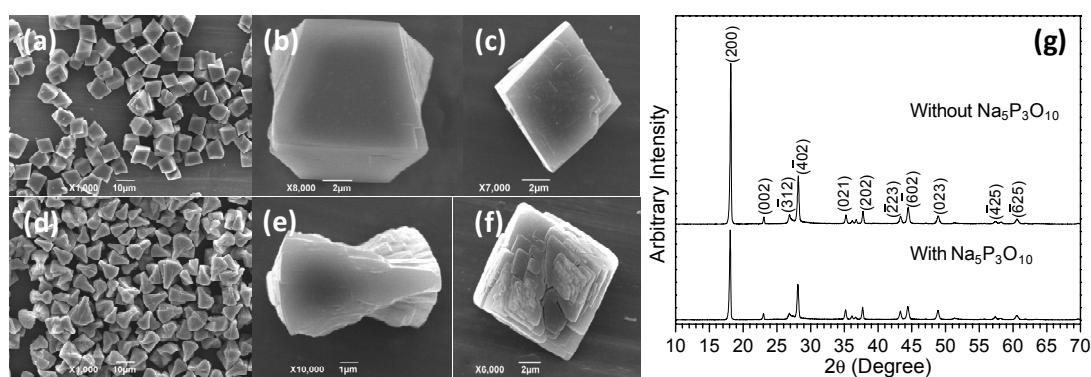
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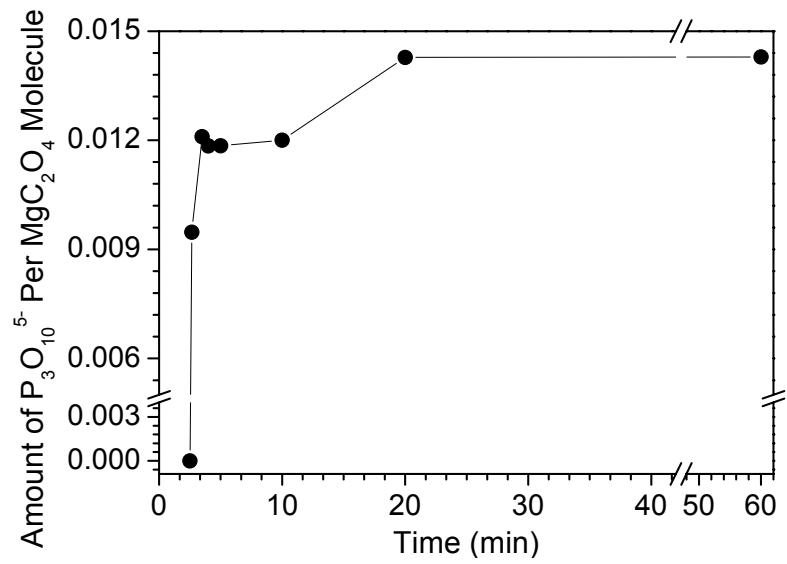
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**Figure S-1.** SEM images of the particles from various reaction times at 323 K by pouring  $\text{Na}_2\text{C}_2\text{O}_4$  into  $\text{Mg}(\text{NO}_3)_2$  solution: (a) 2.5 min; (b) 5 min; (c) 10 min; (d) 20 min; (e) 30 min; (f) 60 min; and (g) the plot of the widths of upper base and lower base size of the obtained particles with reaction time, and inset is a typical particle collected.



**Figure S-2.** SEM images of the particles obtained from the reaction between  $\text{Na}_2\text{C}_2\text{O}_4$  and  $\text{Mg}(\text{NO}_3)_2$  solutions (a-c) without and (d-f) in the presence of 0.05 g  $\text{Na}_5\text{P}_3\text{O}_{10}$  at 323 K, in which (a) and (d) are the particles at a low magnification, (b) and (e) are the side views, and (c) and (f) are the front views of the representative particles; (g) Typical XRD patterns of the products from the reaction systems without and in the presence of 0.05 g  $\text{Na}_5\text{P}_3\text{O}_{10}$ .



**Figure S-3.** Plot of the amount of  $\text{P}_3\text{O}_{10}^{5-}$  per  $\text{MgC}_2\text{O}_4$  molecule from XPS measurements by adding 2 mL aqueous solution containing 0.05 g  $\text{Na}_5\text{P}_3\text{O}_{10}$  into the reaction solution of  $\text{Na}_2\text{C}_2\text{O}_4$  and  $\text{Mg}(\text{NO}_3)_2$  with a delay time of 2.5 min followed by various total reaction periods. The calculations of the atomic ratios for XPS analyses were same as those in Figure 2.