|  |  |
| --- | --- |
|  |  |
| *a* | *e* |
|  |  |
| *b* | *f* |
|  |  |
| *c* | *g* |
|  |  |
| *d* | *h* |

Fig. S1. Histograms of particle width (*D*, nm) distribution: *a)****Mg(OH)2***; *b)****0.2***; *c)****0.5***; *d)****0.6***. Histograms of particle thickness (*h*, nm) distribution: *e)****Mg(OH)2***; *f)****0.2***; *g)****0.5***; *h)****0.6***. Histograms of *D* and *h* distribution for Mg(OH)2 were taken from [9].

|  |  |
| --- | --- |
|  |  |
| *a* | *d* |
|  |  |
| *b* | *e* |
|  |  |
| *c* | *f* |

Fig. S2. Histograms of particle width (*D*, nm) distribution: *a)****0.7***; *b)****0.9***; *c)****1.0***. Histograms of particle thickness (*h*, nm) distribution: *a)****0.7***; *b)****0.9***; *s)****1.0***.

|  |  |  |
| --- | --- | --- |
| Описание: 14 | Описание: F:\ИХС\ФХ ИССЛЕДОВАНИЯ\TEM 25.02.2022 гидроксиды и НТ\0,8-0,2\26.tif | Описание: F:\ИХС\ФХ ИССЛЕДОВАНИЯ\TEM 25.02.2022 гидроксиды и НТ\0,5-0,5\8.tif |
| *a* | *b* | *c* |
| Описание: 9 | Описание: 5 | Описание: 13 |
| *d* | *e* | *f* |
|  | Описание: 12 |  |
|  | *g* |  |

Fig. S3. Micrographs of hydroxide samples: *a)* ***Mg(OH)2***; *b)* sample ***0.2***; *c)* ***0.5***; *d)* ***0.6***; *e)* ***0.7***; *f)* ***0.9***; *g)* ***1.0***. TEM image of Mg(OH)2 wes taken from [9].