

Article

Heterostructural Mixed Oxides Prepared Via ZnAlLa LDH or ex-ZnAl LDH Precursors—Effect of La Content and Its Incorporation Route

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Table S1. Effect of La addition and incorporation route on the size of ZnO and ZnAl₂O₄ crystallites.

| Material | d _{ZnO} (nm) | a (Å) | ZnAl ₂ O ₄ (nm) |
|-------------|-----------------------|-------|---------------------------------------|
| ZnAl_Wk_1La | 2.5 | 8.01 | 1.3 |
| ZnAl_Wk_2La | 2.4 | 8.01 | 1.2 |
| ZnAl_Wk_3La | 2.2 | 8.04 | 1.2 |
| ZnAl_Wk_4La | 2.1 | 8.04 | 1.2 |
| ZnAl_Wk_5La | 1.7 | 8.08 | 1.2 |
| ZnAl_Ik_1La | 2.5 | 8.078 | 2.9 |
| ZnAl_Ik_2La | 2.5 | 8.077 | 2.7 |
| ZnAl_Ik_3La | 2.7 | 8.078 | 2.7 |
| ZnAl_Ik_4La | 5.7 | 8.083 | 2.9 |
| ZnAl_Ik_5La | 11.9 | 8.100 | 2.9 |

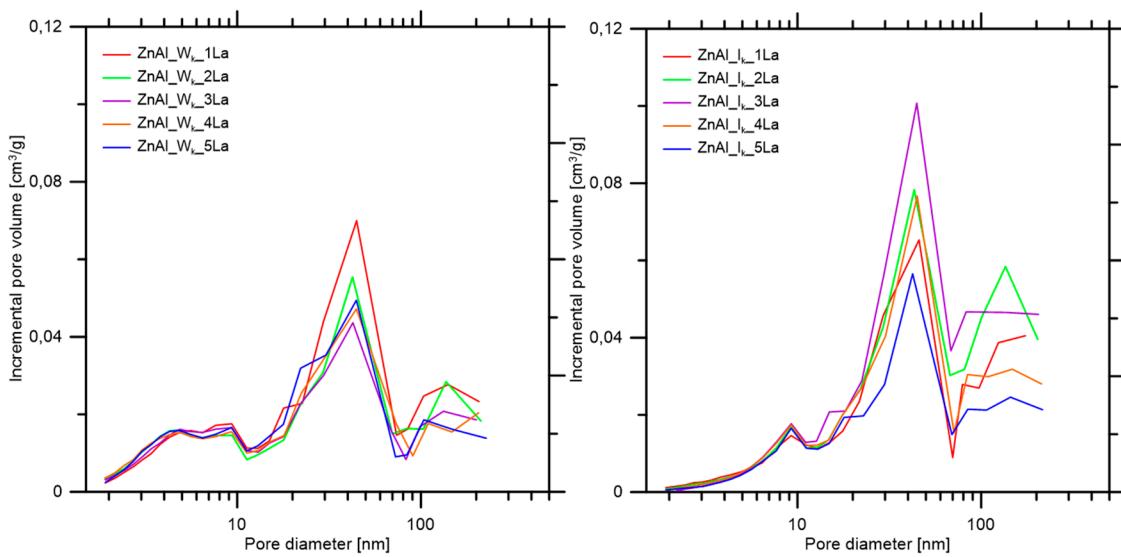


Figure S1. Pore size distribution of $ZnAl_W_k_{x}La$ and $ZnAl_I_k_{x}La$ materials.

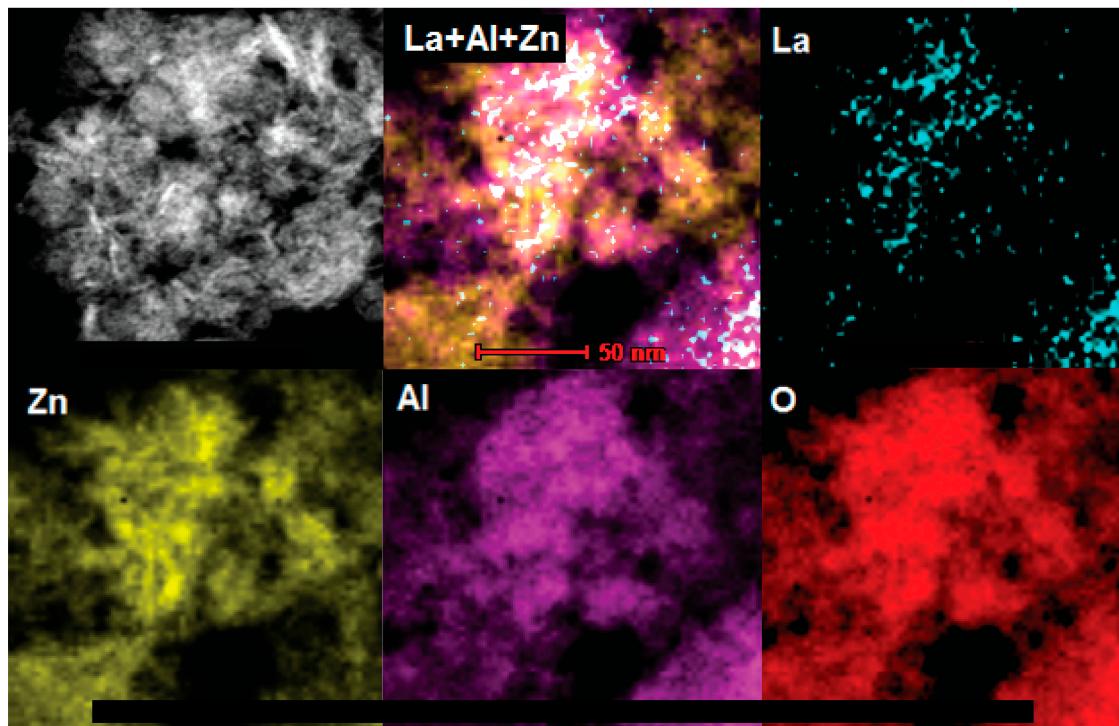


Figure S2. STEM-EDS images along with detailed maps of La (turquoise), Zn (yellow), Al (purple), and O (red) distributions of the $ZnAl_W_k_{1}La$ material.

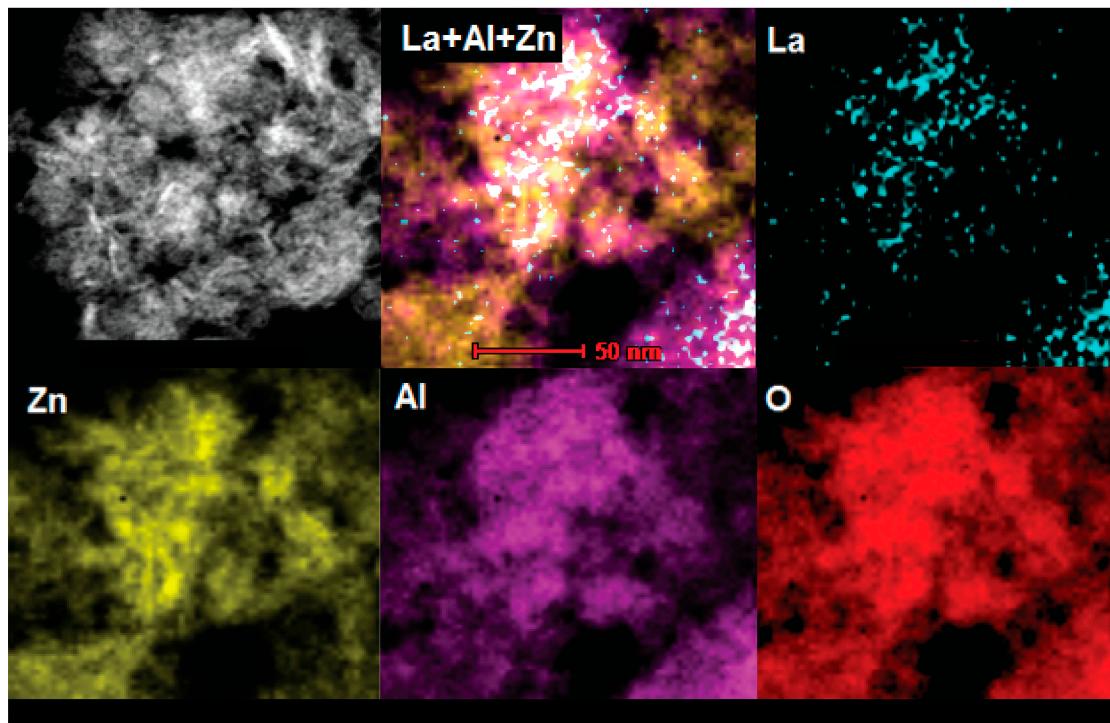


Figure S3. STEM-EDS images along with detailed maps of La (turquoise), Zn (yellow), Al (purple), and O (red) distributions of the ZnAl_W_k_5La material.

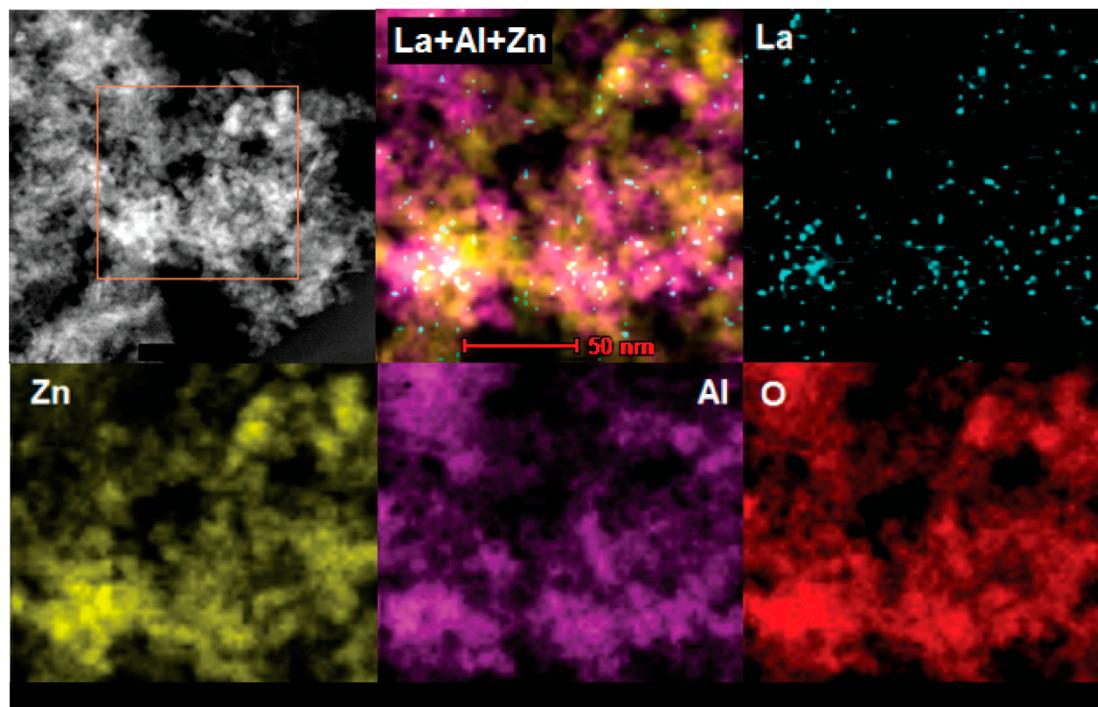


Figure S4. STEM-EDS images along with detailed maps of La (turquoise), Zn (yellow), Al (purple), and O (red) distributions of the ZnAl_I_k_1La material.

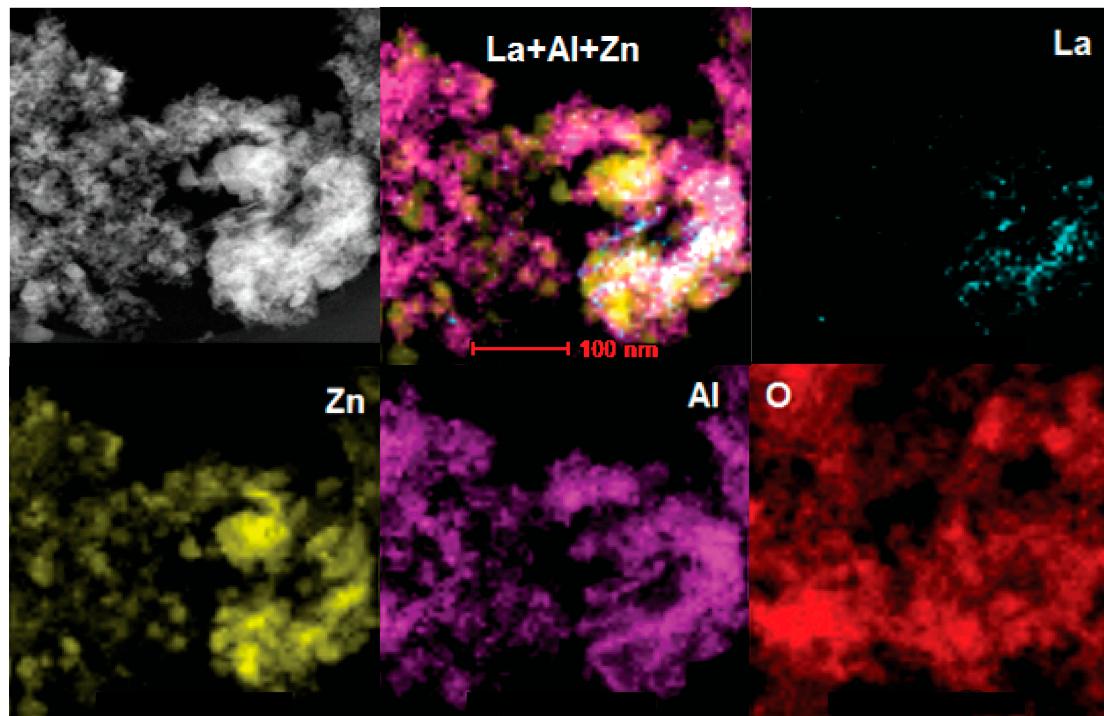
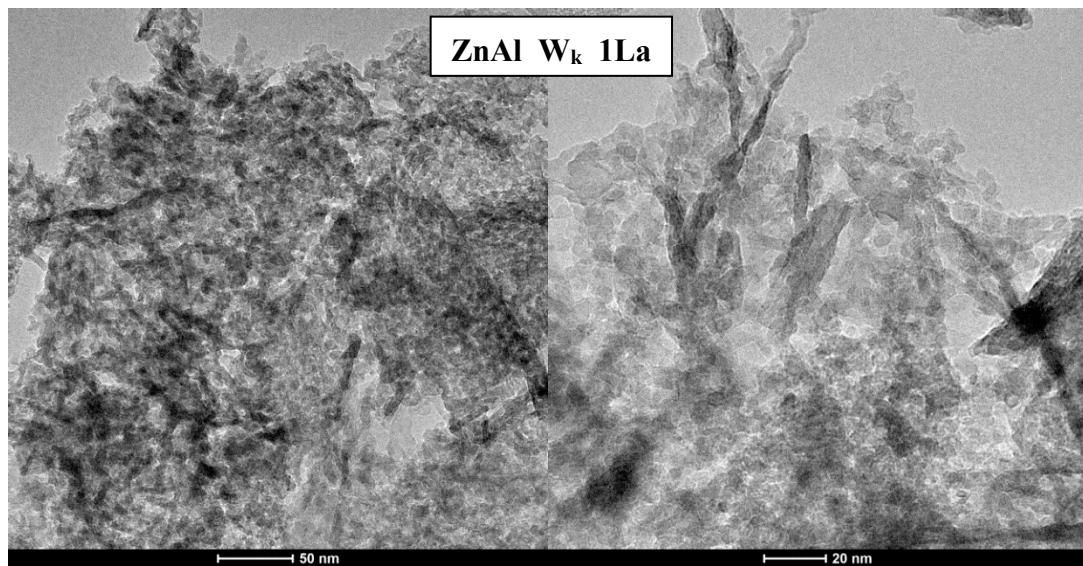


Figure S5. STEM-EDS images along with detailed maps of La (turquoise), Zn (yellow), Al (purple), and O (red) distributions of the ZnAl_I_k_5La material.



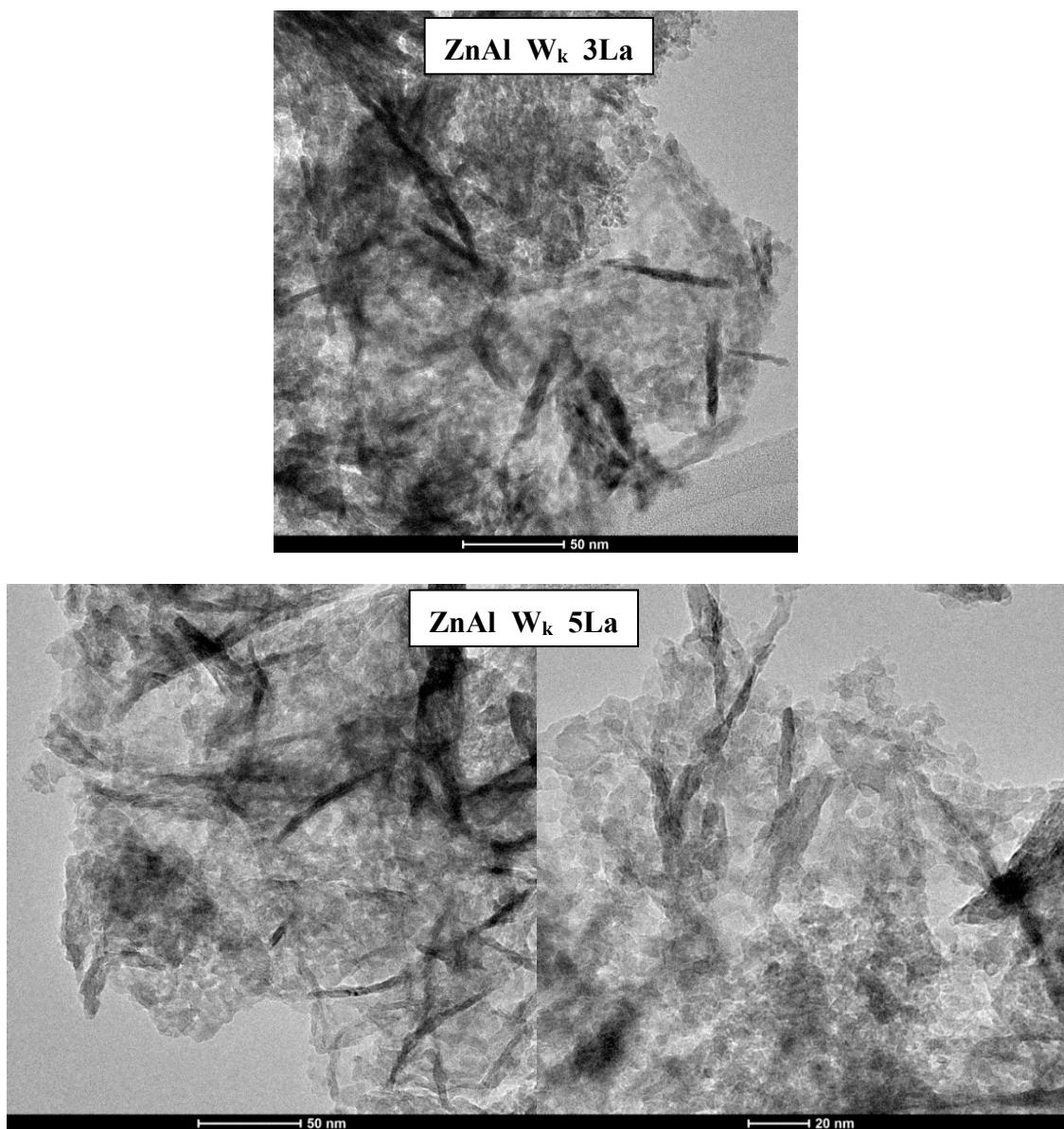


Figure S6. TEM images of ZnAl_xW_kLa materials.

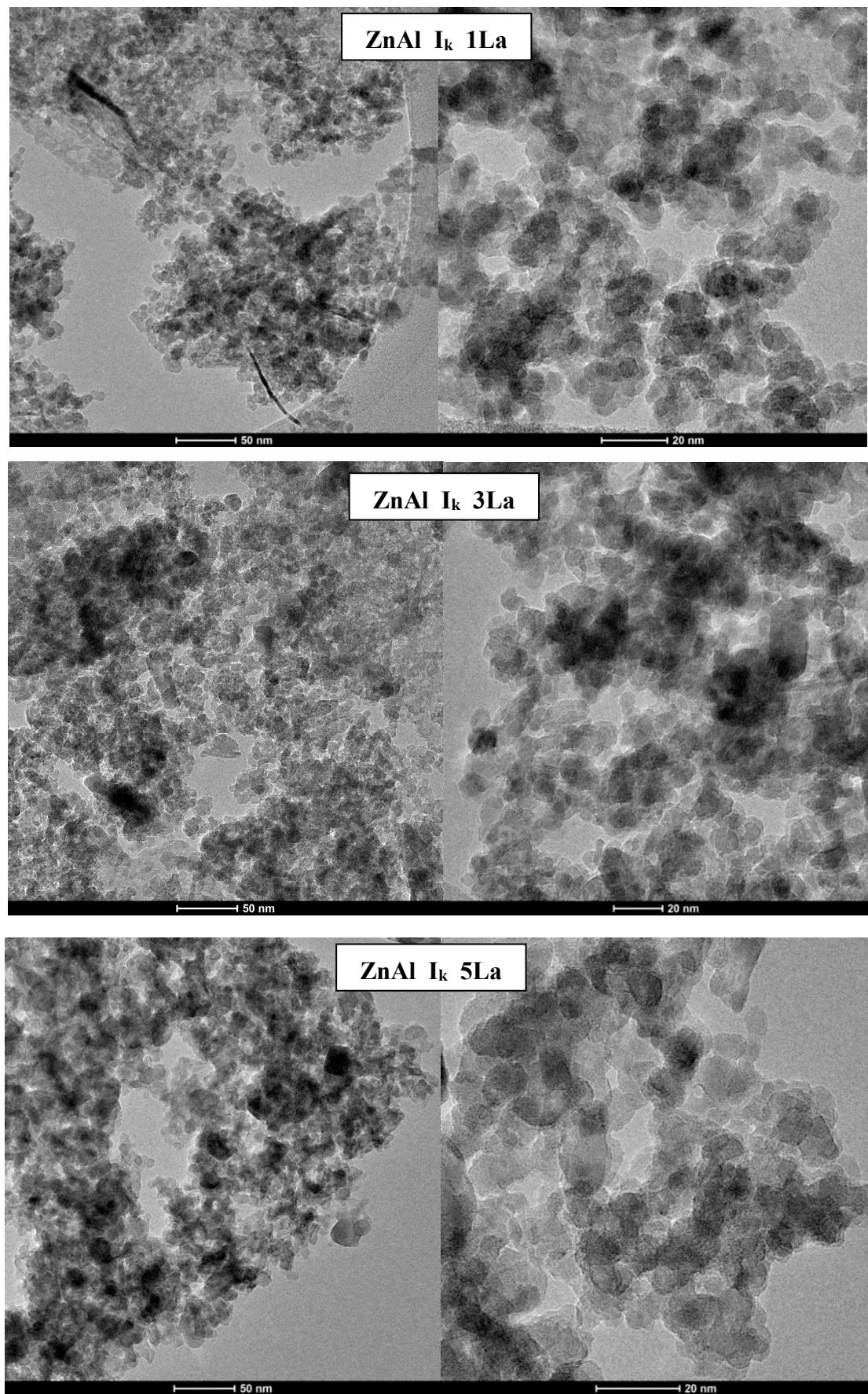


Figure S7. TEM images of $\text{ZnAl}_{\text{I}_k\text{-}}\text{xLa}$ materials.