Mesoporous $(\text{ZnO})_x(\text{MgO})_{1-x}$ nanoplates: template-free solvothermal synthesis, optical properties, and their applications in water treatment

Electronic Supplementary Information

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Fig. S1 The corresponding XRD patterns of S-1 (a) and S-2 (b) before being annealed.
Fig. S2 TGA curve of the as-prepared precursor ZnO/Mg(OH)$_2$ nanoplates (S-2 before being annealed).
**Fig. S3** (a) Nitrogen adsorption–desorption isotherm and (b) the pore size distribution curve of the mesoporous nanoplates.
**Fig. S4** The elemental chemical maps of Mg, O, and Zn for the sample S-2 (a) and S-3 (b), respectively. All scale bars are 400 nm.
Fig. S5 UV–vis absorption spectra of MO solutions after being treated with the samples S-1 (a), S-2 (b), S-3 (c), and S-4 (d) at different time intervals, respectively.