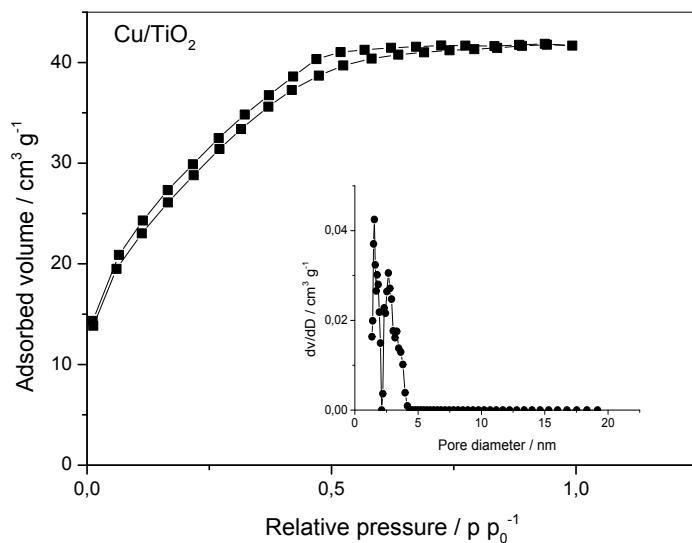
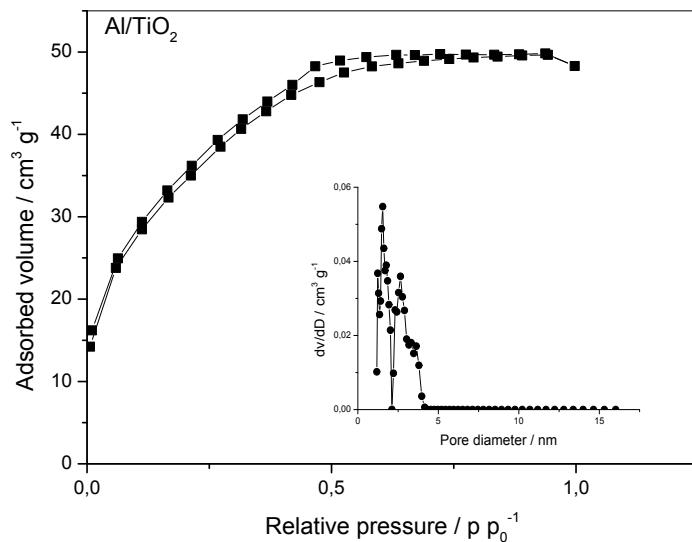


Electronic Supplementary Information

Doped TiO₂: effect of doping element on the photocatalytic activity

Anna Khlyustova, Nikolay Sirotnik, Tatyana Kusova, Anton Kraev, Valery Titov, Alexander Agafonov

G. A. Krestov Institute of Solution Chemistry of Russian Academy of Sciences



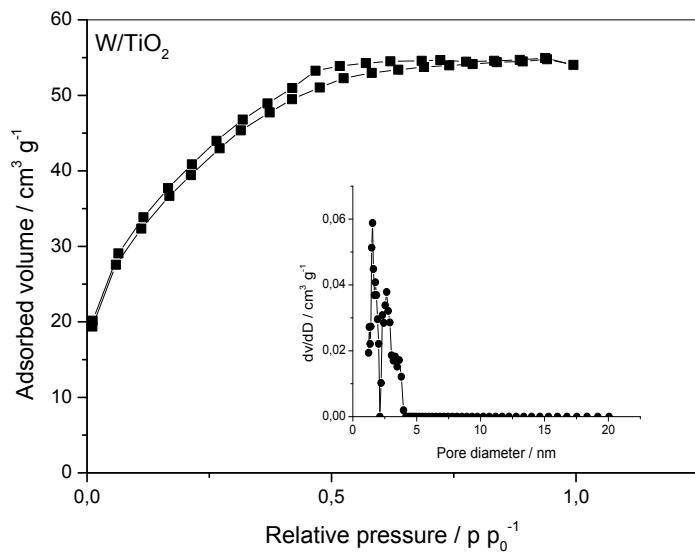
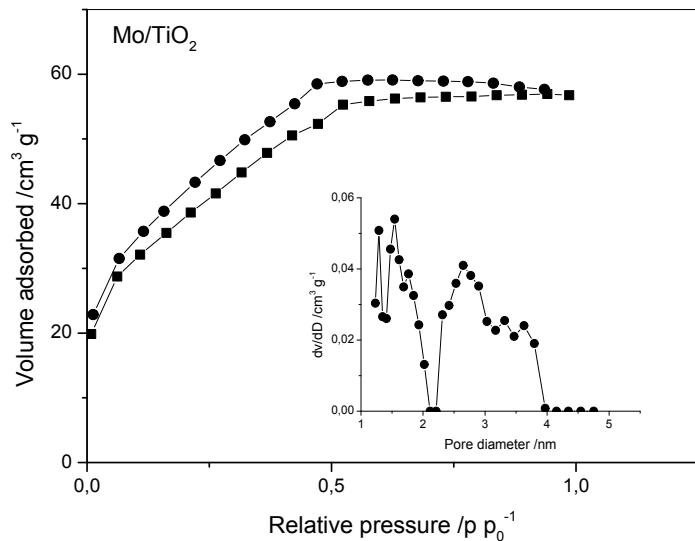


Figure S1 Nitrogen adsorption-desorption isotherms collected at 77 K and pore distribution curves (inside) for Al/TiO₂ (a), Cu/TiO₂ (b), Mo/TiO₂ (c) и W/TiO₂ (d)

II Surface morphology and distribution particle size in liquid phase

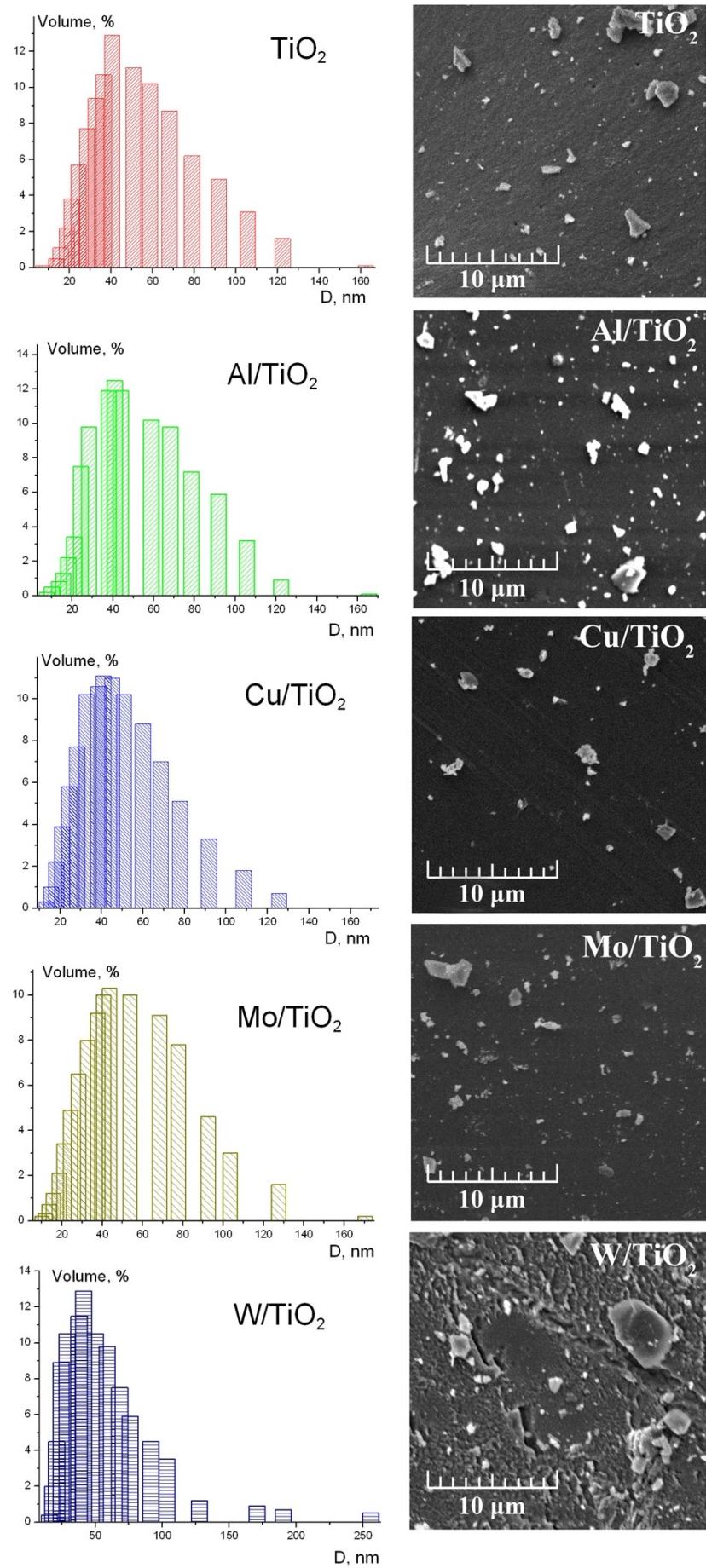


Figure S2 Particle size distribution histograms and SEM images of undoped and doped TiO₂

III Kinetics of adsorption models

Three kinetic models were analyzed and proved for undoped and doped TiO₂ samples. Figures S3-S4 show plots for the pseudo-first, pseudo-second, and intraparticle diffusion models.

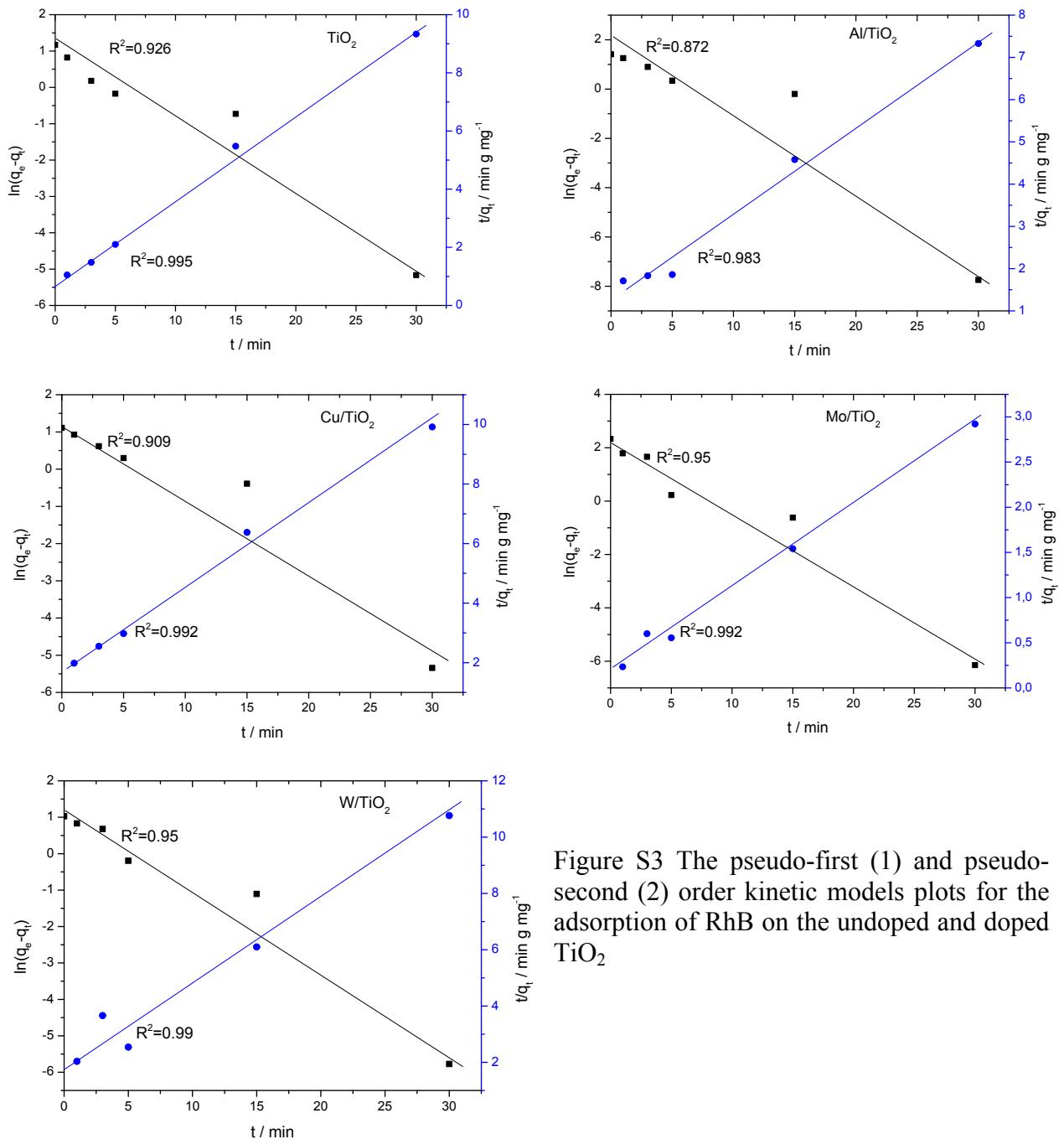


Figure S3 The pseudo-first (1) and pseudo-second (2) order kinetic models plots for the adsorption of RhB on the undoped and doped TiO₂

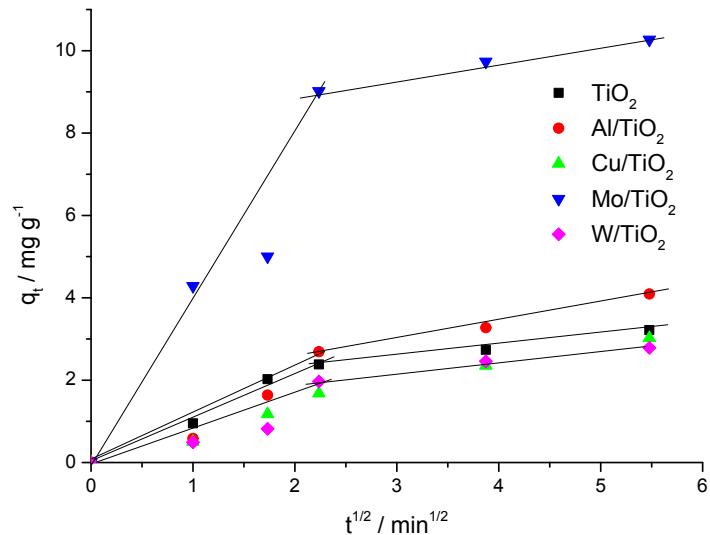


Figure S4 Intraparticle diffusion model for adsorption of Rhodamine B on undoped and doped titanium dioxide

IV UV-vis spectra of Rhodamine B during experiments on photocatalysis

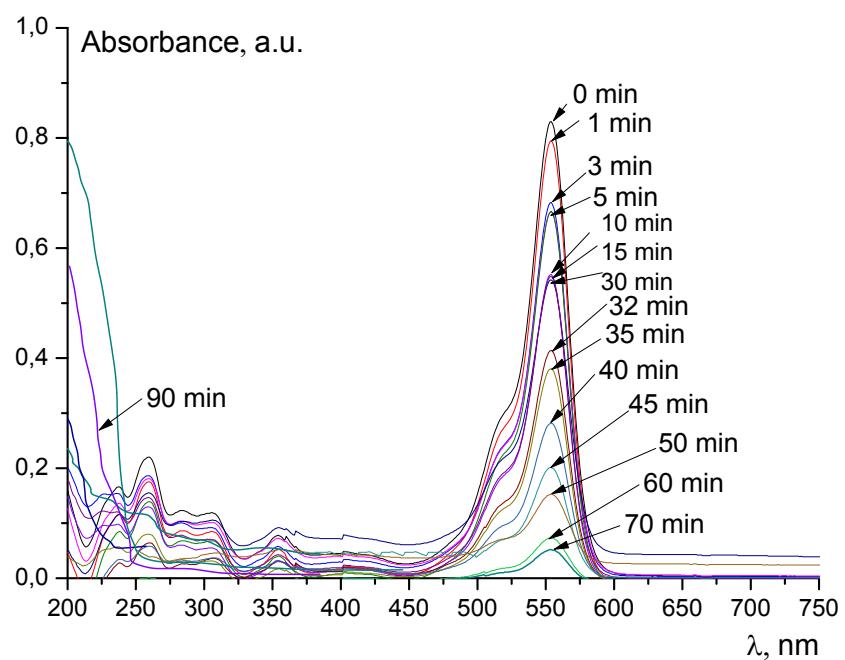


Figure S5 UV-Vis spectra of Rhodamine B dye during sorption (0-30 minutes) and photocatalysis (30-90 minutes) on Mo/TiO₂