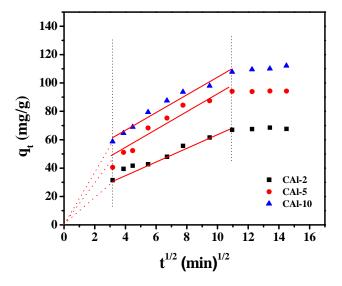
## Rattle-type Carbon-Alumina Core-Shell Spheres: Synthesis and Application for Adsorption of Organic Dyes

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**Table S1.** Intra-particle diffusion model constants and correlation coefficients for adsorption of Orange-II dye on the samples studied

Sample	C <sub>0</sub> - (mg/L)	Intra-particle diffusion model		
		$k_d$ (mg/g min <sup>1/2</sup> )	С	$\mathbb{R}^2$
CAl-2		4.30	20.59	0.973
CAl-5	25	6.79	25.13	0.921
CAl-10		6.17	42.34	0.964



**Fig. S1** Intra-particle diffusion kinetics for adsorption of O-II dye onto the CAl-2, CAl-5 and CAl-10 samples (T = 25 °C; adsorbent dose = 200 mg/L; O-II concentration = 25 mg/L and pH 5.0~6.0).