

Catalytic reduction of dyes and antibacterial activity of AgNPs@Zn@Alginate composite aerogel beads.

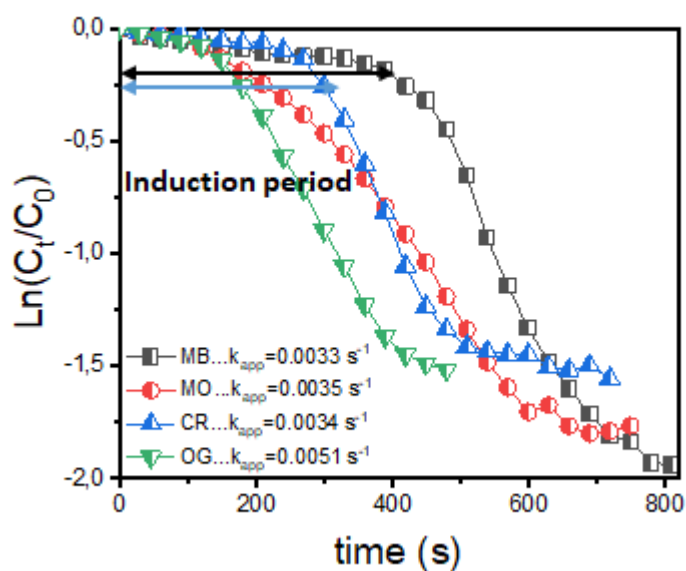


Figure S1. Plot of $\ln(C_t/C_0)$ versus time.

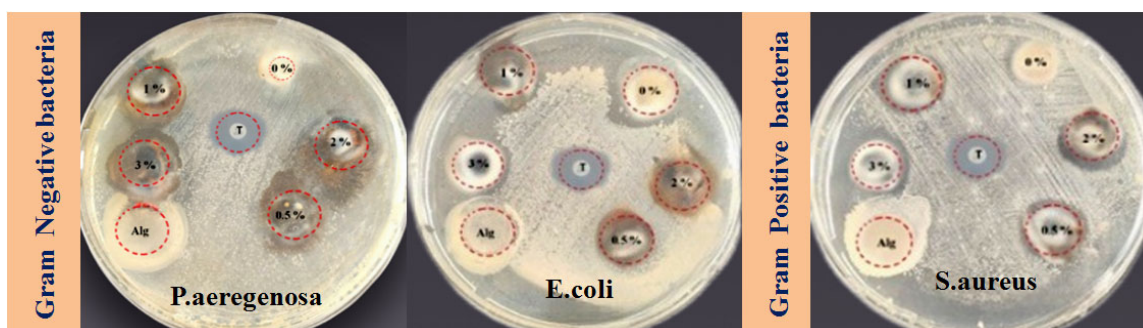


Figure S2. Digital images for antibacterial tests of different samples of Zn-ALG(AgNPs).

Table S1. Comparative study with materials carried out in the literature.

	catalyst	Catalyst mass (mg)	[dye] (mM)	[NaBH ₄]	Reaction time (min)	k _{app} (min ⁻¹)	Ref
MB	Alg-St/AC1@CuNPs	30 mg	0.08	0.2 M	2.5 min	0.73	[31]
	Alg-St/AC5@CuNPs	30 mg	0.08	0.2 M	6.5 min	0.19	[31]
	Alg-St/AC10@CuNPs	30 mg	0.08	0.2M	5 min	0.3	[31]
	Ag ⁰ /CH/PG	0.1g	0.07	0.2M	25 min	//	[34]
	Zn-ALG(Ag 0.5%)	5.3mg	0.1	8mM	7.5 min	0.198	This study
CR	Alg-St/AC1@CuNPs	30 mg	0.08	0.2 M	8 min	0.13	[31]
	Alg-St/AC5@CuNPs	30 mg	0.08	0.2 M	7 min	0.13	[31]
	Alg-St/AC10@CuNPs	30 mg	0.08	0.2M	4 min	0.36	[31]
	Fe ⁰ -Cu ⁰ /Alg-ACBDs	9.5 mg	0.07	0.2 M	6 min	0.655	[37]
	CuAg@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	4 min	0.64	[33]
	Ag@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	5 min	0.46	[33]
	Cu@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	7 min	0.31	[33]
	Zn-ALG(Ag 0.5%)	5.3mg	0.1	8mM	12.5min	0.204	This study
MO	Fe ⁰ -Cu ⁰ /Alg-ACBDs	9.5mg	0.07	0.2 M	4 min	1.163	[37]
	Ag ⁰ /CH/PG	0.1g	0.07	0.2 M	10min	//	[34]
	CuAg@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	2 min	1.75	[33]
	Ag@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	4 min	0.78	[33]
	Cu@BP-NaY	1 ×0.5 cm ²	0.05	0.1 M	5 min	0.64	[33]
	Zn-ALG(Ag 0.5%)	5.3mg	0.1	8mM	12.5 min	0.21	This study
	MC@CA(1) hydrogel beads	4.8mg	0.6	0.6M	14min	//	[36]
OG	MC@CA(1) aerogel beads	4.8mg	0.6	0.6M	14 min	//	[36]
	Zn-ALG(Ag 0.5%)	5.3mg	0.1	8mM	8min	3.267	This study