

Supplementary materials

Table S1

TableS1 f/2 Medium formulation

Liquid in reserve	composition	Content(/500mL)	Content of medium(/L)
Stock1	NaNO ₃	37.4 g	74.8 g
	NaH ₂ PO ₄	2.2 g	44 g
	NaSiO ₃ ·9H ₂ O	8.0 g	16.0 g
Stock2	FeC ₆ H ₅ O ₇ ·5H ₂ O	1.95 g	3.9 mg
Stock3	ZnSO ₄ ·4H ₂ O	11.5 mg	0.023 mg
	MnCl ₂ ·4H ₂ O	89 mg	0.178 mg
	CuSO ₄ ·5H ₂ O	5 mg	0.01 mg
	NaMoO ₄ ·2H ₂ O	3.65 mg	0.0073 mg
	CoCl ₂ ·6H ₂ O	6 mg	0.012 mg
	Na ₂ EDTA	2.715 mg	4.35 mg

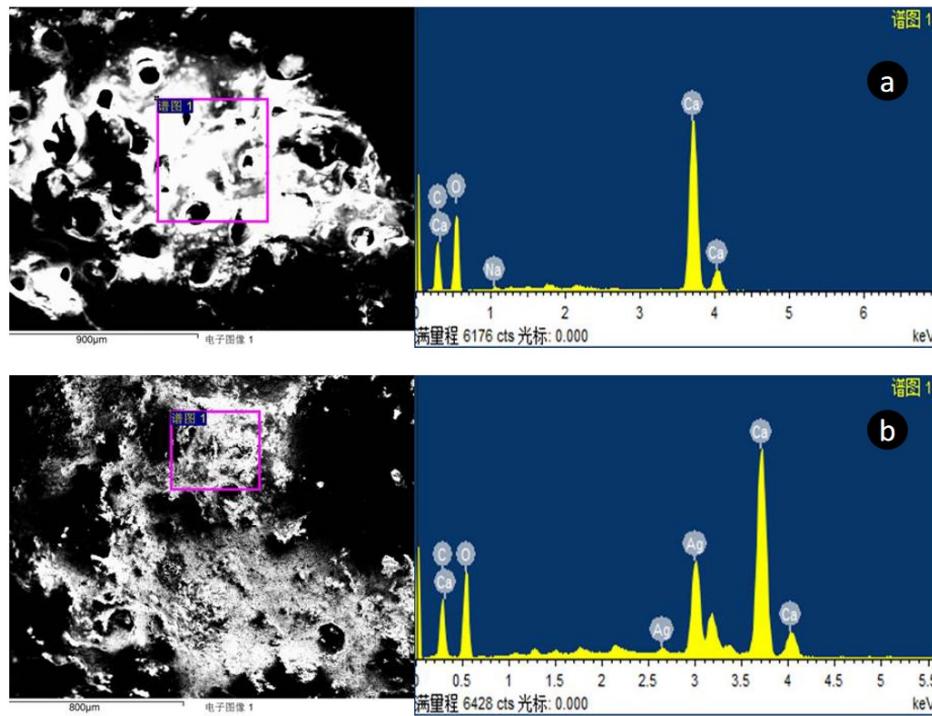


Figure S1 EDS results of CS and CS-Ag(a: CS; b:CS-Ag)

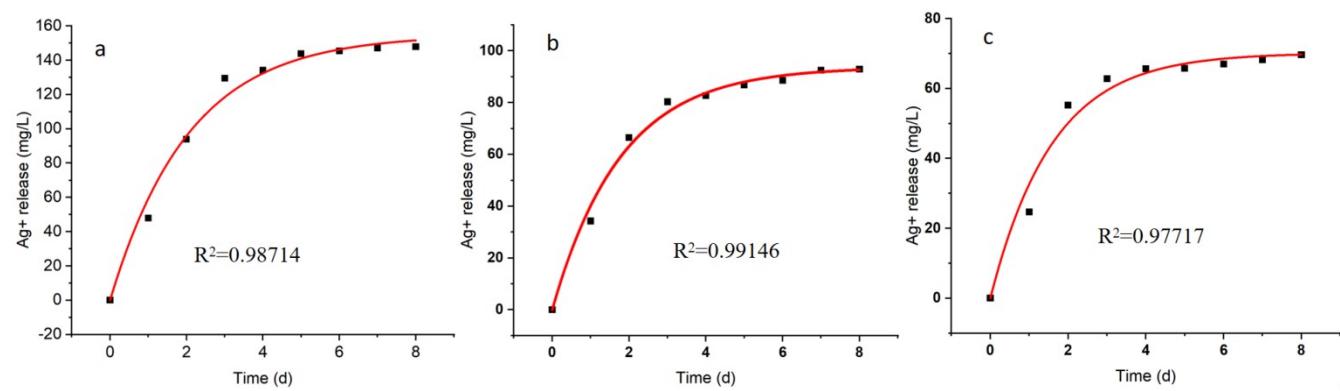


Figure S2 Fitting model of silver ion release kinetics (a: First release cycle; b:Second release cycle; c: Third release cycle)