

SUPPORTING INFORMATION

Co-immobilization of D-Amino Acid Oxidase, Catalase and Transketolase for One-Pot, Two-Step Synthesis of L-Erythrulose

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Figure S1. Long-term thermal stability of free and immobilized DAAO_{Rg} and TK_{gst}.

Table S1. Structure parameters of silica monolithic beads before and after functionalization with amino groups. Data from low temperature nitrogen adsorption.

	S_{BET} [m^2/g]	V_p [cm^3/g]	d_p [nm]
MH	290	1.23	18.5
MH-A	155	0.85	17.5

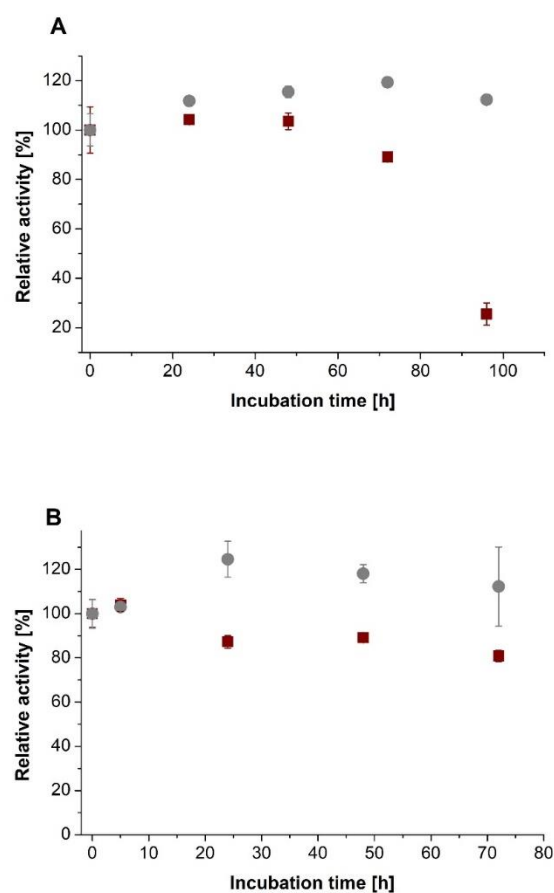


Figure S1. Long-term thermal stability of free (■) and immobilized (●) DAAO_{Rg} (A) and TK_{gst} (B); enzymes were incubated in H₂O with cofactors -ThDP (0.1 mM) and MgCl₂ (1 mM) at 30 °C; 100% is the enzyme activity before incubation.

Reaction conditions for DAAO_{Rg}: D-ser (50 mM) in Tris-HCl (0.5 M, pH7.5), DAAO_{Rg} free or immobilized on amino-modified silica (0.01 mg), free catalase (0.1 mg), 26 °C, 500 rpm, O₂.

Reaction conditions for TK_{gst}: HPA (50 mM), GOA (50 mM), ThDP (0.1 mM), MgCl₂ (1 mM), TK_{gst} free or immobilized on amino-modified silica (0.1 mg), pH 7.0, 50 °C, 500 rpm.