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Co-immobilization of glucose oxidase and catalase in silica inverse opals for glucose removal from commercial isomaltooligosaccharide

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ABSTRACT

In this work, glucose oxidase (GOD) and catalase (CAT) were co-immobilized on novel silica inverse opals (IO-SiO₂) through sol-gel process. The immobilized bi-enzyme system named GOD/CAT@IO-SiO₂ was successfully fabricated and characterized. Morphology characterization indicated that GOD/CAT@IO-SiO₂ had hierarchical porous structure, and the pore diameter of macroporous and mesoporous were 500±50 nm and 6.8 nm, respectively. The macropores were

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