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# Ce(III, IV)-MOF electrocatalyst as signal-amplifying tag for sensitive electrochemical aptasensing

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## ABSTRACT

Metal–organic frameworks (MOFs) as a new class of porous materials have attracted increasing attention in the field of biomimetic catalysis. This study firstly reports a mixed valence state Ce-MOF possessing intrinsic catalytic activity towards thionine (Thi), and its application in constructing an amplified electrochemical aptasensor for thrombin detection. As noticed, the novel catalytic process combines the advantages of 3D infinite extension of the Ce(III, IV)-MOF skeleton containing large amounts of catalytic sites and spontaneous recycling of the Ce(III)/Ce(IV) for

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