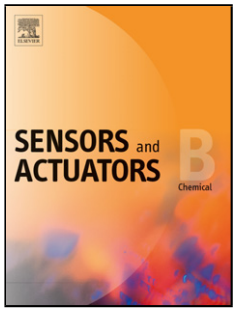

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A novel strategy for improving amperometric biosensor sensitivity using dual-signal synergistic effect for ultrasensitive detection of matrix metalloproteinase-2

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Graphical sbstract

The dual-signal synergistic effect for improving sensitivity of amperometric biosensor has been developed, resulting in a significantly improved sensitivity 43.86 μA·$(LgC_{MMP-2})^{-1}$, which was three-fold higher than those of previous works.