

## **Supporting information**

# Iridium oxide nanoparticles induced dual catalytic/inhibition based detection of phenol and pesticide compounds

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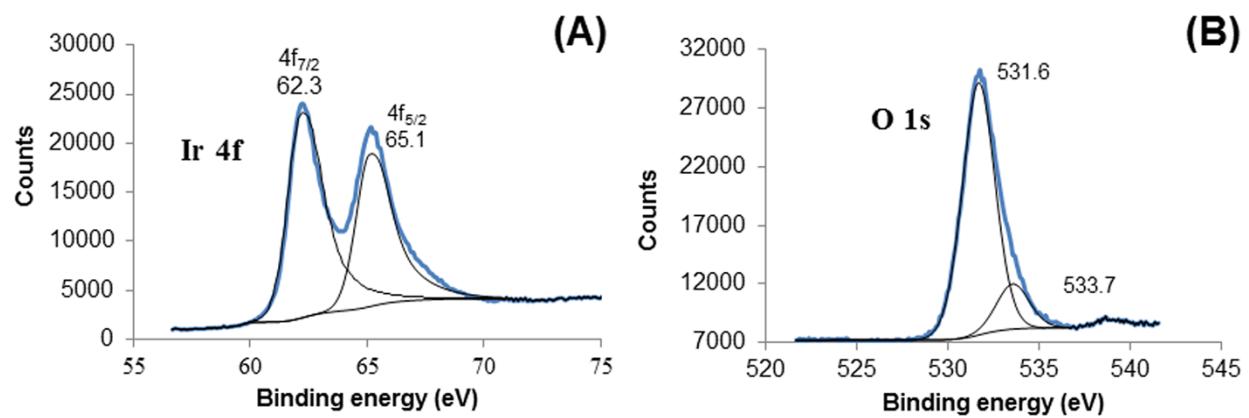
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**Figure S1.** Iridium 4f spectrum of IrOx NPs

Table 1: Comparison between different chlorpyrifos biosensors reported in the literature.

Electrode	Enzyme	Linear Range ( $\mu\text{M}$ )	LOD ( $\mu\text{M}$ )	Sample	Working Potential (mV)	Ref
Gold disk electrodes (d=1.6 mm)	AChE	$1.0 \text{ e}^{-5}$ - $1.0 \text{ e}^0$	$1.0 \text{ e}^{-6}$	Spiked river water	350 (DPV)	[1]
Mini carbon paste electrode	AChE	$1.0 \text{ e}^{-5}$ - $1.0 \text{ e}^0$	$4.0 \text{ e}^{-6}$	-	50	[2]
gold electrode (d=1 mm)	AChE	$5.0 \text{ e}^{-5}$ - $7.5 \text{ e}^{-2}$	$5.0 \text{ e}^{-5}$	Vegetable sample	600	[3]
glassy carbon electrode	TYR	$7.1 \text{ e}^{-4}$ - $2.85 \text{ e}^{-2}$	$5.7 \text{ e}^{-4}$		6	[4]
SPE	TYR	$1 \text{ e}^{-2}$ - $1 \text{ e}^{-1}$	$3.0 \text{ e}^{-3}$	Spike tap and river water	-0.2	This work

## REFERENCES

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