

## Supplementary Information

for

# Electrochemical detection of SARS-CoV-2 based on copper nanoflowers-triggered in situ growth of electroactive polymers

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**Table S1** Comparison of different SARS-CoV-2 analytic methods

Methods	Linear ranges	LOD
optical aptasensor <sup>1</sup>	7.79-123.04 nM	4.5 nM
disposable Electrochemical Sensor <sup>2</sup>	5-100 nM	500 pM
electrochemical biosensor <sup>3</sup>	1-15 $\mu$ M	500 nM
fluorescent method <sup>4</sup>	0-300 nM	35 nM
This work	0.1-1000 nM	33.83 pM

**Table S2** Comparison of this work and RT-PCR

Projects	This work	RT-PCR
sensitivity	48.71%	38%
specificity	100%	100%
Reproducibility (RSD)	0.71%	N/A
total analysis time	3 h	N/A
complexity	simple	complex
Portable or not	Portable	not

## Notes and references

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