

Development of Thermochromic Lateral Flow Assay to Improve Sensitivity for Dengue Virus Serotype 2 NS1 Detection

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Supplemental information

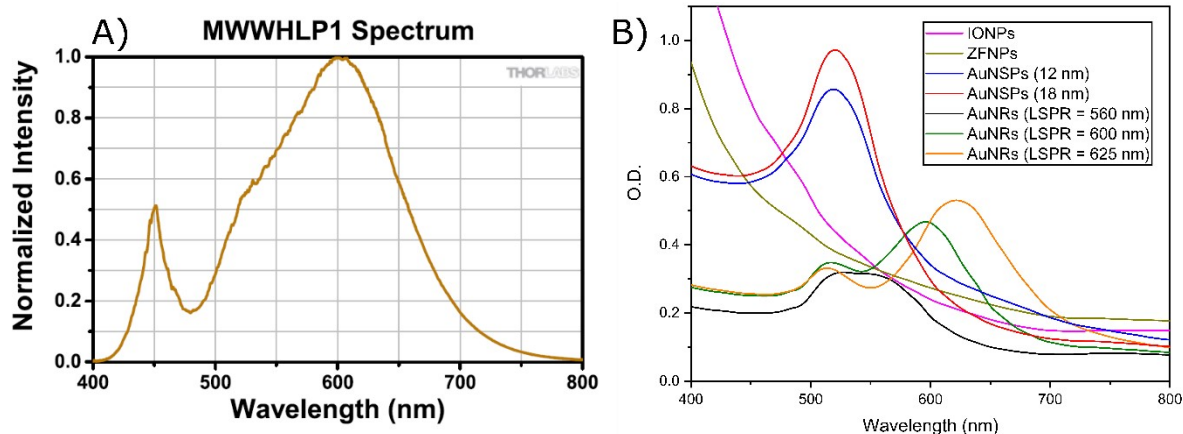


Fig. S1 A) The spectrum provided by the LED (MWWHL1, Thorlabs, UK) and B) the spectrum absorption of MNPs: IONPs (iron oxide nanoparticles), ZFNPs (zinc ferrite nanoparticles), and plasmonic nanoparticles: AuNSPs (gold nanospheres), and AuNRs (gold nanorods) from 400 and 800 nm. The concentration of all suspensions were adjusted to 0.05 mg/mL.

Table S1 The sensitivity and limit of detection (LOD) of the typical and colourimetric thermal sensing LFA for DENV2-NS1 detection analysed through different Bayer colour channels.

Typical of LFA	Channel	Fitting formula	Linear range (ng/mL)	R ²	Sensitivity	S _{LOD}	LOD (ng/mL)
Typical LFA	Red	$y = 0.04834x + 0.96000$	0.78 – 400	0.99258	0.04834	1.1071	6.25
	Green	$y = 0.05284x + 0.95851$	0.78 – 400	0.99588	0.05284	1.0968	6.25
	Blue	$y = 0.04564x + 0.96691$	0.78 – 400	0.99566	0.04564	1.1182	6.25
Thermochromic LFA	Red	$y = 0.24536x + 0.84525$	0.78 – 12.5	0.92498	0.24536	1.3028	3.125
	Green	$y = 0.35898x + 0.75296$	0.78 – 400	0.98066	0.35898	1.1332	1.5
	Blue	$y = 0.25064x + 0.99854$	0.78 – 400	0.93857	0.25064	1.1296	1.5