

Electronic Supplementary Information (ESI) for:

Solution mixing and the emission of light in flow-cells for chemiluminescence detection

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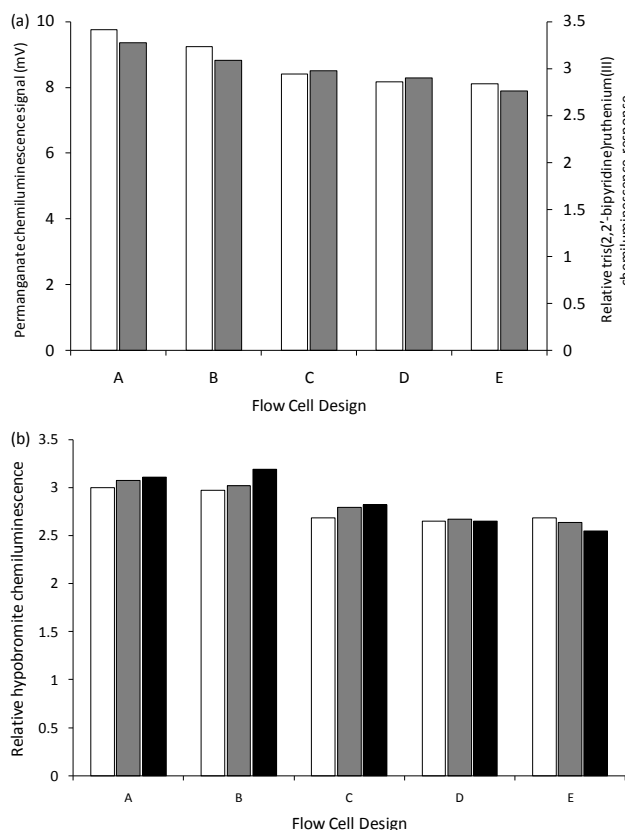


Fig. S1 The effect of mixing zones on chemiluminescence intensity (peak height): (a) the oxidation of morphine with permanganate (white columns), and codeine with tris(2,2'-bipyridine)ruthenium(III) (grey columns), and (b) the reaction of urea (white columns), arginine (grey columns) and ammonium (black columns) with hypobromite. Flow cell designs: A: single-inlet serpentine, B-E: dual-inlet serpentine configurations (B: no mixing zone, C: 1 mm mixing zone after confluence point, D: 2 mm mixing zone after confluence point, E: 4 mm mixing zone at confluence point).

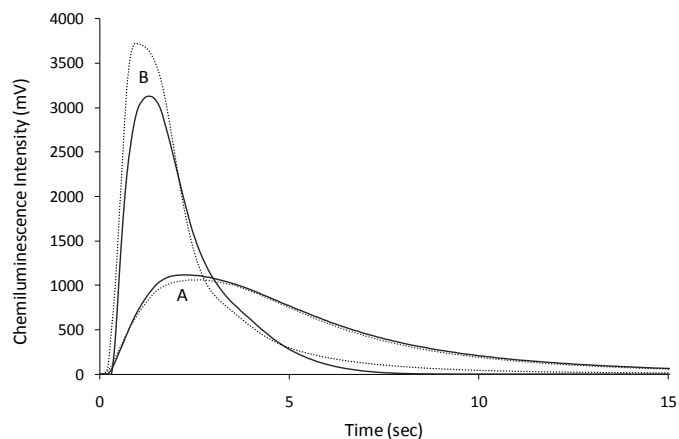


Fig. S2 Chemiluminescence intensity versus time profiles (using the stopped-flow technique) for the reaction of 1×10^{-5} M morphine with acidic potassium permanganate with (A) single- (black) and dual- (dotted) inlet serpentine and (B) single- and dual-serpentine after addition of 6×10^{-4} M manganese(II).