

Supplementary Information

Multifunctional optofluidic lab-on-chip platform for Raman and fluorescence spectroscopic microfluidic analysis

G. Persichetti,^{*a} I. A. Grimaldi,^a G. Testa,^a and R. Bernini^a

^a Institute for Electromagnetic Monitoring of the Environment (IREA), National Research Council (CNR), Naples, Italy.



Fig. A1 The PMMA frame is micromachined to accommodate both the fiber probe and the capillary for the jet ejection on the same axis. The stable flow rate and the PMMA frame guarantee a self-alignment condition.

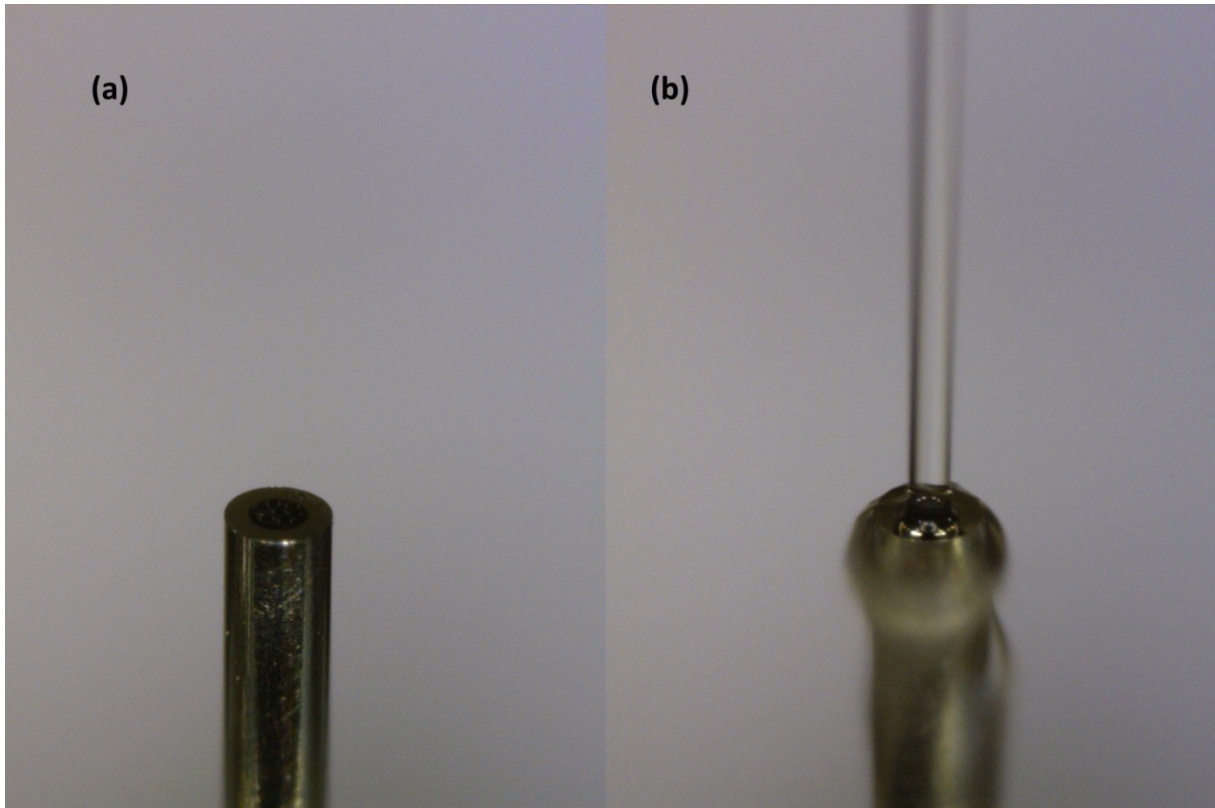


Fig. A2 Detail of the jet waveguide impinging on the fiber probe: (a) tip of the 7 fiber optic probe; (b) jet impinging on the fiber probe.

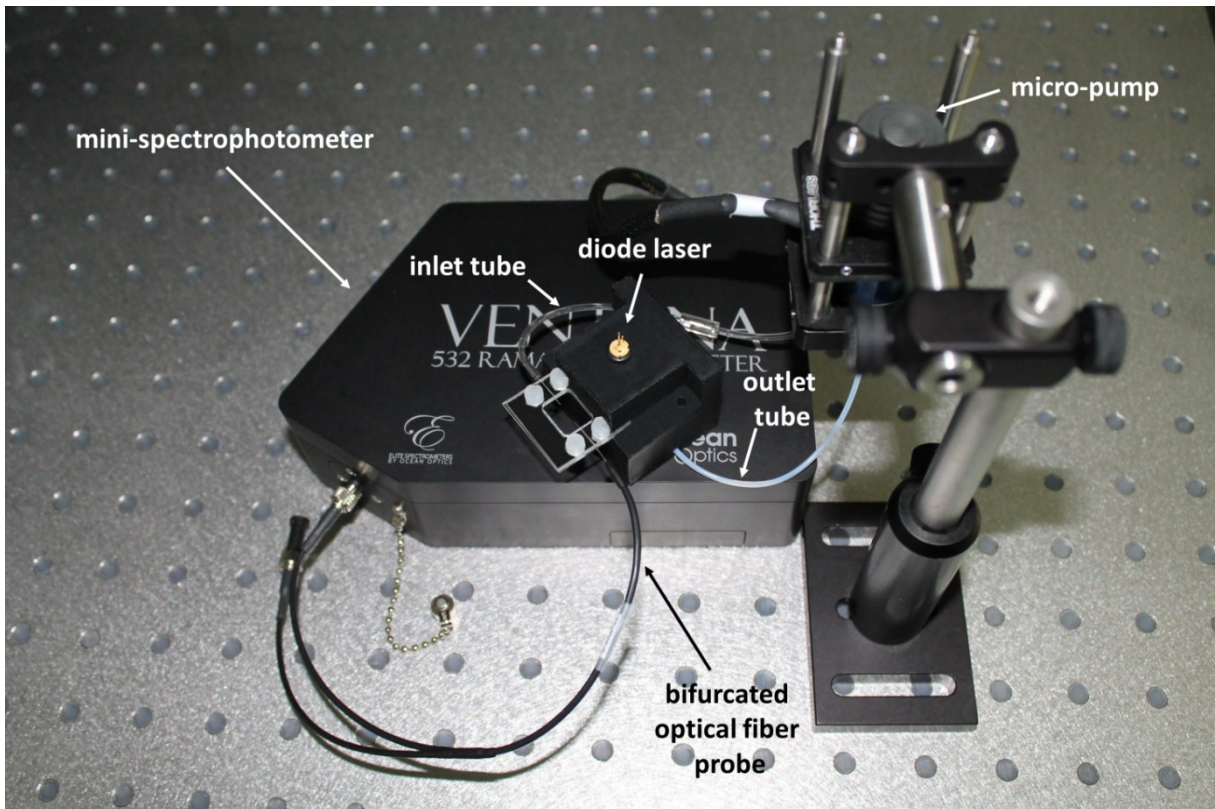


Fig. A3 Experimental setup used to perform the measurements. The chip is not inserted in its holder for illustrative purposes.

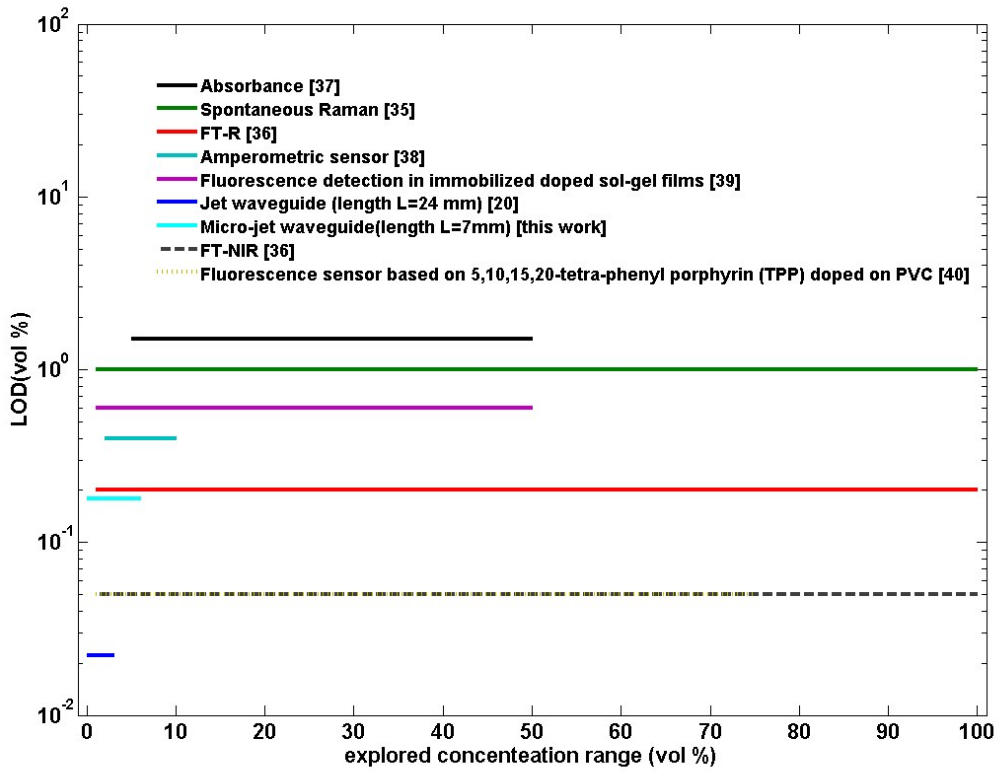


Fig. A4 Comparative diagram of different approaches for ethanol quantification representing data of table1 (references are listed in the text).

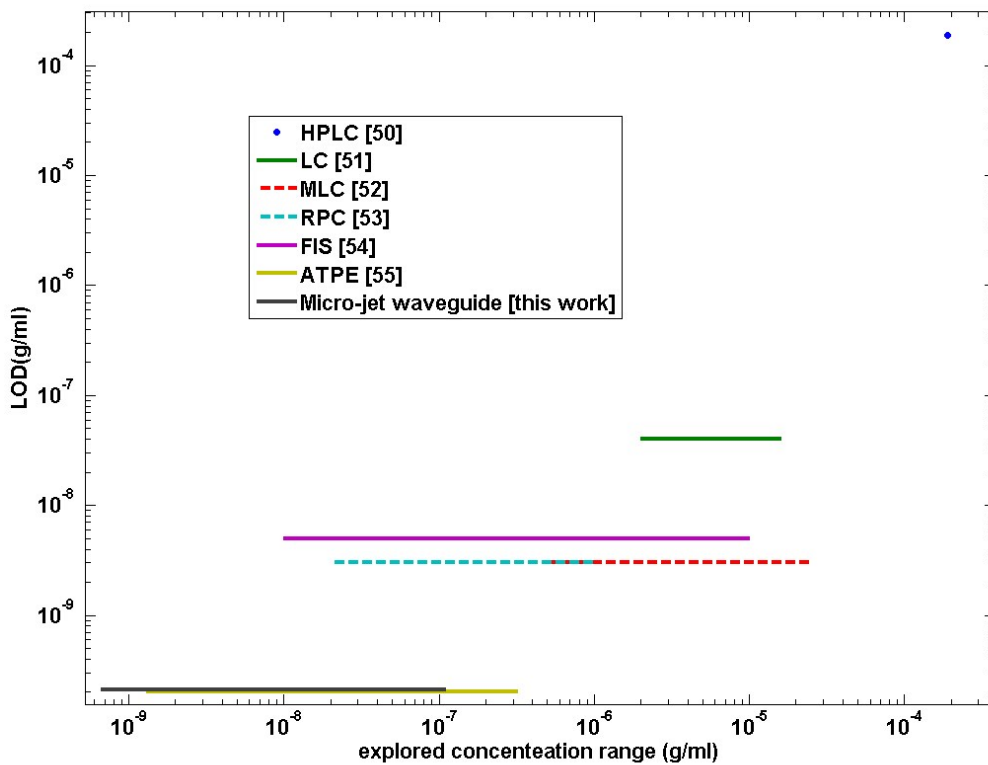


Fig. A5 Comparative diagram of different approaches for riboflavin quantification representing data of table2 (references are listed in the text).