HYPHENATION OF SINGLE-DROP MICROEXTRACTION WITH LASER-INDUCED BREAKDOWN SPECTROMETRY FOR TRACE ANALYSIS IN LIQUID SAMPLES: A VIABILITY STUDY

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Fig. S1 Pareto charts obtained from the Plackett-Burman design for the different emission lines evaluated.



Fig. 2 Response surfaces and contour plots for ZnII (202.458 nm) emission line using the circumscribed central composite design obtained by plotting: (a) pH vs. droplet volume (extraction time: 10 min) (b) pH vs. extraction time (droplet volume: 7.5 μ L); (c) extraction time vs. droplet volume (pH: 10).



Fig. S3 Response surfaces and contour plots for MnII (259.373 nm) emission line using the circumscribed central composite design obtained by plotting: (a) pH vs. droplet volume (extraction time: 10 min) (b) pH vs. extraction time (droplet volume: 7.5 μ L); (c) extraction time vs. droplet volume (pH: 10).



Fig. S4 Response surfaces and contour plots for CuI (324.754 nm) emission line using the circumscribed central composite design obtained by plotting: (a) pH vs. droplet volume (extraction time: 10 min) (b) pH vs. extraction time (droplet volume: 7.5 μ L); (c) extraction time vs. droplet volume (pH: 10).



Fig. S5 Response surfaces and contour plots for NiI (352.454 nm) emission line using the circumscribed central composite design obtained by plotting: (a) pH vs. droplet volume (extraction time: 10 min) (b) pH vs. extraction time (droplet volume: 7.5 μ L); (c) extraction time vs. droplet volume (pH: 10).



Fig. S6 Response surfaces and contour plots for CrI (357.869 nm) emission line using the circumscribed central composite design obtained by plotting: (a) pH vs. droplet volume (extraction time: 10 min) (b) pH vs. extraction time (droplet volume: 7.5 μ L); (c) extraction time vs. droplet volume (pH: 10).