

1 **3D-printed lab-on-valve for fluorescent determination of cadmium and lead in water**

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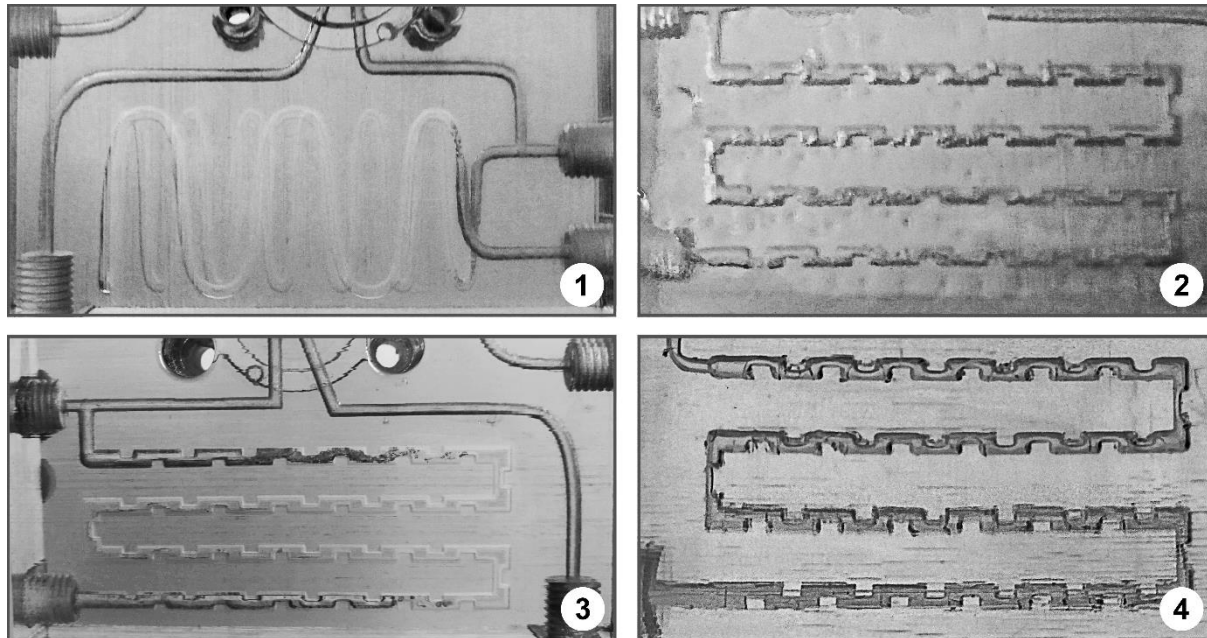
10 Full postal address: LCE, Case 29, 3 place Victor Hugo, 13331 Marseille cedex 3, France.

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Supplementary material

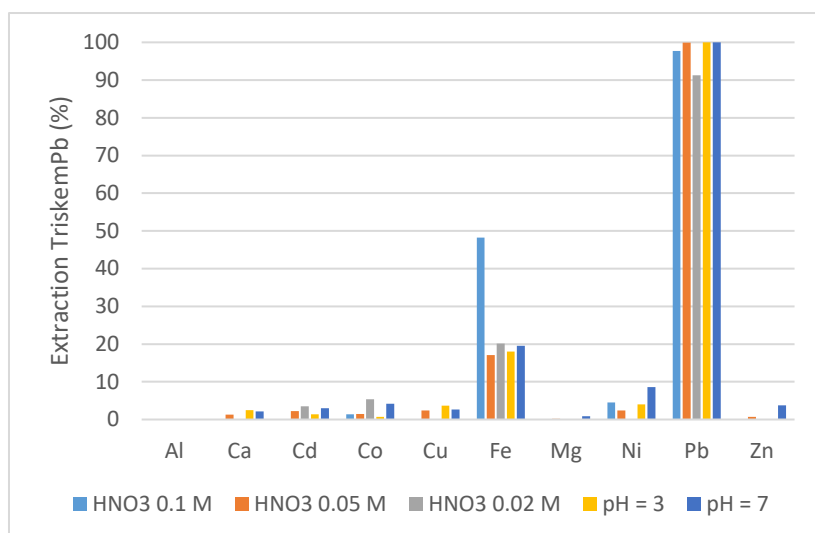
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14 **Fig S1.** Mixing coils printed with different technologies: Polyjet (1;3), Stereolithography (2),
15 DLP (4). Original pictures (unaltered photographs).

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2 **Fig S2.** Extraction rate of several metals on Triskem Pb resin as a function of nitric acid
3 concentration or pH of the multi-metal solution (0.037 mmol.L⁻¹ each metal; volume = 30
4 mL; flowrate = 3 mL.min⁻¹).

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6 **Table S1.** Analytical parameters.

	Lead determination	Cadmium determination
Detection limit	0.17 µg L ⁻¹	0.2 µg L ⁻¹
Linear working range	0.2–20 µg.L ⁻¹	0.2–15 µg.L ⁻¹
Equation	IF=0.513[Pb ²⁺]+3.915	IF=5.299[Cd ²⁺]+14.265
Regression coefficient	0.951	0.997
Repeatability (%) (<i>n</i> = 8)	6.2	3.0
Injection throughput	3.3 h ⁻¹	3.3 h ⁻¹
Reagent consumption (mL)		
- HNO ₃	8	-
- KI	-	4
- Ammonium oxalate	4	-
- Rhod-5N reagent	4	4

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