Supplementary Material (ESI) for Journal of Analytical Atomic Spectrometry

SUPPORTING INFORMATION

Metal-Containing Polystyrene Beads as Standards for Mass Cytometry

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Table S1 Microwave digestion system: [1] digestion program. This is table is reproduced from ref. 1 with permission.

STEP	Time (min)	Power (W)
1	3	400
2	1	0
3	5	400
4	1	0
5	2	400
6	1	0
7	10	400
8	30	Allow to cool to room temperature

Figure S1. SEM image for the PS microsphere samples AA086-Tm synthesized in the presence of 0.1 % $TmCl_3$ added in the second stage with AA: 2 wt %/styrene (d = 1.9 μm, CV_d = 1.9%). The represents 10 μm.

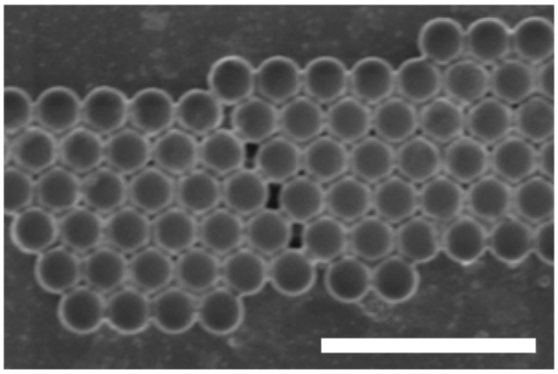


Figure S2. Distribution of mass cytometry signal intensity for a population of PS microspheres (AA083-Tb) prepared by 2-DisP in presence of $TbCl_3$ (0.1 wt%/styrene) and AA (2.0 wt%/styrene)

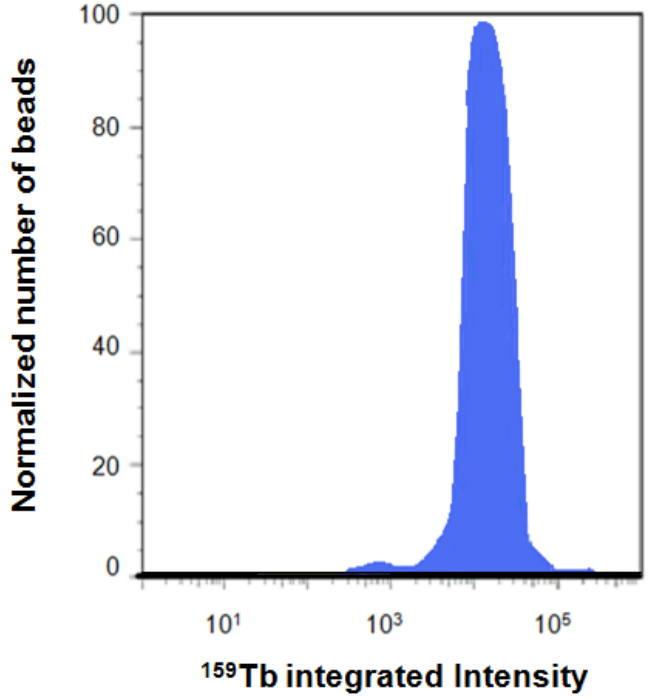
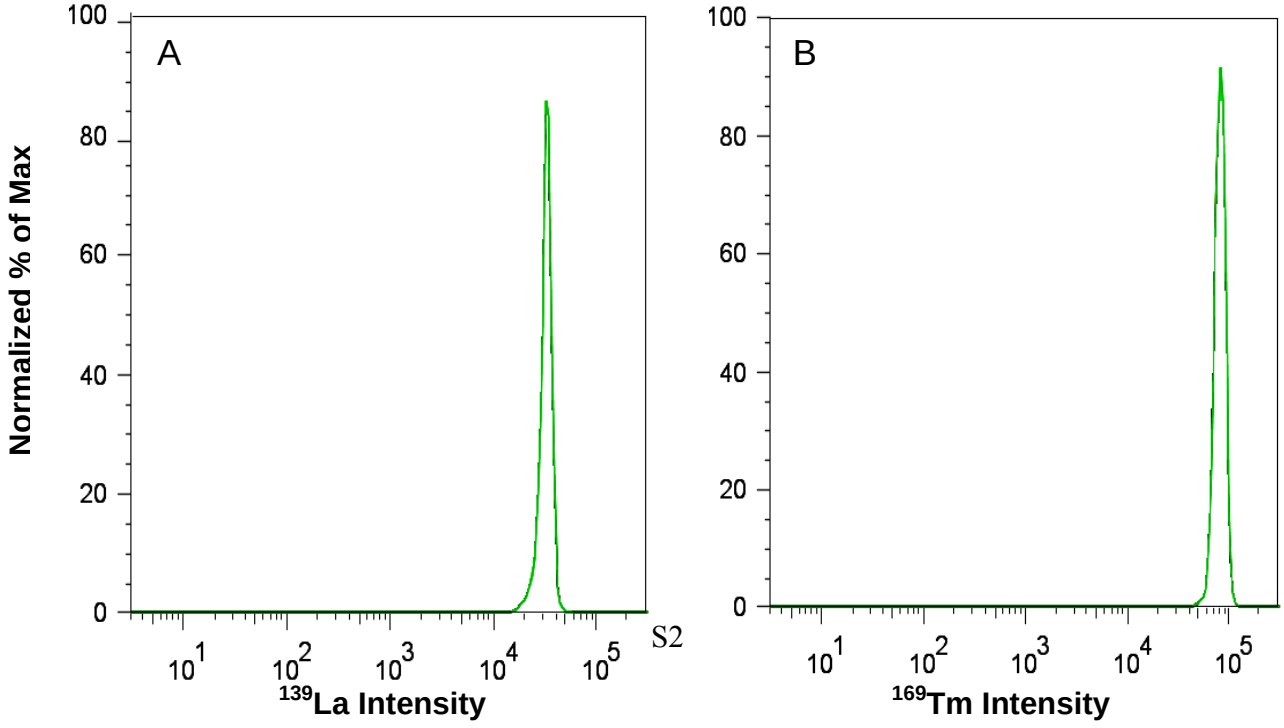


Figure S3.Signal intensity distribution for A) ^{139}La and B) ^{169}Tm for sample AA105.[2] This sample is characterized by CV_{La} = 13 % and CV_{Tm} = 11%. This figure is reproduced from ref. 2 with permission.



References

1. L. Perring, M. I. Alonso, D. Andrey, B. Bourqui and P. Zbinden, *Anal. Bioanal. Chem.*, 2001, **370**, 76-81.
2. A. I. Abdelrahman, S. Dai, S. C. Thickett, O. Ornatsky, D. Bandura, Baranov.V. and M. A. Winnik, *J. Am. Chem. Soc.*, 2009, *131*, 15276–15283.