

1 **Supporting information**

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3 **Validation of microwave acid digestion, diffusive gradients in thin-films preconcentration**
4 **and inductively coupled plasma optical emission spectrometry methodology for**
5 **determination of REEs in natural zeolites**

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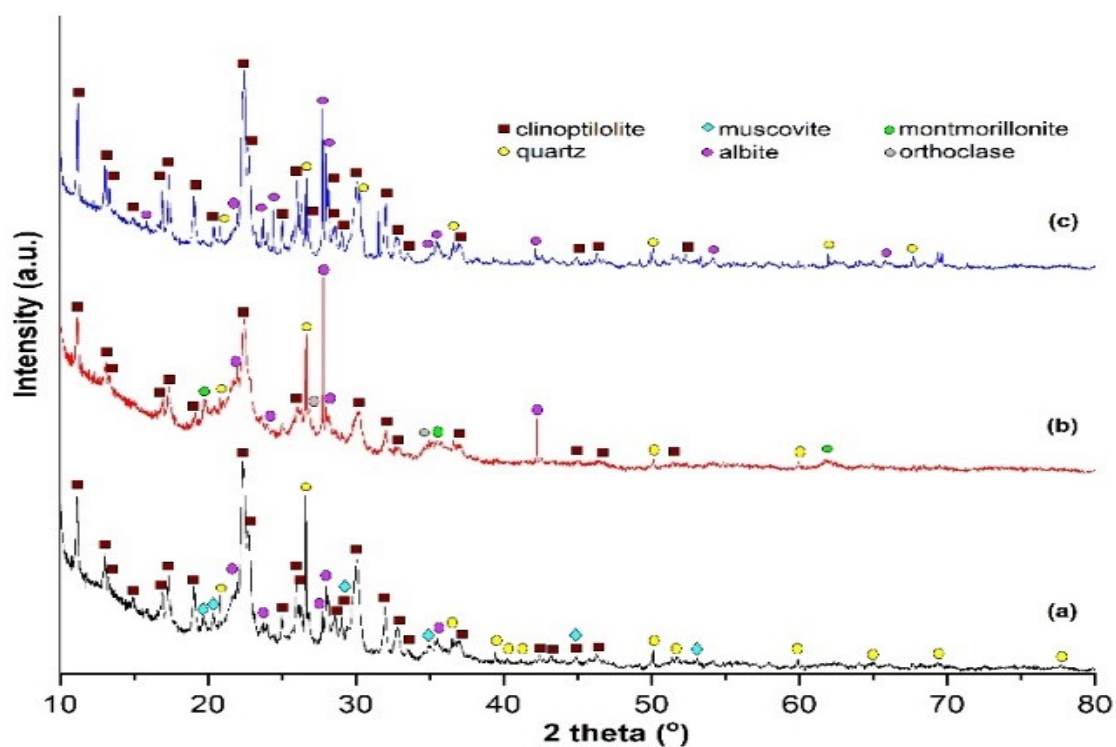
16 **Content**

17 **Figure S1.** XRD patterns of (a) Rupea, (b) Chilioara and (c) Macicasu zeolite samples

18 **Figure S2.** Calibration curves for REEs determination by ICP-OES

19 **Table S1.** Diffusion coefficients for REE used for DGT calculation.

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22 **Figure S1.** XRD patterns of (a) Rupea, (b) Chilioara and (c) Macicasu zeolite samples.

23 According to the XRD analysis, the Racos, Chilioara and Macicasu zeolite samples contain

24 clinoptilolite (00-047-1870/ 01-080-1557/ 00-047-1870) as the main mineral, attended by

25 albite (00-010-0393/ 00-020-0548/ 01-076-0926), quartz (01-070-7344/ 01-079-1910/01-

26 079-1910), muscovite (00-007-0025/-/ -), montmorillonite (-/ 00-058-2038/ -), and orthoclase

27 (-/ 00-031-0966/ -).

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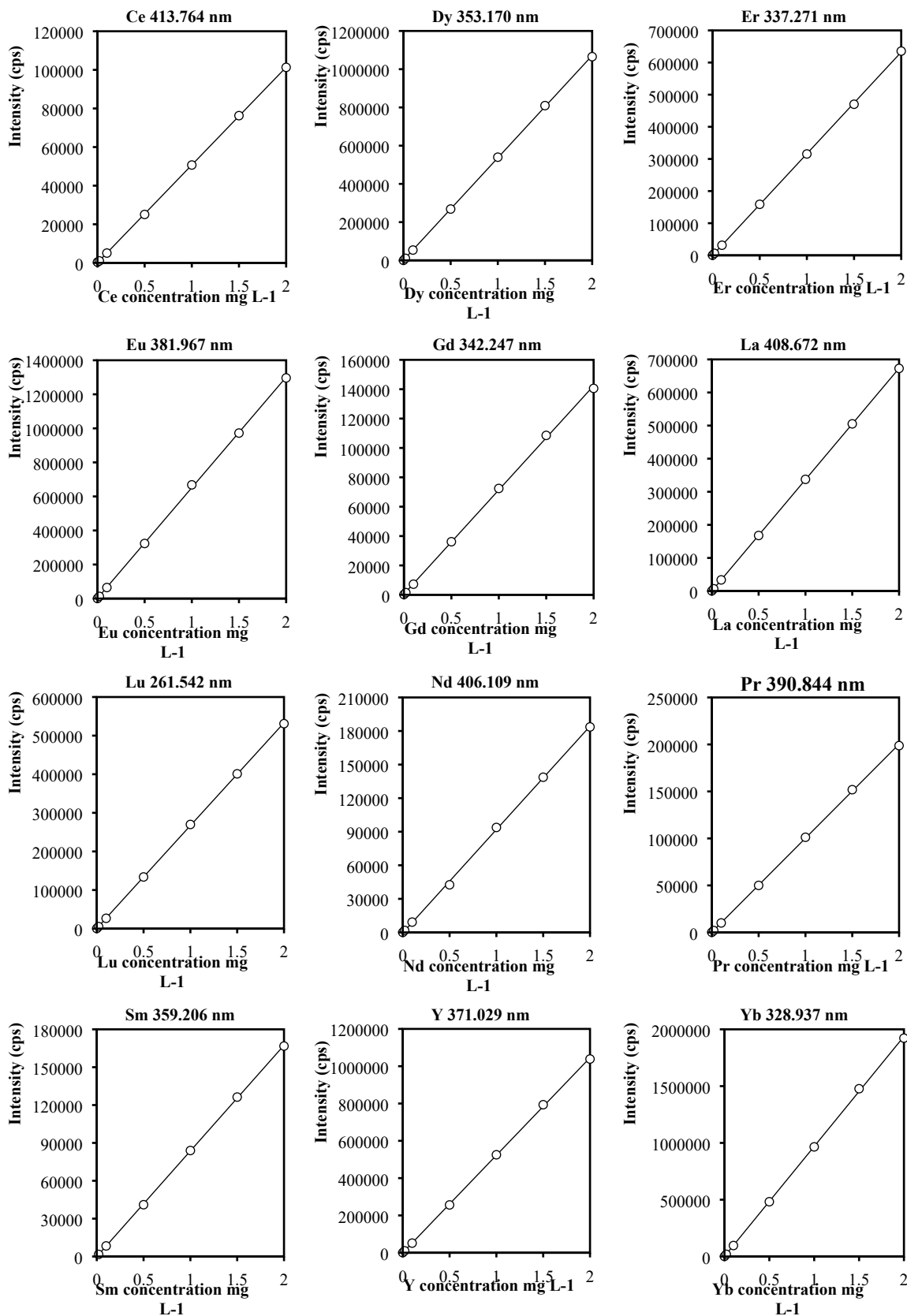


Figure S2. Calibration curves for REEs determination by ICP-OES over the 0 – 2 mg L⁻¹ concentration range

31 **Table S1.** Diffusion coefficients for REEs used for DGT calculation (at 25 °C).^{1,2}

REE	Diffusion coefficient ($\times 10^{-6} \text{ cm}^2\text{s}^{-1}$)	REE	Diffusion coefficient ($\times 10^{-6} \text{ cm}^2\text{s}^{-1}$)
Ce	6.19	Lu	4.97
Dy	5.82	Nd	6.16
Er	5.85	Pr	6.18
Eu	6.02	Sm	6.08
Gd	5.97	Y	4.82
La	6.19	Yb	5.82

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35 **References**

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