

Supplementary Information

A Straightforward Method for Determination of Al and Na in Aluminosilicates Using ICP OES

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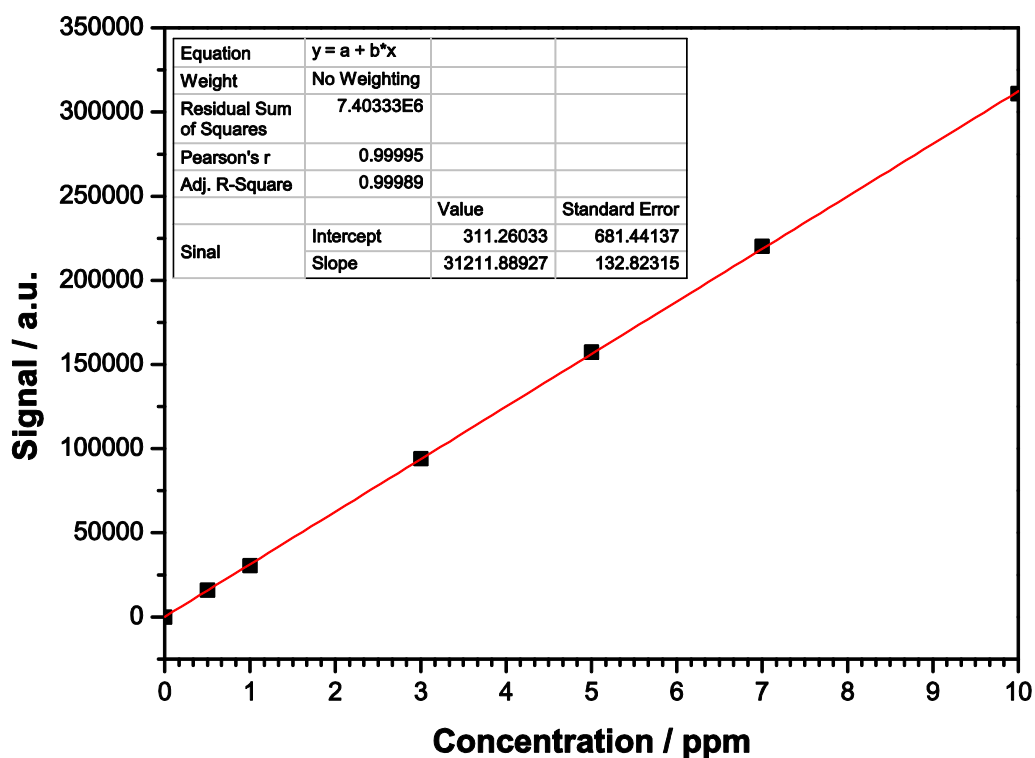


Figure S1. Calibration curve of aluminum.

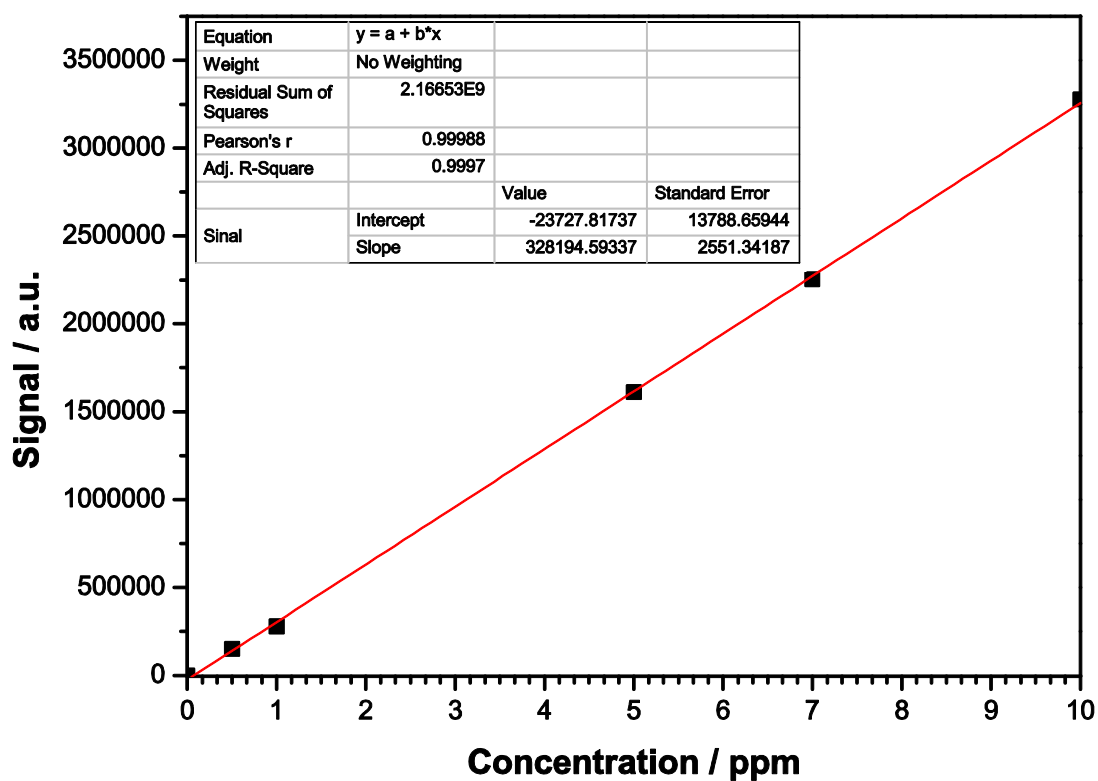


Figure S2. Calibration curve of sodium.

Table S1. Microwave program for pillared Na-[Al]-RUB-18, mordenite and omega samples decomposition

Step	Power / W	time / min
1	400	3
2	790	10
3	750	5
4	0	3

Table S2. Concentrations of Al and Na of pillared Na-[Al]-RUB-18 samples submitted to microwave-assisted digestion and determined using ICP OES

Pillared sample ^a	Diluted solution		Si/Al _{ICP}
	$\lambda = 396.152 \text{ nm}$	$\lambda = 589.5 \text{ nm}$	
	Al _{ICP} / (mg L ⁻¹)	Na _{ICP} / (mg L ⁻¹)	
[Al15-Y]-RUB-18	$6,3153 \pm 2 \cdot 10^{-1}$	$2,7689 \pm 6 \cdot 10^{-2}$	41 ± 2
[Al30-Y]-RUB-18	$3,4804 \pm 1 \cdot 10^{-1}$	$1,9872 \pm 4 \cdot 10^{-2}$	66 ± 3
[Al60-Y]-RUB-18	$2,1436 \pm 4 \cdot 10^{-2}$	$1,6315 \pm 6 \cdot 10^{-2}$	131 ± 1

^aSample codes: [Al15-Y]-RUB-18: pillared Na-[Al]-RUB-18 with nominal Si/Al molar ratio of 15 in the layers and measured Si/Al molar ratio of Y; Y is generally much larger than the nominal Si/Al ratio because the pillars are made of pure SiO₂.

Table S3. Concentrations of Al and Na, and Si/Al molar ratios of mordenite and omega zeolites submitted to microwave-assisted digestion and determined using ICP OES

Sample	Diluted solution		
	$\lambda = 396.152 \text{ nm}$	$\lambda = 589.5 \text{ nm}$	Si/Al _{ICP}
	Al _{ICP} / (mg L ⁻¹)	Na _{ICP} / (mg L ⁻¹)	
Mordenite	5.35 ± 0.27	4.85 ± 0.28	5.35 ± 0.40
Omega	6.53 ± 0.12	5.64 ± 0.07	4.46 ± 0.09