

Supporting Information

Moisture-saturated zeolites – A new strategy for releasing nitric oxide

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Table S1 The acid induced release of NO_x^a from NaY zeolite in various conditions

Sample	NaY				Control	
V/m (cm ³ g ⁻¹)	500	333	500	333	/	
pH value	1.2	1.2	1.0	1.0	1.2	
NO _x released in acid solution (μmol g ⁻¹)	30 min	0.28	0.23	0.52	0.47	0
	60 min	0.11	0.17	0.29	0.29	0
	90 min	0.11	0.13	0.23	0.18	/
	120 min	0.11	0.13	0.06	0.06	/
	Total	0.62	0.67	1.10	1.00	0
Desorption proportion (%) ^b	5.54	5.98	9.82	8.93	/	

^a The test was performed at 310 K, and the sample desorbed the NO_x of 11.20 μmol g⁻¹ in TPD process.

^b This value is the ratio of NO_x released in acid solution to that desorbed in TPD test.

Table S2 Decomposition of NaNO₂ in acid solution under various conditions

Temperature of acid solution		310			298	
(K)						
pH value		1.0	1.2	7.0	1.2	7.0
NO _x released in acid solution (μmol)	30 min	0.078	0.072	0.005	0.040	0.003
	60 min	0.060	0.055	0.005	0.037	0.002
	90 min	0.038	0.042	0.005	0.030	0.002
	120 min	0.025	0.027	0.006	0.022	0
	Total (A)	0.201	0.195	0.021	0.129	0.007
Desorbed proportion (%) (A/0.254) ^a		79.1	76.8	8.3	50.8	2.8
[NO ₂ ⁻] (μmol)		0.104	0.110	0.512	0.238	0.515

^a Theoretic amount of NO_x detected from thorough decomposition of NaNO₂ is 0.254 μmol.

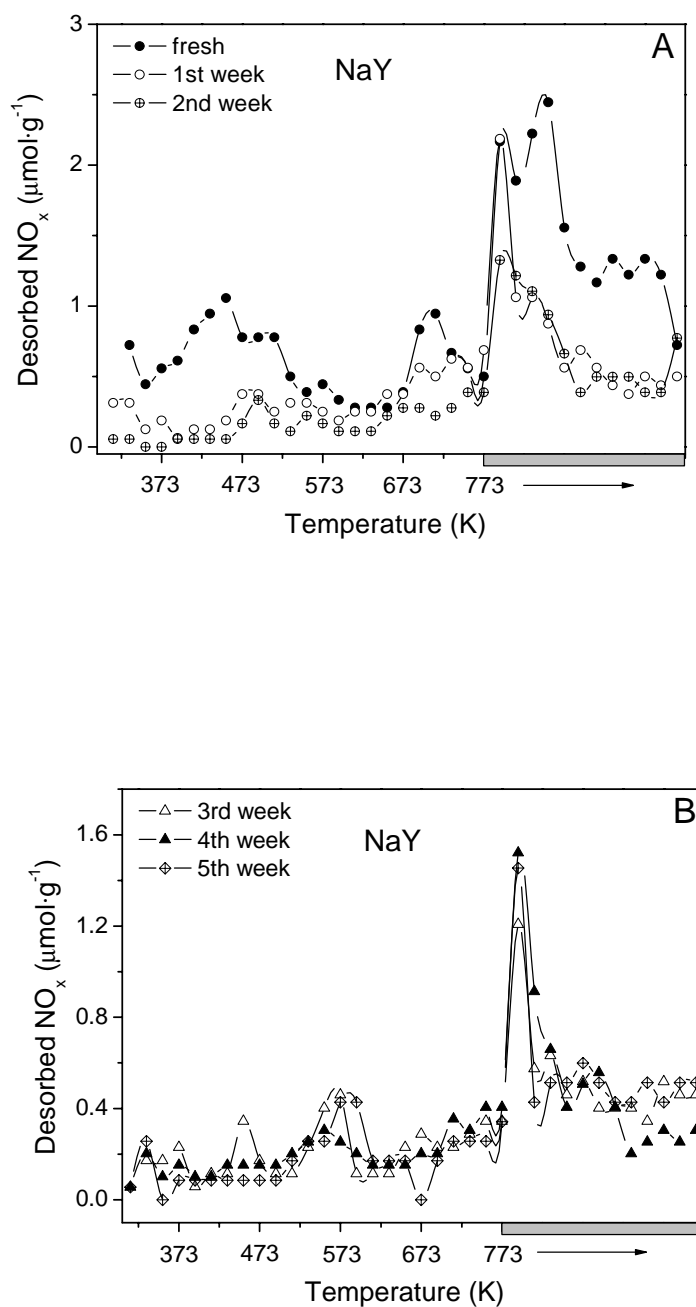


Figure S1 NO_x-TPD curves on the zeolite NaY adsorbed NO and stored under ambient conditions for different weeks.