

Electronic supplementary information for:

Molybdenum Oxide Nanoparticles: Preparation, Characterization, and Application in Heterogeneous Catalysis

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Table 1. Physical properties of PTFE.

Property	Unit	Nominal value
Density	g/dm^3	400
Specific area	m^2/g	10
Average particle size	μm	5
Melting point	K	600
Moisture content	%	0.04

Fig. 1 TG curves of PTFE (a), NH₄Cl (b), PTFE–NH₄Cl (c) and the fitted theoretical curve based on a mixed form of PTFE and NH₄Cl in a 1:6 molar ratio (d).

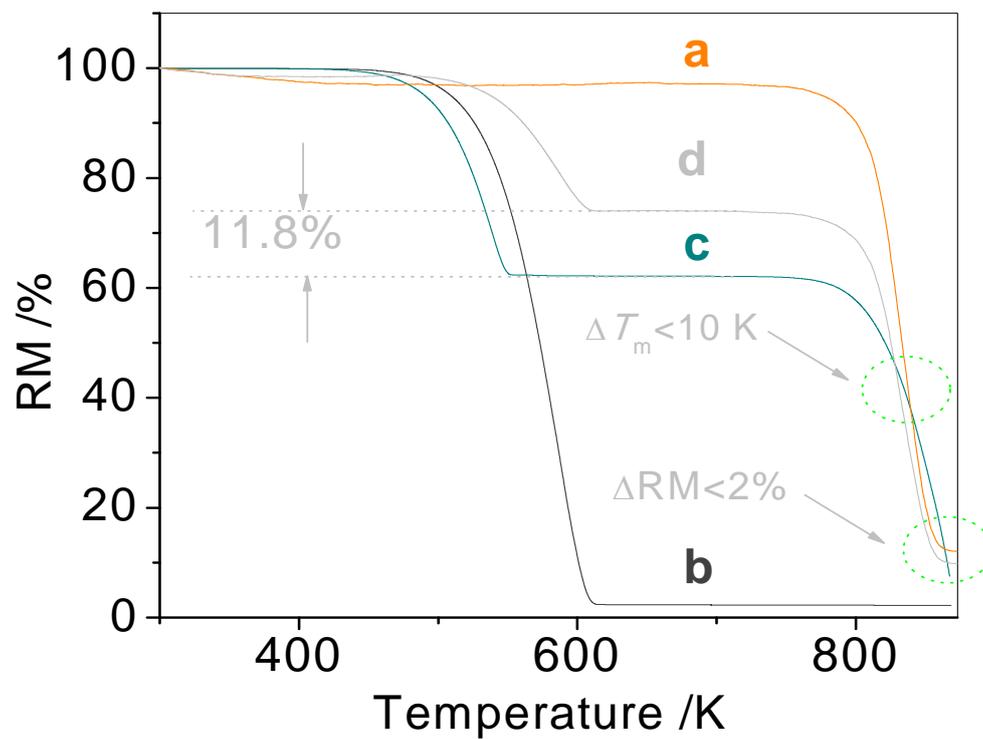


Fig. 2 Raman spectra of the residues of PTFE (a), PTFE-AMT (b), PTFE-MoO₃ (c) and PTFE-NH₄Cl (d) at 873 K for 2 h, and PTFE-AMT at 751 (e) and 837 K (f) for 30 min under nitrogen atmosphere. Relative signal intensity was normalized to the intensity of the peak at 1580 cm⁻¹ in curve b.

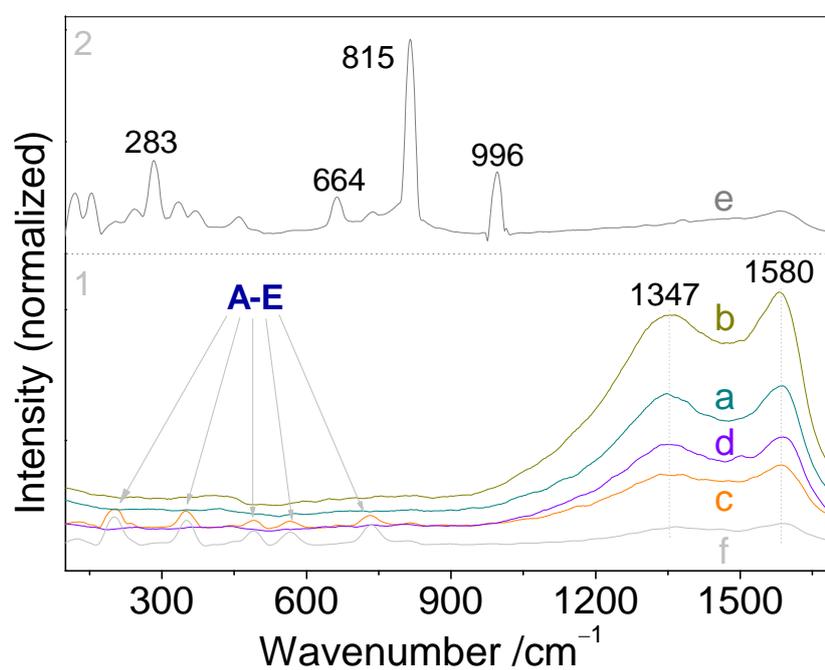


Fig. 3 XRD patterns of the residues of PTFE (a), PTFE–AMT (b), PTFE–MoO₃ (c) and PTFE–NH₄Cl (d) at 873 K for 2 h, and PTFE–AMT at 751 (e) and 837 K (f) for 30 min under nitrogen atmosphere. Relative signal intensity was normalized to the intensity of the peak at 18.2° in curve a.

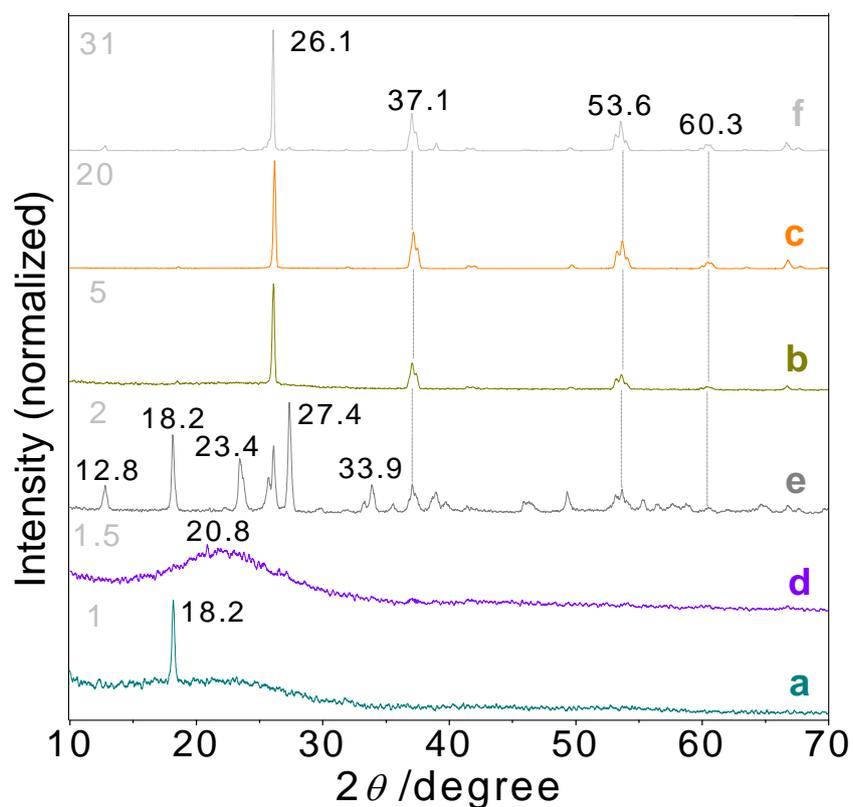


Fig. 4 FE-SEM images of the residues of PTFE (a), PTFE-AMT (b), PTFE-MoO₃ (c) and PTFE-NH₄Cl (d) at 873 K for 2 h, and PTFE-AMT at 751 (e) and 837 K (f) for 30 min under nitrogen atmosphere.

