Electronic Supplementary Material (ESI) for Catalysis Science & Technology.
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Supporting Information

For

POM@IL-MOFs - Inclusion of POMs in Ionic Liquid modified MOFs to produce recyclable oxidation catalysts

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Section S1: Characterization of immobilized HPW onto MIL-101(Cr) (HPW/MIL-101(Cr))

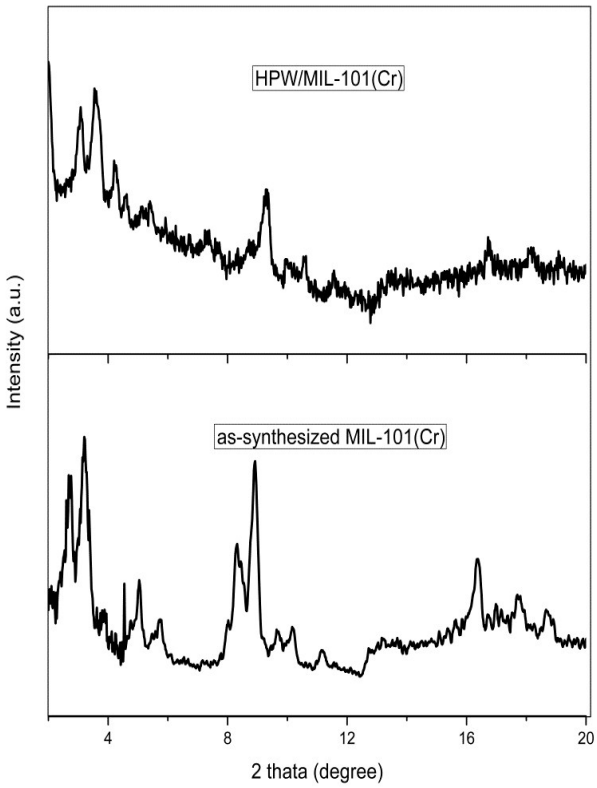

Figure S1. PXRD patterns of MIL-101(Cr) and HPW/MIL-101(Cr).

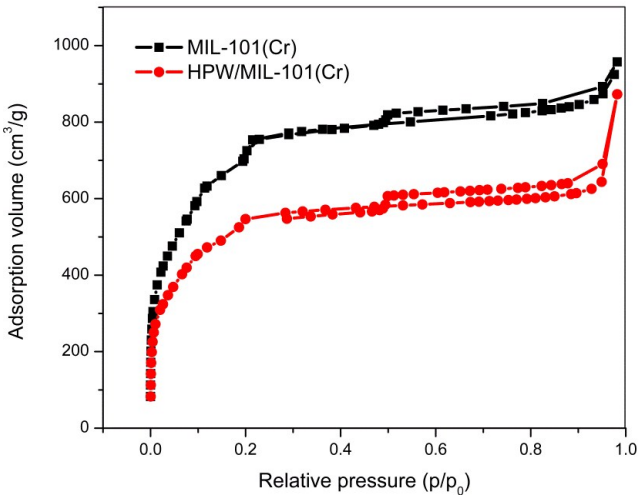

Figure S2. Nitrogen sorption isotherms of MIL-101(Cr) and HPW/MIL 101(Cr).

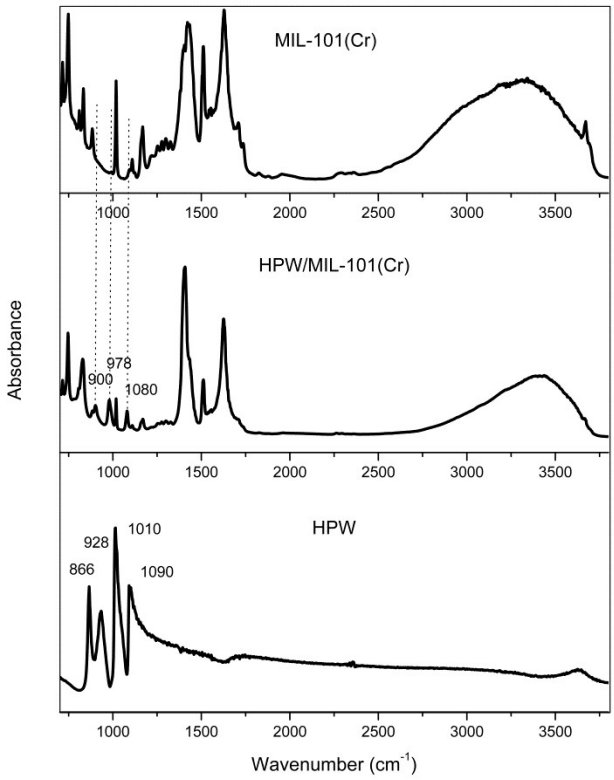

Figure S3. DRIFT spectra of MIL-101(Cr) and HPW/MIL 101(Cr).

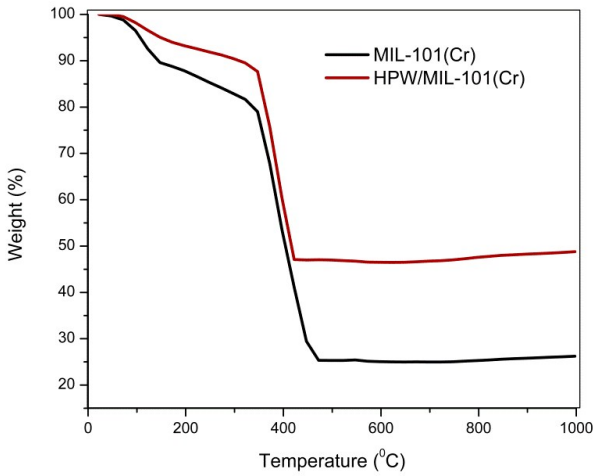

Figure S4. TGA curves of MIL-101(Cr) and HPW/MIL-101(Cr).

Section S2: Textural properties and elemental analysis of PW/DAIL/MIL-101(Cr) materials.

Table S1. Textural properties and elemental analysis of the prepared materials.

Sample	N content[a] (mmol g^{-1})	S_{Lang} (m^2 g^{-1})	Pore Volume (cm^3 g^{-1})
MIL-101(Cr)	-	3735	1.48
DAIL(0.3)/MIL-101(Cr)	1.12	3049	1.41
PW/DAIL(0.3)/MIL-101(Cr)	1.12	2704	1.35
PW/DAIL(0.9)/MIL-101(Cr)	2.44	2675	1.34
PW/DAIL(1.5)/MIL-101(Cr)	3.86	2110	0.96
HPW/MIL-101(Cr)	-	2827	1.38

[a] obtained by means of CHN analysis

Section S3: Characterization of the recycled PW/DAIL/MIL-101(Cr)

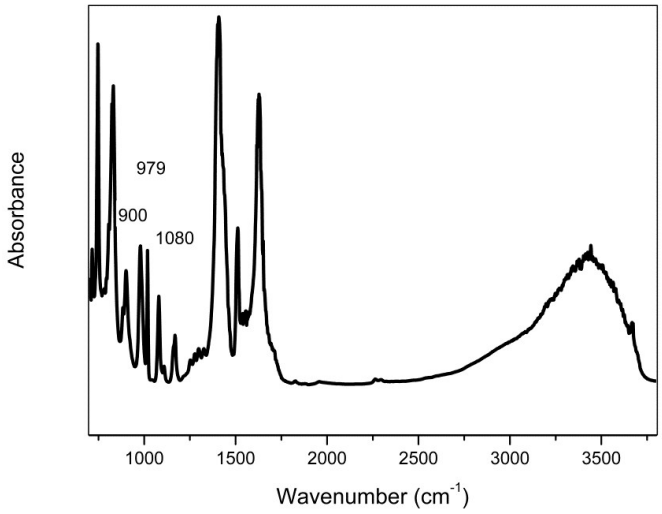

Figure S5. DRIFT spectra of the recycled PW/DAIL/MIL-101(Cr) catalyst.

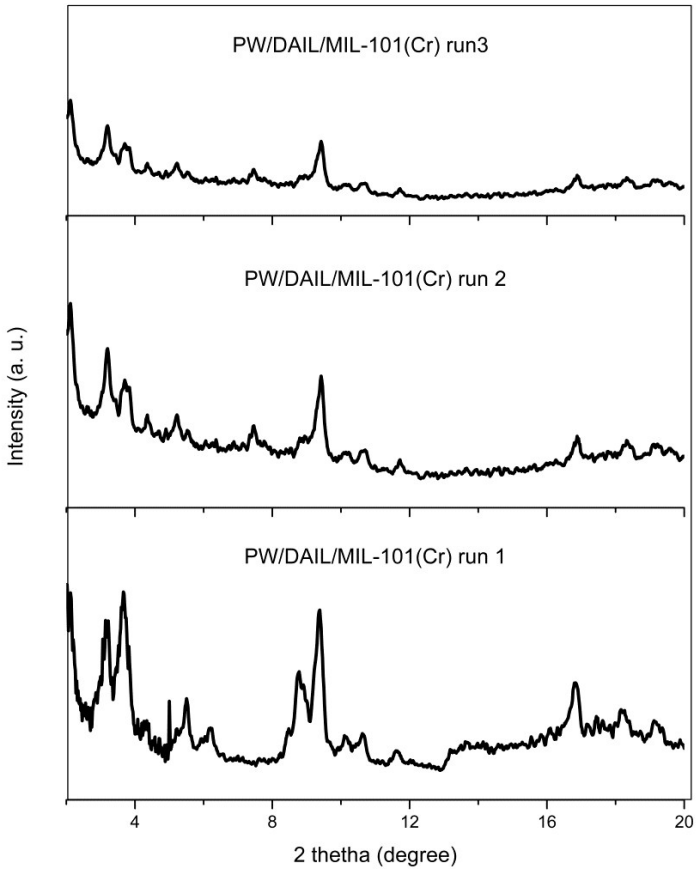

Figure S6. PXRD patterns of the PW/DAIL/MIL-101(Cr) catalyst after each catalytic run.