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Supporting Information

Introducing Electrical Conductivity to Metal-Organic Framework Thin Films by Templated Polymerization of Methyl Propiolate

Beren Sen[a], Jaciara C. C. Santos[a], Ritesh Haldar[a], Qiang Zhang[a], Tawheed Hashem[a], Peng Qin[a], Ying Li[a], Frank Kirschhöfer[a], Gerald Brenner-Weiss[a], , Hartmut Gliemann[a], Lars Heinke[a], Christopher Barner-Kowollik[b,c], Alexander Knebel*[a], Christof Wöll*[a]

[a] Institute of Functional Interfaces, Karlsruhe Institute of Technology, Hermann-von-Helmholtz-Platz 1, 76344, Eggenstein-Leopoldshafen, Germany

[b] Centre for Materials Science, School of Chemistry and Physics, Queensland University of Technology (QUT), 2 George Street, QLD 4000, Brisbane, Australia

[c] Institute of Nanotechnology, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen, Germany.

*corresponding authors

AK: Alexander.Knebel@kit.edu

CW: Christof.Woell@kit.edu

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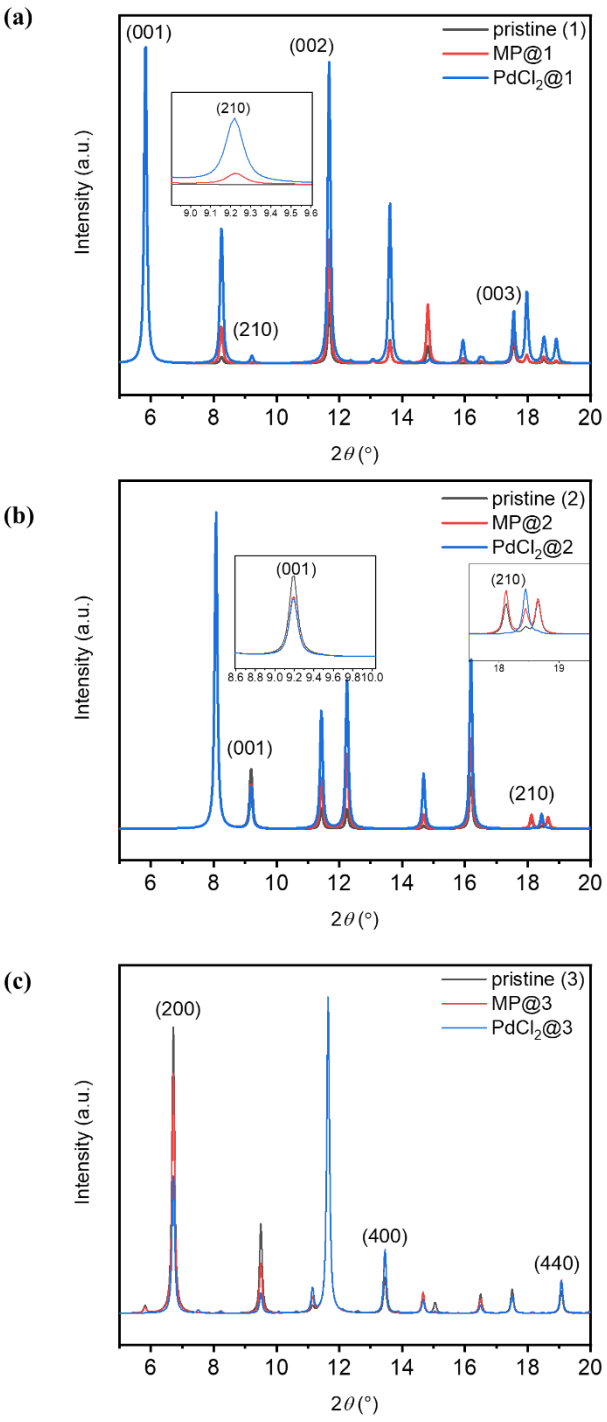

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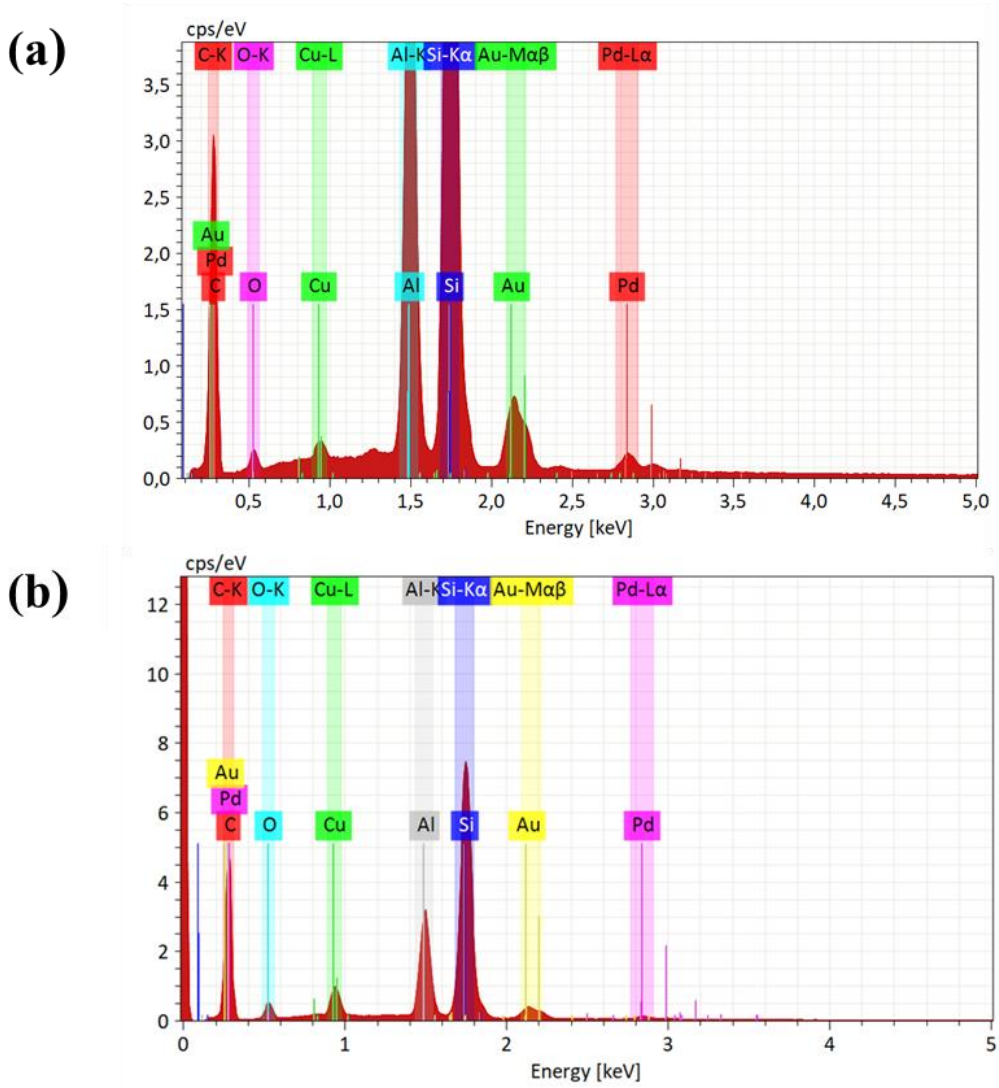

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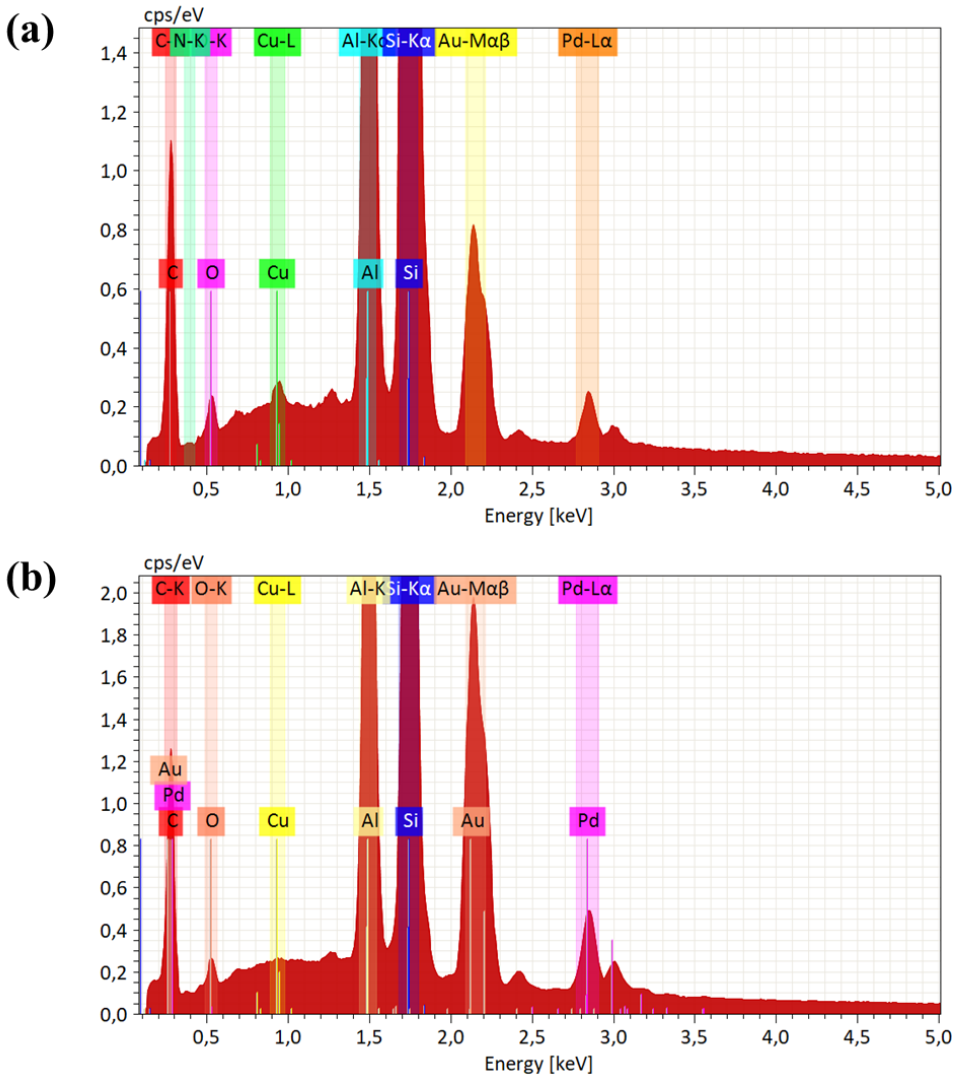

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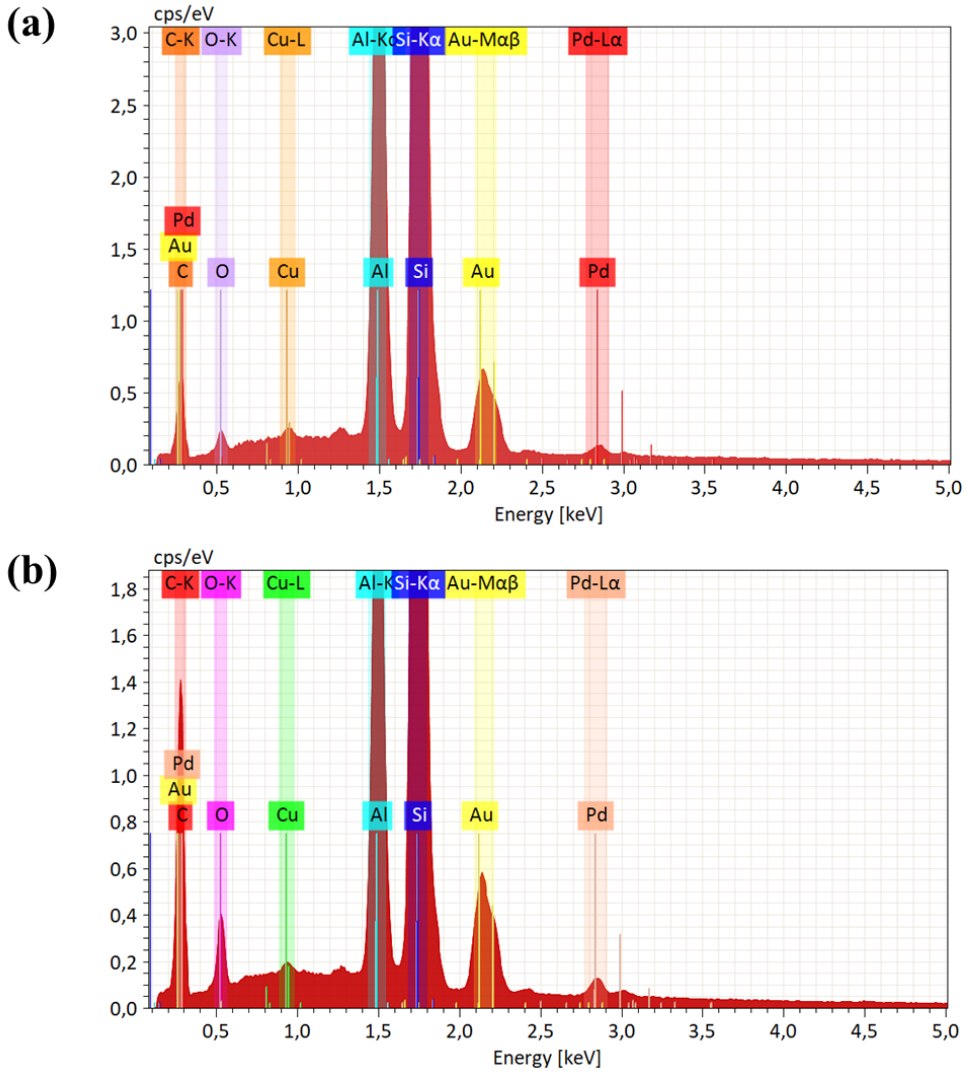

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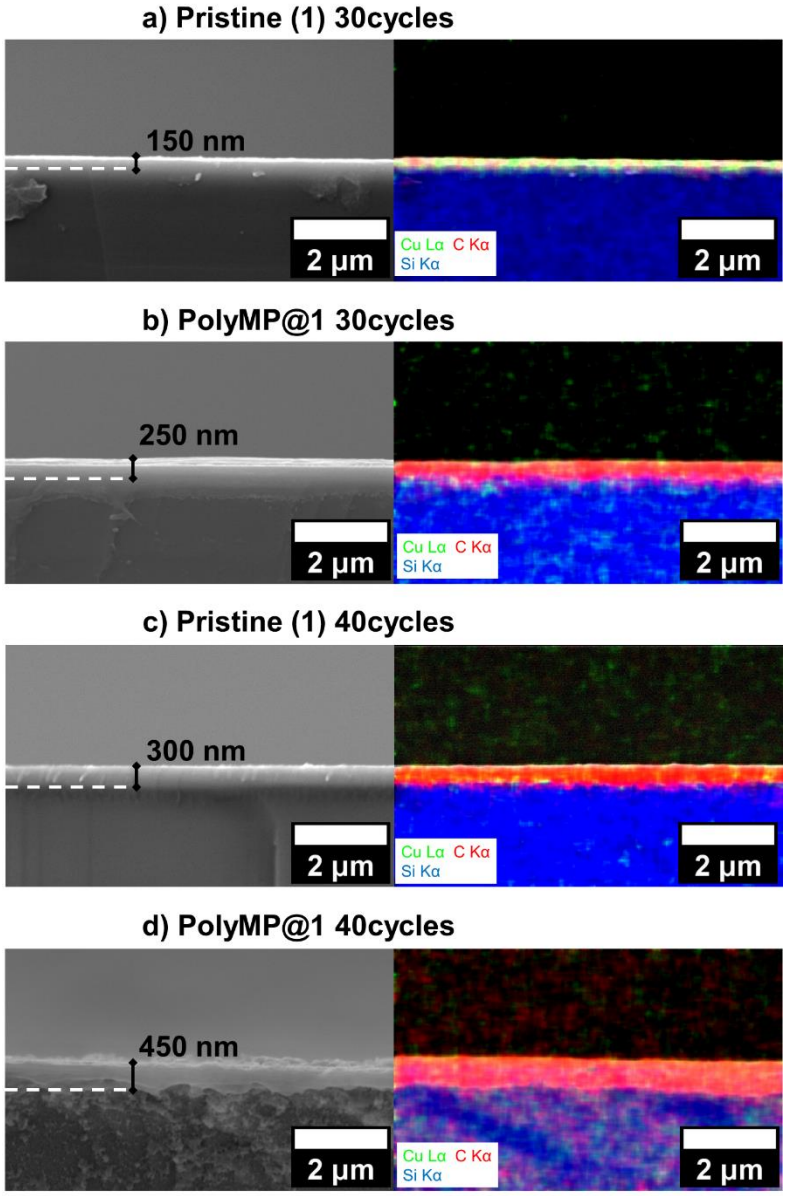

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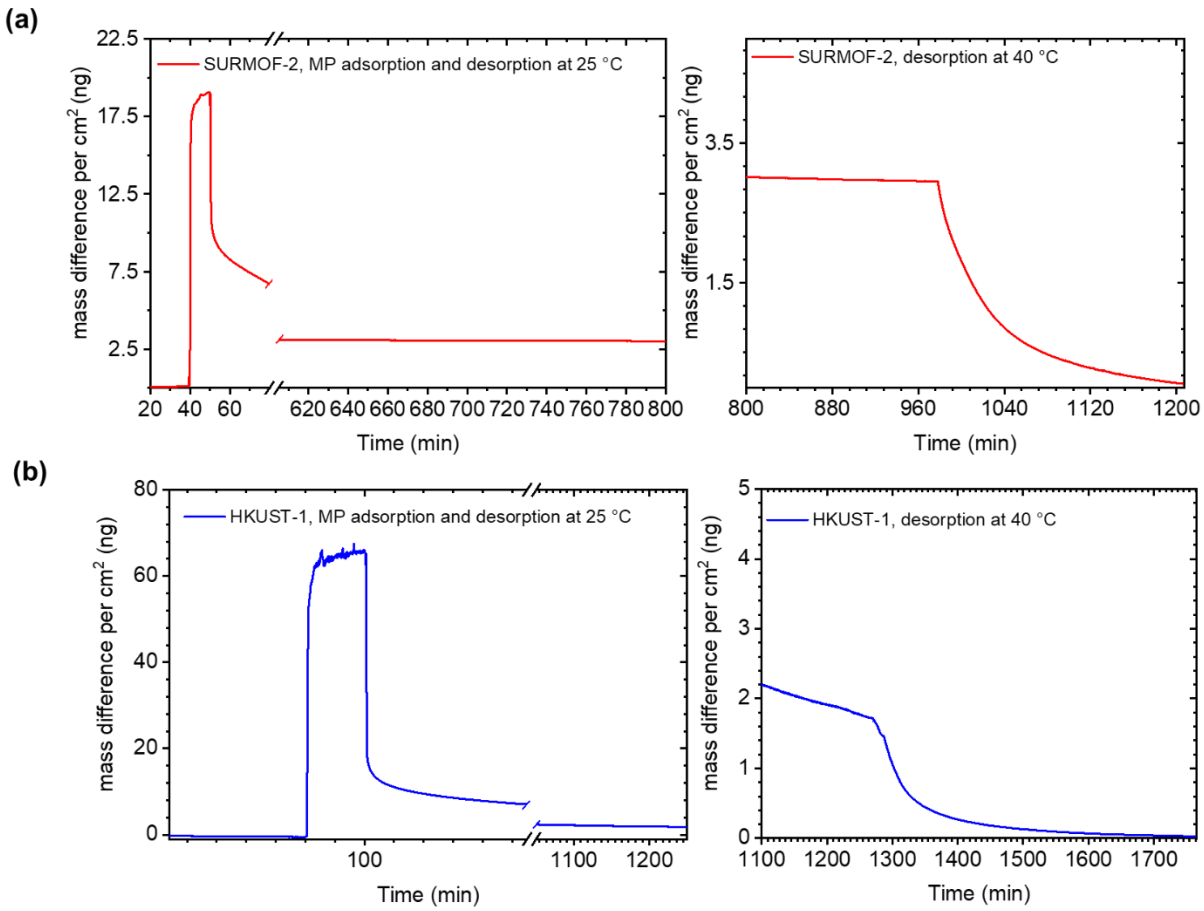

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Time constant (s)	**HKUST-1**	**SURMOF-2**
$T_{0.5}$	18	112
$T_{0.8}$	154	8655

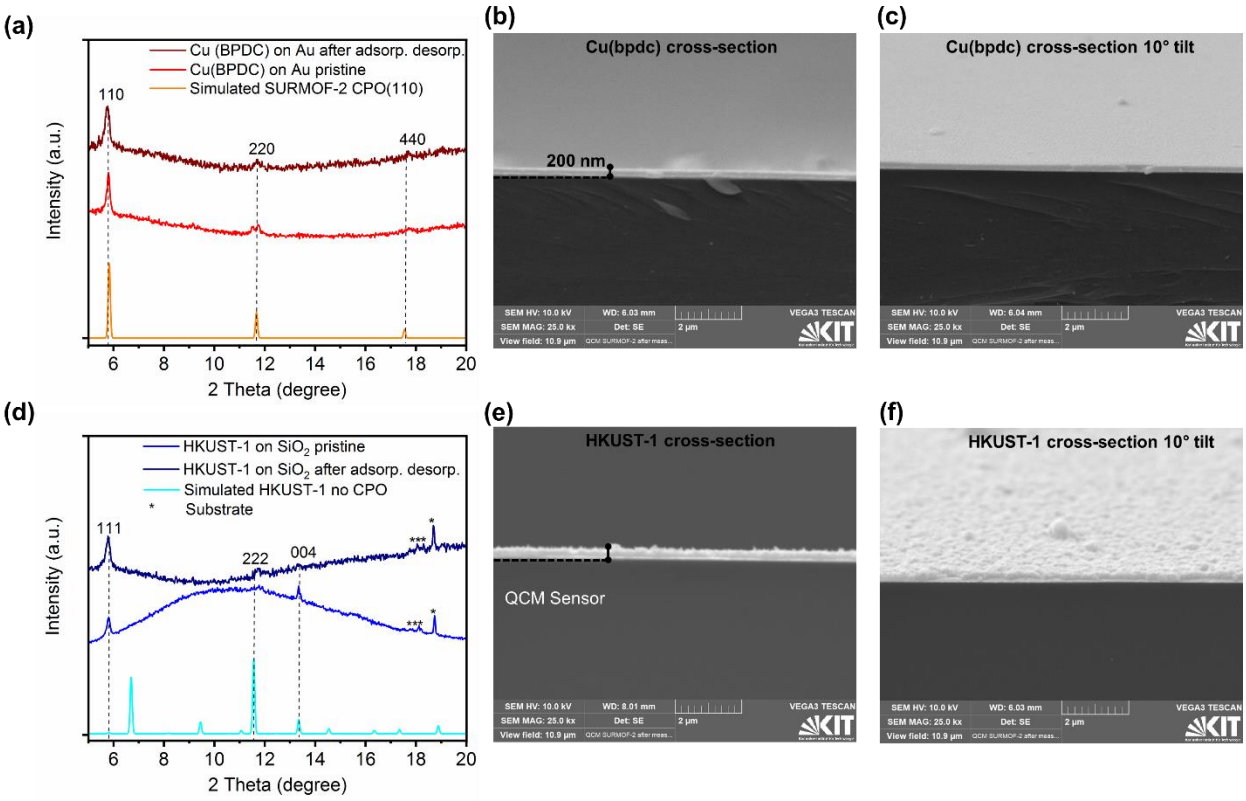
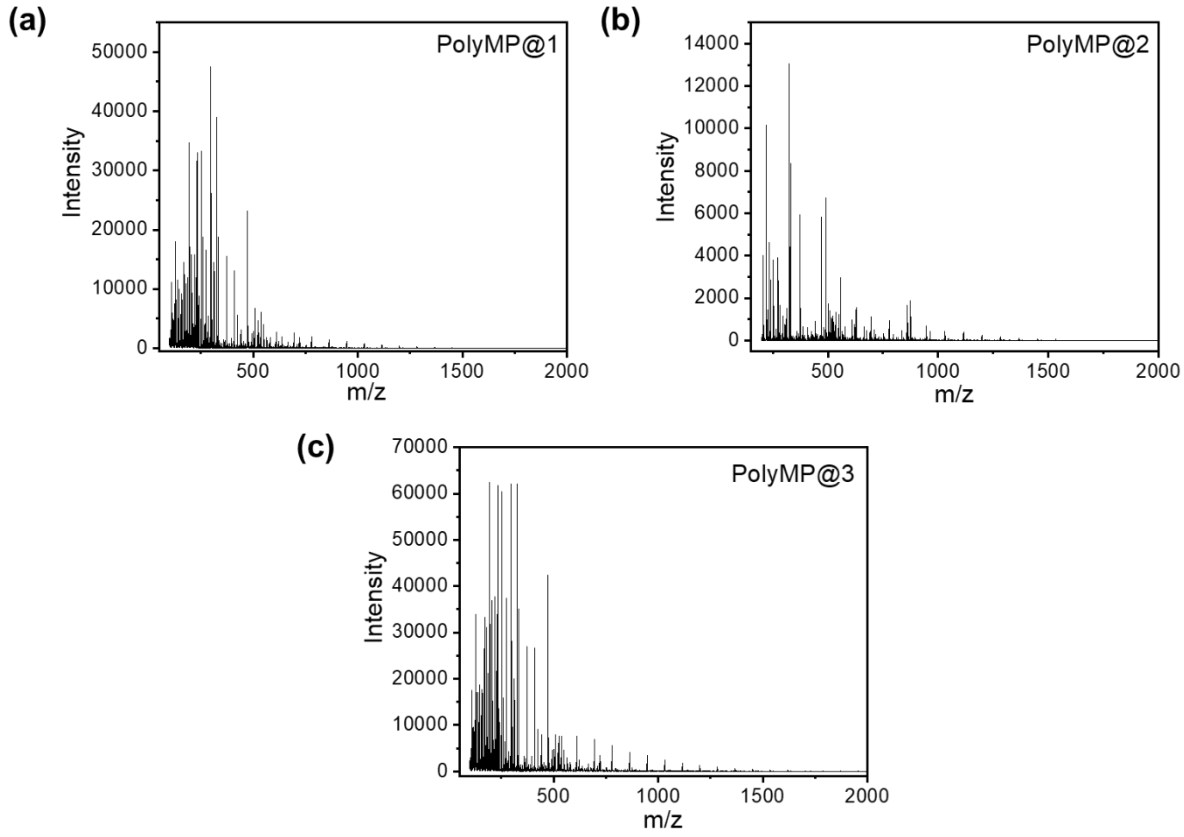


Fig. S7 XRD patterns of Cu(bpdc) (a) and HKUST-1 (d) on the QCM sensors with Au and SiO_2 toplayer before and after adsorption and desorption experiments; SEM cross-section images (with 0° and 10° tilt angle) of the QCM sensors after the adsorption and desorption experiments of Cu(bpdc) (b, c) and HKUST-1 (e, f), showing the homogeneous 200-250 nm thick MOF-coatings.



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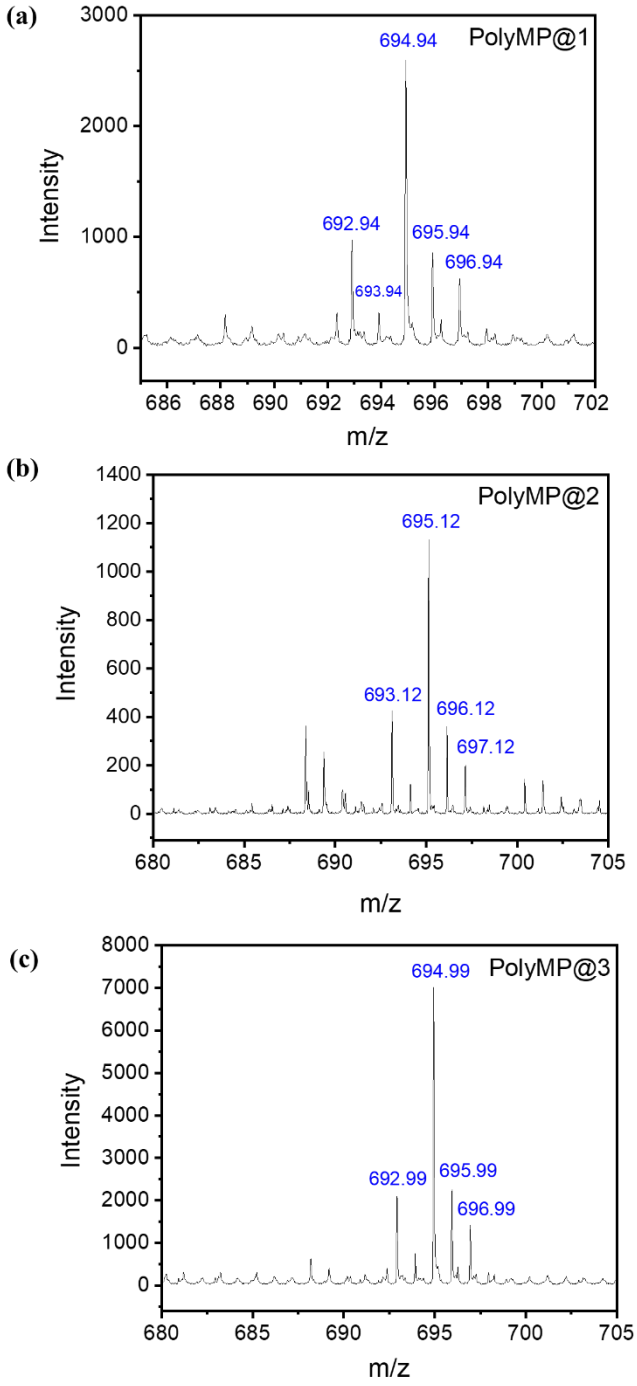

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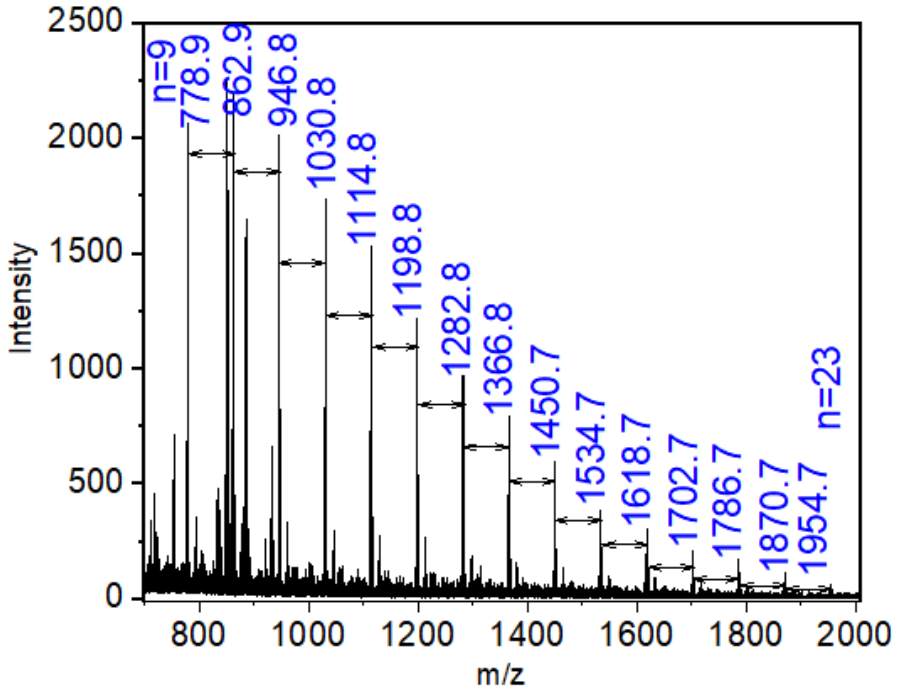

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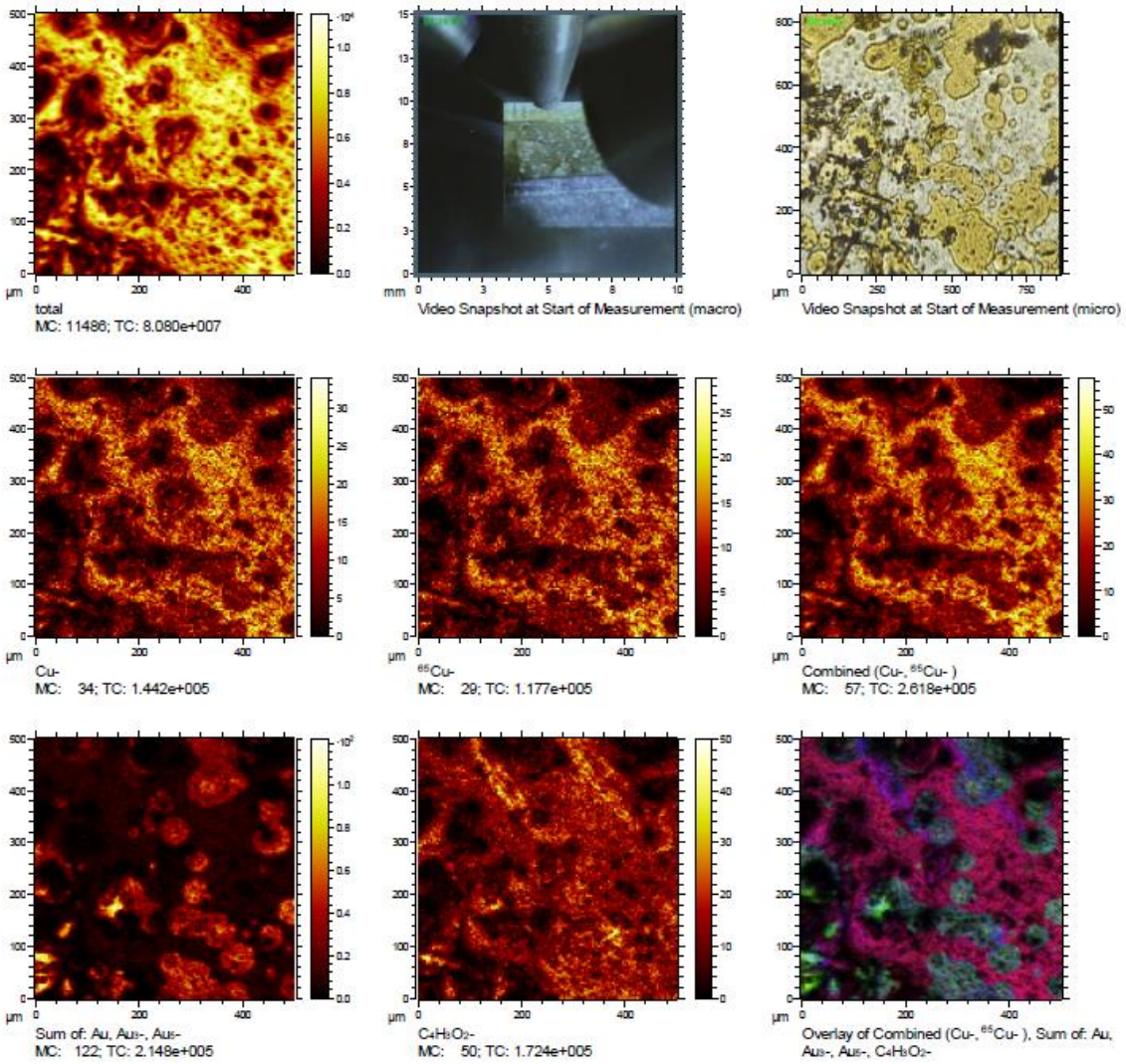


Fig. S11 Depth integrated images of **polyMP@1** from ToF-SIMS analysis.

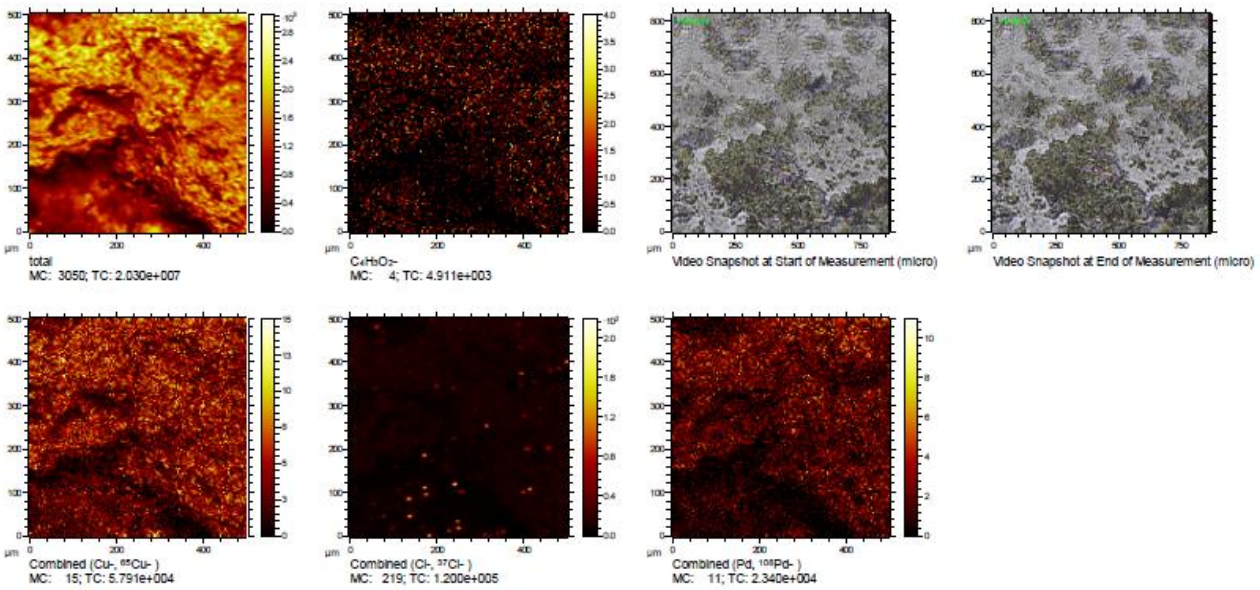


Fig. S12 Depth integrated images of **polyMP@2** from ToF-SIMS analysis.

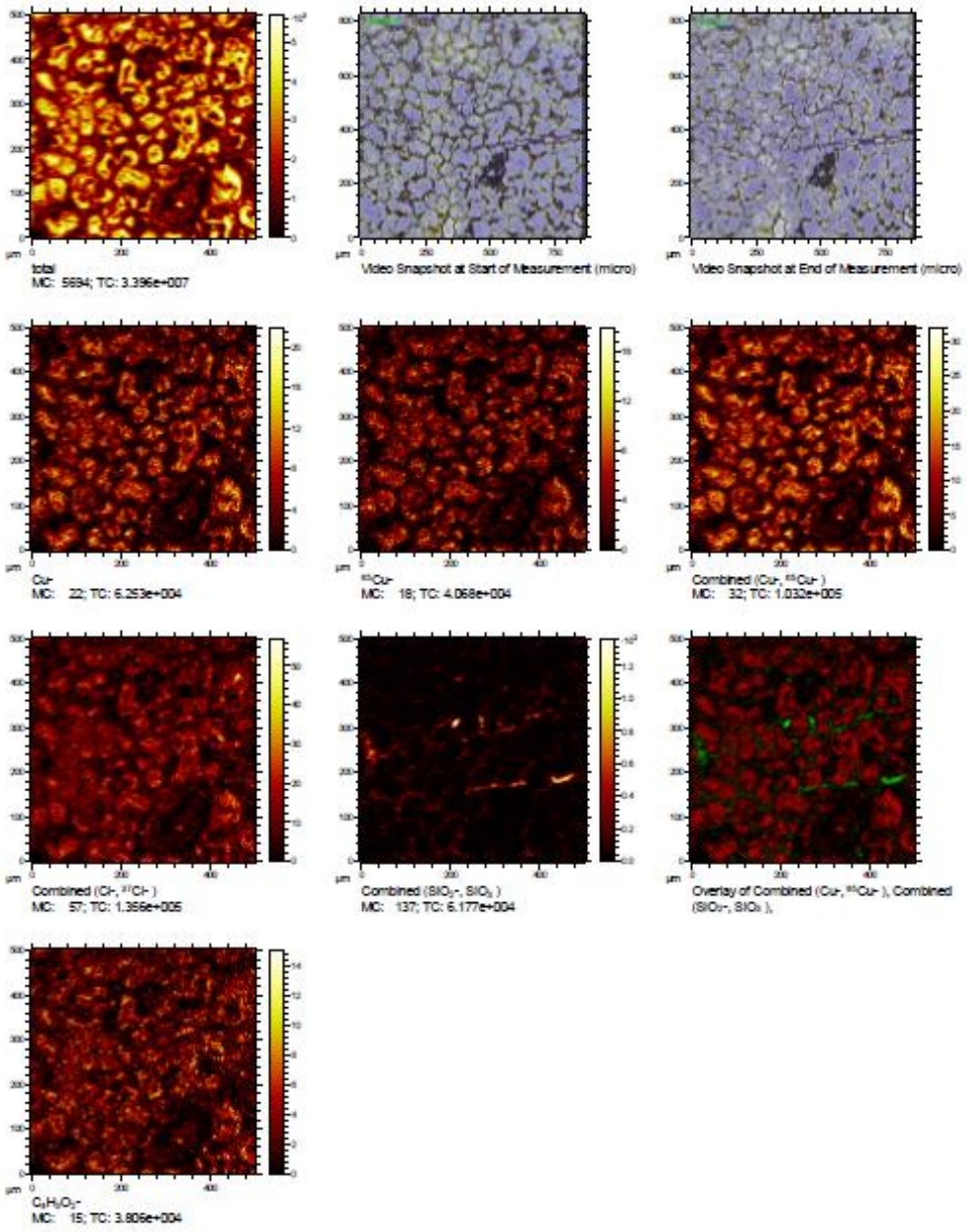
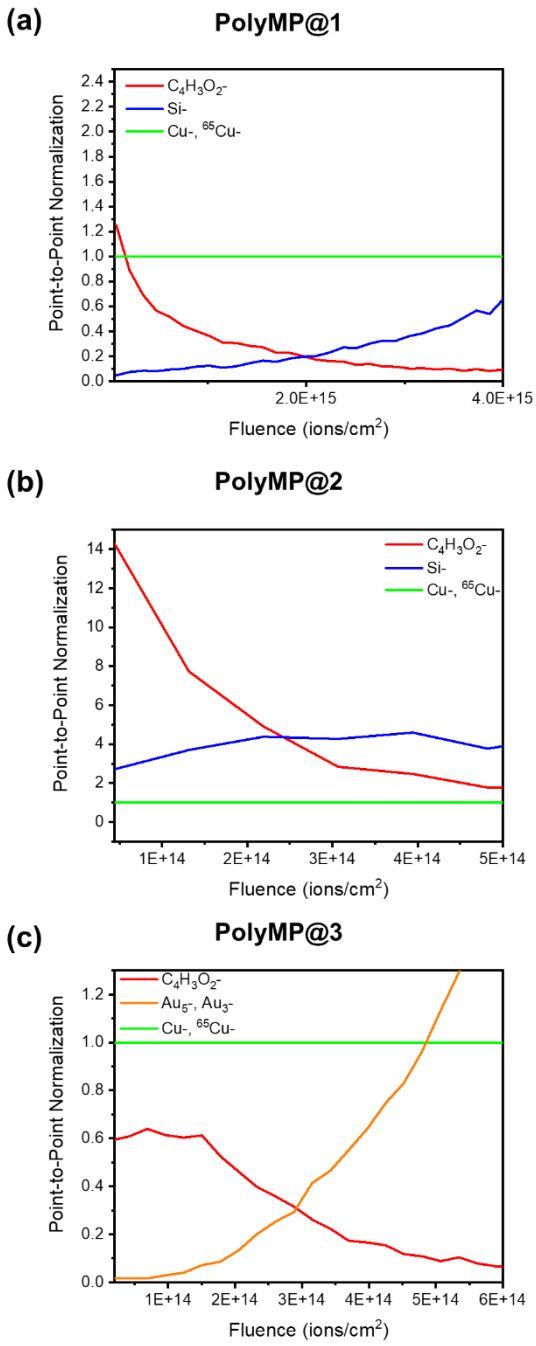


Fig. S13 Depth integrated images of **polyMP@3** from ToF-SIMS analysis.



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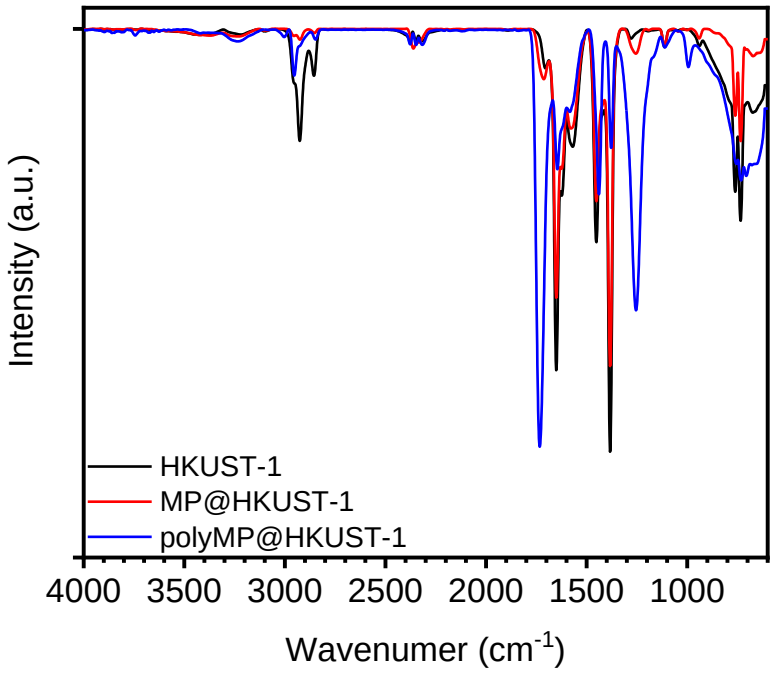

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