The study of the structure and conductive properties of an iron gallate MOF: $[Fe^{III}(C_7H_4O_5)]_n \cdot 2nH_2O$

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Supplementary Information

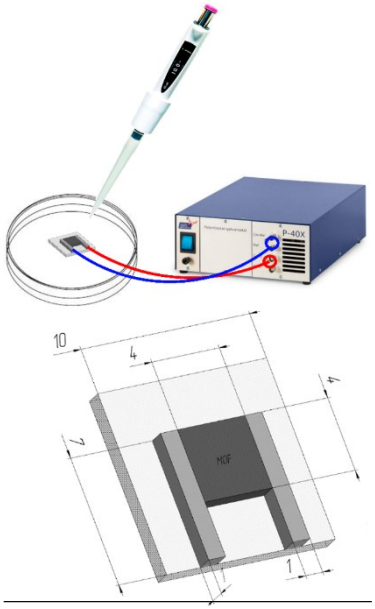

Fig. S1. Schematic diagram of measurement setup (above) and an electrochemical cell (below).

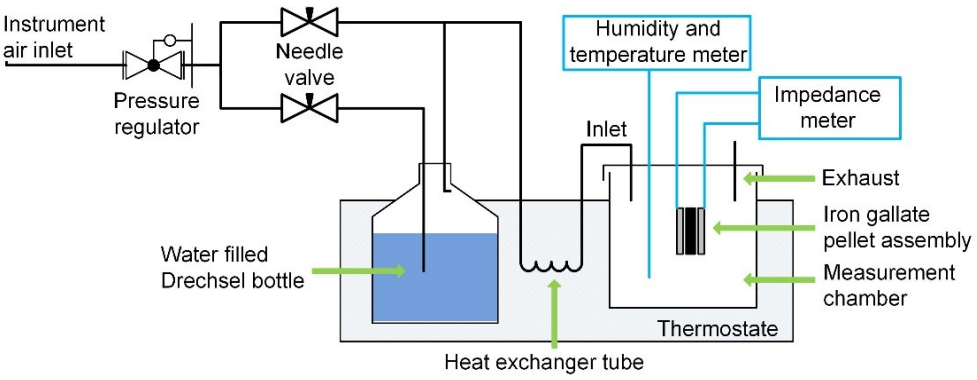

Fig. S2. Impedance measurement setup.

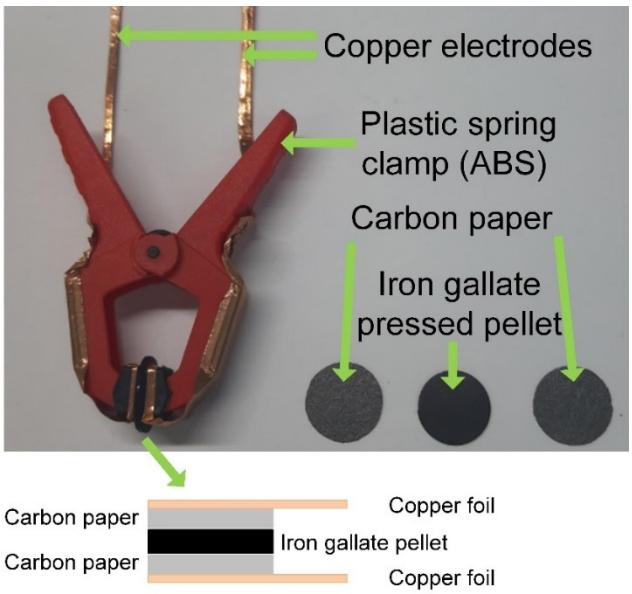

Fig. S3. Iron gallate pellet assembly.

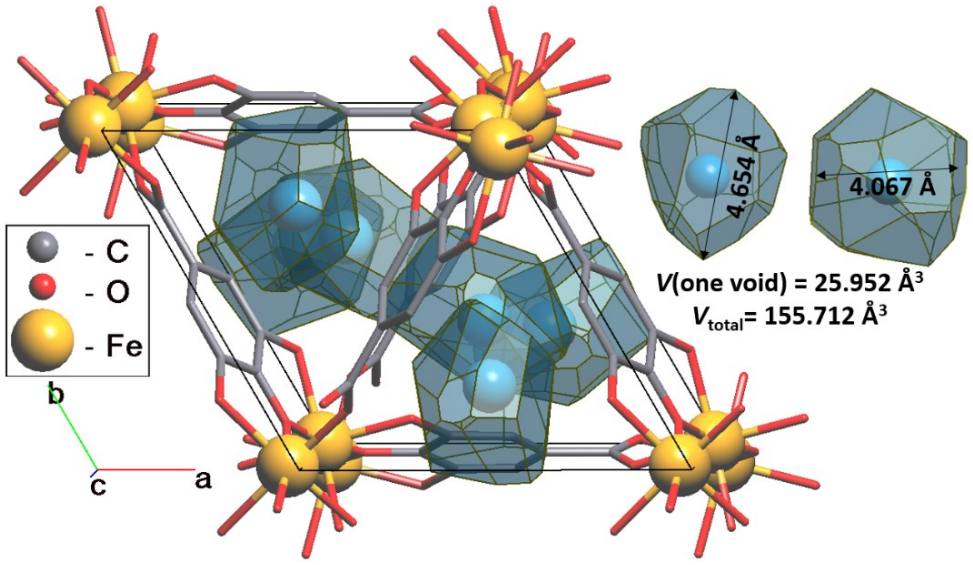

Fig. S4. Pores in iron (III) gallate with volume indicated.

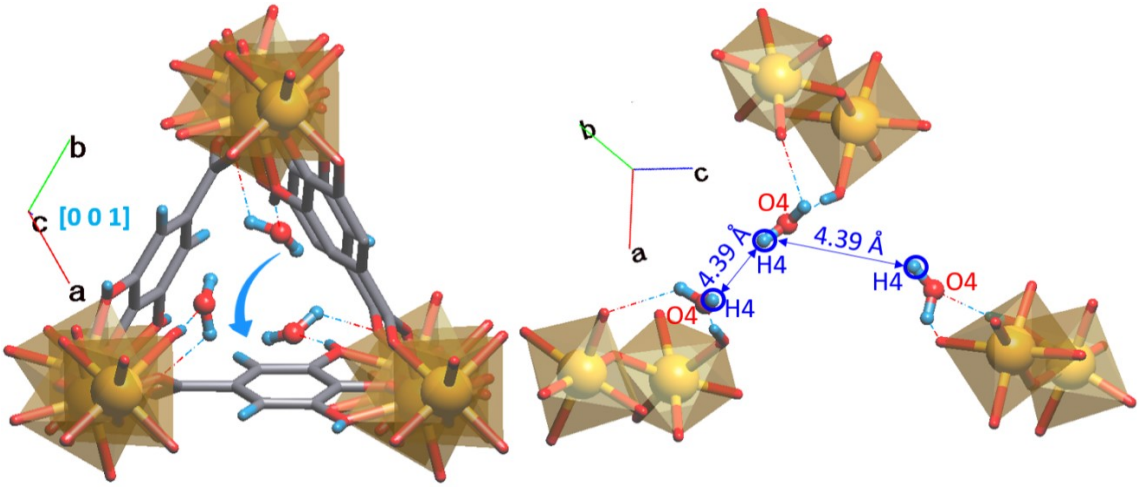

Fig. S5. Formation of hydrogen bonds between guest water molecules and the MOF framework. Hop length between migrating protons.

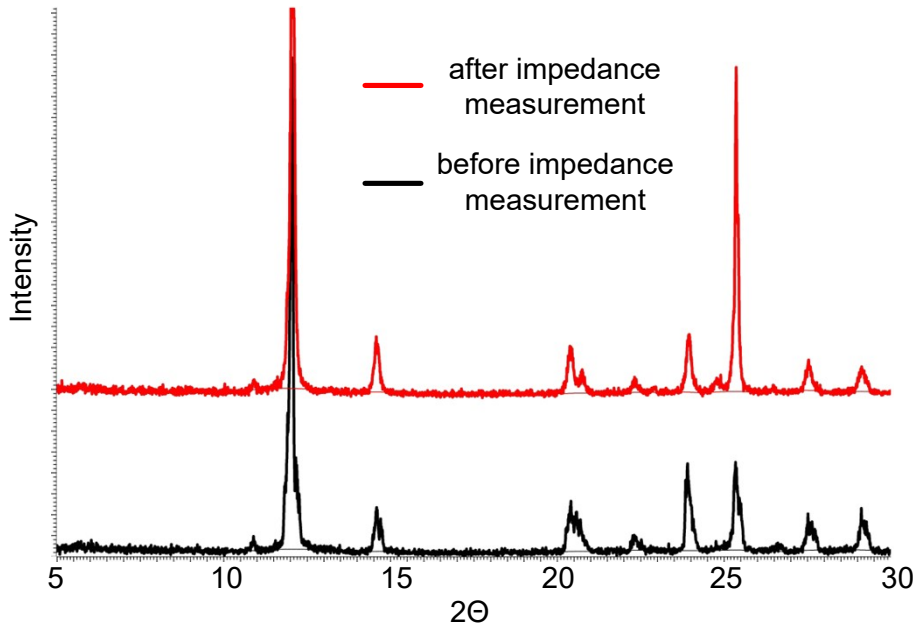

Fig. S6. PXRD spectra of the pristine iron (III) gallate and sample immediately after electrochemical impedance measurements.

Table S1. Atomic coordinates in iron (III) gallate after Rietveld refinement. The occupancy of all atoms is 1.

Atom	x	y	z
Fe	0	0.9351	0.1667
O1	0.8144	0.6756	0.1476
O2	0.1708	0.2827	0.1774
O3	0.8365	0.8365	0
O4	0.8382	0.3192	0.0702
C1	0.7127	0.7127	0
C2	0.5193	0.4723	0.1067
C3	0.2754	0.2754	0
C4	0.6834	0.6287	0.1059
C5	0.4394	0.4394	0