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Supplementary Information

Intrinsic Low Dielectric Behavior of a Highly Thermal Stable Sr-Based Metal–Organic Framework for Interlayer Dielectric Materials

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Table S1. Crystal and structure refinement data for compound **1**

Chemical formula	$C_{16}H_{14}O_{11}Sr_2$
Formula weight (g/mol)	557.51
Crystal system	Monoclinic
Space group	*C*2/*c*
Temperature	296 (2)
a (Å)	24.074(5)
b (Å)	12.735(3)
c (Å)	13.455(3)
B (°)	118.63(3)
V (Å ^{3})	3620.5(12)
Z	8
D_{calcd} (g/cm^3)	2.046
θ range (°)	3.02-26.40
μ (mm^{-1})	5.955
F (000)	2192
Reflns collected	13817
Unique reflns	3683
Parameters	262
R_{int}	0.0358
R_1, wR_2[a] ($I > 2\sigma(I)$)	0.0260, 0.0518
R_1, wR_2[a] (all data)	0.0388, 0.0557
GOF	1.026

[a] $R_1 = \Sigma||F_0|-|F_c||/\Sigma|F_0|$; $wR_2 = [\Sigma w(F_0^2 - Fc^2)_2/\Sigma w(F_0^2)_2]^{1/2}$

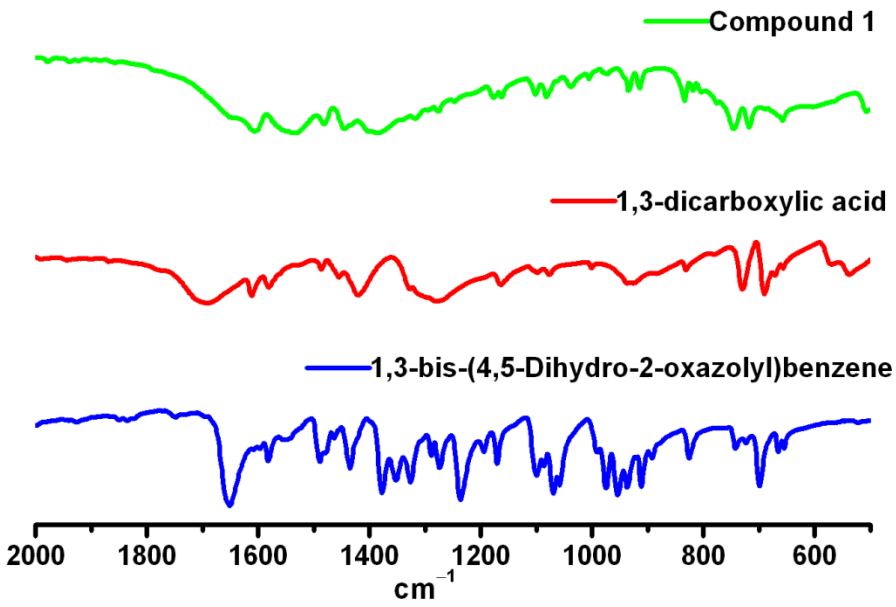

Figure S1. IR spectra of 1,3-bis-(4,5-dihydro-2-oxazolyl)benzene, 1,3-dicarboxylic acid and compound **1**.

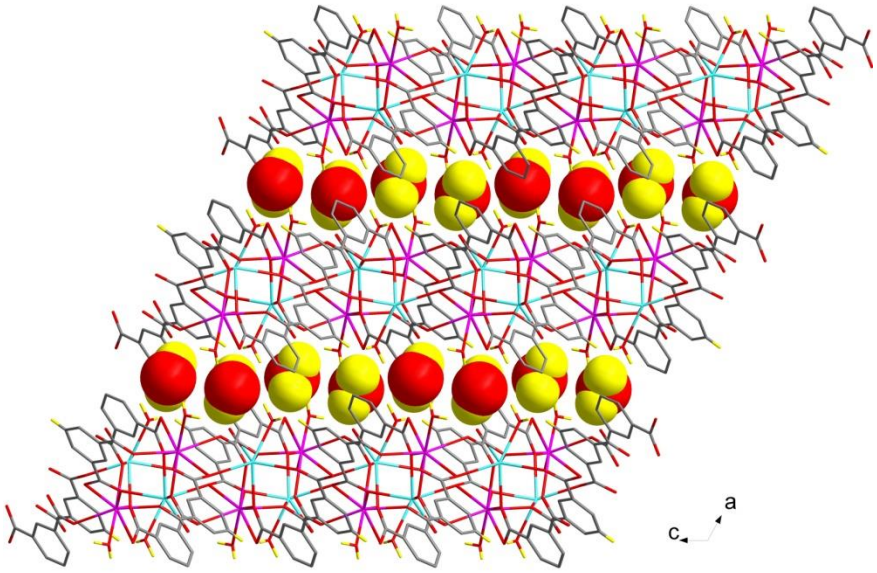

Figure S2. Compound **1** with water molecules present between the layers may undergo shrinkage along the *a*-axis upon dehydration with a (200) plane shift in PXRD.

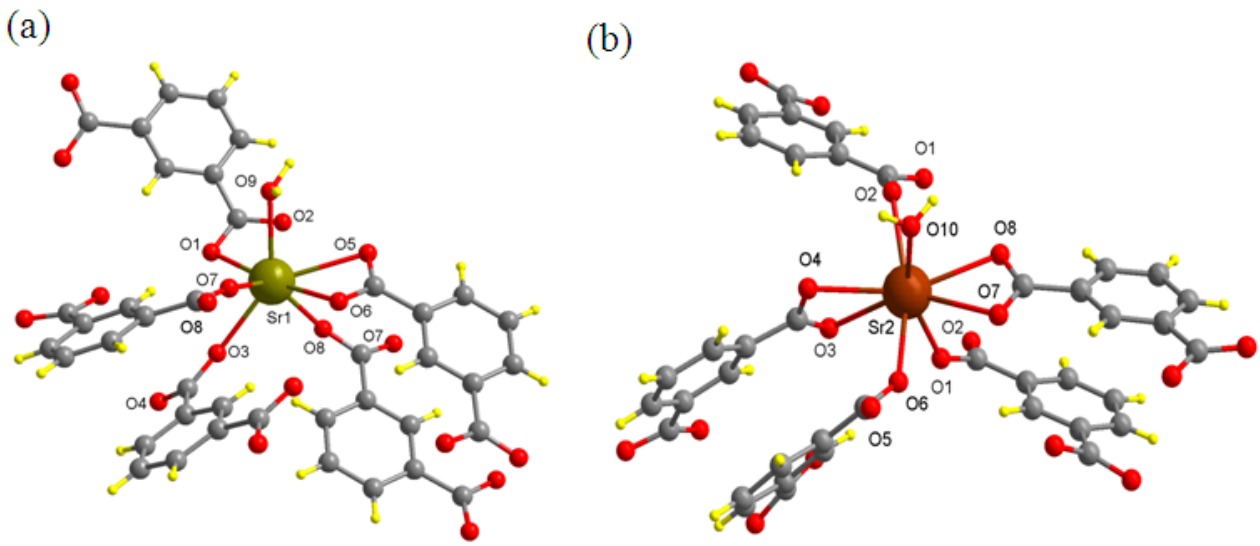

Figure S3. Coordination environment of (a) Sr(1) and, (b) Sr(2) in compound **1**.

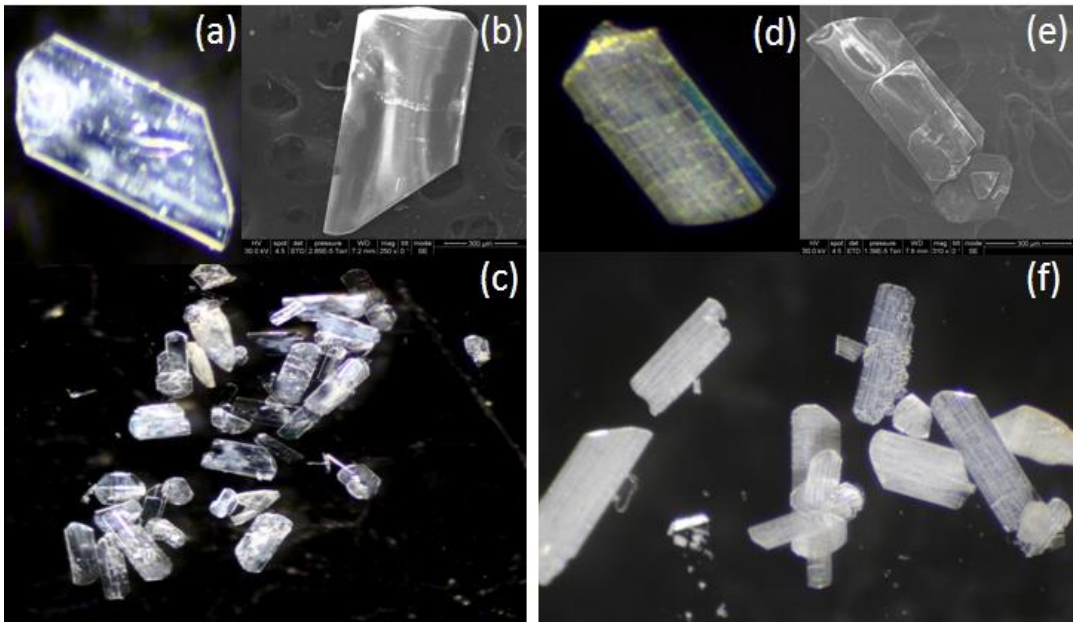

Figure S4. Surface topology shown through (a) A single crystal of compound **1**, (b) SEM image of a single crystal of compound **1**, (c) Crystals of compound **1**, (d) A single crystal of dehydrated compound **1′**, (e) SEM image of a single crystal of dehydrated compound **1′**, (f) crystals of dehydrated compound **1′**.

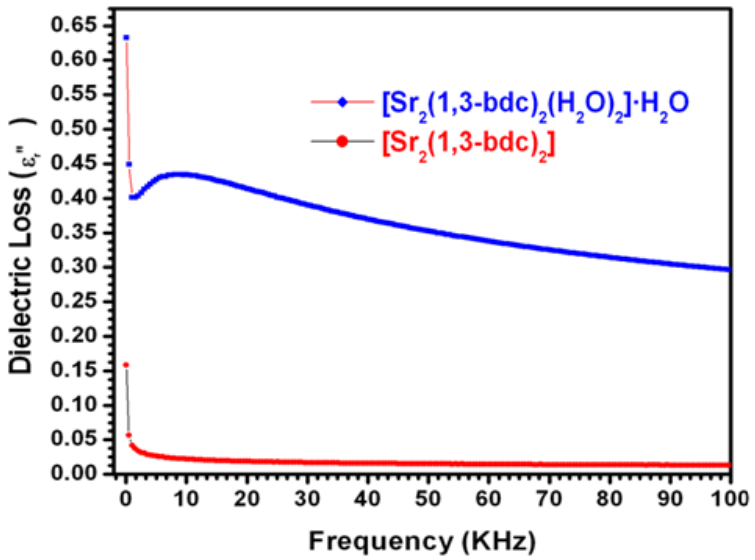

Figure S5. Dielectric loss vs frequency curves of pellet sample **1** and dehydrated compound **1′**.

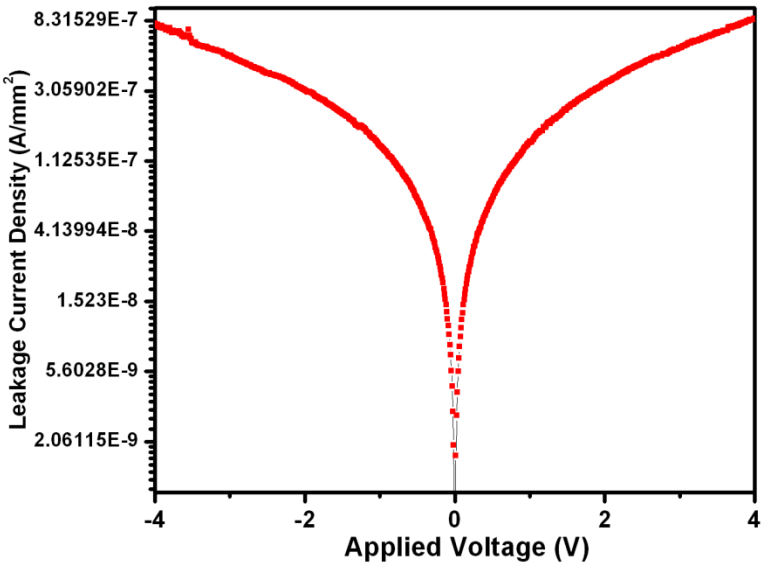

Figure S6. Leakage current density (A/mm^2) measurement for the dehydrated sample **1′**.