Electronic Supplementary Information

Mixed Metal $Co^{II}_{1-x}Zn^{II}_{x}$-Organic Frameworks Based on Chains with Mixed Carboxylate and Azide Bridges: Magnetic Coupling and Slow Relaxation

Yan-Qin Wang, Kun Wang and En-Qing Gao*

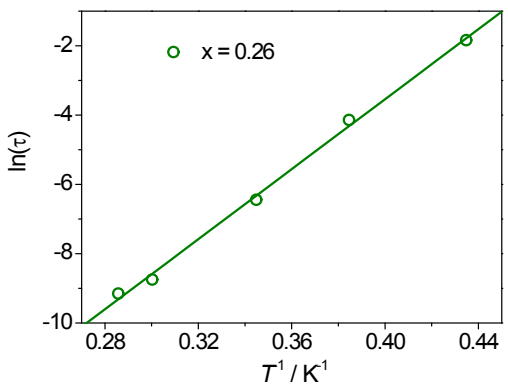
Table S1. Crystal data and structure refinements for compound **1**

Compound	**1**
Formula	$C_8H_8ZnN_4O_5$
Mr	305.55
Crystal system	Orthorhombic
space group	*P*nma
a, Å	7.6089(18)
b, Å	7.2802(17)
c, Å	18.485(4)
α, deg	90
β, deg	90
γ , deg	90
V, Å^3	1024.0(4)
Z	4
D_c, g cm^{-3}	1.982
μ, mm^{-1}	2.421
Unique.reflns/R_{int}	1262 / 0.0617
R_1 [I>2σ(I)]	0.0438
wR_2(All data)	0.1213
GOF	1.015

Table S2. Bond distances (Å) and angles (deg) of **1**.

Zn1-N1	2.096(2)	Zn1-O2B	2.114(3)
Zn1-O1	2.152(3)	N1-Zn1-N1C	180.0
N1-Zn1-O2B	91.82(15)	N1C-Zn1-O2B	88.18(15)
O2B-Zn1-O2D	180.000(1)	N1-Zn1-O1C	88.14(15)
N1-Zn1-O1	91.86(15)	O2B-Zn1-O1	88.09(12)
O2D-Zn1-O1	91.91(12)	O1C-Zn1-O1	180.000(1)

Symmetry codes: B: x-1/2, y, -z+3/2; C: -x+1, -y, -z+1; D: -x+3/2, -y, z-1/2.



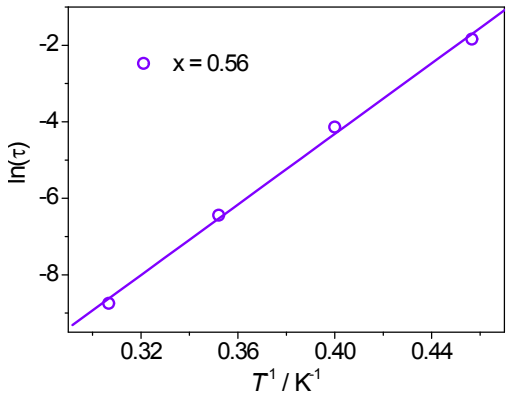


Fig. S1 The Arrhenius-law fits for the $Co^{II}_{1-x}Zn^{II}_{x}$ materials (x = 0.26 top; x = 0.56 bottom).