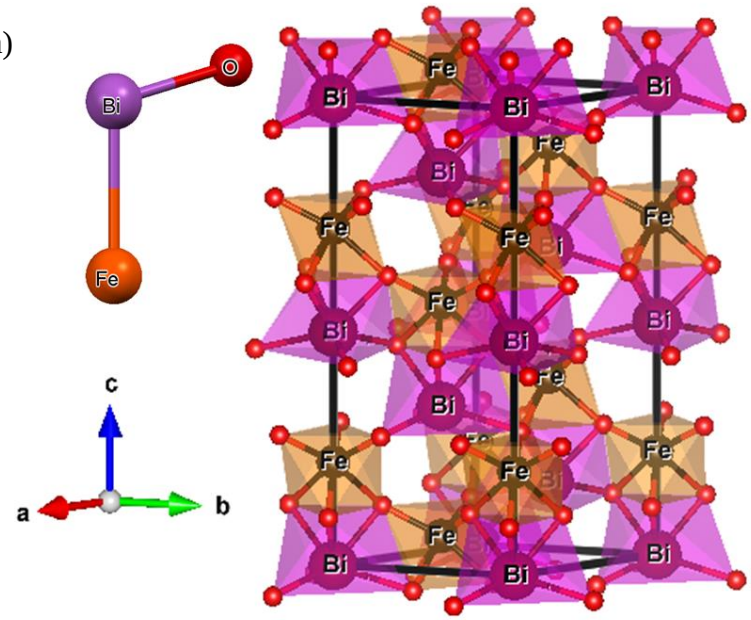
TABLE 1. Reitveld parameters of different samples.

Sample		Eu 0	Eu 1	Eu 5	Eu 10
a (Å)= b (Å)		5.571 (9)	5.560 (9)	5.555 (8)	5.547 (9)
c (Å)		13.854 (5)	13.843 (4)	13.828 (2)	13.799 (1)
Cell Volume ($Å^3$)		372.36 (6)	371.72 (8)	370.81 (5)	365.29 (1)
Particle Size (nm)		32.6 (5)	29.8 (3)	28.6 (3)	25.8 (2)
Micro Strain x 10^{-3}		1.32 (2)	2.11 (4)	3.54 (3)	5.65 (1)
χ^2		1.19	1.10	1.15	1.05
Bond lengths (Å)					
Fe-O		1.921	1.920	1.917	1.914
Bi-O		2.360	2.359	2.348	2.336
Bond Angles (°)					
Fe-O-Fe		156.22	155.45	153.97	152.27
Bi-O-Bi		109.74	109.43	107.32	105.95
Atomic Position					
x	Bi/Eu	0	0	0	0
	Fe	0	0	0	0
	O	0.4425 (5)	0.4423 (5)	0.4420 (4)	0.4417 (2)
y	Bi/Eu	0	0	0	0
	Fe	0	0	0	0
	O	0.0145 (2)	0.0143 (9)	0.0141 (5)	0.0136 (5)
z	Bi/Eu	0	0	0	0
	Fe	0.2220 (8)	0.2217 (2)	0.2215 (8)	0.2211 (7)
	O	0.9542 (6)	0.9540 (4)	0.9537 (8)	0.9535 (3)
R_{wp}		18.6	18.3	17.7	16.9
R_p		4.5	4.1	3.3	2.5
R_{Bragg}		5.2	4.8	4.1	3.4

Table 2. Activation energy of different samples:

Sample	***E_a(eV)***
Eu 0	**1.08**
Eu 1	**1.12**
Eu 5	**1.18**
Eu 10	**1.24**

(a)



(b)

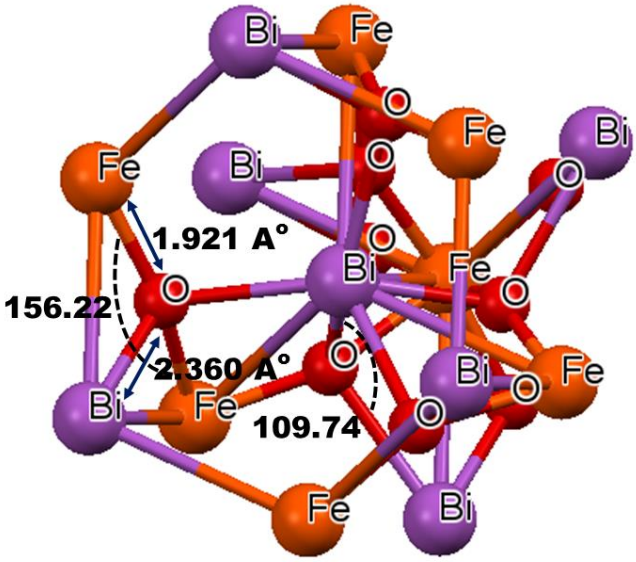


Fig. S1 (a) Crystal structure of Eu 0 representing the FeO_6 polyhedra (b) unit cell showing the bond position

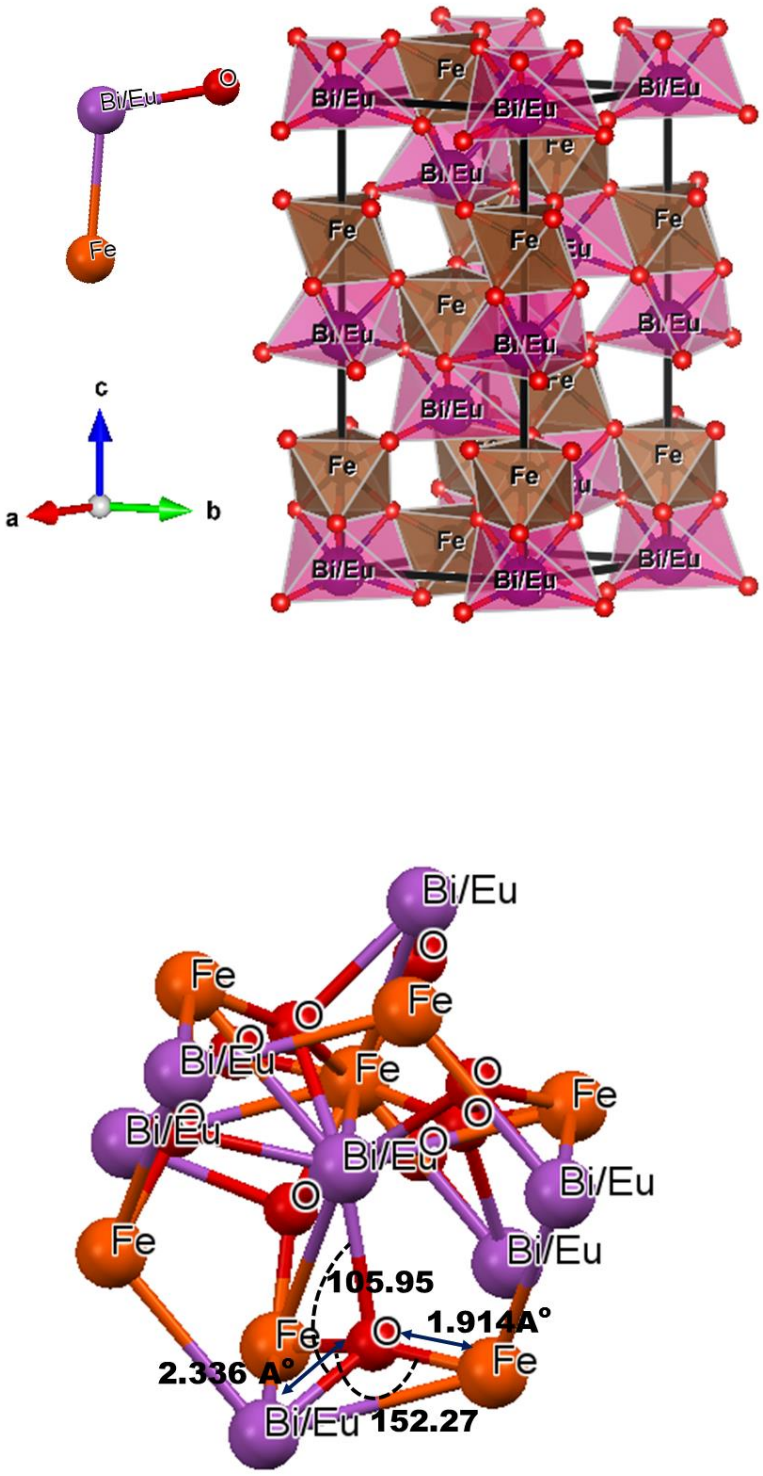


Fig. S2 (a) Crystal structure of Eu 10 representing the FeO_6 polyhedra (b) unit cell showing the corresponding bond position