

Table S1 Atomic parameters of calcined PSB NFs obtained by Rietveld refinement

500 °C_6 h						
Atom	site	x	Y	Z	Occupancy	U_{iso}
Fe1	8f	0.00000	0.1379(15)	0.5683(14)	0.6	0.007(5)
Ti1	8f	0.00000	0.1379	0.5683	0.4	0.007
Fe2	4c	0.00000	0.1823(14)	0.25000	0.8	0.005(10)
Ti2	4c	0.00000	0.1823	0.25000	0.2	0.005
O1	4c	0.00000	0.762(6)	0.25000	1.000	0.06(23)
O2	8f	0.00000	0.035(5)	0.098(4)	1.000	0.056(20)
O3	8f	0.00000	0.304(4)	0.077(4)	1.000	0.027(16)
550 °C_4 h						
Atom	site	x	Y	Z	Occupancy	U_{iso}
Fe1	8f	0.00000	0.1378(10)	0.5684(14)	0.6	0.006(4)
Ti1	8f	0.00000	0.1378	0.5684	0.4	0.006
Fe2	4c	0.00000	0.1823(11)	0.25000	0.8	0.004(7)
Ti2	4c	0.00000	0.1823	0.25000	0.2	0.004
O1	4c	0.00000	0.762(3)	0.25000	1.000	0.007(17)
O2	8f	0.00000	0.035(4)	0.098(5)	1.000	0.055(12)
O3	8f	0.00000	0.3042(29)	0.0771(32)	1.000	0.027(16)
600 °C_3 h						

Atom	site	<i>x</i>	<i>Y</i>	<i>Z</i>	Occupancy	U_{iso}
Fe1	8f	0.00000	0.1387(13)	0.5717(15)	0.6	0.007(4)
Ti1	8f	0.00000	0.1387	0.5717	0.4	0.007
Fe2	4c	0.00000	0.1794(15)	0.25000	0.8	0.011(8)
Ti2	4c	0.00000	0.1794	0.25000	0.2	0.011
O1	4c	0.00000	0.761(6)	0.25000	1.000	0.057(12)
O2	8f	0.00000	0.032(4)	0.094(4)	1.000	0.058(14)
O3	8f	0.00000	0.310(3)	0.067(3)	1.000	0.017(11)

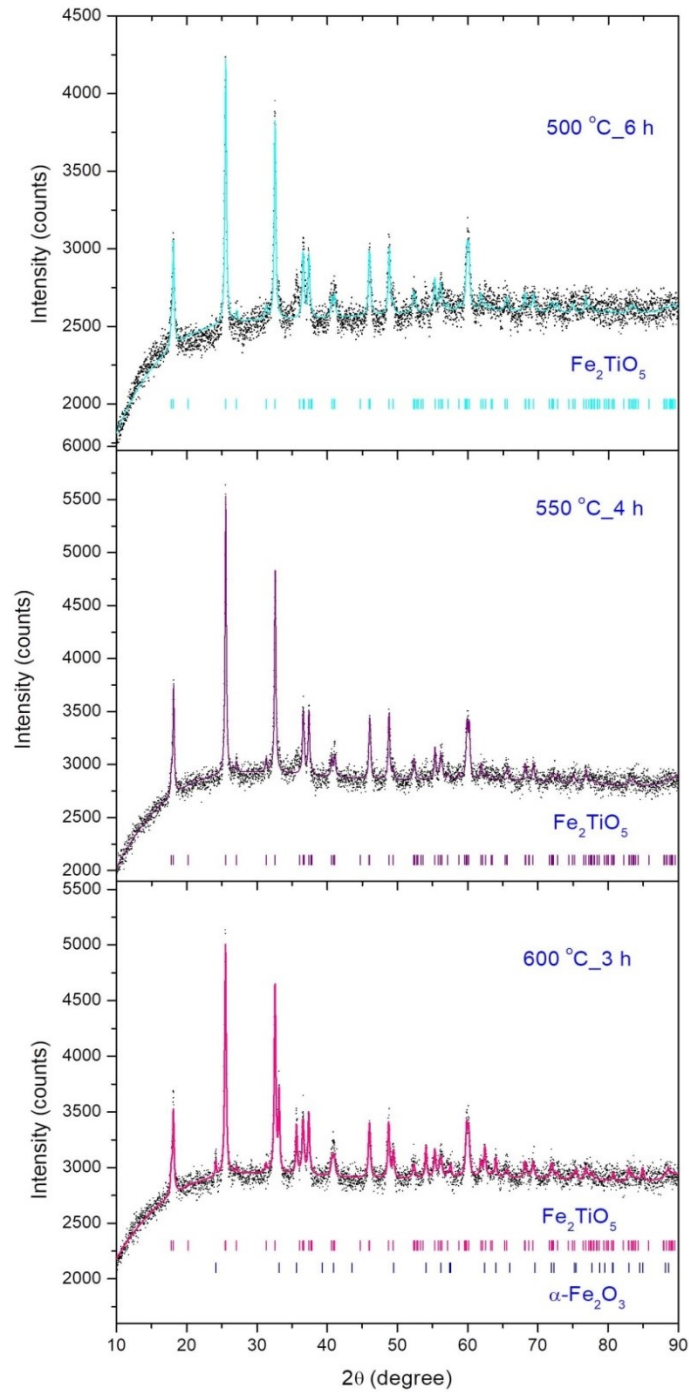


Fig. S1 Rietveld refinement to XRD patterns of Fe_2TiO_5 fibers calcined at 500_ 6 h, 550_ 4 h and 600 °C_ 3 h

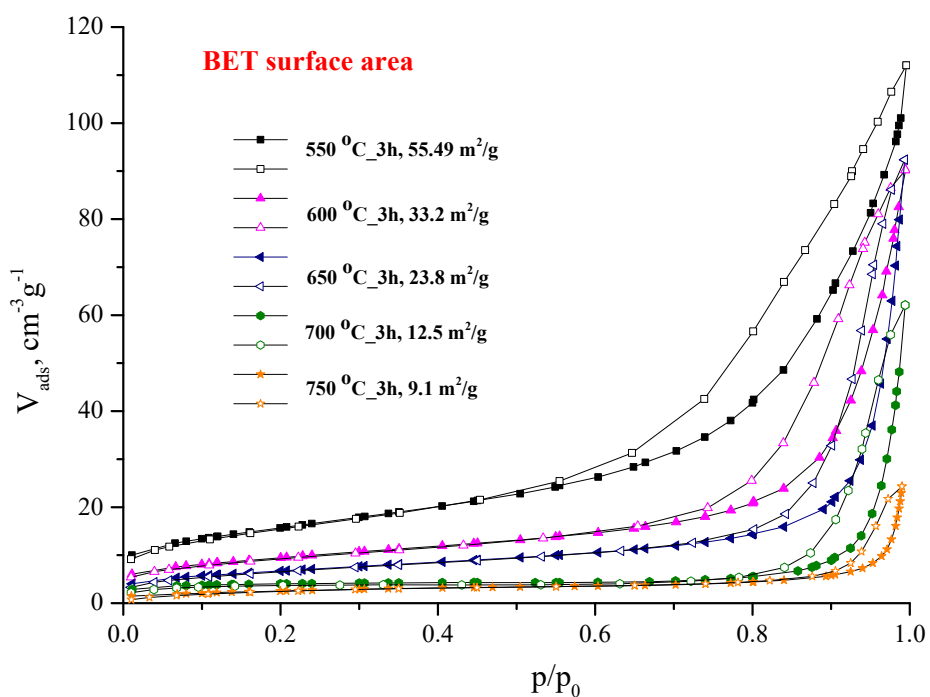


Fig. S2 N₂ adsorption–desorption isotherms for samples 550 °C_3 h, 600 °C_3 h, 650 °C_3 h, 700 °C_3 h and 750 °C_3 h

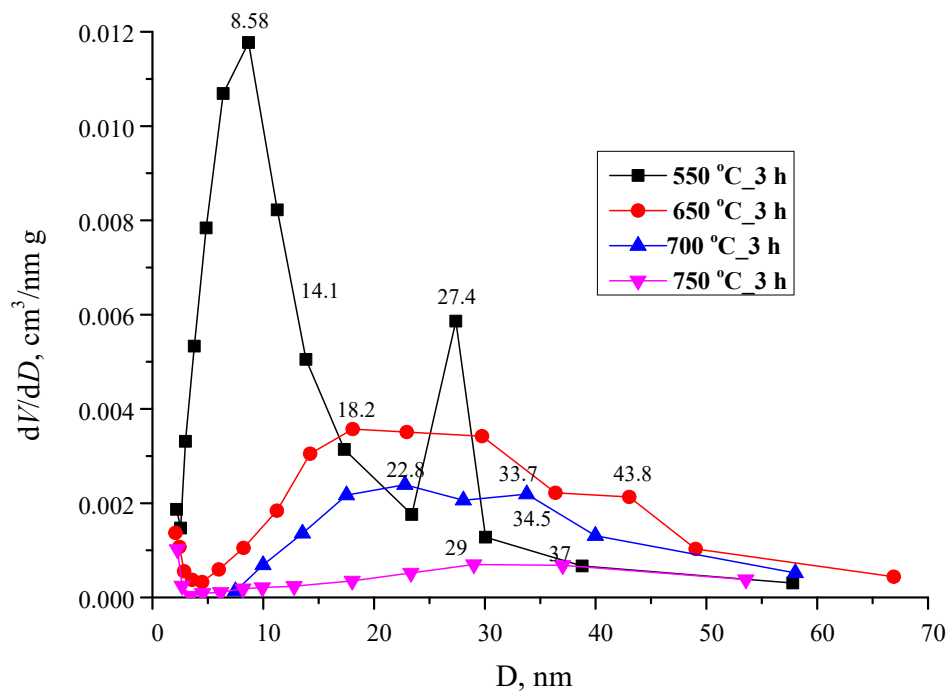


Fig S3 Pore size distribution curves of samples calcined at 550 °C_3 h, 650 °C_3 h, 700 °C_3 h and 750 °C_3 h

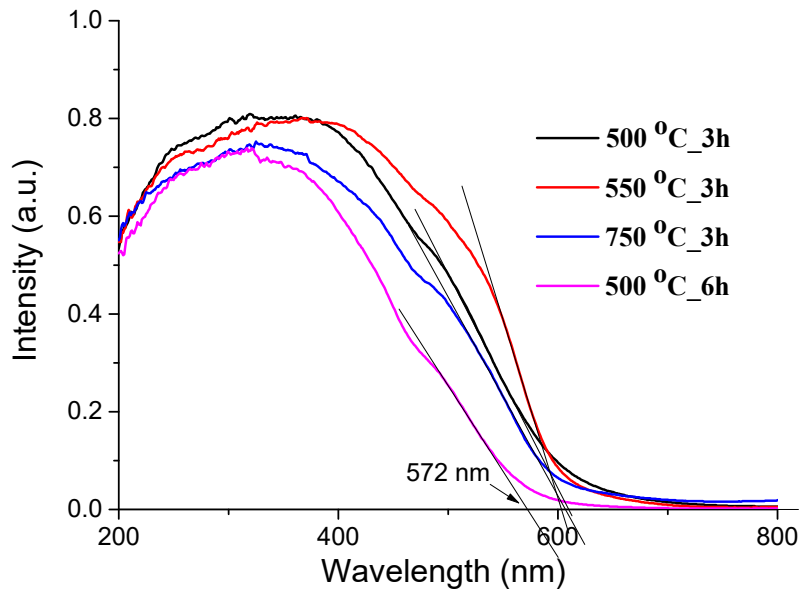


Fig. S4 Optical absorbance spectra of different PSB calcined nanofibers

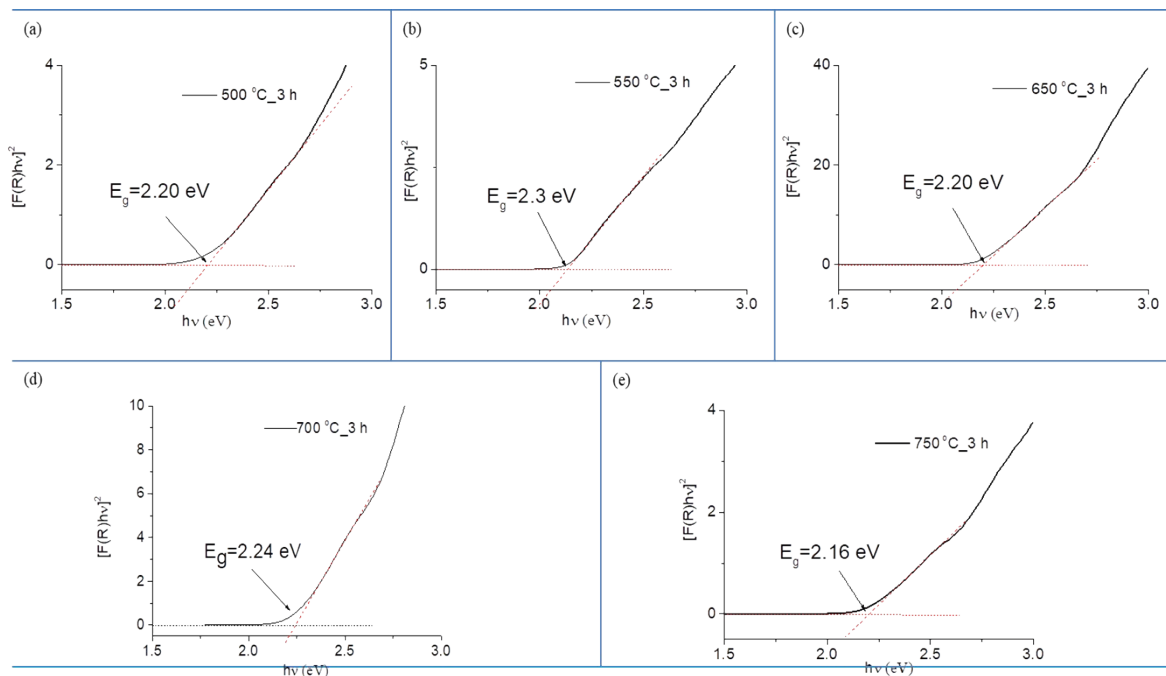


Fig.S5 a-e Plots of $[F(R)hv]^2$ versus photon energy ($h\nu$) for samples 500 °C_3 h, 550 °C_3 h, 650 °C_3 h, 700 °C_3 h, and 750 °C_3 h