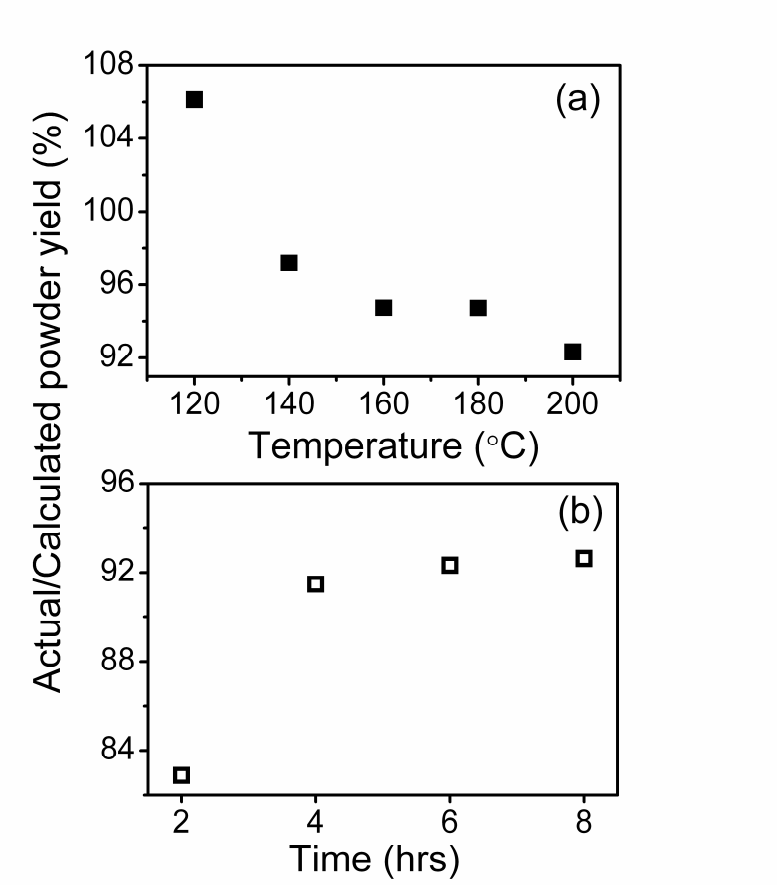
Supporting Information (1)

Calculated powder yield data of BFO obtained at different processing (a) temperatures and (b) times.



Supporting Information (2)

Lattice parameters by LeBail fittings of the peak from the out-of planes and in-planes BFO(122) and BFO(128) in C*m* space group, from which $a_{PC,}$ b_{PC}, c_{PC} and $d(100)$ tabulated in text Table 1 are calculated based on $a_{PC} = a_M / \sqrt{2}$, $b_{PC} = b_M / \sqrt{2}$, $c_{PC} = c_M$, $V_{PC} = V_M / 2$, and $d(100) = \frac{\sqrt{(a_{PC}^2 + b_{PC}^2)}}{2}$.

Temp (°C)	Time (h)	BFO film lattice parameters (C*m* monoclinic)				
		a_M (Å)	b_M(Å)	c_M (Å)	β (°)	Vol , V_M(Å)^3
120	6	5.4233(4)	5.644(1)	3.9722(2)	88.34(1)	121.54(2)
140	6	5.4897(3)	5.6386(3)	3.9750(2)	89.239(2)	123.03(1)
160	6	5.4612(5)	5.5814(6)	3.9723(4)	89.362(6)	121.07(2)
180	6	5.483(1)	5.662(1)	3.9819(3)	89.14(1)	123.60(1)
200	6	5.488(1)	5.695(1)	3.9658(2)	89.13(1)	123.93(2)
200	6 (+anneal)	5.4812(3)	5.6348(4)	3.9597(1)	89.22(1)	122.28(1)
200	2	5.583(1)	5.602(1)	3.9682(2)	89.07(2)	124.09(4)
200	4	5.4909(2)	5.674(1)	3.9607(1)	89.16(1)	123.38(1)
200	8	5.5558(1)	5.5854(2)	3.9598(1)	88.762(4)	122.85(1)

Supporting Information (3)

Lattice parameters by Rietveld refinements of the BFO powders obtained at different processing temperatures and times in R*3c* space group, from which $a_{bulk\text{-}PC}$ and V_{PC} tabulated in text Table 1 are calculated based on $a_{bulkPC} = a_R/\sqrt{2}$ and $V_{PC} = (a_R/\sqrt{2})^3$.

Temp.(°C)	Time (h)	BFO powder lattice parameters		
		R*3c* Rhombohedral		
		a_R	c_R	Volume, V_R (Å^3)
120	6	5.614(4)	13.68(2)	373.14(7)
140	6	5.5823(4)	13.875(1)	374.44(6)
160	6	5.5804(3)	13.838(1)	373.19(5)
180	6	5.5801(2)	13.843(7)	373.32(4)
200	6	5.5868(4)	13.862(1)	373.99(2)
200	2	5.5801(2)	13.844(1)	374.25(8)
200	4	5.5787(3)	13.855(1)	373.42(5)
200	8	5.5820(2)	13.869(1)	374.25(3)