

Figure S1. TG-DTA curves of (a) EG at heating rate of $10\text{ K}\cdot\text{min}^{-1}$ and (b) PS at heating rate of $10\text{ K}\cdot\text{min}^{-1}$. Air flow rate was $30\text{ ml}\cdot\text{min}^{-1}$.

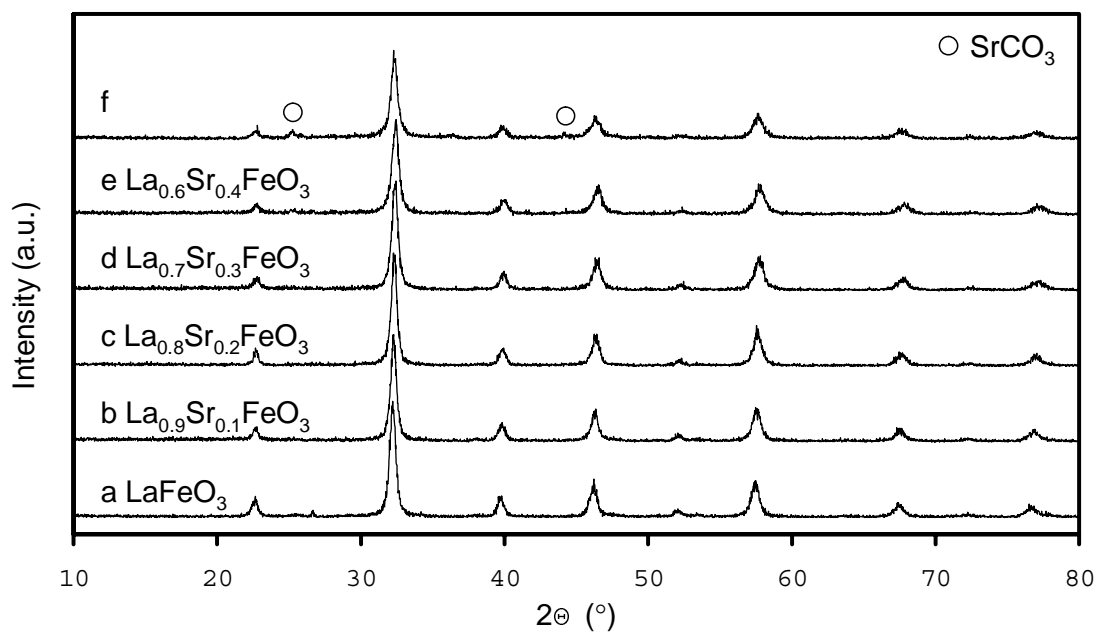


Figure S2. XRD patterns of solid materials obtained by a calcination (873 K) of EG-methanol (40 vol%) solution of mixed metal nitrate ($\text{LaNO}_3 : \text{Sr}(\text{NO}_3)_2 : \text{Fe}(\text{NO}_3)_3 = 1-x : x : 1$, where $x = 0.1-0.5$, total metal concentration was 1.0 M) (a) $x = 0$, (b) $x = 0.1$, (c) $x = 0.2$, (d) $x = 0.3$, (e) $x = 0.4$ and (f) $x = 0.5$. Calcination rate was $1 \text{ K} \cdot \text{min}^{-1}$ and the calcination temperature was kept for 5 hours. Markers are located according to the JCPDS 37-1493 LaFeO_3 card and JCPDS 05-0418 SrCO_3 card.

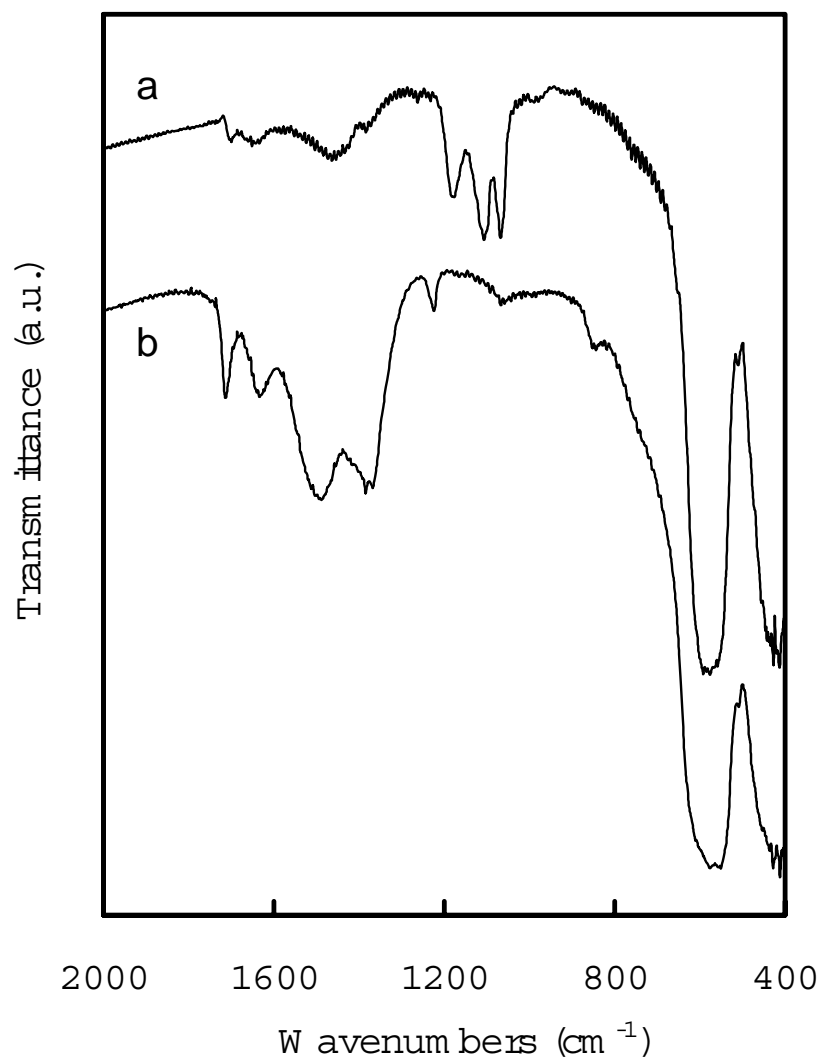


Figure S3. IR of (a) 3DOM LaFeO_3 and (b) non-porous LaFeO_3 perovskite materials calcined at 873 K for 5 hours.

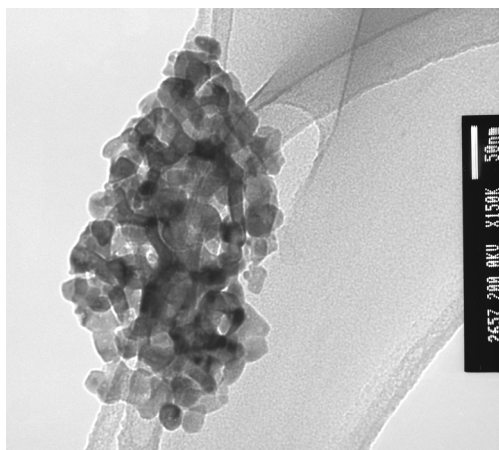


Figure S4. TEM image of non-porous LaFeO₃ perovskite material (JEOL JEM-2000FX).