Supplementary data

Lanthanum Ion (La\(^{3+}\)) substituted CoFe\(_2\)O\(_4\) anode material for lithium ion Battery applications

Rajendran Indhrajothi\(^1\), Ignacimuthu Prakash\(^2\), Manne Venkateswarlu\(^3\), Nallani Satyanarayana\(^1\)*

1. Department of Physics, Pondicherry University, Puducherry 605 014, India.
E-mail: nallanis2011@gmail.com, Tel: +91-413-2654404

2 Multifunctional Materials & Devices Laboratory, School of Electrical and Electronics Engineering, SASTRA University, Thanjavur 613 401, Tamilnadu, India.

3. R & D, Amara Raja Batteries Ltd, Tirupati 517 520 A.P, India
Figure S1. SEM images of a) CoFe₂O₄ polymeric intermediate dried at 333 K b) CoLa₀.₀₆Fe₁.₉₄O₄ polymeric intermediate dried at 333K and c) CoLa₀.₀₆Fe₁.₉₄O₄ polymeric intermediate dried at 448K.

Figure S2. FESEM images of a) CoFe₂O₄ sample calcined at 623 K b) CoLa₀.₀₆Fe₁.₉₄O₄ sample calcined at 773K
Figure S3. SEM-EDS mapping and spectrum results of CoFe$_2$O$_4$ sample obtained at 623 K.
**Figure S4.** SEM-EDS mapping and spectrum results of CoLa$_{0.06}$Fe$_{1.94}$O$_4$ sample obtained at 773 K.