

Supporting information

Effect of pressure on the properties of a NASICON

$\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}(\text{PO}_4)_3$ nanofiber solid electrolyte

Andrea La Monaca,^{a,b} Gabriel Girard,^a Sylvio Savoie,^a Hendrix Demers,^a Giovanni Bertoni,^{c,d} Sergey Krachkovskiy,^a Sergio Marras,^e Enrico Mugnaioli,^f Mauro Gemmi,^f Daniele Benetti,^b Ashok Vijh,^a Federico Rosei,^b and Andrea Paoella^{a}*

^a Centre d'excellence en électrification des transports et stockage d'énergie, Hydro-Québec, 1806 Boulevard Lionel-Boulet, Varennes, Québec J3X 1S1, Canada.

^b Centre Énergie, Matériaux et Télécommunications, Institut National de la Recherche Scientifique, 1650 Boulevard Lionel-Boulet, Varennes, Québec J3X 1S2, Canada.

^c IMEM-CNR, Parco Area delle Scienze 37/A, Parma 43124, Italy.

^d CNR - Istituto Nanoscienze, Via Campi 213/A, Modena 41125, Italy.

^e Istituto Italiano di Tecnologia, Via Morego 30, Genova 16163, Italy.

^f Istituto Italiano di Tecnologia, Center for Nanotechnology Innovation @NEST, Piazza San Silvestro 12, Pisa 56127, Italy.

* Corresponding author: Andrea Paoella (paoella.andrea2@hydroquebec.com)

Using pressure values higher than 150 MPa results in broken samples after the heat treatment.

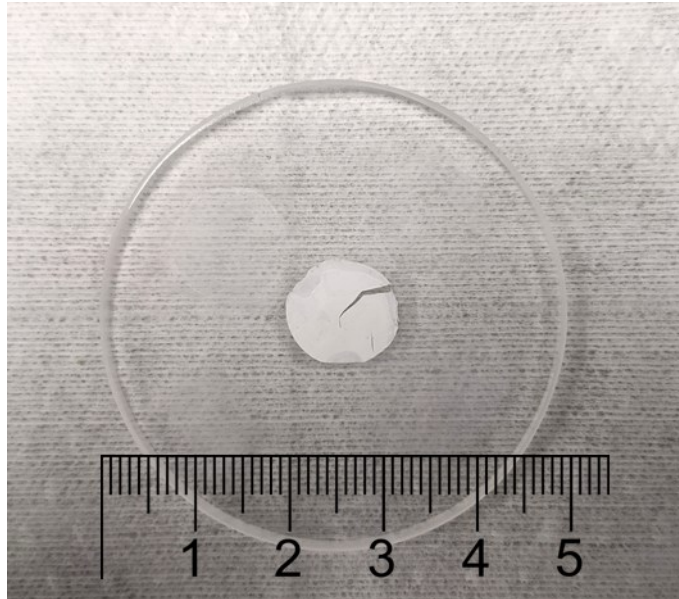


Fig. S1 LAMP fiber sample pressed at 300 MPa and calcined at 850 °C for 2h.

Four-point probe tests have been performed with a Loresta-GX (MCP-T700) by Mitsubishi Chemical Analytech using a QPP or a PSP probe.



Fig. S2 Four-point probe test of pLAMPnf. The value is out of the range of the instrument ($>10^8 \Omega/\text{sq}$).

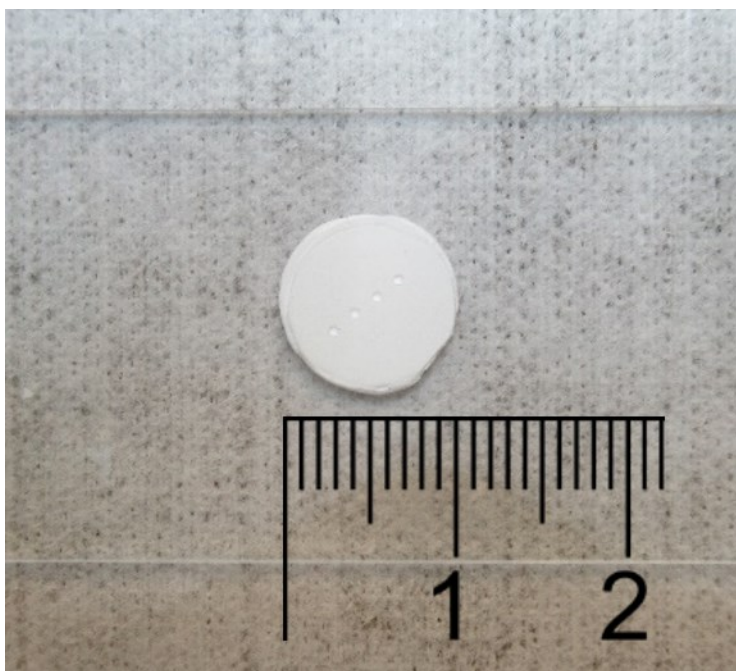


Fig. S3 Indentations made by the PSP probe on LATPnf