

## ELECTRONIC SUPPLEMENTARY INFORMATION

### Near-room-temperature reversible giant barocaloric effects in [(CH<sub>3</sub>)<sub>4</sub>N]Mn[N<sub>3</sub>]<sub>3</sub> hybrid perovskites

Jorge Salgado-Beceiro,<sup>a</sup> Ariel Nonato,<sup>b</sup> Rosivaldo Xavier Silva,<sup>c</sup> Alberto García-Fernández,<sup>a</sup>  
Manuel Sánchez-Andújar,<sup>a</sup> Socorro Castro-García,<sup>a</sup> Enric Stern-Taulats,<sup>d</sup>  
María Antonia Señarís-Rodríguez,<sup>a\*</sup> Xavier Moya<sup>d\*\*</sup> and Juan Manuel Bermúdez-García<sup>a,d\*\*\*</sup>

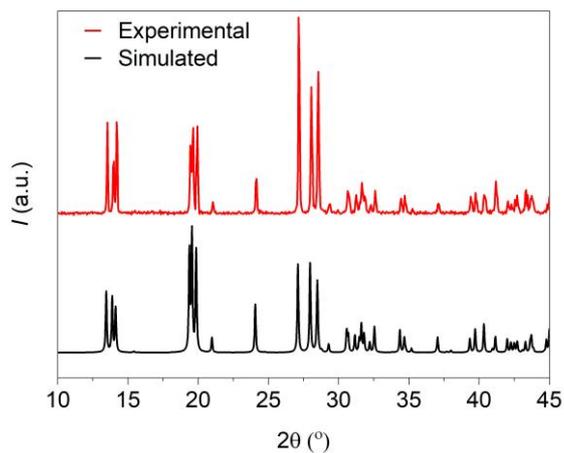
a. University of A Coruña, QuiMolMat Group, Dpt. Chemistry, Faculty of Science and Advanced Scientific Research Center (CICA), Zapateira, 15071 A Coruña, Spain.

b. Coordenação de Ciências Naturais, Universidade Federal do Maranhão, Campus do Bacabal, 65700-000, Bacabal - MA, Brazil.

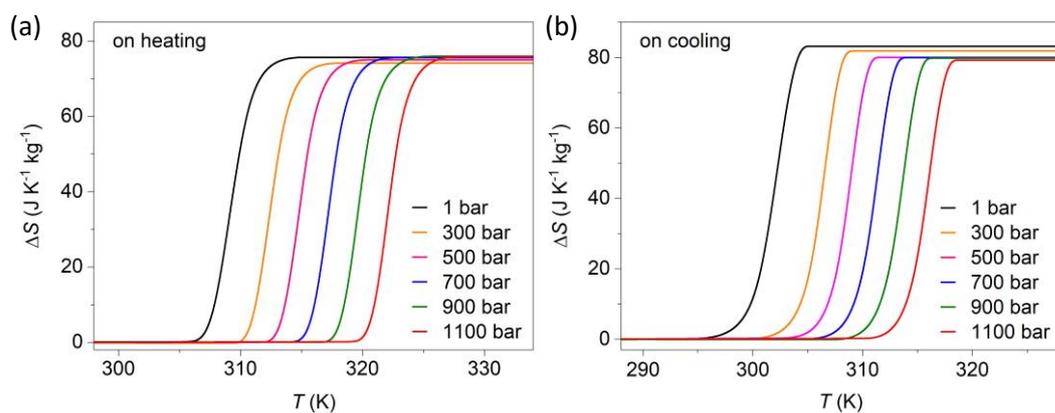
c. Coordenação de Ciências Naturais, Universidade Federal do Maranhão, Campus VII, 65400-000, Codó - MA, Brazil

d. Department of Materials Science, University of Cambridge, Cambridge CB3 0FS, United Kingdom.

\* m.senaris.rodriguez@udc.es, \*\*xm212@cam.ac.uk, \*\*\*j.bermudez@udc.es



**Figure S1.** Experimentally recorded (—) and simulated (—) room-temperature powder x-ray diffraction spectra for  $[(\text{CH}_3)_4\text{N}]\text{Mn}[\text{N}_3]_3$ .



**Figure S2.** Thermally driven isobaric changes in entropy on heating (a) and on cooling (b), with respect to the low-temperature phase for each pressure.