

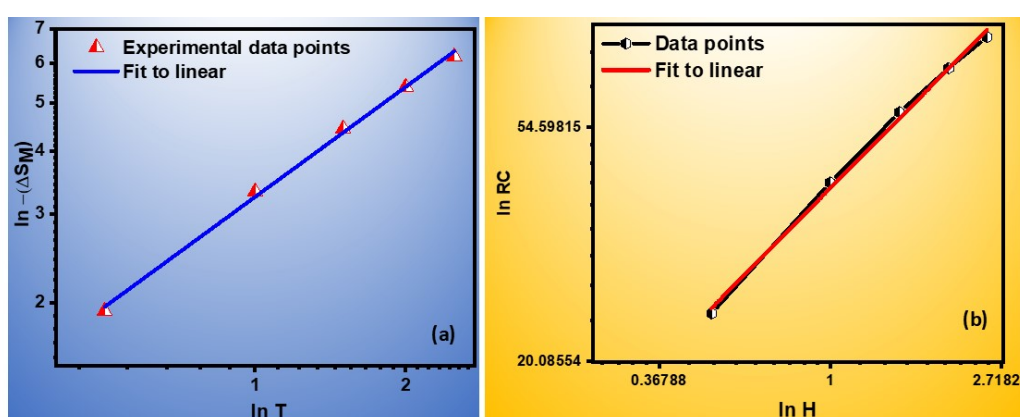
## Unveiling the Magnetic, Magnetocaloric and critical behaviour of melt spun Lanthanum Iron Silicon Alloys: A Comprehensive Study

Anjana Vinod<sup>a</sup>, D. Arvindha Babu<sup>b</sup>, W. Madhuri<sup>c\*</sup>

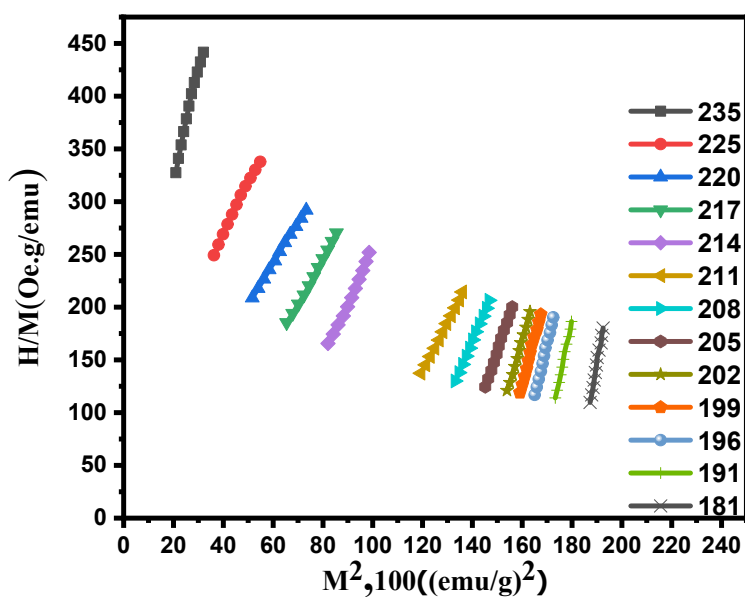
<sup>a</sup>School of Advanced Sciences, Vellore Institute of Technology, Vellore 632014 Tamil Nadu, India

<sup>b</sup>Defence Metallurgical Research Laboratory, Hyderabad 500058 Telangana, India

<sup>c\*</sup>Ceramic Composites Laboratory, Centre for Functional Materials, Vellore Institute of Technology,  
Vellore, 632014, Tamil Nadu, India



**Fig. S1** (a) Temperature dependence of the magnetic entropy change for the  $\text{LaFe}_{11.4}\text{Si}_{1.6}$  alloys in In-In scale (b) Temperature dependence of the relative cooling power for the  $\text{LaFe}_{11.4}\text{Si}_{1.6}$  alloys in In-In scale.



**Fig. S2** Below-Arrott plot of  $\text{LaFe}_{11.4}\text{Si}_{1.6}$  alloys in high field region.