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Supplementary Information

Dielectric and Electrochemical Performance of Rhombohedral Lanthanum Manganate Perovskite Nanostructure

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Tables

Table S1: 2 theta and corresponding (h k l) planes from the XRD spectra of LaMnO₃ samples.

2 Theta (degree)	(h k l)	2 Theta (degree)	(h k l)
22.8	(1 0 -2)	52.8	(2 -1 6)
32.4	(2 -1 0)	58	(3 0 0)
32.7	(1 0 4)	58.6	(1 0 -8)
38.4	(2 -1 3)	67.8	(4 -2 0)
40	(2 0 2)	68.6	(2 0 8)
40.6	(0 0 6)	77.4	(4 -1 -4)
46.7	(2 0 -4)	77.9	(3 -1 -8)
52.3	(3 -1 -2)		

Figures

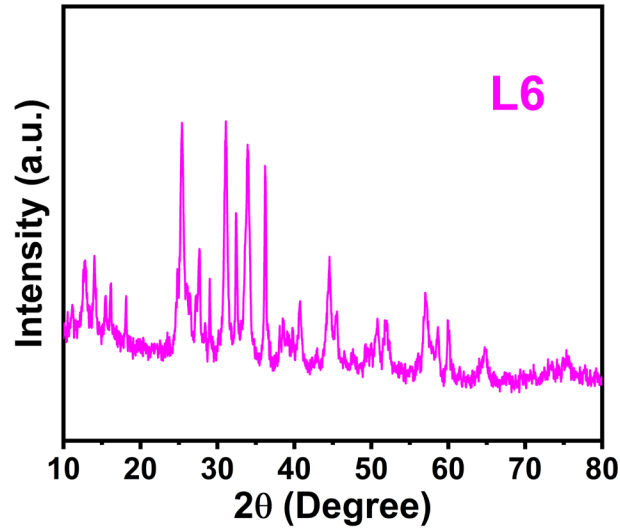


Figure S1. XRD spectrum of L6 sample.

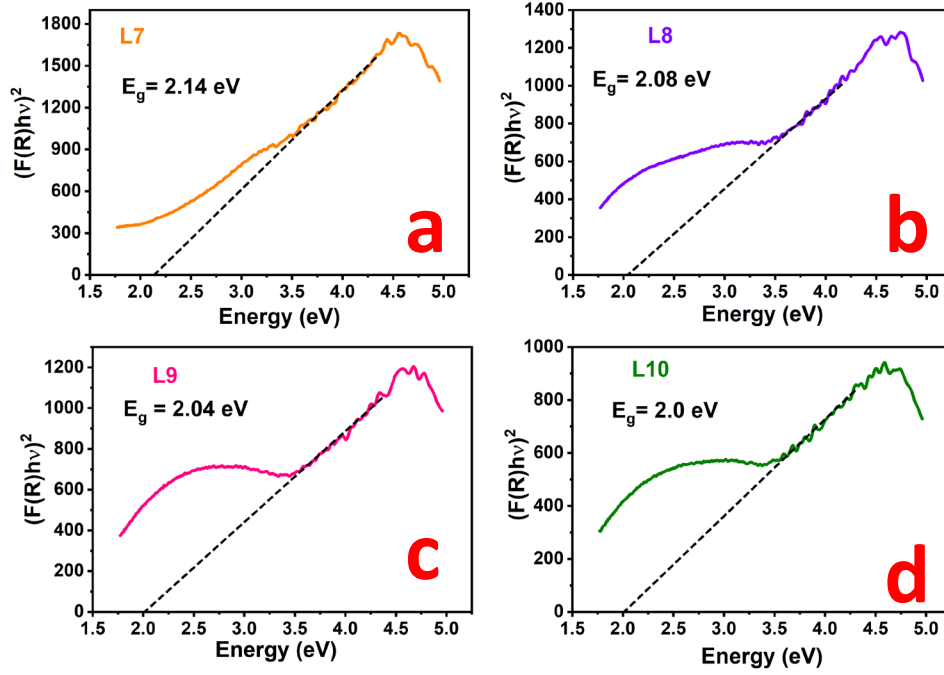


Figure S2. $(F(R)h\nu)^2$ versus $h\nu$ plot for direct band gap of LaMnO_3 samples annealed at different temperatures (a) L7, (b) L8, (c) L9 and (d) L10

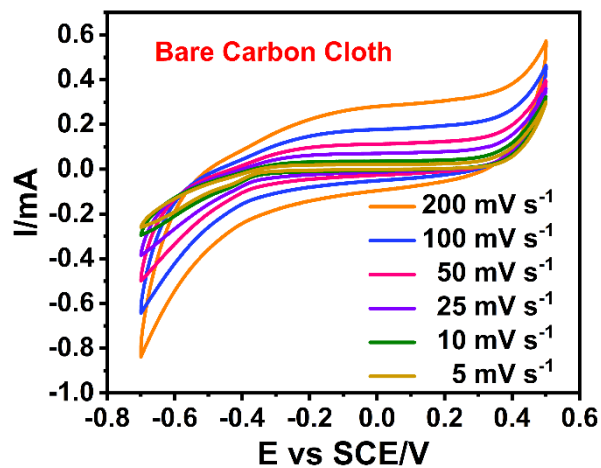


Figure S3. Cyclic voltammetry curves of bare carbon cloth at different scan rates.

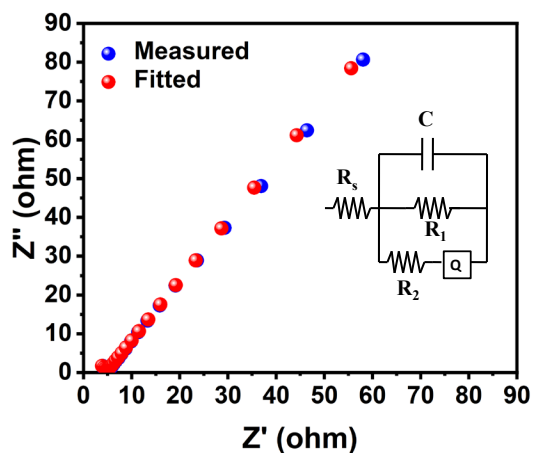


Figure S4. Measured and Fitted Nyquist plot for L7 electrode (inset- equivalent circuit)

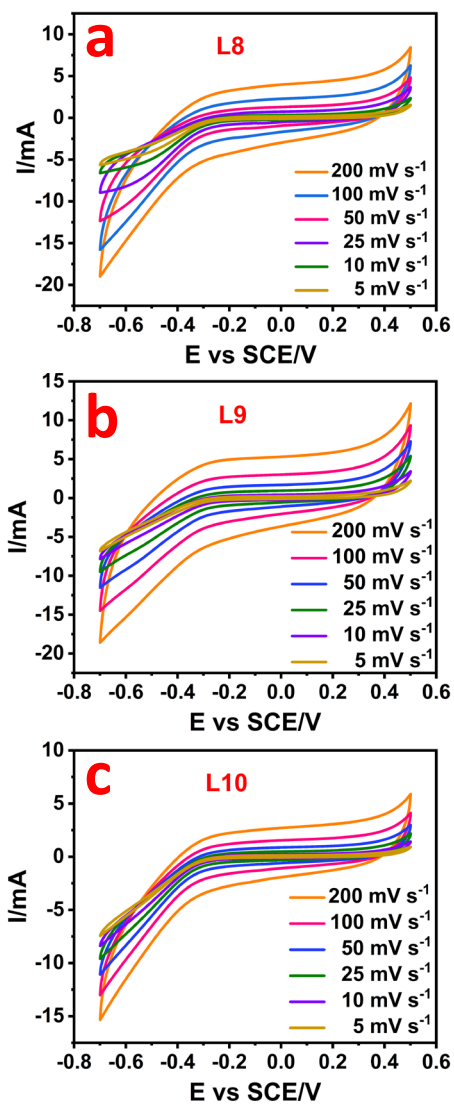


Figure S5. Cyclic Voltammetry curves of LaMnO₃ samples (a) L8, (b) L9 and (c) L10.

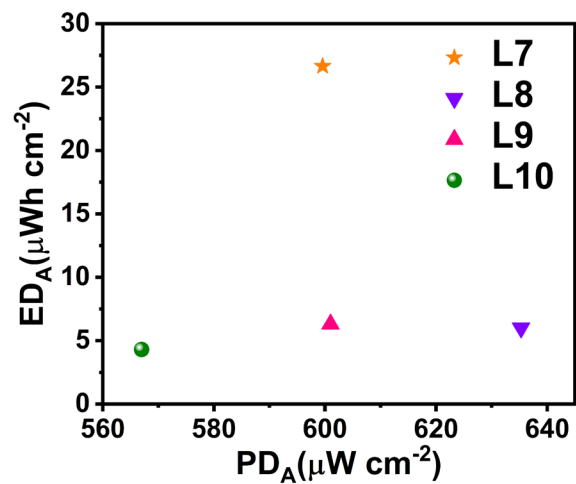


Figure S6. Ragone plot of different LaMnO₃ samples.

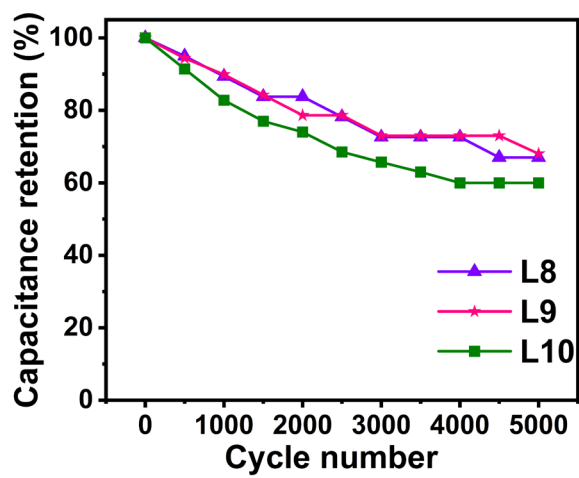


Figure S7. Cycling stability of L8, L9 and L10 samples.