Supporting Information

Analog memristive characteristics of square shaped lanthanum oxide nanoplates layered device

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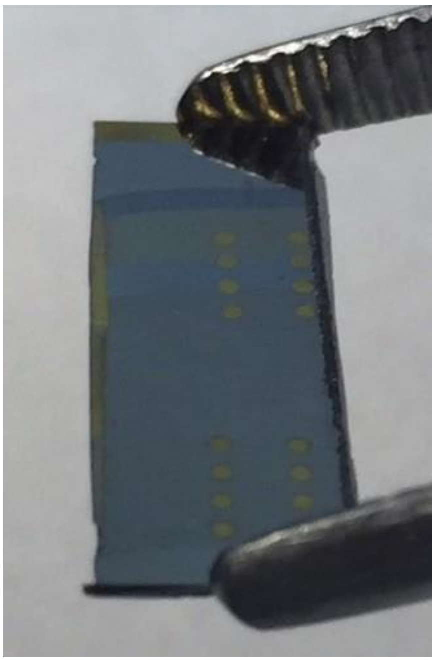
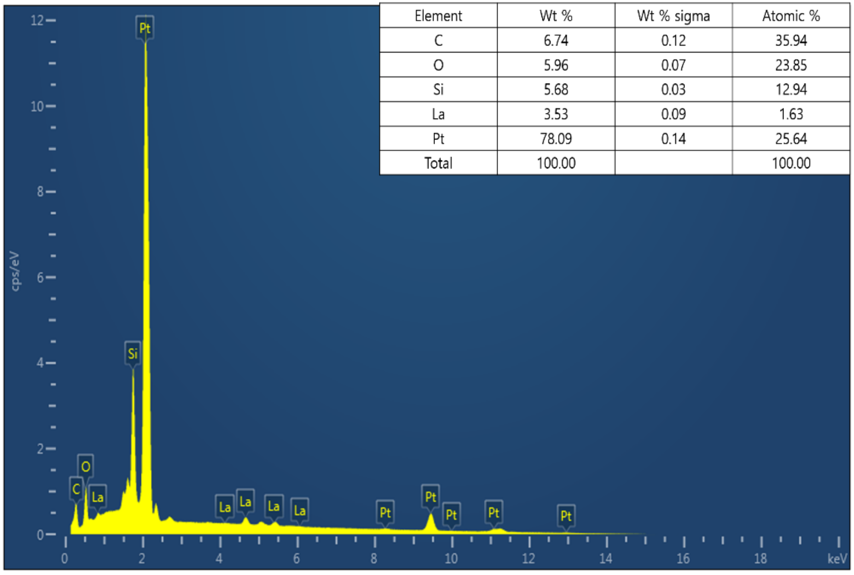


(a)



Element	Wt %	Wt % sigma	Atomic %
C	6.74	0.12	35.94
O	5.96	0.07	23.85
Si	5.68	0.03	12.94
La	3.53	0.09	1.63
Pt	78.09	0.14	25.64
Total	100.00		100.00

(b)

Figure S1. (**a**) Photo image of a complete LaO_x NPs layered device having Au top electrode, and (**b**) EDS analysis of atomic ratio on surface of LaO_x NPs layer.

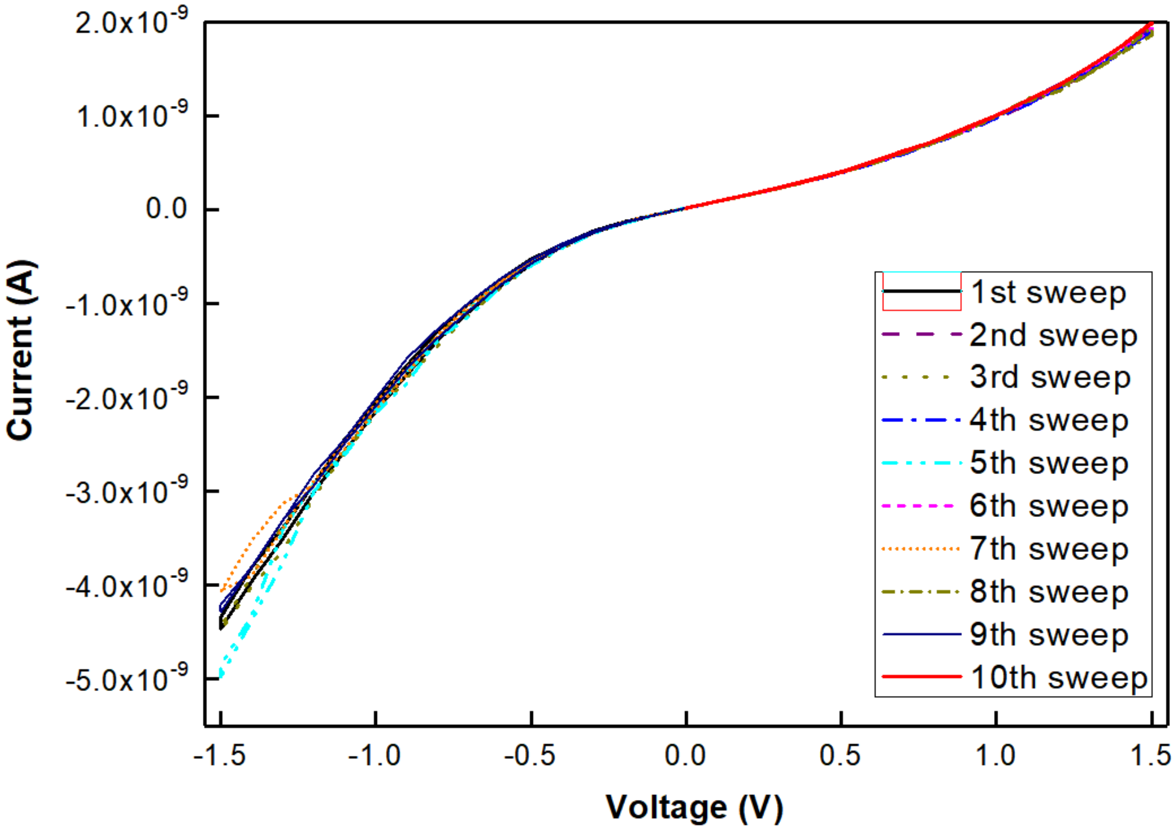


Figure S2. I-V characteristics of ten consecutive sweep of Al/ LaO_x NPs/Pt device

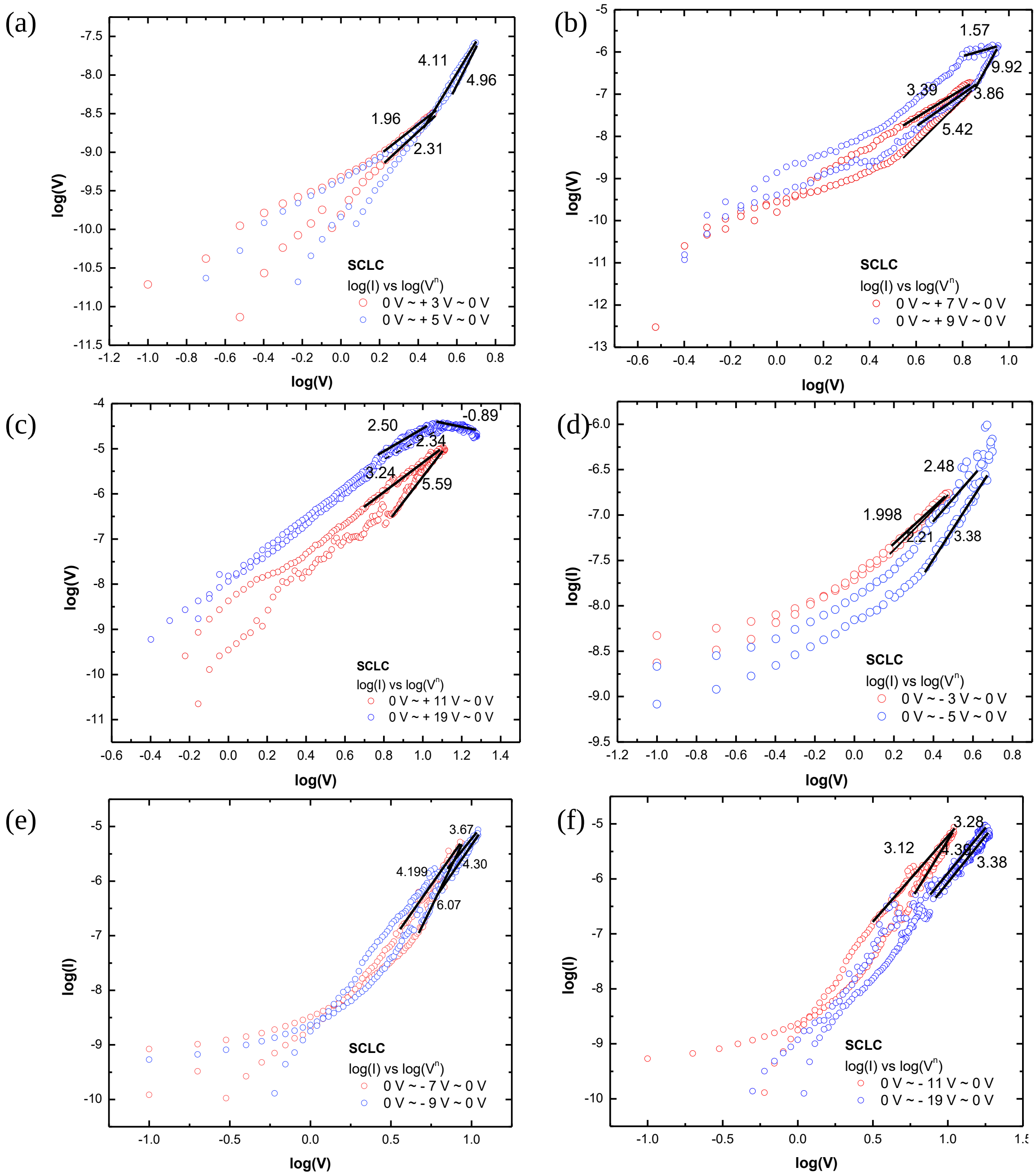


Figure S3. Replot of I - V in Figure 3c with the form of SCLC at (**a**) + 3 V, + 5 sweep, (**b**) –3 V sweep, -5 V sweep, (**c**) + 7, + 9 V sweep, (**d**) – 7 V, - 9 V sweep, (**e**) + 11 V sweep, +19 V sweep and (**f**) -11 V sweep, -19 V sweep.