

Fatal contradiction of "lon migration" concept as an origin of hysteresis

(3) Suppose if all I act as an electron carrier, the current will be?

```
I[A] = q[C]/t[s] *a = 6.391 [Å], V = 2.61e<sup>-22</sup> [cm<sup>3</sup>] (for cubic)

= N<sub>e(from I-)</sub> × 1.602<sup>-19</sup> [C]/t<sub>(I-V scan)</sub> [s]

= (3 (atom)/2.61e<sup>-22</sup> [cm<sup>3</sup>] × 9.82e<sup>-6</sup> [cm<sup>3</sup>]) × 1.602<sup>-19</sup> [C]/5 [s]

= 0.00362 [A]

\rightarrow J = 0.0461 [mA/cm<sup>2</sup>]

Too small

5mm\nearrow

\downarrow

500nm
```