

Surface Origin of High Conductivities in Undoped In_2O_3 Thin Films

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$$\mu = -3.2 \text{ eV} \quad (1)$$

$$T = 2 \text{ K}$$

$$E_F = 1 \text{ eV}$$

$$H[V]$$

$$B \text{ lk I}_2 \text{ I}_3 = 1 \text{ V}$$

$$I_2 \text{ I}_3 = 3.1$$

$$(E_g = 3.1 \text{ eV})$$

I i ic face d . ϵ
 ((111)),

I_{23}
 $7.0 \ 7.6 \ 0$
 $(L \ P \ 6.8 \ 0,$
 $50 /A^2 \cdot \Gamma$
 $-46 \cdot \Gamma$
 $-47,$
 $.A$
 $2.3 \ 0,$
 $0.2 \ 0$
 $0.6 \ 0$
 $3.1 \ 0$
 $\epsilon \ .3,$

$2 \ B$
 $\epsilon \ 3$
 $\epsilon \ .4,$
 I_i
 $V^{(111)},$
 $.A$
 $I \ I^{(111)}$

$V^{(111)}$
 S
 $(\epsilon \ .3),$
 $($
 $,$

$\epsilon \ 4$
 $I^{(111)}$
 V
 $)$

-19,

-10.

I ,

I 2 3

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Method .

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-1/6

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(1) (2),

C cl i .

(-1,12 .) -1,6,8 10 , -1 5 ,

10²⁰ -1
I 2 3
-fi .

