

# Surface Origin of High Conductivities in Undoped $\text{In}_2\text{S}_3$ Thin Films

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

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

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

$$H[V]$$

$$B \text{ lk } I_2 \text{ } 3 \text{ } 1 \quad V$$

$$I_2 \text{ } 3 \text{ } 1, \quad I_2 \text{ } 3$$

$$(E_g = 3.1 \text{ eV}) \quad -[0, 15] \text{ wh2(dect)-5f}$$

*I i ic face d* .  $\epsilon$  (111),

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

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

$V^{(111)}$   
 $S$   
 $(\epsilon \ .3),$   
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$\epsilon \ 4$   
 $I^{(111)} \ V$   
 $)$

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10<sup>20</sup> -1  
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