

Origins of the *p*-type nature and cation deficiency in Cu₂O and related materials

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I. INTRODUCTION

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II. METHODS

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$$\begin{aligned}
 \Delta H_{D, (E_F, \mu)} &= (E_{D,} E_H) + \sum_{\alpha} \alpha (\mu_{\alpha} + \Delta \mu_{\alpha}) \\
 &+ (E_v + \Delta E_F), \quad (1)
 \end{aligned}$$

ACKNOWLEDGMENT

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