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符號說明

A: 1.54×10^{-10} ($A\ V^{-2}\ eV$)
B: 6.83×10^{9} ($V\ eV^{-3/2}\ m^{-1}$)
d: distance between cathode and anode
d_1: the distance of emitters
e: electron charge
E: applied electric field
E_{to}: turn-on electric field
E_f: Fermi-level
E_{Fo}: Fermi-level at 0K
E_{vac}: energy level in the vacuum
h: effective barrier height
h_1: the height of emitters
I: field emission current
J: field-emission current density
L: length
q: electron charge
r: root diameter
S: slope of the F-N plot
S_F: field-screening factor
t: time
T: temperature
V: applied voltage
W_a: surface potential barrier
y: $3.7947\times10^{-4}E^{1/2}/\varphi$
α: emitting area
β: local field enhancement factor at the emitting surface
ε_0: permittivity of free space
φ: work function
Δφ: decrease in barrier height
ρ: density

表目錄

圖目錄