## **Accepted Manuscript**

Quantum Tunneling through Aromatic Molecular Junctions for Molecular Devices: A Review

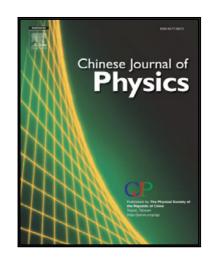
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#### ACCEPTED MANUSCRIPT

### **Highlights**

- Conjugation is directly proportional to conductance of aromatic MJs.
- Doping of aromatic MJs introduce rectification and NDR effect.
- The geometric parameters of bond length, bond angle and rotation angle are optimized.
- Copper, gold and silver as the ideal choices of electrode materials for MJs.
- Highest conductance of <1,1,0> orientation followed by <1,0,1> and least by <1,1,1>.



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