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## Fabrication of a graphene edge based field emitter and its electron emission properties

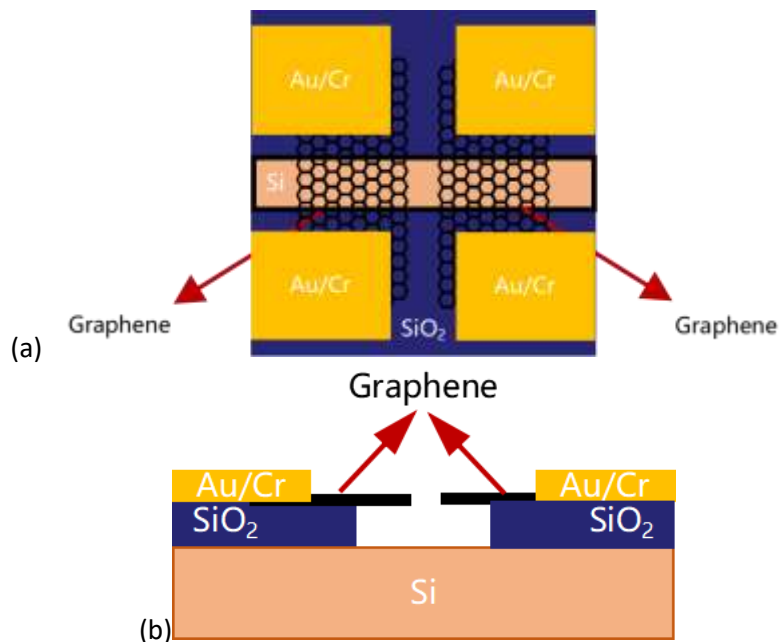
### Abstract

Graphene edges based field emitters were designed in this paper, which could be fabricated by using a scalable process. Advantages of the vacuum tube and transistor could be combined. The nanoscale vacuum tubes can provide high frequency/power output while satisfying the metrics of lightness, cost, lifetime, and stability at harsh conditions, and the operation voltage can be decreased comparable to the modern semiconductor devices. TWO pages abstract format: including figures and references.

### References

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### Figures



**Figure 1:** (a)Top and (b) lateral view of the graphene based field emitters