

Graphene nanoribbons with electrodes attached at their corners

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Abstract Graphene nanoribbons with the electrodes attached at their corners are studied computationally with the focus on transport through zig-zag edges. The energy-dependent transmission coefficients are computed. The results show how the two currents flowing through the zig-zag edges influence each other. For the special case of the linear regime analytical formulas are derived. For higher bias voltages numerical results are obtained. The study extends recent work [1] and has been particularly motivated by experimental study [2].

References

- [1] M. Konôpka, J. Phys.: Condens. Matter, **27** (2015) 435005.
- [2] M.T. Allen *et al.*, Nature Physics, **12** (2016) 128.