Applications of 2D Materials Beyond Graphene

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1. Introduction & Beginnings
   (a) Before graphene
      i. Fullerenes discovered in 1985 [4]

Notes from class overview

1. TMDs
2. Compare 2D materials to properties of graphene
3. Why are 2D material significant
   (a) Electronic device applications
4. Fundamental materials
5. State of the art ("cutting-edge")
6. Problems/Outlook:
   Contacts, interface, controlled doping, etc...
7. Citations: [1, 6, 2, 5, 3, 8, 7]

References

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[4] H. W. Kroto, J. R. Heath, S. C. O'Brien, R. F. Curl, and R. E. Smalley. C60: Buckminsterfullerene. *Nature*, 318:162–163, 1985.

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[7] K. S. Novoselov, D. Jiang, F. Schedin, T. J. Booth, V. V. Khotkevich, S. V. Morozov, and A. K. Geim. Two-dimensional atomic crystals. *Proceedings of the National Academy of Sciences of the United States of America*, 102(30):10451–10453, 2005.

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