

A Bibliometric Study on Twisted Graphene

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Abstract: Graphene is a flat monolayer of carbon atoms tightly packed into a two-dimensional honeycomb lattice and has completely conjugated sp^2 hybridized planar structure. Its peculiar structure makes it useful for numerous applications. Graphene sandwich and twisted graphene are the most recent and tempting forms of graphene. Twist in graphene layers can introduce several angle dependent properties. Twisting graphene layer by magic angle (1.1°) and applying electric field can convert graphene from an insulator to a conductor and then to a superconductor, which can conduct electricity flawlessly. Looking into the potential for future applications of twisted graphene a bibliometric analysis has been undertaken on this topic. Bibliometrics is the most appropriate tool to keep the track on present and past research trends. In this paper, Web of science, the most authentic data base has been utilized to analyse the research trends on twisted graphene since its discovery by Geim and coworkers. Data has been obtained from the year 2004 to 2020 and has been analysed by the VOS viewer tool. Publishing trends have been analyzed on the bases of collaborating authors, organizations, countries, citations, keywords and the leading journals publishing graphene research.

Keywords: Bibliometric analysis, graphene, twisted graphene, Web of Science, VOS viewer tool

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