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How graphene and graphene fuel cell will revolutionize aerospace industry

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Graphene (a carbon molecular monolayer) is a wonder material of great interest to materials researchers. Its molecular-layer thickness, finite fractional absorption, high melting point, and impermeability to gases coupled with the fact that doped materials, additives and multiple layers increase both fractional absorption and reflectivity indicates that it may be a superior material for application in solar-photon sailing. This paper first reviews relevant graphene physical and optical properties and then investigates the kinematics of interstellar solar sails constructed using this material. Two sail configurations are considered: thin-film probes and hollow-bodies sails. It is shown that graphene sail performance may be superior to

that of beryllium sails, electrodynamic tether, and ion beathing engine. How graphene porous nature and its absorption and reflection will help in sailing spacecraft and what will be its effect on adding it to various aerospace materials like Aluminum 6061, 7075, titanium. How graphene fuel cell will allow our UAV'S to run for more than a 48 hours to a week.

What are the advantages and disadvantages of using graphene?

I will be discussing on what wonders that graphene can do in aerospace industry and how we produce graphene at low cost. How cheaper and secure will be space race in future.

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