

Graphene in Security and Defence Applications

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Abstract

Graphene has emerged as an extraordinary nanomaterial for many potential applications in very different industries such as semiconductor, biotechnology, energy, transport, aerospace, security and defence. As a result of its high electrical and thermal conductivity, transparency and flexibility, graphene is quite a unique material that should impact many industries. However, at present most of these developments are at a research stage due to the many challenges that have to be overcome in order for graphene to become a success in the market place.^{1,2}

I would like to show the potential that graphene could have in the security and defence industry in imparting electrical, mechanical and tribological properties to materials,^{3,4} in obtaining high sensitivity sensors,⁵ in water purification⁶ and in thermal management.⁷

References

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Figures