

Abstract Submitted
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Design of Graphene Oxide UV-cut filter with visible spectrum transmittance optimized via thin-film interference JEREMY LOW, Univ of NC - Chapel Hill — The geometry dependence of transmittance spectra in Graphene Oxide films is shown by thin-film interference in the UV-Vis spectrum. This effect has been shown to increase transmittance of a desired wavelength in the visible spectrum while decreasing transmittance in the UV-Vis spectrum at one-half the original wavelength. This effect can be controlled across the UV-Vis spectrum by modifying the mean thickness across the GO film. Furthermore it is shown that this can be utilized to design Graphene Oxide films that have high transmittance in the visible spectrum while blocking nearly 100% of UV radiation.

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