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Type: **Poster Presentation**

## Effects of irradiation energy and fluence on the optical absorbance of silver implanted amorphous carbon thin films

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An initial investigation of the optical properties of silver doped amorphous carbon films is presented in this study. The effects of alternate variations of irradiation energies and fluences in relation to the surface plasmon resonance (SPR) were studied. The study exhibits that the shifts in energy and fluences suggested a change in the overall optical absorbance and consequently on the plasmonic properties of the thin films.

### Summary

The study describes how the working conditions in an ion implantation procedure influence the optical absorbance of carbon thin films.

**Apply to be considered for a student &nbsp; award (Yes / No)?**

Yes

**Level for award (Hons, MSc,   PhD, N/A)?**

PhD

**Main supervisor (name and email) and his / her institution**

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**Would you like to submit a short paper for the Conference Proceedings (Yes / No)?**

Yes

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