

Engineering the optical properties of diamond using laser processing

The controlled generation of vacancies and vacancy-related colour centres in single crystal diamond using femtosecond pulsed lasers opens a wealth of opportunities for both engineering the material and studying its properties. The main aim of this project will be to explore the creation of a variety of colour centres in synthetic diamond as a means to engineer its optical properties for technological purposes. The project will be sponsored by De Beers Technologies who are also interested in developing understanding of the potential impact of laser writing on methods for identification of synthetic diamond and heat treated natural diamond.

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