

RECENT DEVELOPMENTS IN STUDIES ON DIAMOND FILMS BY PLASMA CVD FOR FUTURE ELECTRONIC DEVICES

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With brief introduction of fabrication methods of diamond films by plasma CVD, recent progress in diamond research mainly done in the author's laboratory at Osaka University is reviewed, especially on the following topics: "low temperature diamond fabrication", "ion implantation", "hydrogen plasma treatment of ion-implanted diamond to remove ion-induced damage", "Oxygen diffusion into the bulk assisted by the hydrogen treatment", and "hole-burning effect".