Deposition of Functional Carbon Compound Thin Films
Using Synchrotron Radiation Ablation

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Abstract
Various functional carbon compound thin films such as diamond, fullerene, polyparaffynylene and hydrocarbon were prepared by the synchrotron radiation ablation method. Carbon compounds have become one of the most interesting materials for advanced functional devices. All carbon compounds except for graphite were ablated by SR irradiation. Only graphite could not be ablated. The mechanism involved in the carbonization was clarified.