Annealing Effect on the Crystal Structure of TiO₂ Thin Film
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Abstract: Titanium dioxide (TiO₂) thin films were prepared on glass substrates by ion-assisted electron-beam evaporation with 200nm thickness and subsequently crystallized by rapid thermal annealing at the rage of 200~700℃ in flowing N₂ gas. The crystal structure of the films were examined by X-ray diffractometer. As-deposited TiO₂ films were amorphous. After annealing, anatase and rutile phase of TiO₂ films were observed together.

Key Words: TiO₂, IAD, Crystal structure, RTA