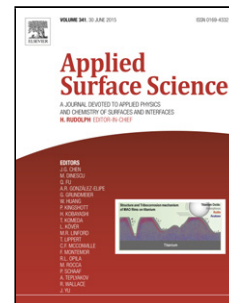


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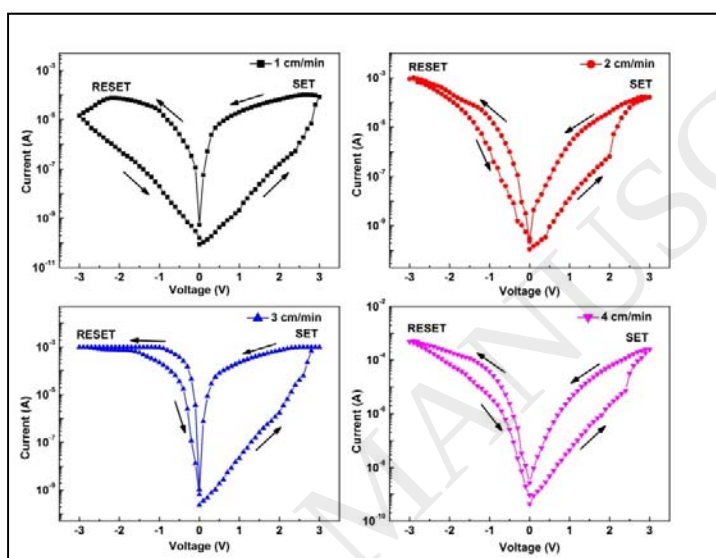
Electrical characteristics of dip coated TiO₂ thin films with various withdrawal speeds for resistive switching applications

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Graphical abstract



Resistive switching behavior of dip coated TiO₂ films.

Highlights

- * TiO₂ thin films were dip-coated on silicon substrate by varying the withdrawal speed from 1 cm/min to 4 cm/min.
- * The thickness and crystallinity of the films is found to be increased with the withdrawal speed.
- * The films deposited at lower withdrawal speed have possessed high oxide and interface charge density of $2.5 \times 10^{12} \text{ cm}^{-2}$ and $2.1 \times 10^{12} \text{ eV}^{-1} \text{ cm}^{-2}$, respectively.
- * The films coated with a withdrawal speed of 1 cm/min have shown better resistive switching behavior with an enhanced memory window in both the polarities.

Abstract

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