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Physicochemical model for reactive sputtering of hot target

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Highlights

- When model is applied for a cold target, hysteresis width is proportional to the ion current density.
- Two types of processes of hot target sputtering are possible, depending on the current density: with and without the hysteresis.
- Sputtering process is dominant at current densities less than 50 A/m^2 and evaporation can be neglected.
- For current densities over 50 A/m^2 the hysteresis width reaches its maximum and the role of evaporation increases.

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