

Summary

- An experiment has been carried out to study the particle growth in a DC glow discharge argon plasma with two parallel graphite electrodes
- The experimental results showed that the more carbon particle erode if the experiments have performed for longer time and higher discharge voltage and background pressure.
- The particles growth initially increases with time and then saturates in a span of discharge parameters.
- The sputtering process becomes more efficient when the cathode is biased with negative voltage.
- We believe, our experimental results will be helpful to fusion community to understand the sputtering from carbon walls of different tokamaks.