

METHOD TO OBTAIN SIC CLASS OF FILMS OF DESIRED COMPOSITION AND FILM PROPERTIES

ABSTRACT

Provided are methods and systems for providing silicon carbide class of films. The composition of the silicon carbide film can be controlled by the choice of the combination of precursors and the ratio of flow rates between the precursors. The silicon carbide films can be deposited on a substrate by flowing two different organo-silicon precursors to mix together in a reaction chamber. The organo-silicon precursors react with one or more radicals in a substantially low energy state to form the silicon carbide film. The one or more radicals can be formed in a remote plasma source.

FIG. 4