

Title (en)
USE OF A CVD REACTOR FOR DEPOSITING TWO-DIMENSIONAL LAYERS

Title (de)
VERWENDUNG EINES CVD-REAKTORS ZUM ABSCHIEDEN ZWEIDIMENSIONALER SCHICHTEN

Title (fr)
UTILISATION D'UN RÉACTEUR DE DÉPÔT CHIMIQUE EN PHASE VAPEUR POUR LE DÉPÔT DE COUCHES BIDIMENSIONNELLES

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Abstract (en)
[origin: WO2021089424A1] The invention relates a method for depositing a two-dimensional layer onto a substrate in a CVD reactor (1), in which a process gas is fed by means of a feed line (10) into a gas-inlet member (2), which has gas-outlet openings (14, 24) which open out into a process chamber (3), in which the process gas in the process chamber (3) or the decomposition products thereof are brought to a surface of the substrate (4), and in which the substrate (4) is brought to a process temperature (TP) by means of a heating device (6) such that, after a chemical reaction of the process gas, the two-dimensional layer forms on the surface. According to the invention, during the heating up or after the heating up of the substrate (4) to the process temperature (TP), initially a first gas flow (Q1) of the process gas, with which there is no layer growth on the surface of the substrate (4), is fed into the process chamber (3) and then, while the substrate surface is being observed, the gas flow of the process gas is increased for as long as it takes to obtain a second gas flow (Q2), with which the layer growth begins, and subsequently the gas flow of the process gas is increased by a predetermined value to a third gas flow (Q3), with which the layer is deposited. The beginning of the layer growth is identified by observing the progression over time of a measurement curve (26) of a pyrometer.

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