gas-phase-grown carbon fibres

Carbon fibres grown in an atmosphere of hydrocarbons with the aid of fine particulate solid catalysts such as iron or other transition metals and consisting of graphitizable carbon.

Note:

Gas-phase-grown carbon fibres transform during graphitization heat treatment into graphite fibres. These show a very high degree of preferred orientation and are particularly suitable for intercalation treatments. The term 'vapour-grown carbon fibres' alternatively used in the literature is acceptable. The use of the term 'CVD fibres' is not recommended as an alternative for gas-phase-grown carbon fibres since the term 'CVD fibres' also describes fibres grown by a chemical vapour deposition (CVD) process on substrate fibres.

Source:

PAC, 1995, 67, 473 (Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)) on page 490