

stress graphitization

The solid-state transformation of non-graphitic carbon into graphite by heat treatment combined with application of mechanical stress, resulting in a defined degree of graphitization being obtained at a lower temperature and/or after a shorter time of heat treatment than in the absence of applied stress.

Note:

Stress graphitization may also occur in volume elements of a carbon body in the process of heat treatment as a result of the action of internal residual or thermal stresses.

Source:

PAC, 1995, 67, 473 (*Recommended terminology for the description of carbon as a solid (IUPAC Recommendations 1995)*) on page 505