Linear thermal expansion coefficient of graphite MPG-7 in the temperature range of 1600–2600 K

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Results of the experimental investigation of the average linear thermal expansion coefficient of graphite mode MPG-7 in the 1600–2600 K range are presented. The samples under study were cut from one blank perpendicular and parallel to the pressing direction. The relative elongation was measured by means of markers in the shape of cylindrical apertures. The distance between the marks was determined in pixels in the photography processed in the COM-PASS 3D environment. The true temperature was measured by the blackbody models established outside the section where the relative elongation was measured. The dependences of the average linear thermal expansion coefficient of MPG-7 turn out to be an increasing function of temperature thus correlating with the published data available for graphite mode MPG-6.

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