SYNTHESIS OF HIGH QUALITY SUPERFINE STRUCTURAL POWDERS OF SILICIUM CARBIDE

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We have synthesized and studied the experimental samples of silicium carbide, which were produced of mechanically activized elemental fine-disperse silicium and pyrolitical soot according to the technology developed by the authors. We have shown that, as a result of synthesis, it is possible to produce the powder of silicium carbide (α- and β-phases) with high purity, nanodimensional fractional composition, and silicium dioxide content not more then 1 - 2 mass %.