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**Self-propagating High-temperature Synthesis of Porous Materials
Based on the Ti-Si-Al-C System**

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ABSTRACT

The process of pore formation and product phase compositions have been studied in the course of self-propagating high-temperature synthesis in the Ti-Si-Al-C system. The structure of the $\text{Ti}_5(\text{Si,Al})_3\text{C}_{0.6}$ single crystals formed in minor amounts has been determined. The dependences of the combustion velocity and the sample elongation on the sample density and the gaseous medium pressure have been plotted.