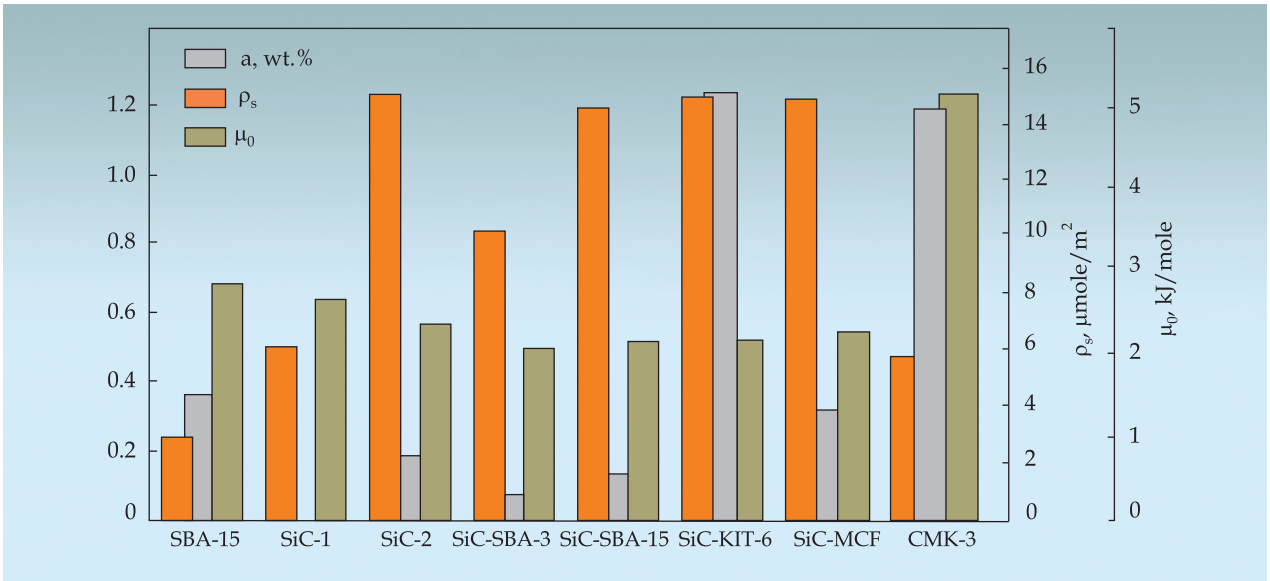
DISPERSE AND POROUS SILICON CARBIDE BASED MATERIALS FOR VARIOUS FUNCTIONAL PURPOSES



Phisical snd chemical properties of developed materials

Areas of Application

The materials are to be used for creating sorbents and catalysts for high-temperature and high-exothermic reactions, hydrogen adsorbents, materials for defense industry and electronics

Specification

Crystallite size, nm	~13—70
S_{BET}, m^2/g	<410
V_{pore}, cm^3/gr	<1.0
Hydrogen adsorption at 77 K and 1 atm, wt.%	<1.24

Advantages

As compared with analogs, the offering has higher structural and sorption characteristics, possesses a higher adsorption capacity towards hydrogen and the highest specific adsorption of H_2 (ρ up to 15 μmole/m^2) among the studied porous materials based on silica and carbon

Stage of Development. Suggestions for Commercialization

IRL3, TRL3
Batch manufacture, upon request

IPR Protection

IPR3

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