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Effect of temperature on the hydrothermal treatment textural characteristics of mesoporous silica

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Abstract

Mesoporous silica has been produced by liquid crystal templating method. Ionic surfactant cetyltrimethylammonium bromide was used as the template. The influence of synthesis conditions on textural properties of mesoporous silica have been investigated by method of low-temperature nitrogen adsorption. It has been ascertained that textural properties such as specific surface area, volume and size of mesopores, pore size distribution are significantly determined by synthesis conditions.