

DISSIPATIVE PROCESSES IN ZEOLITES

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S u m m a r y

For the first time, the temperature-frequency dependences of internal friction and the shear modulus of zeolite on a basis of clinoptilolite are studied. It is shown that the dissipative process in the range (170 ÷ 270) K is a relaxation process with an activation energy of 42 kJ/mole and can be related to defreezing the local mobility of the bridging ions of oxygen. As a result of irradiation of zeolite, we have discovered a redistribution of the intensity in the fine structure of a nonrelaxation maximum of internal friction in the range 300 ~ 370 K and an increase in the shear modulus in the whole temperature range. The indicated phenomenon is related to dehydration of zeolite.