

DIELECTRIC PROPERTIES OF $\text{Bi}_{12}\text{SiO}_{20}:\text{Mn}$ CRYSTALS

T. V. Panchenko, L. M. Karpova, V. M. Duda

Dnipropetrovsk National University, Faculty of Physics
(13, Naukova Str., Dnipropetrovsk 49050, Ukraine;
e-mail: pancht@mail.ru)

S u m m a r y

Temperature and frequency dependences of the real and imaginary parts of the complex dielectric permittivity $\varepsilon^*(\omega)$ of Mn-doped $\text{Bi}_{12}\text{SiO}_{20}$ crystals in the thermoelectret state have been studied in the audio-frequency range and the temperature interval $300 \div 800$ K. Dielectric anomalies of the quasi-resonance type were observed. The corresponding Cole-Cole diagram demonstrates a section, which is close to linear.