PIEZO-OPTICAL SURFACES

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S u m m a r y

We present a method of construction of piezo-optical surfaces (POS) which consists in the finding of the difference of position vectors of the optical indicatrix perturbed by a mechanical stress and a nonperturbed one. It is proved that the method of construction of the indicative surfaces (IS) of the longitudinal and transversal piezo-optical effects (POE) is a partial case of the offered method. The examples of POS are adduced for cubic crystals BaF_2 and KBr which concern to the symmetry class m3m. It is shown that the transformation law of components of the tensor of piezo-optical coefficients (POC) upon a rotation of the coordinate system is identical to the difference of position vectors of the optical indicatrix perturbed by the tensor of POCs and those of a nonperturbed one. This statement is spread on other physical effects induced in crystals by external fields.