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The invention relates to thermoelectric devices for conversion of thermal energy into electrical potential by using the temperature difference or thermal flow, particularly to single-crystal anisotropic thermocouples.

The cross-type single-crystal anisotropic thermocouple is made of a single-crystal cylindrical microwire, with the anisotropy of the thermoelectromotive force, in dielectric insulation, twisted in the shape of a spiral compactly assembled in a plane, wherein the crystallographic axes x_1 and x_2 in the cross-section of the microwire are at an angle greater than 0° and smaller than 90° with respect to the plane of the spiral, and with a temperature gradient perpendicular to the plane of the spiral.

Claims: 2

Fig.: 3