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ANALYSIS OF FIBER-OPTIC SENSORS FOR DIAGNOSTICS AND MONITORING OF ELECTRICAL EQUIPMENT

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ABSTRACT

The article describes the basic principles to date; one of the applications of fiber-optic technologies for measuring purposes is fiber-optic multi-sensor systems. Fiber-optic multi-sensor systems include quasi-distributed sensor networks built on the basis of fiber-optic sensors, usually based on fiber Bragg gratings. One of the main advantages of fiber Bragg gratings is the unique way of converting the measured value into a change in the wavelength of radiation passing through and/or reflected from the grating, as well as the ease of manufacturing. fiber Bragg gratings have proven themselves well and are widely used in construction, oil production, energy, aerospace engineering, etc.

KEYWORDS: *Fiber-optic sensors, point-to-point sensors, phase-shift sensors, temperature sensors.*

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