ACADEMICIA: An International Multidisciplinary Research Journal

ISSN: 2249-7137 Vol. 12, Issue 03, March 2022 SJIF 2022 = 8.252

A peer reviewed journal

DEVELOPMENT OF FILM STRAIN CONVERTERS BASED ON BISMUTH-**ANTIMONY TELLURIDES**

Yusupova Dilfuza Aminovna*; Umarova Maftuna**

*Associate Professor. Candidate of Physical and Mathematical Sciences, Department of Physics, FerSU, Fergana, UZBEKISTAN Email id: dilfuza.physic@mail.ru

**Associate Professor, Candidate of Physical and Mathematical Sciences, Department of Physics, FerSU, Fergana, UZBEKISTAN

DOI: 10.5958/2249-7137.2022.00203.8

ABSTRACT

The article discusses the mechanism of fatigue failure of a material and a method for determining the process of material fatigue by developing semiconductor polycrystalline converters based on bismuth-antimony tellurides. The technological process of obtaining semiconductor film sensors by the method of thermal vacuum evaporation of a mixture of granular materials is described.

KEYWORDS: Strain Gauge, Sensing Element, Polycrystalline Films, Semiconductor Film Converter, Accumulated Fatigue Damage Sensor

REFERENCES

- 1. Yusupova DA. Research on the physical principles of strain gauge transducers based on bismuth-antimony tellurides. EPRA International Journal of Multidisciplinary Research (IJMR) 2021;7(4):144-147.
- 2. Yusupova Da. Use of Automation of The Technological Process For Manufacturing Strength Sensitive Films Based on A Semiconductor Joint (Bisb) 2-Xte3-X. Epra International Journal of Research & Development 2021;6(4):46-49
- 3. Yusupova DA. Study of the electrical properties of multi-component condensed compounds based on bismuth and antimony tellurides. Internauka: electron. Scientific magazine. 2021; 47(223_2). URL: https://internauka.org/journal/sci
- 4. Yusupova Da, Fozilova Mdk. Main Characteristics And Features of Semiconductor Film Strain Transducers. Scientific progress, 2021;2(1):441-447.
- 5. Yusupova DA. A method for automating the technological process of obtaining strainsensitive films of bismuth-antimony tellurides. Scientific journal "Universum: technical sciences" 2021;12(93):23-26.
- 6. Yusupova DA. Automation of the process of obtaining strain-sensitive films of bismuthantimony tellurides containing nanogranules with reproducible. Actual scientific research in the modern world, Collection of scientific papers. Pereyaslav-Khmelnitsky 2017;4(24):128-133.