PROCEEDINGS OF SPIE

[SPIDigitalLibrary.org/conference-proceedings-of-spie](https://spiedigitallibrary.org/conference-proceedings-of-spie)

Flexible organic temperature sensors

Daniela Topasna

Daniela Topasna, "Flexible organic temperature sensors," Proc. SPIE 9665, Tenth International Topical Meeting on Education and Training in Optics and Photonics, 96651W (3 June 2007); doi: 10.1117/12.2207806

SPIE.

Event: Tenth International Topical Meeting on Education and Training in Optics and Photonics, 2007, Ottawa, Ontario, Canada

Flexible Organic Temperature Sensors

Daniela Topasna et al

Virginia Military Institute

Lexington, VA

The design and fabrication of thin film temperature sensors for various applications is an important and well established field. In order to gain familiarity with the design and fabrication of such devices, students at the Virginia Military Institute create and test their own thin film temperature sensors using organic polymers. The sensor is created by depositing a conducting polymer onto a flexible substrate with electrical contacts deposited by thermal evaporation. The resistance of the polymer as a function of temperature establishes a relationship that is then used to determine unknown resistances.