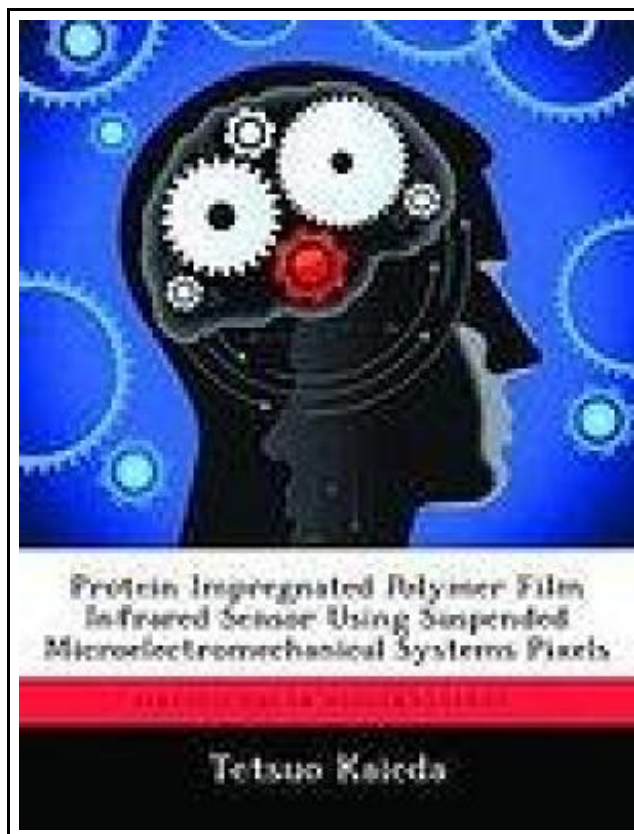


Protein Impregnated Polymer Film Infrared Sensor Using Suspended Microelectromechanical Systems Pixels



Filesize: 6.05 MB

Reviews


It is great and fantastic. I actually have read and so i am certain that i am going to going to go through once again yet again in the future. I realized this ebook from my dad and i encouraged this book to find out.


(Dr. Kayden Gerlach)

PROTEIN IMPREGNATED POLYMER FILM INFRARED SENSOR USING SUSPENDED MICROELECTROMECHANICAL SYSTEMS PIXELS



Biblioscholar Nov 2012, 2012. Taschenbuch. Book Condition: Neu. 246x189x9 mm. This item is printed on demand - Print on Demand Neeware - The Air Force Research Laboratory Materials and Manufacturing Directorate have developed a novel protein impregnated polymer (PIP) suspension that changes resistivity as a function of absorbed infrared radiation. Due to this property, the PIP is a potential material for use as an uncooled bolometer, or thermal sensor. In this research, a thermally-isolated pixel design, sensor characterization methods, and sensor fabrication and processing steps were developed. To create a microbolometer, the PIP was applied to two prototype micro-electro-mechanical systems (MEMS) surface micro-machined structures. The first is a raised cantilever pixel array that uses residual stress polysilicon and metal film arms to bend the pixels away from their substrate. The second is a suspended membrane pixel array in which the backside silicon wafer substrate is removed. The thermal sensor's figures of merit responsivity, detectivity, noise equivalent power, noise equivalent temperature difference, and thermal time constant, were modeled. An attempt was made to evaluate the performance of the fabricated microbolometer pixels by comparing measured data to model predictions. This research shows the PIP material can be used to make a practical thermal sensor. 150 pp. Englisch.

 [Read Protein Impregnated Polymer Film Infrared Sensor Using Suspended Microelectromechanical Systems Pixels Online](#)

 [Download PDF Protein Impregnated Polymer Film Infrared Sensor Using Suspended Microelectromechanical Systems Pixels](#)

Relevant Kindle Books



Psychologisches Testverfahren

Reference Series Books LLC Nov 2011, 2011. Taschenbuch. Book Condition: Neu. 249x191x7 mm. This item is printed on demand - Print on Demand Neuware - Quelle: Wikipedia. Seiten: 100. Kapitel: Myers-Briggs-Typindikator, Keirsey Temperament Sorter, DISG,...

[Download ePub »](#)



Programming in D

Ali Cehreliz 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Download ePub »](#)



No Friends?: How to Make Friends Fast and Keep Them

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Do You Have NO Friends? Are you tired of not having any...

[Download ePub »](#)



Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success

Brookes Publishing Co. Paperback. Book Condition: new. BRAND NEW, Six Steps to Inclusive Preschool Curriculum: A UDL-Based Framework for Children's School Success, Eva M. Horn, Susan B. Palmer, Gretchen D. Butera, Joan A. Lieber, How...

[Download ePub »](#)



How to Make a Free Website for Kids

Createspace, United States, 2015. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Table of Contents Preface Chapter # 1: Benefits of Having a Website Chapter...

[Download ePub »](#)