

# Tigran Arsen Abrahamyan

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Ֆիզիկատեխնիկական հետազոտությունների կենտրոն

Head of laboratory

## 🌐 Language skills

Русский English

## 📖 Publications

Article

### **Dielectric coated conductive rod resonantly coupled with a cut transmission line as a tunable microwave bandstop filter and sensor**

David Hambaryan, Tigran Abrahamyan, Henrik Parsamyan, Artyom Movsisyan, Bill Minasyan,

Hovhannes Haroyan, Arsen Babajanyan, Kiejin Lee, Barry Friedman, Khachatur Nerkararyan

Heliyon 2024 e24477

Manual

### **Գիտափորձի ավտոմատացում LabVIEW միջավայրում**

Տիգրան Աբրահամյան, Հենրիկ Պարսամյան

2023 93

Article

### **Resonant Interaction Between Microwaves and Thin Conducting Microstructure with Finite Length**

T. Abrahamyan, H. Haroyan, D. Hambaryan, H. Parsamyan, K. Lee, A. Babajanyan, Kh. Nerkararyan

NanoWorld Journal 2022 S5

Article

### **Surface-standing-wave formation via resonance interaction of a finite-length conductive rod with microwaves**

Tigran Abrahamyan, Hovhannes Haroyan, David Hambaryan, Henrik Parsamyan, Arsen Babajanyan,

Kiejin Lee, Barry Friedman, Khachatur Nerkararyan

Journal of Physics D: Applied Physics 2022 445001

Article

### **Microwave response phase control of a graphite microstrip**

Arsen Babajanyan, Tigran Abrahamyan, Hovhannes Haroyan, Billi Minasyan, Torgom Yezekyan,

Kiejin Lee, Barry Friedman, Khachatur Nerkararyan

Carbon 2022 151-156

Article

### **Detection of Iron Nanoparticles in Aqueous Solutions by Microwave Sensor**

L. Odabashyan, N. Margaryan, G. Ohanyan, M. Manvelyan, D. Hambaryan, T. Abrahamyan,

R. Khachatryan, A. Babajanyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 171-175

Article

**ОБНАРУЖЕНИЕ НАНОЧАСТИЦ ЖЕЛЕЗА В ВОДНЫХ РАСТВОРАХ С ПОМОЩЬЮ МИКРОВОЛНОВОГО СЕНСОРА**

Л. ОДАБАШЬЯН, Н. МАРГАРЯН, Г. ОГАНЯН, М. МАНВЕЛЯН, Д. АМБАРЯН, Т. АБРААМЯН, Р. ХАЧАТРЯН,  
А. БАБАДЖАНЯН  
Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2020  
251-258

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Article

**Investigation of Ag Nanoparticles/Water Solutions by Microwave Stripline Sensor**

A. Babajanyan, T. Abrahamyan, R. Khachatryan, D. Hambaryan, B. Hovhannisyanyan, B. Minasyan,  
L. Odabashyan  
Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 196-202

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Article

**ИССЛЕДОВАНИЕ РАСТВОРОВ НАНОЧАСТИЦ Ag В ВОДЕ С ПОМОЩЬЮ МИКРОВОЛНОВОГО ПОЛОСКОВОГО СЕНСОРА**

А. БАБАДЖАНЯН, Т. АБРАМЯН, Р. ХАЧАТРЯН, Д. АМБАРЯН, Б. ОГАНЕСЯН, Б. МИНАСЯН,  
Л. ОДАБАШЯН  
Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2019  
263-271

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Article

**Characteristics of Light Transfer in the Connected Conical Waveguides With the Same Symmetry Axis**

Shant Arakelyan, Tigran Abrahamyan, Arsen Babajanyan, Khachatur Nerkararyan  
Applied Optics 2016 3854-3857  
<https://www.osapublishing.org/ao/home.cfm>

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Article

**Sensitive Detection of Nano-Scale Vibrations by the Metal-Coated Fiber Tip at the Liquid-Air Interface**

A. J. Babajanyan, T. A. Abrahamyan, H. A. Minasyan, Kh. V. Nerkararyan  
International Journal of Mechanical, Aerospace, Industrial and Mechatronics Engineering 2015 651-654  
<https://www.waset.org/journal/Mechanical>

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Conference

**Sensitive Detection of Nano-Scale Vibrations by the Metal-Coated Fiber Tip at the Liquid-Air Interface**

A. J. Babajanyan, T. A. Abrahamyan, H. A. Minasyan, Kh. V. Nerkararyan

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Conference

**Detection of Resonant Oscillations of the Liquid Surface by using a Tapered Fiber Opto-Mechanical Sensor**

Tigran Abrahamyan, Stella Sargsyan, Arsen Babajanyan, Khachatur Nerkararyan

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Conference

**Detection of Nanometric Vibrations by Using Opto-Mechanical Sensor**

Arsen Babajanyan, Tigran Abrahamyan, Shant Arakelyan, Khachatur Nerkararyan

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*Conference*

**Noninvasive in-vitro monitoring of D-glucose concentration by using a microwave fractal sensor**

A. Babajanyan, L. Odabashyan, Zh. Baghdasaryan, T. Abrahamyan, N. Harutyunyan, S. Kim, J. Kim, B. Friedman, K. Lee

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*Conference*

**Sensing of silver nanoparticles in aqueous solutions by using an optical fiber probe-tip**

A. Babajanyan, T. Abrahamyan, R. Khachatryan, Kh. Nerkararyan

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*Conference*

**Characterization of Ag nanoparticles concentration in aqueous solution by microwave biosensor**

Arsen Babajanyan, Zh. Baghdasaryan, T. Abrahamyan, L. Odabashyan, H. Lee, D. Kim, M. Kim, S. Kim, K. Lee

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*Conference*

**Detecting Low Dose of Glucose in the Microwave Range By Using Thermoelastic Optical Indicator Microscope**

Tigran Abrahamyan, Nelli Babajanyan, David Hambaryan, Hasmik Manukyan, Arsen Babajanyan, Kiejin Lee

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*Conference*

**Dielectric-Coated Conductive Rod Resonantly Coupled with a Cut Goubau Line as a Sensitive Microwave Sensor**

Tigran Abrahamyan, Hovhannes Haroyan, David Hambaryan, Artyom Movsisy, Henrik Parsamyan, Arsen Babajanyan, Khachatur Nerkararyan, Kiejin Lee

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