

# Tigran Arsen Abrahamyan

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Head of laboratory

## 🌐 Language skills

Русский English

## 📖 Publications

Article

### Resonant conversion of THz waves with orthogonal polarization upon transmission through a woven mesh

Tigran Abrahamyan, Henrik Parsamyan, Davit Manukyan, Khachatur Nerkararyan

Applied Optics 2025 123-128

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

Article

### Highly dispersive transmission conditions for a conductive rods-based ultrathin bilayer metastructure

Tigran Abrahamyan, Gor Ohanyan, David Hambaryan, David Kalantar, Henrik Parsamyan,

Hovhannes Haroyan, Arsen Babajanyan, Kiejin Lee, Khachatur Nerkararyan

Journal of Physics D: Applied Physics 2024 355108

Manual

### Պիտափորձի 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

*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

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*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

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*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. Hovhannisyan, 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*

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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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*Conference*

**Resonant interaction between microwaves and thin conducting microstructure with finite length**

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