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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

Resonant enhancement and confinement of microwave field in coupled conductive rod systems

Tigran Abrahamyan, Gor Ohanyan, David Hambaryan, Artyom Movsisyan, Henrik Parsamyan,

Hovhannes Haroyan, Arsen Babajanyan, Khachatur Nerkararyan

Physica Scripta 2025 025515

Article

L-cysteine polymorph coatings for THz sensing metasurfaces

M. Zhezhu, A. Vasil'ev, H. Parsamyan, T. Abrahamyan, G. Baghdasaryan, S. Gyoalyan, D. Ghazaryan,

H. Gharagulyan

Results in Physics 2025 108351

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

Article

Resonant detection of surface microwaves using dielectric-coated conductive rods coupled with a cut Goubau line

Manual

Փիտափորձի 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, Kiejun 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,

Kiejun 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. БАБАДЖАНИЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2020

251-258

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

Article

ИССЛЕДОВАНИЕ РАСТВОРОВ НАНОЧАСТИЦ Ag В ВОДЕ С ПОМОЩЬЮ МИКРОВОЛНОВОГО

ПОЛОСКОВОГО СЕНСОРА

А. БАБАДЖАНЫАН, 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

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>

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>

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

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

Conference

Detection of Nanometric Vibrations by Using Opto-Mechanical Sensor

Arsen Babajanyan, Tigran Abrahamyan, Shant Arakelyan, Khachatur Nerkararyan

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

Conference

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

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

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

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,

Kiejn Lee

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, Kiejn Lee

Conference

Resonant interaction between microwaves and thin conducting microstructure with finite length

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

Conference

Resonances Induced by Structural Asymmetry in the THz Domain and Their Applications

Sara Gyoalyan, Marina Zhezhu, Alexey Vasil'ev, Henrik Parsamyan, Tigran Abrahamyan,

Gayane Baghdasaryan, Davit A. Ghazaryan, Hermine Gharagulyan

Conference

Realizing multiple bound states in the continuum in optical and THz metasurfaces

T. Abrahamyan, H. Parsamyan, D. Hambaryan, Kh. Nerkararyan
