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Institute of Physics

Chair of Physical Process Modeling and Signal Processing

Ամբիոնի վարիչ (դոցենտ)

Language skills

Simple English Русский

Publications

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

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

Tigran Abrahamyan, Gor Ohanyan, Hovhannes Haroyan, Arsen Babajanyan, Khachatur Nerkararyan

IET Conference Proceedings 2024 11-14

Article

Tunable ultra-broadband terahertz metamaterial absorber based on vanadium dioxide strips

Lilit Gevorgyan, Hovhannes Haroyan, Henrik Parsamyan, Khachatur Nerkararyan

RSC Advances 2023 11948-11958

Article

Broadband tunable mid-infrared absorber based on conductive strip-like meta-atom elements

Henrik Parsamyan, Hovhannes Haroyan, Khachatur Nerkararyan

Article

Electrically Small Microstrip Antenna Based on Magnetodielectric Materials

Hovhannes Haroyan, Arsen Hakhoumian, Ararat Stepanyan

Journal of Telecommunications and Information Technology 2022 98-102

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

Broadband Absorption of Microwaves in Periodic Cylindrical Structures

Lilit Gevorgyan, Henrik A. Parsamyan, Hovhannes Haroyan

Springer Proceedings in Physics (Optics and Its Applications) 2022 39-46

Article

Broadband Infrared Absorption Due to Low Q-factor Dipole Modes of Cr Strips

H. A. Parsamyan, D. S. Hambaryan, H. S. Haroyan

Springer Proceedings in Physics (Optics and Its Applications) 2022 59-68

Article

GRAPHITE-INSULATOR-METAL BASED METAMATERIAL ABSORBER AT X-BAND

D. Hambaryan, L. Gevorgyan, H. Parsamyan, A. Yesayan, H. Haroyan, Kh. Nerkararyan

IEEE Xplore 2022 15-17

Article

Միկրոալիքային խոցող զենք. տեսության և կառուցվածքի որոշ հարցեր

Հ. Ս. Հարոյան, Խ. Վ. Ներկարարյան, Ա. Ա. Հախումյան, Ա. Հ. Մակարյան, Կ. Ռ. Միրզոյան

Հայկական Բանալ 2021 67-82

Article

Light control in a hemicylindrical whispering gallery microcavity-parallel plate waveguide system

Hovhannes Haroyan, Henrik Parsamayn, Khachatur Nerkararyan
Optics Communications 2020 126122(1-5)

Article

Broadband microwave absorption based on the configuration resonance of wires

Henrik Parsamyan, Hovhannes Haroyan, Khachatur Nerkararyan

Applied Physics A: Materials Science and Processing 2020 773

Article

Semicylindrical microresonator: excitation, modal structure, and Q-factor

H. HAROYAN, H. PARSAMYAN, KH. NERKARARYAN, T. YEZEKYAN

Applied Optics 2018 6309-6313

Article

Power Domain Non-orthogonal Multiple Access (PD-NOMA) Technique For 5G Networks

H. Haroyan, G. Hovsepyan, S. Sargsyan

Armenian Journal of Physics 2018 284-287

Article

Plasmonic Nanoparticles Arrangements for Biosensing

H. Haroyan, T. Yezekyan, H. Parsamyan

Armenian Journal of Physics 2018 241-245

Article

Fano Resonance in Coupled Semicylindrical Microresonators

H. Haroyan, T. Yezekyan, H. Parsamyan, A. Ninoyan

Armenian Journal of Physics 2018 252-256

Article

Waveguide resonator with high quality factor excited through the subwavelength slit

Khachik Sahakyan, Hovhannes Haroyan, Kh. Nerkararyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2017 45-52

<http://www.springer.com/physics/particle+and+nuclear+physics/journal/11958>

Article

Stopping power and the straggling parameter of a heavy charged particle moving through a homogeneous free-electron gas

H. Matevosyan, K. Sargsyan, H. Haroyan

Armenian Journal of Physics 2017 128-143

Article

Построение гибридных программных систем PIC-моделирования

Д. А. Осипян, Г. Г. Матевосян, О. С. Ароян

Reports of NAS RA 2017 154-161

Article

Широкодиапазонная диэлектрическая проницаемость столкновительной плазмы с произвольным зарядом ионов

М. Е. Вайсман, Н. Е. Андреев, Г. Г. Матевосян, О. С. Ароян

Reports of NAS RA 2017 222-233

Article

Detection of CO2 laser radiation in a ferrite

H. Haroyan, A. Makaryan, K. Movsisyan, Farokh Nazari, V. Tadevosyan, H Julfayan

Journal of Physics: Conference Series 2016 012007

<http://iopscience.iop.org/journal/1742-6596>

Article

Analytic Description of Various Ring Type Surface Plasmon Microresonators

H. Haroyan

Physical Bases of Instrumentation 2016 50-63

http://jfop.ru/archive_issues_en/

Article

High Gain Broadband Plasmonic Slot Nano-Antenna

H. S. Haroyan, V. R. Tadevosyan

International Journal of Computer, Electrical, Automation, Control and Information Engineering 2015
1070-1073

<https://www.waset.org/journal/Electrical>

Article

Cylindrical plasmonic microcavity and its excitation

Hovhannes Haroyan

Proceedings of SPIE - The International Society for Optical Engineering 2015 963015-(1-7)

<http://spie.org/publications/conference-proceedings>

Manual

«Վիճակագրական ռադիոֆիզիկա» լաբորատոր աշխատանքների ձեռնարկ

Ա. Ժ. Բաբաջանյան, Վ. Ռ. Թադևոսյան, Հ. Ս. Հարոյան, Ա. Հ. Մակարյան

2012 86

Conference

Whispering-Gallery Microresonator with a New Easy and Controllable Excitation Method

H. Parsamyan, H. Haroyan, Kh. Nerkararyan

Conference

Slot Nano-Antenna Integrated with Plasmonic Waveguide

H. Haroyan

Conference

Spectral Efficiency Improvement in Nonlinear Wireless Systems

H. Haroyan, T. Harytyunyan, S. Sargsyan, G. Harutyunyan

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

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
