

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

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

Dark-probe scanning near-field microscopy

Henrik Parsamyan, Torgom Yezekyan, Khachatur Nerkararyan, Sergey I Bozhevolnyi

New Journal of Physics 2023 103015

Article

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

Henrik Parsamyan, Hovhannes Haroyan, Khachatur Nerkararyan

Materials Today Communications 2022 103692

Article

Analysis of bistability at the coupling between waveguide and whispering gallery modes of a nonlinear hemicylinder

Henrik Parsamyan, Khachik Sahakyan, Khachatur Nerkararyan

Journal of Physics D: Applied Physics 2022 165102

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

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 գեներ. 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

Core-shell particles as efficient broadband absorbers in infrared optical range

KHACHATUR V. NERKARARYAN, ANDREY B. EVLYUKHIN, SERGEY I. BOZHEVOLNYI
Optics Express 2019 17474-17481

Article

Efficient broadband infrared absorbers based on core-shell nanostructures

Khachatur V. Nerkararyan, Sergey I. Bozhevolnyi, Henrik A. Parsamyan
Journal of the Optical Society of America B: Optical Physics 2019 2643-2649

Article

Dynamics of a quantum emitter resonantly coupled to both external field and localized surface plasmon

Khachatur V. Nerkararyan, Torgom S. Yezekyan, Sergey I. Bozhevolny
Physical Review B 2018 045401(1-6)

Article

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

H. HAROYAN, H. PARSAMYAN, KH. NERKARARYAN, T. YEZEKYAN
Applied Optics 2018 6309-6313

Article

Dynamics of a Quantum Emitter Coupled to a Metal Nanostructure in the Presence of External

Resonant Field

K.V. Nerkararyan, T.S. Yezekyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2018 332-337

*Article***Numerical Analysis of Light Non-Resonant Transmission Through a Sub- Wavelength Slit at Angular Incidence**

Kh. Sahakyan, Kh. Nerkararyan

Armenian Journal of Physics 2017 30-35

<http://ajp.asj-oa.am/>

*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***Phase-shifted response of plasmonic nanostructures: Implications to luminescence upconversion**

Khachatur V. Nerkararyan, Torgom S. Yezekyan, Sergey I. Bozhevolnyi

Journal of Luminescence 2017 595-598

<http://www.sciencedirect.com/science/journal/00222313>

*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

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*Article***Enhanced nonresonant light transmission through subwavelength slits in metal**

ANDERS PORIS, KHACHATUR V. NERKARARYAN, KHACHIK SAHAKYAN, SERGEY I. BOZHEVOLNYI

Optics Letters 2016 242-245

<https://www.osapublishing.org/ol/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

The Resonant Coupling of the Quantum Dots in the Environment of Metal Nanoparticle at Optical Frequencies

Sona Nerkararyan, Arsen Babajanyan, Khachatur Nerkararyan

Conference

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

H. Parsamyan, H. Haroyan, Kh. Nerkararyan

Conference

Detection of Nanometric Vibrations by Using Opto-Mechanical Sensor

Arsen Babajanyan, Tigran Abrahamyan, Shant Arakelyan, Khachatur Nerkararyan

Conference

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

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

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
