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Публикации

Статья
Modeling the Parameters of p-i-n Solar Cells Based on CH3NH3PbI3 Perovskite
Ferdinand Gasparyan
Indian Journal of Pure and Applied Physics 2024 51-57

Статья
Optical simulation and experimental investigation of the crystalline silicon/black silicon/perovskite tandem structures
Ferdinand Gasparyan, Gagik Ayvazyan, Vladimir Gasparian
Optical Materials 2023 113879

Статья
Optical Properties of the Crystalline Silicon-black Silicon-perovskite Tandem Solar Cells
Ferdinand Gasparyan
Advanced Materials Science and Technology 2023 0517626.(1-11)

Статья
Capacitive Immunosensors Based on Structures Electrolyte-Insulator-Semiconductor
F.V. Gasparyana, V.V. Simonyan, L.F. Gaspar
Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 257–265

Статья
ЕМКОСТНЫЕ ИММУНОСЕНСОРЫ НА ОСНОВЕ СТРУКТУР ЭЛЕКТРОЛИТ–ИЗОЛЯТОР–ПОЛУПРОВОДНИК
Ф.В. ГАСПАРЯН, В.В. СИМОНЯН, Л.Ф. ГАСПАРЯН
Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2023
354–365

Статья
Dynamics of Charged Complex Molecules in Aqueous Solution
F.V. Gasparyan, L.F. Gasparyan, V.V. Simonyan
Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 98–103

Статья
Reflection and Transmission of Radiation of the Structure Crystalline Silicon–Black

Silicon–Perovskite
F. V. Gasparyan, G. Y. Ayvazyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 160-165

Статья

Effect of thermal annealing on the structural and optical properties of black silicon
Ferdinand Gasparyan, Gagik Ayvazyan, Surik Khudaverdyan, Ashok Vaseashta

Journal of Materials Science: Materials in Electronics 2022 17001–17010

Статья

Internal Electrical Noises of BioFET Sensors Based on Various Architectures
Lusine Gasparyan, Ferdinand Gasparyan, Vahan Simonyan

Open Journal of Biophysics 2021 177-204

Образовательный Руководство

Պինդմարմնային էլեկտրոնիկա

Ֆերդինանտ Գասպարյան

2021 220

Статья

Activation–relaxation processes and related effects in quantum conductance of molecular junctions
F. Gasparyan, N. Boichuk, S. Vitusevich

Nanotechnology 2020 045001(1-7)

Статья

Noises and Signal-to-Noise Ratio of Nanosize EIS and ISFET Biosensors
Lusine Gasparyan, Ilya Mazo, Vahan Simonyan, Ferdinand Gasparyan

Open Journal of Biophysics 2020 1-12

Статья

Study of Molecular Junctions Metal–DNA–Metal for the DNA Sequencing
L.F. Gasparyan, I. A. Mazo, V. V. Simonyan, F. V. Gasparyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 77-86

Статья

EIS Biosensor for Detection of Low Concentration DNA Molecules
L. F. Gasparyan, I. A. Mazo, V. V. Simonyan, F. V. Gasparyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 101-109

Статья

DNA Sequencing Modified Method through Effective Regulation of Its Translocation Speed in Aqueous Solution
Lusine Gasparyan, Ilya Mazo, Ferdinand Gasparyan, Vahan Simonyan

Open Journal of Biophysics 2020 96-112

Статья

ИССЛЕДОВАНИЕ МОЛЕКУЛЯРНЫХ ПЕРЕХОДОВ МЕТАЛЛ– ДНК–МЕТАЛЛ ДЛЯ СЕКВЕНИРОВАНИЯ ДНК
Л.Ф. ГАСПАРЯН, И.А. МАЗО, В.В. СИМОНЯН, Ф.В. ГАСПАРЯН

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

104-116

Статья

EIS БИОСЕНСОР ДЛЯ ОПРЕДЕЛЕНИЯ НИЗКОЙ КОНЦЕНТРАЦИИ МОЛЕКУЛ ДНК
Л.Ф. ГАСПАРЯН, И.А. МАЗО, В.В. СИМОНЯН, Ф.В. ГАСПАРЯН

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

136-146

Монография

Ֆիզիկայի պատմություն
Ֆերդինանտ Գասպարյան
2020 438

Статья

DNA Sequencing: Current State and Prospects of Development
F. Gasparyan, L. Gasparyan, I. Mazo, V. Simonyan

Open Journal of Biophysics 2019 169-197

Статья

ISFET Based DNA Sensor: Current-Voltage Characteristic and Sensitivity to DNA Molecules
F. Gasparyan, L. Gasparyan, I. Mazo, V. Simonyan

Open Journal of Biophysics 2019 239-253

Статья

Photoconductivity, pH Sensitivity, Noise, and Channel Length Effects in Si Nanowire FET Sensors
Ferdinand Gasparyan, Ihor Zadorozhny, Hrant Khondkaryan, Armen Arakelyan, Svetlana Vitusevich

Nanoscale Research Letters 2018 87-95

https://nanoscalereslett.springeropen.com/

Статья

Noise spectroscopy of tunable nanoconstrictions: molecule-free and molecule-modified
Ferdinand Gasparyan, Volodymyr Handziuk, Lode K J Vandamme, Maristella Coppola, Viktor Sydoruk,

Mykhailo Petrychuk, Dirk Mayer, Svetlana Vitusevich

Nanotechnology 2018 385704 (1-12)

Статья

Electrical Noises in Thin Metal Wires

F.V. Gasparyan.
Journal of Contemporary Physics (Armenian Academy of Sciences) 2018 376–383

Статья

Электрические шумы в тонких металлических проволоках

Ф. Гаспарян
Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2018

501-511

Статья

К теории переноса тока в механически управляемых обрывных переходах

Ф. Гаспарян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2017

166-176

http://www.flib.sci.am/eng/Fizika/Frame.html

Статья

Double-gated Si NW FET sensors: Low-frequency noise and photoelectric properties

F.Gasparyan

Journal of Applied Physics 2016 064902(1-8)

http://aip.scitation.org/jap/info/contact

Статья

ЭФФЕКТ СМЕЩЕНИЯ КРАЯ ПОГЛОЩЕНИЯ В КРЕМНИЕВОЙ НАНОПРОВОЛОКЕ

Ф.В. ГАСПАРЯН, А.А. АРАКЕЛЯН, Г.Д. ХОНДКАРЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2016

464-470

http://www.flib.sci.am/eng/Fizika/Frame.html

Статья

Double-gated Si NW FET sensors: Low-frequency noise and photoelectric properties

F. Gasparyan, H. Khondkaryan, A. Arakelyan, I. Zadorozhnyi, S. Pud, S. Vitusevich

Journal of Applied Physics 2016 064902-(1-9)

http://aip.scitation.org/jap/info/contact

Статья

The Effect of Shifting of the Absorption Edge in the Silicon Nanowire

F.V. Gasparyan, A.H. Arakelyan, H.D.Khondkaryan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2016 345-349

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

Статья

Quantum modulation of the channel charge and distributed capacitance of double gated nanosize FETs

F.V. Gasparyan, V.M. Aroutiounian

Advances in Nano Research 2015 49-54

http://www.techno-press.org/?journal=anr&subpage=1

Статья

Single trap in liquid gated nanowire FETs: Capture time behavior as a function of current.

F. Gasparyan

Journal of Applied Physics 2015 174506(1-5)

http://aip.scitation.org/jap/info/contact

Статья

Quantum modulation of the channel charge and distributed capacitance of double gated nanosize FETs.

18. F.V. Gasparyan

Advances in Nano Research 2015 49-54

http://www.techno-press.org/?journal=anr&subpage=1

Статья

Low-Frequency Noises in the Metal–Semiconductor Contact

F. V. Gasparyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2015 170–176

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

Статья

Низкочастотные шумы контакта металл-полупроводник

Ф.В. Гаспарян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2015

228-236

http://www.flib.sci.am/eng/Fizika/Frame.html

Статья

CHARGE CARRIER'S DISTRIBUTION IN THE INVERSION CHANNEL OF NANOSIZED FETs

F.V. GASPARYAN

Armenian Journal of Physics 2014 136-146

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

Статья

New Applications of the Noise Spectroscopy for Hydrogen Sensors
Ferdinand Gasparyan, Hrant Khondkaryan, Mikayel Aleksanyan

Journal of Modern Physics 2014 1-8

http://www.scirp.org/journal/jmp/

Статья

Single trap dynamics in electrolyte-gated Si-nanowire field effect transistors
S. Pud, F. Gasparyan, M. Petrychuk, J. Li, A. Offenhäusser, S. A. Vitusevich

Journal of Applied Physics 2014 233705-(1-11)

http://aip.scitation.org/jap/info/contact

Статья

Статистические и шумовые характеристики нанокомпозитных газовых сенсоров
Р.В. Оганесян, Г.Д. ХОНДКАРЯН, М.С. АЛЕКСАНЯН, В.М. АРАКЕЛЯН, Б.О. СЕМЕРДЖЯН,

Ф.В. ГАСПАРЯН, В.М. АРУТЮНЯН

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2014

241 - 251

Статья

Chapter 11: Noise Reduction in (Bio-) Chemical Sensors Functionalized with Carbon Nanotube Multilayers

F.V. Gasparyan

NATO Science for Peace and Security Series B: Physics and Biophysics, Advanced Sensors for Safety and Security
2013 139-150

http://www.springer.com/gp/book/9789400770027

Монография

Դիէլեկտրիկների ֆիզիկա

Ֆ. Գասպարյան

2013 217

Монография

Low-Frequency Noise Spectroscopy at Nanoscale: Carbon Nanotube Materials and Devices
Svetlana Vitusevich, Ferdinand Gasparyan

2011 40

Конференция

Ultraviolet photodetector on the base of silicon nanowires

F. Gasparyan

Конференция

UV photodetector on the base of silicon nanowire FET

Ferdinand Gasparyan

Конференция

Low-frwquency noises and SNR of double gated Si NW ISFET based biochemical sensor
F.V. Gasparyan, H.D.Khondkaryan

Конференция

Low-frequency noises of double-gated SiNW FET under irradiation
F. Gasparyan, H.Khondkaryan, A.Arakelyan

Конференция

Optical properties of double-gated silicon nanowire FETs
Hrant Khondkaryan, Armen. Arakelyan, Ferdinand Gasparyan

Конференция

BIOCHEMICAL SENSORS BASED ON SILICON NANORIBBON FETs Part 1: Samples Fabrication, CVCs, pH-sensitivity
F. Gasparyan, I.Zadorozhnyi, H.Khondkaryan, A.Arakelyan, S.Vitusevich

---

Конференция

Noise Characterization of Molecular Junctions
F. Gasparyan, V.Handziuk, M.Coppola, V.Sudoruk, D.Mayer, S.Vitusevich

---

Конференция

Biochemical Sensors Based on Silicon Nanoribbon FETs. Part 2: Low-frequency noise and size-dependent effects
F. Gasparyan, I. Zadorozhnyi, H. Khondkaryan, A. Arakelyan, S. Vitusevich

---

Конференция

Transport Regimes in Tunable Gold Nanoconstructions: Proposed Solution by Low-Frequency Noise Spectroscopy
F. Gasparyan, V. Handziuk, L. Vandamme, M. Coppola, V. Sydoruk, M. Petrichuk, D. Mayer, S. Vitusevich

---

Патент

Method of 1/f Noise Reduction And Noise Level Manipulation In Semiconductor Based Devices

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