

Artak Ara Avetisyan

Research Institute of Physics
Laboratory of Solid State Physics
Senior researcher

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Education

Institution	Yerevan State University
Faculty	Physics
Date	1997 - 2000
Degree name	PhD student

Institution	Yerevan State University
Faculty	Physics
Date	1992 - 1997
Degree name	Qualified specialist

Scientific Rank/degree

Institution	Yerevan State University
Date	2000
Degree name	Candidate
Specialty	Physico-mathematical sciences
Scientific Supervisor	Kazaryan Eduard Mushegh
Research Topic	The influence of nonparabolicity on impurity states

Language skills

Հայերեն Русский English Ελληνικά Deutsch

Work experience

Institution	Yerevan State University
Period of time	2010 till now
Rank/degree	Senior Researcher

Institution	Antwerp University
Period of time	2008 - 2010
Rank/degree	researcher

Institution Yerevan State University
Period of time 2005 - 2008
Rank/degree researcher

Institution Cyprus University
Period of time 2003 - 2005
Rank/degree researcher

Institution Yerevan State University
Period of time 2002 - 2003
Rank/degree researcher

Institution Bremen University
Period of time 2001 - 2002
Rank/degree researcher

Institution Yerevan State University
Period of time 1998 - 2001
Rank/degree researcher

Scientific interests

- Physics of condensed matter
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Participation in international conferences and seminars

15/09/2023 - laser physics
20/09/2023 IRF
Armenia

Other information

Graduated from Yerevan State University in 1997.

Publications

Article

Shallow donor states and interlevel transitions in gapped graphene bilayers

A .P. Djotyan, K. Mouloupoulos, A.A. Avetisyan

Semiconductor Science and Technology 2025 015012

Article

Coherent Control of a Shallow Impurity Quantum States in Graphene Monolayer by

Bichromatic Phase Modulated Laser Pulses: Influence of Relaxation Processes [Когерентное управление квантовыми состояниями мелкой примеси в монослое графена с помощью фазомодули]

A.A. Avetisyan, A.P. Djotyan, G.P. Djotyan, A.L.Vartanian, A.L. Asatryan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2025 42-49

Article

Comparative study on polaronic quantum confinement effects in wurtzite ZnO and GaN nanowires under external fields

Anna Asatryan, Arshak Vartanian, Serob Hayrapetyan, Tigran Ghukasyan, Artak Avetisyan, Ya-Hong Xie

Results in Physics 2025 108535

Article

Optical Transitions 1S-2P_x between Lowest States of a Shallow Impurity in Graphene Monolayer [Оптические переходы 1S-2P_x между уровнями мелкой примеси в монослойном графене]

A. P. Djotyan, A. A. Avetisyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 165-171

Article

Hydrogen-Like Impurity States in Doped Bilayer Graphene: Results for Different Trial Functions [Водородоподобные примесные состояния в легированном двухслойном графене: результаты для различных пробных функций]

A.A. Avetisyan, K. Mouloupos, A.P. Djotyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 265 - 271

Article

Coherent Control of Lowest States of a Shallow Impurity in Graphene Monolayer by Phase Modulated Laser Pulses [Когерентный контроль наинизших уровней мелкой примеси в монослойном графене с помощью модулированных по фазе лазерных импульсов]

A. P. Djotyan, G. P. Djotyan, A. A. Avetisyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 272 - 278

Article

The Energy Levels of a Shallow Impurity in Monolayer Graphene in a Perpendicular Magnetic Field [Энергетические уровни мелкой примеси в монослойном графене в перпендикулярном магнитном поле]

A. A. Avetisyan, A.P. Djotyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2024 386-390

Article

Coulomb Interaction in Graphene Systems

A. A. Avetisyan, A. P. Djotyan

Physics of Particles and Nuclei 2023 997-1001

Article

Impurity states in gated graphene systems in a magnetic field

A. A. Avetisyan, A. P. Djotyan

International Conference on Microwave & THz Technologies, Wireless Communications and OptoElectronics (IRPhE 2022)
2023 46-48

Article

Interaction of Electromagnetic Field with Gated Graphene Bilayer

A. P. Djotyan, A. A. Avetisyan, K. Mouloupoulos

Armenian Journal of Physics 2019 33-39

Article

Impurity States in Gated Graphene Bilayer in a Magnetic Field

A.A. Avetisyan, A.P. Djotyan

Armenian Journal of Physics 2019 248-253

Article

Tunable Excitons in Bilayer Graphene with Opened Energy Gap

A. A. Avetisyan, A. P. Djotyan, K. Mouloupoulos

Physics of Atomic Nuclei 2018 799-803

Article

Nonlinear Properties of Gated Graphene in a Strong Electromagnetic Field

A.P. Djotyan, A.A.Avetisyan, K.Mouloupoulos

Physics of Atomic Nuclei 2017 307-314

<http://link.springer.com/journal/11450>

Article

EXCITONIC ABSORPTION IN GAPPED GRAPHENE SYSTEMS

A.P.Djotyan, A.A.Avetisyan

Proceedings of the YSU A. Physical and Mathematical Sciences 2017 93-96

<http://www.ysu.am/science/en/journals>

Article

Tunable excitons in gated graphene systems

A.A. Avetisyan, A.A.Djotyan, K.Mouloupoulos

Proceedings of SPIE-Progress in Biomedical Optics and Imaging 2017 1-11

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

Conference

**COHERENT RESPONSE OF MULTILAYER GRAPHENE SYSTEMS TO LASER RADIATION:
NONLINEAR EFFECTS AND MANY ELECTRON CORRELATIONS**

Artak Avetisyan, Djotyan Anahit

Conference

Nonlinear optical properties of gated graphene systems

Artak Avetisyan, Djotyan Anahit

Conference

Excitonic absorption in gated graphene systems

Artak A. Avetisyan, Anahit P. Djotyan, Konstantinos Mouloupoulos

Conference

Tunable excitonic absorption in gapped graphene systems

A. Avetisyan, A. Djotyan, K. Mouloupoulos

Conference

Nonlinear response and tunable excitonic absorption in gapped graphene systems

Konstantinos Mouloupoulos, Artak A. Avetisyan, Anahit P. Djotyan
