Full name Davit B. Hayrapetyan

Date of birth 27 August, 1982

Citizenship Republic of Armenia

Nationality Armenian

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Married, 3 children (2014, 2017, 2019)

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Business address Russian-Armenian University

H. Emin 123, Yerevan 0051, Armenia



2014 - Associate professor in the field of physics.

2009 – Doctor of Physics (PhD) in the field of Semiconductor and Insulator Physics, Yerevan State University, Scientific supervisors Prof. J.R. Panosyan and Prof. E.M. Kazaryan

PhD thesis: "Investigation of electronic and optical properties of quantum structures with nontrivial geometry".

2006 – 2009, Postgraduate Student, Department of Physics, State Engineering University of Armenia.

2004 – 2006, Department of Solid State Physics, Faculty of Physics, Yerevan State University.

Master's degree of Physics in the field of Physics (diploma of honor),

Master thesis: "Direct interband light absorption in strongly oblate and strongly prolate ellipsoidal quantum dots"

2000 – **2004**, Graduated from Faculty of Physics, Department of Solid State Physics, Yerevan State University.

Bachelor's degree of Physics in the field of Physics (Diploma of honor)

Bachelor thesis: "Electron states in a strongly flattened ellipsoidal quantum dot in the presence of electric and magnetic fields"

HONORS AND AWARDS

2021 – **ICO/ICTP Gallieno Denardo International Award** - "For his breakthrough contributions to the theory of semiconductor nanosystems, as well as his promotion of optics and photonics in Armenia under difficult circumstances."



- **2017** Winner of the "Highly effective young researchers under 35 age (Top 50)" competition initiated by State Committee of Science of Armenia
- **2016** Winner of the "Highly effective young researchers under 35 age (Top 50)" competition initiated by State Committee of Science of Armenia
- 2016 "The Best Young Scientist" initiated by Russian-Armenian University
- 2015 Award after V. Hambartsumian initiated by Russian-Armenian State University
- **2012** Award from "Tashir" charitable foundation for articles with maximum citations in the international scientific journals
- 2012 "The Best Young Scientist" initiated by Russian-Armenian University
- 2011 "The Best Young Lecturer" initiated by Russian-Armenian University
- **2011** Award from "Gagik Tsarukyan" charitable foundation for articles in the international scientific journals with high impact factor
- **2011** "The Best scientific work" initiated by World Armenian Congress, The Union of Armenians in Russia and The National Academy of Sciences of Armenia in the nomination Physics
- 2006 President Educational Award in the field of Information Technologies, First place in "The Best Master" nomination
- 2003 "The Best Student" in Yerevan State University
- 2003 "The Best Student" in Physics Faculty of Yerevan State University 3rd place award
- 2000 Gold medal for the excellent advancement and exemplary behavior in the high school

EMPLOYMENT HISTORY

- **2018 up to now,** Head of the Department of General Physics and Quantum Nanostructures, Institute of Engineering and Physics, Russian-Armenian University.
- **2018 2020**, CTO of Solar Group LLC.
- **2018 up to now,** Head of the Wolfram Laboratory.
- **2017 up to now,** Adjunct professor, Department of Semiconductor Physics and Nanoelectronics, Institute of Physics, Nanotechnologies and Telecommunications, Peter the Great St. Petersburg Polytechnic University.
- **2017 2018**, Head of the Laboratory of Mathematical Modeling of Quantum Systems, Institute of Mathematics and High Technologies, Russian-Armenian University.

2014 – **2018**, Associate professor, Department of General Physics and Quantum Nanostructures, Institute of Mathematics and High Technologies, Russian-Armenian University.

2014 – **2016**, Research scientist, Department of theoretical physics, Centre of Quantum Technologies and New Materials, Yerevan State University

2014 – 2017 CEO of Energy Systems LLC

2013 – 2014, Teacher, "Usmunq" Private School

2010 – 2011, Researcher at BiPi LLC

2009 – 2015, Research scientist, Heliotechnic Problem Laboratory, National Polytechnic University of Armenia

2009 – 2013, Senior lecturer, Faculty of Applied Physics and Engineering, Russian-Armenian University.

2007 – **2009**, Junior Research scientist, Faculty of Applied Physics and Engineering, Russian-Armenian University.

GRANTS

2021-2022 - Head of the Project of the Russian-Armenian Research Collaboration Grant initiated by the State committee of science of Armenia and Russian Foundation for Basic Research, Project 20RF-048, Exciton transport, exciton-exciton interaction, 2D hybrid perovskites, organic-inorganic perovskites, multilayer nanostructure.

2021-2023 — Coordinator of Horizon **2020** WIDESPREAD-05-2020 Twinning Program, NanoQIQO-952335, Twinning towards the Russian-Armenian University's scientific excellence and innovation capacity in nanomaterials for quantum information and quantum optics.

2021-2022 – Scientific advisor of the PhD Students Support Program of the State Committee of Science, "Optical properties of magnetobiexcitons in semiconductor quantum dots", PhD student Yuri Bleyan.

2020-2021 - Principal Investigator of the ANSEF (the Armenian National Science and Education Fund) Award 2020, 20AN:PS-nano-2205, Theoretical and experimental investigation of optical properties of biexctons in quantum dots.

2019-2021 - Head of the Project of the **Armenian-Italian Research Collaboration Grant** initiated by the State committee of science of Armenia, Project AI-01/19, Photophysical investigation of semiconductor quantum dots.

2018-2020 - Participant of the Thematical funding of the State Committee of Science of Armenia, Project 18T-1C062. Investigation of trion and biexciton structures in semiconductor quantum dots.

- **2016 2018** Head of the Project of the Young Scientists Research Support Program initiated by the State committee of science of Armenia, Project 16YR-1C022, Investigation of quantum nanostructures with non-trivial geometry: electronic, excitonic and impurity states, linear and nonlinear optical properties in terahertz range.
- **2014 2017** Tempus "Armenqa" project 543817, Implementation of National and Sectorial Qualifications Frameworks in Armenia.
- **2016 2018** Participant of the Development Project initiated by the Russian-Armenian University, Investigation of many particle and photoluminescence characteristics of the semiconductor quantum dots and dashes.
- **2016 2018** Participant of the ISTC (The International Science and Technology Center) Project A-2130, Control of light in structured nonlinear media: Application to all-optical devices.
- **2015 2016** Participant of the Development Project initiated by the Russian-Armenian University, Investigation of Coulomb, spin, and electro-optical properties of layered quantum dots and quantum dashes.
- **2015 2016** Principal Investigator of the ANSEF (the Armenian National Science and Education Fund) Award 2015, NANO-3905, Cylindrical quantum dot with different confining potentials in the presence of external electrical and magnetic fields: impurity states and electrostatic multipoles.
- **2013 2015** Participant of the ISTC Project K-2050, Development of Technologies of Stabilization of Parameters of Photovoltaic Cells.
- **2012** Scientific advisor of the Postgraduate Students Support Program-2012 of the State Committee of Science, "Influence of hydrostatic pressure on electronic states and optical properties of spherical quantum dots", PhD student Hovhannes Tevosyan.
- **2011 up to now** Participant of the Basic funding of the State Committee of Science of Armenia, Investigation of physical properties of quantum nanostructures with non-trivial geometry and different confinement potentials.
- **2009 2011** Participant of the ISTC Project A-1695, Nanotubes/Diamond Like Carbon composite transparent conductive material for Solar Cell and Conductive Coating Applications.
- **2009** Participant of the ANSEF Award 2008, NANO-1759, Theoretical Investigation and Modeling of Electronic and Optical Properties of Strongly Oblated Semi-Ellipsoidal (3D) and Semi-elliptical (2D) Lens Shaped Quantum Dots.
- **2008** Participant of the ANSEF Award 2008, NANO-1301, Theoretical Investigation and Modeling of Electronic and Optical Properties of Strongly Oblate (Prolate) Ellipsoidal and Semi-ellipsoidal Quantum Dots.

MEMBERSHIP IN COMMITTEES

2020 – Co-chair of online workshop "From Darkness to Brightness" devoted to International Day of Light, 16 May, 2020, Yerevan, Armenia

2017 – **up to now** – Member of the Programme Committee for the specific programme implementing Horizon 2020 - Configuration NMBP (European Commission)

2017-2020 Member of the committee of the state examination and Bachelor graduate works of Yerevan State University (Faculty of Radiophysics)

2015 – 2017 Member of the Committee for Sectorial Qualifications Framework in the Higher Education System for Physics of Republic of Armenia (Co-funded by the Tempus Programme of the European Union)

2015 – 2020 Member of the committee of the state examination and Master graduate works of Russian-Armenian University (Chair of General Physics and Quantum Nanostructures)

2012 – 2020 Member of the committee of the state examination and Bachelor graduate works of Russian-Armenian University (Chair of General Physics and Quantum Nanostructures)

2011 – Member of Olympiad program committee of Sixth annual international Microelectronics Olympiad of Armenia, Yerevan

2010 – Member of Olympiad program committee of Fifth annual international Microelectronics Olympiad of Armenia, Yerevan

PROFESSIONAL MEMBERSHIP

2018 up to now OSA (Optical Society of America), Adviser of RAU student chapter

2011 up to now ICO (International Commission for Optics), member

REVIEWER OF SCIENTIFIC JOURNALS

Physica E: Low-dimensional Systems and Nanostructures

Superlattices and Microstructures

Optics Communications

Physica B: Condensed Matter

Journal of Contemporary physics

Journal of Inorganic and Organometallic Polymers and Materials

Radiation Effects and Defects in Solids

International Journal of Modern Physics B

Journal of Materials Research and Technology

Philosophical Magazine Letters

European Physical Journal B

Chemical Society Reviews (**IF=40.44**)

Reviewer of National Scientific Agencies

Science Committee of Armenia (SC)

The Science Fund of the Republic of Serbia (SFRS)

LANGUAGES

Armenian (Native), Russian (Fluent), English (Proficient)

EXPERTISE

2017 - Expert of the ANQA on the institutional review of the French university in Armenia in the framework of the tempus TNA_QA project, 2017

2015 - 2017 Expert of the ARMENQA on the development of sectorial qualifications frameworks for Armenian higher education in the field of physics, 2015-2017

2016 - up to now Member of the Program Committee on the Nanotechnologies, Advanced Materials, Biotechnology, and Advanced Manufacturing and Processing (NMBP) configuration of the European Commission Horizon 2020 Framework Programme

TEACHING COURSES (Assoc. Prof at Russian-Armenian University)

- 1. Post graduate Optical properties of quantum systems, lectures, training, testing, exam.
- 2. Graduate Quantum systems of Nanoelectronics, lectures, training, testing, exam.
- 3. Approximation Methods of Quantum Mechanics, lectures, training, testing, exam.
- 4. Graduate Methods of Mathematical Modeling (Wolfram Mathematica 10.4), lectures, practical training, testing, essay, and exam.
- 5. Undergraduate Basics of Theoretical Physics (Mechanics, Electromagnetism, Quantum Mechanics, Statistical mechanics), practical training, testing, exam.
- 6. Undergraduate General Physics (Classical Mechanics, Molecular Physics), lectures, laboratory, testing, exam.

SUPERVISOR

Bachelor Thesis

- 1. **Elen Altunyan**, Calculation of the dipole and quadrupole moments of exciton complexes in quantum dots, **2020**.
- 2. **Levon Tadevsoyan**, Electric and magnetic susceptibilities of trions and biexcitons in quantum dots, 2020
- 3. Tigran Avetisyan, Calculation of photoionization for cylindrical quantum dots, 2020.
- 4. Vahe Danielyan, Experimental methods of obtaining and band structure of graphene, 2020.
- 5. **Paruyr Movsesyan**, Electronic states and fundamental absorption in a spherical layered quantum dot, **2019**.
- 6. **Tigran Sargsyan**, Impurity states and impurity absorption in a quantum well with a Pöschl-Teller confining potential, **2018**.
- 7. Julieta Shahnazaryan, Calculation of photoluminescence in an ellipsoidal quantum dot, 2018.
- 8. Yuri Bleyan, Biexciton states in a strongly oblate ellipsoidal quantum dot, 2017.
- 9. Vahe Karakhanyan, Band structure of two-electron states in a quantum ring, 2017.
- 10. Gagik Ohanyan, Impurity states with a spheroidal quantum dot, 2016.
- 11. Ruben Bedjanyan, Absorption in a cylindrical quantum dot, 2015.
- 12. Arthur Sargsyan, Electronic states in a pyramidal quantum dot, 2014.

Master Thesis

- 1. **Tigran Sargsyan**, Linear and nonlinear optical absorption of light in a cylindrical quantum dot at various confining potentials, **2020**.
- 2. **Julieta Shahnazaryan**, Study of absorption and photoluminescence spectra of ellipsoidal quantum dots, **2020**
- 3. Yuri Bleyan, Optical properties of biexcitons and trions in quantum dots, 2019.
- 4. Georgi Ionisyan, Exciton states in a spherical quantum dot, 2019.
- 5. Gagik Ohanyan, Nonlinear optical properties of ellipsoidal quantum dots, 2018.
- 6. **Gor Grigoryan**, Impurity states in a spherical nanolayer with Kratzer's confining potential, **2017**.
- 7. Artur Sargsyan, Electronic states in ellipsoidal quantum dots, 2016.
- 8. **Zaven Eghoyan**, Electronic states in a double quantum well with a modified Pöschl-Teller potential, **2015**.
- 9. **Tigran Vardanyan**, Impurity states in a cylindrical quantum dot with a modified Pöschl-Teller potential, **2014**.
- 10. **Hayk Kaltakhchyan**, Electronic states and absorption of light in strongly oblate truncated ellipsoidal quantum dot, **2013**.

PhD Students

- 1. **2018 2022 Gagik Ohanyan,** Some questions of linear and nonlinear optical properties of ellipsoidal quantum dots
- 2. **2019 2022 Yuri Bleyan,** Study of the optical properties of complex excitonic complexes in quantum dots
- 3. **2020 2023 Tigran Sargsyan,** Investigation of the properties of vertically coupled cylindrical quantum dots for quantum computations

INVITED LECTURER

- 1. Saarland University, Chair of Physical and Theoretical Chemistry, Erasmus+ Programme, 18-24 November 2018. Title:
 - a) Generalization of Kohn theorem for lens-shaped quantum dots: Theory and Experiment.
- 2. Peter the Great St. Petersburg Polytechnic University, Department of Semiconductor Physics and Nanoelectronics, Institute of Physics, Nanotechnologies and Telecommunications, 5-100 Programme, 12-18 November 2017. Titles:
 - a) Conical quantum dots: Electronic states and optical properties.
 - b) Application of the Wolfram Language for the Calculations of Physical Characteristics of Quantum Nanostructures.
 - c) The use of different types of confining potential for modeling of semiconductor quantum nanostructures.
- 3. Saarland University, Chair of Physical and Theoretical Chemistry, Erasmus+ Programme, 14-19 November 2016. Titles:
 - a) Electronic and Optical Properties of the Conical Quantum Dots Ensemble.
 - b) Core/shell/shell spherical quantum dot with Kratzer confining potential.
- 4. Vrije Universiteit Brussel, "B-PHOT" Brussels Photonics Group, Erasmus+ Programme, 8-13 December 2019. Titles:
 - a) Investigation of Semiconductor Nanostructures at Russian-Armenian University.
 - b) Generalization of Kohn theorem for lens-shaped quantum dots: Theory and Experiment.

RESEARCH AREAS

Electronic and optical properties of semiconductor low dimensional systems: one-electron states, impurity states, exciton states, biexciton and trion states, interband and intraband transitions, absorption coefficient (for ensemble of quantum dots (QD)), influence of external electric and magnetic fields, influence of external hydrostatic pressure and temperature, different shaped QDs (quantum rings, core/shell QDs, nanoshells, spherical, cylindrical, ellipsoidal, conical QDs),

Optical properties of Diamond Like Carbon (DLC) films, Analyze of Raman spectras and IR spectras of DLC films, contact angle measurement and analyze of DLC films.

Calculation methods

Effective mass method, geometrical adiabatic approximation, variational method, perturbation theory, numerical methods (Wolfram Mathematica 12, OriginPro 2015)

SHORT TERM SCIENTIFIC VISITS

- 5. The group of Prof. Dr. Michael Springborg, Chair of Physical and Theoretical Chemistry, Saarland University, Saarbrucken, Germany, 14-19 November 2016.
- 6. The group of Prof. Dr. Dmitry Firsov, Department of Semiconductor Physics and Nanoelectronics, Peter the Great St. Petersburg Polytechnic University, St. Petersburg, Russia, 12-18 November 2017.
- 7. The group of Prof. Dr. habil. Arturs Medvids, Department of Semiconductor Physics, Riga Technical University, Riga, Latvia, 18-25 November 2017.
- 8. The group of Prof. Dr. Michael Springborg, Chair of Physical and Theoretical Chemistry, Saarland University, Saarbrucken, Germany, 18-24 November 2018.
- 9. "B-PHOT" Brussels Photonics Group headed by Prof. Hugo Thienpont, Vrije Universiteit Brussel (VUB), Brussels, Belgium, 8-13 December, 2019

CONFERENCES ORGANIZING COMMITTEE MEMBERSHIP

- **2019** International School on **Optics and Photonics** (ISOP-2019), 1-7 July, 2019, Yerevan, Armenia. Position: **Director.**
- **2018** 13th Annual Conference of Russian-Armenian University, 3-7 December, 2018, Yerevan, Armenia. Position: **Member of Organizing Committee.**
- **2017** 4th International Advanced School on "**Frontiers in Optics & Photonics**" (FOP-2017), 19-25 September, 2017, Yerevan-Ashtarak, Armenia. Position: **Director.**
- **2016** 4th International Symposium of "**Optics and its applications**" (Optics-2016), July 25-28, Yerevan Ashtarak, Armenia, 2016. Position: **Chair**.
- **2016** 3rd International Advanced School on "**Frontiers in Optics & Photonics**" (FOP-2016), 29 February 12 March, 2016, Yerevan-Ashtarak, Armenia. Position: **Director**.
- **2015** 3rd International Symposium of "**Optics and its applications**" (Optics-2015), October 1-5, Yerevan Ashtarak, Armenia, 2015. Position: **Chair**.
- 2014 2nd International Advanced School on "**Frontiers on Optics and Photonics**" (FOP-2014), 30 August 5 September, 2014, Yerevan-Ashtarak, Armenia. Position: **Member of Organizing Committee**.
- **2014** 2nd International Symposium of "**Optics and its applications**" (Optics-2014), September 1-5, Yerevan Ashtarak, Armenia, 2014. Position: **Member of Organizing Committee**.
- 2012 Scientific Conference "Actual Problems of Nanoscale Systems Physics" dedicated to the 70th anniversary of NAS RA academician E.M. Kazaryan NAS of Armenia, March 21-22, Yerevan, Armenia, 2012. Position: **Director**.
- **2003** Scientific Conference "Actual Problems of Nanoscale Systems Physics" dedicated to the 70th anniversary of NAS RA academician E.M. Kazaryan NAS of Armenia, March 21-22, Yerevan, Armenia, 2012. Position: **Director**.

Position: Member of Organizing Committee.

CONFERENCES, SCHOOLS AND WORKSHOPS

- 1. SPIE Photonics Europe Digital Forum 2020, "Optical parameters of coupled vertical cylindrical quantum dots with double modified Pöschl-Teller potential", 6-10 April, 2020.
- 2. Laser Physics 2019 Conference, a) "The band gap variation of Boron Nitride nanotube", b) "Theoretical Investigation of Impurity States and Light Absorption in Quantum Well with Modified P"oschl-Teller Potential", c) "Effect of Hydrostatic Pressure and Temperature on the Impurity States and Diamagnetic Susceptibility in Strongly Oblate Ellipsoidal Quantum Dot", c) "Investigation of binding and recombination energies of heavy hole- and light hole- trion states in ellipsoidal quantum dot", 17-20 September, Ashtarak, Armenia, 2019.
- 3. International School on Optics and Photonics (ISOP-2019), "Evaluation of Periodical Literature", 1 7 July, 2019, Yerevan, Armenia.
- 4. 13th Annual Conference of Russian-Armenian University, "a) Photoluminescence of biexcitons and excitons in ellipsoidal quantum dot, b) Binding energy and photoionization cross-section of hydrogen-like donor impurity in strongly oblate ellipsoidal quantum dot, c) Electronic and transport properties of the Nitride Bohr nanotube", 3 7 December, 2018, Yerevan, Armenia.
- 5. 7th International Conference on New Frontiers in Physics (ICNFP 2018), "Theoretical investigation of optical properties of quasi two-dimensional excitonic complexes in ellipsoidal quantum dots" 4-12 July, Kolymbari, Crete, Greece.
- 6. 5th International Advanced School on "Frontiers in Optics & Photonics" (FOP-2018), "Investigation of excitonic complexes in ellipsoidal quantum dots", 22-27 June, 2018, Yerevan-Ashtarak, Armenia.
- 7. International School on Metamaterials and Nanotechnologies, "Conical quantum dots: exciton states and optical properties" and "Application of Wolfram- Mathematica for modeling of quantum dots", 24-28 December, Tsakhkadzor, Armenia, 2017.
- 8. Armenian Wolfram Technology Conference 2017, "Application of the Wolfram Language for the Calculations of Physical Characteristics of Quantum Nanostructures", 23-24 September, Yerevan, Armenia, 2017. (Invited Speaker)
- 9. Laser Physics 2017 Conference, "Binding energy and photoionization cross-section of hydrogen-like donor impurity in strongly oblate ellipsoidal quantum dot", 19-22 September, Ashtarak, Armenia, 2017.
- 10. 4th International Advanced School on "Frontiers in Optics & Photonics" (FOP-2017), 19-25 September, 2017, Yerevan-Ashtarak, Armenia.
- 11. School Natural Science and Applications, "Application of Wolfram language in natural sciences", 26-28 August, Tsakhkadzor, Armenia, 2017.
- 12. Final Conference "National and Sectorial Qualifications Frameworks of the Higher Education of Armenia: Achievements and Issues", 17 May, Yerevan, 2017.
- 13. Seminar and Workshop on "Learning outcomes and study programmes assessment and evaluation", Tempus "Armenqa" project 543817, 17-21 April, Ghent, Belgium, 2017.
- 14. Conference Devoted to the 75 Anniversary of E.M. Kazaryan, Russian-Armenian University, "Conical quantum dot in the presence of the electric field" February 23-24, Yerevan, Armenia, 2017.

- 15. 11th Annual Scientific Conference of Russian-Armenian University, "Electronic and Optical Properties of the Conical Quantum Dots Ensemble", 5-9 December, Yerevan, Armenia, 2016.
- 16. "Implementation of National and Sectorial Qualification Frameworks in Armenia", Workshop on "Finalizing SQFs in five subject areas of HE" and Training in "Using NQFs and SQFs for shaping programs of HE", 15-16 December, Yerevan, 2016.
- 17. Scientific camp "Physics and We: lightning the optics", "What is NANO?", 8-12 August, 2016, Byurakan, Yerevan.
- 18. 4th International Symposium of "Optics and its applications" (Optics-2016), July 25-28, Yerevan Ashtarak, Armenia, 2016.
- 19. 3rd Russian School of young Scientists, St Petersburg, 21-25 June, 2016.
- 20. Workshop on Twining project "Empowerment of the Tertiary Level Education of the Republic of Armenia for European Higher Educational Area Integration", Yerevan, 5-6 April, 2016.
- 21. 3rd International Advanced School on "Frontiers in Optics & Photonics" (FOP-2016), 29 February 12 March, 2016, Yerevan-Ashtarak, Armenia.
- 22. Issues of the Implementation of National and Sectorial Qualifications Frameworks in the Higher Education System of Armenia, Yerevan, 3-4 March, 2016.
- 23. Energy Materials and Nanotechnology (EMN) Guangzhou Meeting, "Magneto optics in conical quantum dot ensemble", December 3-6, Guangzhou, China, 2015. (**Invited Speaker**).
- 24. Workshop on "Development of sectorial qualifications frameworks for Armenian higher education", Tempus "Armenqa" project 543817, Osnabruck, 02-05 November, 2015.
- 25. 3rd International Symposium of "Optics and its applications" (Optics-2015), October 1-5, Yerevan Ashtarak, Armenia, 2015.
- 26. Armenian Wolfram Technology Conference, 26-27 September, Dilijan, Armenia, 2015. (Participant)
- 27. School on Anomalous Transport, Superconductivity and Magnetism in Nanosystems, 15-20 June, Kyiv Ukraine, 2015.
- 28. SPIE Microtechnologies, "Light absorption of cylindrical quantum dot with Morse potential in the presence of parallel electrical and magnetic fields", 4 6 May, Barcelona, Spain, 2015. (Poster).
- 29. 2nd International Symposium on Optics and its Applications, September 1-5, Yerevan Ashtarak, Armenia, 2014.
- 30. 2nd International Advanced School on "Frontiers in Optics & Photonics" 30 August 5 September, Yerevan-Ashtarak, Armenia, 2014. (**Invited Speaker**)
- 31. SPIE Optical Metrology, 13-16 May, Munich, Germany, 2013.
- 32. Laser Physics 2013, 8-11 October, Ashtarak, Armenia, 2013.
- 33. Scientific Conference "Actual Problems of Nanoscale Systems Physics" dedicated to the 70th anniversary of NAS RA academician E.M. Kazaryan NAS of Armenia, March 21-22, Yerevan, Armenia, 2012.
- 34. International Advanced School on "Frontiers in Optics & Photonics" (FOP-2012) 2-7 July, Yerevan-Ashtarak, Armenia, 2012. (**Invited Speaker**)
- 35. Workshop on Supersymmetry in Integreble Systems, 27-30 August, Yerevan, Armenia, 2012.
- 36. International Conference Laser Physics 2012, Ashtarak, Armenia, 9-12 October, 2012.
- 37. 7th Annual Scientific Conference of Russian-Armenian (Slavonic) University, 3-7 December, 2012.
- 38. International Scientific Workshop Photonics & Micro- and Nano- structured Materials (PMNM 2011), Yerevan, Armenia, June 28-30, 2011.

- 39. International Symposium "OPTICS and its applications" (OPTICS-2011), Yerevan Ashtarak, Armenia, 5-9 September 2011.
- 40. International Conference Laser Physics 2011, Ashtarak, Armenia, 11-14 October, 2011.
- 41. 6th Annual Scientific Conference of Russian-Armenian (Slavonic) University, 5-9 December, 2011.
- 42. Second International School on Nanophotonics and Photovoltaics, Tsakhkadzor, Armenia, 15-22 September, 2010.
- 43. Third International Forum "ROSNANOTECH", Moscow, 1-3 November, 2010.
- 44. Annual Scientific Conference of State Engineering University of Armenia, Yerevan, November 22-26, 2010.
- 45. 5th Annual Scientific Conference of Russian-Armenian (Slavonic) University, 6 10 December, 2010.
- 46. Second International Forum "ROSNANOTECH", Moscow, 6-8 October, 2009.
- 47. 4th Annual Scientific Conference of Russian-Armenian (Slavonic) University, 30 November 4 December, 2009.
- 48. International Advanced Research Workshop Modern Problems in Optics & Photonics (MPOP), Yerevan, Armenia, 27 August 2 September, 2009.
- 49. Virtual Conference on Nanoscale Science and Technology, "VC-NST-2008" USA, July 24-29, 2008.
- 50. First International Forum "ROSNANOTECH", Moscow, 6-8 October, 2008
- 51. 3rd Annual Scientific Conference of RAU, 5-10 December, 2008.
- 52. Annual Scientific Conference of State Engineering University of Armenia, Yerevan, October 6-9, 2008.
- 53. Semiconductor Micro and Nanoelectronics. The sixth international conference, Tsakhcadzor, Armenia, September 18-20, 2007.
- 54. Conference dedicated to the 50th anniversary of YSU Solid State Physics Chair, Yerevan, October, 2007.
- 55. 2nd Annual Scientific Conference of Russian-Armenian (Slavonic) University, 3-7 December, 2007.
- 56. Annual Scientific Conference of State Engineering University of Armenia, Yerevan, October 8-10, 2007.
- 57. International Conference Micro and Nanotechnologies with the Use of Ions Beams, Accelerated to Low and Average Energies. Obninsk, Russia, 16-18 October, 2007.
- 58. 14th Semiconducting and Insulating Materials Conference, SIMC-XIV, University of Arkansas, Fayetteville, Arkansas 72701, USA, May 15-20, 2007.
- 59. 10th International scientific conference and school. Actual problems of solid electronics and microelectronics. Divnomorskoye, Russia, 24-29 September, 2006.
- 60. Semiconductor Micro and Nanoelectronics. The fifth international conference, Aghveran, Armenia, September 16-18, 2005.
- 61. 3rd National Conference of Young Physicists, Yerevan, YSU, Armenia, November 4-8, 2003.