

Kuzanyan Astghik

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WORK EXPERIENCE

1. **Lecturer**
Russian-Armenian University, Department of General Physics and Quantum Nanostructures (February 2023) – present
2. **Researcher**
Institutes for Physical Research of National Academy of Science of the Republic of Armenia (September 2021) – present
3. **Trainer**
Armenian-Indian Center for Excellence in ICT (AITC) (December 2022)
4. **Post-Doctoral Researcher**
University of California, Los Angeles, Mechanical and Aerospace Engineering Department (October 2021– October 2022)
5. **Lecturer**
Russian-Armenian University, Department of General Physics and Quantum Nanostructures (February 2021 – July 2021)
6. **Junior researcher**
Institutes for Physical Research of National Academy of Science of the Republic of Armenia (January 2017 – September 2021)
7. **Technical writer**
Technology and Science Dynamics (March 2016 up to December 2017)
8. **Technical writer**
Professional engineering company InSol (September 2013 up to February 2016)
9. **Laboratory Assistant**
Institutes for Physical Research of National Academy of Science of the Republic of Armenia (July 2009 up to December 2016)

EDUCATIONAL BACKGROUND

1. **PhD Degree** (PhD award date: 14 January 2020)
Institutes for Physical Research National Academy of Science of the Republic of Armenia.
Theses: Development of the thermoelectric single-photon detector's detection pixel model
2. **Master's Degree** (MS award date: 15 July 2011) *diploma with honors*
National Academy of Science of the Republic of Armenia, International Scientific-Educational Centre, Radioengineering and Telecommunication
Theses: Fractal patch antenna arrays.
3. **Bachelor's Degree** (BC award date: 8 July 2009)
Yerevan State University, Department of Radiophysics.
Theses: Fractal antenna arrays.

AWARDS

1. Winner of **Postdoctoral Fellowship** by The Promise Armenian Institute (PAI) at UCLA in 2021, USA
2. **Best Presentation in Young Section** in International Conference Thermoelectrics and its Applications 2016, St. Petersburg, Russian Federation
3. Winner of **SPIE Education Scholarship** 2016, USA
4. Winner of **Officer Travel Grant** for SPIE Optics + Photonics in August 2014, San Diego, USA

MEMBERSHIP OF PROFESSIONAL SOCIETIES

1. Member of International Society of Optics & Photonics **SPIE** (2010 present)
Mentor of Yerevan State University student chapter (2020 - 2022)
President of Yerevan State University student chapter in 2014
Vice president of Yerevan State University student chapter in 2013
2. Member of The Optical Society of America **OPTICA** (2014 present)
Co-adviser of Institutes for Physical Research Armenia OPTICA student chapter-present from 2022, present
President of Institutes for Physical Research Armenia OPTICA student chapter in 2020
Vice president of Institutes for Physical Research Armenia OPTICA student chapter in 2019
3. Member of International Commission for Optics **ICO** (2014 present)

SERVICE

1. *Scientific Secretary* of International Conference Laser Physics 2023, 12-15 September, 2023, Ashtarak, Armenia
2. *Director* of 6th “International Advanced School on Frontiers in Optics & Photonics” 30 August – 11 September, 2021, Yerevan-Ashtarak, Armenia
3. *Coordinator* of 7th International Symposium “Optics and its applications” 20-24 September, 2019, Ashtarak-Yerevan, Armenia
4. *Head of Project* of 5th International Advanced School on Frontiers in Optics & Photonics 22-27 June, 2018, Yerevan-Ashtarak, Armenia
5. *Member of organizing committee* of 4th International Symposium “Optics and its applications” 25-28 July, 2016, Ashtarak-Yerevan, Armenia
6. *Head of Project* SPIE.FOCUS Armenia: 3rd International Symposium “Optics and its applications” 1-5 October, 2015, Ashtarak-Yerevan, Armenia
7. *Member of organizing committee* of 2nd International Symposium “Optics and its applications” (smr 2633) 1-5 September, 2014, Ashtarak-Yerevan, Armenia
8. *First contact person* of International Conference “IONS Armenia” 11-14 September, 2013, Yerevan-Ashtarak, Armenia
9. *Member of organizing committee* of International Symposium “Optics and its applications” 5-9 September, Ashtarak-Yerevan, Armenia
10. *Member of organizing committee* of International Workshop “Photonics and Micro- and Nano-Structured materials” held on June 27-30, 2011 Yerevan, Armenia

RESEARCH PROJECTS

1. Competitive Innovation Fund under “Education Improvement Project with Additional Financing” loan program – “Establishment of Research and Educational Center for the Microfabrication of Optical Systems” 2023-2025 – *project coordinator*.
2. FAST foundation’s Advance Research Grants – “Novel energy-efficient tunable method for fabrication of nanomaterials: Biomedical and energy storage applications” 2023-2027 – *Senior Researcher*
3. ISTC foundation - GE-2776 “Enhancing the thermoelectric performance of cobalt-based oxide materials”, 2022 – *submanager*.
4. Ministry of Education and Science of Armenia State committee of science 21T-1C088 “Sensor development of the thermoelectric single-photon detector for UV radiation taking into account thermal noise”, 2021-2024 – *project coordinator*.
5. Ministry of Education and Science of Armenia State committee of science - 18T-2F134 “Thermoelectric single photon detector with high efficiency for application in telecommunication systems: selection of materials and detection pixel development”, 2018-2020 – *group member*.
6. Armenian National Science and Education Fund (ANSEF) - “Transition-Edge Sensors on the Basis of Re-entrant Superconductors”, 2016-2017 – *group member*.
7. Ministry of Education and Science of Armenia State committee of science - 15RF-018 “Preparation and investigation of solid solutions of rare-earth hexaborides for using in low-temperature thermoelectric devices”, 2015-2017 – *group member*.
8. European Commission’s 7th Framework Program - FP7-NMP-310750 “Development of Multifunctional Thermal Barrier Coatings and Modeling”, 2013-2015 – *group member*.

ATTENDED CONFERENCES

1. International Conference **Laser Physics 2023**, 12–15 September 2023, Ashtarak, Armenia.
2. 11th International Symposium **Optics & its Applications**, July 11-15, 2023, Yerevan-Ashtarak, Armenia.
3. European Conference **SPIE Optics and Optoelectronics 2023** 24 - 27 April 2023, Prague, Czech Republic.
4. **SPIE Optics and Photonics 2022**, 21-24 August 2022, San Diego, USA.
5. International Conference **Laser Physics 2021**, 21 – 24 September 2021, Ashtarak, Armenia.
6. **SPIE Photonics Europe**, 6 - 10 April, 2020, Digital Forum.
7. **Winter College on Optics: Quantum Photonics and Information** | (smr 3424) 10 - 21 February 2020, Trieste, Italy.
8. **7th International Symposium Optics & its Applications**, 20 - 24 September, 2019 Yerevan-Ashtarak, Armenia.
9. International Conference **Laser Physics 2019**, 17 – 20 September 2019, Ashtarak, Armenia.
10. European Conference **SPIE Optics and Optoelectronics 2019** 1 - 4 April 2019, Prague, Czech Republic.
11. International Conference **Laser Physics 2018**, 18 – 21 September 2018, Ashtarak, Armenia.
12. IX International Conference for Professionals and Young Scientists **Low Temperature Physics - ICPYS LTP 2018**, June 4-8, 2018, Kharkiv, Ukraine.

13. 6th International Symposium **Optics & its Applications**, February 17-20, 2018, Trento, Italy.
14. International Conference **Laser Physics 2017**, 19 – 22 September 2017, Ashtarak, Armenia.
15. European Conference **SPIE Optics and Optoelectronics 2017** 24 - 27 April 2017, Prague, Czech Republic.
16. **Winter College on Optics: Advanced Optical Techniques for Bio-imaging** | (smr 3104) 13-24 February 2017, Trieste, Italy.
17. International Conference **Thermoelectrics and its applications-2016** 15-16 November 2016, Saint Petersburg, RF.
18. 4th International Conference “**Nanotechnologies**” **Nano –2016** October 24 –27, 2016, Tbilisi, Georgia.
19. 4th International Symposium **Optics & its Applications**, July 25-28, 2016 Yerevan-Ashtarak, Armenia.
20. **OPTO-Meeting for Young Researchers & SPIE/OSA Student Chapter Meeting 2016** 06 - 09 June 2016, Gdansk, Poland.
21. International Conference **Laser Physics 2015** 6-9 October 2015, Ashtarak, Armenia
22. SPIE.FOCUS Armenia: 3rd International Symposium “**Optics and its applications**” 1-5 October, 2015, Ashtarak-Yerevan, Armenia.
23. **Single Photon Workshop 2015**, 13-17 July, 2015, Geneva, Switzerland.
24. European Conference **SPIE Optics and Optoelectronics 2015**, 13-16 April, 2015, Prague, Czech Republic.
25. International Young Scientist Conference **Developments in Optics and Communications (DOC Riga)** 8-10 April, 2015, Riga, Latvia.
26. Nano-2014 **3rd international conference “Nanotechnologies”** 20-24 October, 2014, Tbilisi, Georgia.
27. 2nd International Symposium on **Optics and its Applications (smr 2633)**, 1-5 September, 2014, Yerevan-Ashtarak, Armenia.
28. International Conference **Laser Physics 2013**, 8-11 October, 2013, Ashtarak, Armenia.
29. International Conference **IONS Armenia**, 11-14 September, 2013, Yerevan-Ashtarak, Armenia.
30. European Conference **SPIE Optics and Optoelectronics 2013**, 15-18 April, 2013, Prague, Czech Republic.
31. International Conference **Laser Physics 2012**, 9-12 October, 2012, Ashtarak, Armenia.
32. International Conference **IONS 12**, 4-7 July, 2012, Naples, Italy.
33. International Conference **Laser Physics 2011**, 11-14 October, 2011, Ashtarak, Armenia.
34. International Symposium **Optics and its applications**, 5-9 September, 2011, Yerevan-Ashtarak, Armenia.

PUBLICATIONS’ LIST

1. **A.A. Kuzanyan**, V.R. Nikoghosyan, A.S. Kuzanyan “Ultraviolet thermoelectric single photon detector with high signal-to-noise ratio” *Optical Engineering* 63(1), 017105, (2024). DOI: 10.1117/1.OE.63.1.017105
2. **A.A. Kuzanyan**, V.R. Nikoghosyan, A.S. Kuzanyan “Signal-to-Noise Ratio of a Thermoelectric Single-Photon Detector with Different Values of the Physical Parameters

- of the Sensor Material” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 58(3), pp. 305-313, (2023). DOI:10.1134/S106833722303012X
3. H. Gyulasaryan, **A. Kuzanyan**, A. Manukyan, A.S. Mukasyan “Combustion Synthesis of Magnetic Nanomaterials for Biomedical Applications” *Nanomaterials* 13 (13), 1902 (2023). DOI: 10.3390/nano13131902
 4. **A.A. Kuzanyan**, A.S. Kuzanyan, V.R. Nikoghosyan, S.R. Harutyunyan “Fast thermoelectric photodetector for UV radiation” *SPIE proceedings* 125700G (2023) DOI:10.1117/12.2664550
 5. **A.A. Kuzanyan**, A. S. Kuzanyan, V. R. Nikoghosyan, V. T. Tatoyan, V. S. Kuzanyan, S. R. Harutyunyan, G. Ts. Kharatyan, G. R. Badalyan “Signal-to-Noise Ratio of the Thermoelectric Single-Photon Detector with CeB₆ Sensor and Bi-2223 Absorber” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 58(2), pp. 155-163, (2023). DOI: 10.1134/S1068337223020123
 6. **A.A. Kuzanyan**, A.S. Kuzanyan, V.R. Nikoghosyan, S.R. Harutyunyan “Simulation of Heat Propagation Processes in the Five-Layer Detection Pixel with FeSb₂ Sensor After Simultaneous Absorption of Several Photons” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 57(4), pp. 393-400, (2022). DOI: 10.1134/S1068337222040144
 7. **A.A. Kuzanyan**, A. S. Kuzanyan, V. R. Nikoghosyan, S. R. Harutyunyan “Simulation of Heat Propagation Processes in Thermoelectric Detection Pixels” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 57(3), pp. 280-288, (2022). DOI: 10.1134/S1068337222030100
 8. **A.A. Kuzanyan**, V. R. Nikoghosyan, N. G. Margiani, G. A. Mumladze, S. R. Harutyunyan, A.S. Kuzanyan “Modeling of Heat Propagation Processes in Detection Pixel of Thermoelectric Single-Photon Detector with High-Temperature Superconducting Absorber” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 57(2), pp. 184-181, (2022). DOI: 10.3103/S1068337222020141
 9. **A.A. Kuzanyan**, S. R. Harutyunyan “Superconductor-Insulator Transition in Ultra-Thin Sb₂Te₃ Nanoplates” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 57(1), pp. 81-86, (2022). DOI: 10.3103/S1068337222010121
 10. **A.A. Kuzanyan**, S. R. Harutyunyan “Weak Localization and Weak Anti-Localization in Ultra Thin Sb₂Te₃ Nanoplates” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 56(4), pp. 359–365, (2021). DOI: 10.3103/S1068337221040101
 11. **A.A. Kuzanyan** “Semiconductor Sensor of the Thermoelectric Single-Photon Detector for Recording Near-Infrared Radiation” *Semiconductors*, Vol. 55(4), pp. 336–343, (2021). DOI: 10.1134/S1063782621040084
 12. **A.A. Kuzanyan** “Determination of the Number of Photons Absorbed in SiO₂/W/FeSb₂/W Detection Pixel of Thermoelectric Single-Photon Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 56(1), pp. 33–37, (2021). DOI: 10.3103/S1068337221010102
 13. **A.A. Kuzanyan**, S. I. Petrosyan, A. S. Kuzanyan, and G. R. Badalyan “The Use of Silicon Dioxide Films as Anti-Reflective Coating of Thermoelectric Single-Photon Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 55(4), pp. 364–369, (2020). DOI: 10.3103/S1068337220040106
 14. **A.A. Kuzanyan**, A. S. Kuzanyan, S. I. Petrosyan, V. S. Kuzanyan and G. R. Badalyan “Electron Beam Deposition of Lanthanum Hexaboride Films for Usage as Anti-Reflective

- Coating” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 55(2), pp. 240–250, (2020). DOI: 10.3103/S1068337220020073
15. **A.A. Kuzanyan**, V.R. Nikoghosyan and A.S. Kuzanyan “Simulation of Heat Propagation Processes Taking Place in the Detection Pixel of Thermoelectric Single Single-Photon Detector” *IEEE Sensors Journal*, 20(21), pp. 12776 – 12782, (2020). DOI: 10.1109/JSEN.2020.3000608
 16. **A.A. Kuzanyan**, V.R. Nikoghosyan and A.S. Kuzanyan “More than one photon detection using four-layer thermoelectric single-photon detector” *Proc. of SPIE 11354, Optical Sensing and Detection VI*, 1135428 (2020). DOI: 10.1117/12.2555452
 17. **A.A. Kuzanyan**, V.R. Nikoghosyan and A.S. Kuzanyan “Modeling and Simulation of Ultrafast and Highly Efficient Single Photon Detection from Infrared to Ultraviolet” *IEEE Sensors Journal*, 20(6), pp. 3040-3046, (2020). DOI: 10.1109/JSEN.2019.2957603
 18. A.S. Kuzanyan, **A.A. Kuzanyan**, V. N. Gurin, M. P. Volkov, and V. R. Nikoghosyan. “High-Efficiency Thermoelectric Single-Photon Detector Based on Lanthanum and Cerium Hexaborides”. *Semiconductors*, Vol. 53, No. 5, pp. 682–685, (2019). DOI: 10.1134/S1063782619050130
 19. **A.A. Kuzanyan**, A.S. Kuzanyan, V.R. Nikoghosyan. “Four-Layer Detection Pixel of Single-Photon Thermoelectric Detector”. *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 54(2), 236–248, (2019). DOI: 10.3103/S1068337219020099
 20. **A.A. Kuzanyan**, A.S. Kuzanyan, V. R. Nikoghosyan “A high-performance thermoelectric single-photon detector for telecom wavelengths” *Proc. of SPIE*, vol. 11027, (2019). DOI: 10.1117/12.2520105
 21. A.S. Kuzanyan, **A.A. Kuzanyan**, V.R. Nikoghosyan “Three-layer detection pixel of single-photon thermoelectric detector based on rare-earth hexaborides” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 53, No 4, pp. 338–350, (2018). DOI:10.3103/S1068337218040096
 22. **A.A. Kuzanyan**, A.S. Kuzanyan, V.R. Nikoghosyan “Single-Layer Detection Pixel of Single-Photon Thermoelectric Detector Based on Rare-Earth Hexaborides” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 53, No. 3, pp. 242–251, (2018). DOI: 10.3103/S106833721803009X
 23. S.I. Petrosyan, **A.A. Kuzanyan**, G.R. Badalyan, A.S. Kuzanyan “Preparation and Investigation of the Properties of W/CeB₆/W Heterostructure as a Sensitive Element of Single-Photon Thermoelectric Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 53, No. 2, pp. 157–165, (2018). DOI: 10.3103/S1068337218020081
 24. **A.A. Kuzanyan**, V. R. Nikoghosyan, and A. S. Kuzanyan “Simulation of Heat Propagation Processes in the Detection Pixel with Superconducting Layers of Single-Photon Thermoelectric Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 53, No. 1, pp. 96–110, (2018). DOI: 10.3103/S1068337218010097
 25. **A.A. Kuzanyan**, V. R. Nikoghosyan, and A. S. Kuzanyan “Investigation of the Processes of Heat Propagation in W/FeSb₂/W Detection Pixel of the Single Photon Thermoelectric Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 52, No. 3, pp. 249–257, (2017). DOI: 10.3103/S1068337217030100
 26. **A. A. Kuzanyan**, A. S. Kuzanyan, G. R. Badalyan, S. I. Petrosyan, V. O. Vardanyan, V. N. Gurin, M. P. Volkov, and S. Kh. Pilosyan “CeB₆ Thin Films Produced on Different

- Substrates by Electron-Beam Deposition” ISSN 1063-7826, *Semiconductors*, vol. 51, No. 8, pp. 999–1001, (2017). DOI: 10.1134/S1063782617080176
27. A. S. Kuzanyan, **A. A. Kuzanyan**, V. R. Nikoghosyan, V. N. Gurin, M. P. Volkov “Prospects of using rare-earth hexaborides in thermoelectric single-photon detectors” ISSN 1063-7826, *Semiconductors*, vol. 51, No. 7, pp. 870–873, (2017). DOI: 10.1134/S1063782617070235.
 28. A.S. Kuzanyan, V.R. Nikoghosyan, **A.A. Kuzanyan**, “An ultrafast thermoelectric sensor for single-photon detection in a wide range of the electromagnetic spectrum” *Proc. of SPIE* vol. 10229, 102290P, (2017). DOI: 10.1117/12.2264543
 29. **A.A. Kuzanyan**, A.S. Kuzanyan, Vahan Nikoghosyan “Ultra-fast Sensor for Single-photon Detection in a Wide Range of the Electromagnetic Spectrum” *Sensors & Transducers*, vol. 207(12), pp. 21-29, (2016).
 30. A.S. Kuzanyan, **A.A. Kuzanyan**. Pulsed Laser Deposition of Large-Area Thin Films and Coatings, Chapter in the book “*Applications of Laser Ablation - Thin Film Deposition, Nanomaterial Synthesis and Surface Modification*”, ISBN 978-953-51-2812-0, edited by Dongfang Yang, INTECH, pp. 149-173, (2016).
 31. **A. A. Kuzanyan**, “Computer Simulation of Heat Distribution Processes in W/(La,Ce)B₆/W Sensor of Thermoelectric Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 51(4), pp. 360–370, (2016). DOI: 10.3103/S1068337216040083
 32. **A. A. Kuzanyan**, A. S. Kuzanyan, V. R. Nikoghosyan, V. N. Gurin, and M. P. Volkov “Investigation of Processes of Heat Propagation in Multilayer Sensor of Thermoelectric Single-Photon Detector” *Journal of Contemporary Physics (Armenian Academy of Sciences)*, vol. 51(2), pp. 181–190, (2016). DOI: 10.3103/S1068337216020122
 33. **A. A. Kuzanyan**, A. S. Kuzanyan and V. R. Nikoghosyan “Ultrafast TSPD on the basis of CeB₆ sensor” *Journal of Physics: Conference Series* 673, 012007, (2016). DOI:10.1088/1742-6596/673/1/012007
 34. K. M. Makeev, V. N. Gurin, L. I. Derkachenko, M. P. Volkov, A. S. Kuzanyan, **A. A. Kuzanyan**, T. B. Popova, E. V. Ivanova “Obtaining of crystals of polyelemental solid solutions of rare earth hexaborides”, *Technical Physics Letters* 42(1):1-3, (2016). DOI: 10.1134/S1063785016010120
 35. A.S. Kuzanyan, V.R. Nikoghosyan, **A.A. Kuzanyan** “Modeling of kinetic processes in thermoelectric single photon detectors” *Proc. SPIE 9504, Photon Counting Applications*, 95040O (2015). DOI:10.1117/12.2178673
 36. A.S. Kuzanyan, V.R. Nikoghosyan, **A.A. Kuzanyan** “CeB₆ Sensor for Thermoelectric Single-Photon Detector” *Sensors & Transducers*, vol. 191(8), pp. 57-62, (2015).
 37. **A.A. Kuzanyan** "Nanosensor for thermoelectric single-photon detector" *International journal of nanosciences and nanotechnologies Nano Studies*, vol. 9, pp. 93-102, (2014).
 38. A.S. Kuzanyan, **A.A. Kuzanyan**, V.A. Petrosyan, S.Kh. Pilosyan, A.Z. Grasiuk “A simple solution to the problem of effective utilization of the target material for pulsed laser deposition of thin films”, *Quantum Electronics* 43 (12), pp.1170 – 1174, (2013). DOI:10.1070/QE2013v043n12ABEH015194

39. **A.A. Kuzanyan**, A.S. Kuzanyan "Thermoelectric nanowire single-photon detector", *Proc. SPIE 8773, Photon Counting Applications IV; and Quantum Optics and Quantum Information Transfer and Processing*, 87730L (2013). DOI:10.1117/12.2016987;http://dx.doi.org/10.1117/12.2016987
40. **A.A. Kuzanyan**, V.A. Petrosyan And A.S. Kuzanyan" Methods for pulsed laser deposition of large-area films using more than one target" *International Journal of Modern Physics: Conference Series*, vol. 15, pp. 170 –178, (2012). DOI: 10.1142/S2010194512007118
41. **A.A. Kuzanyan**, V.A. Petrosyan and A.S. Kuzanyan "Thermoelectric single-photon detector" *Journal of Physics, Conference Series*: vol. 350 N 012028, (2012). DOI:10.1088/1742-6596/350/1/012028
42. A.A. Hakhoumyan, N.G. Poghosyan, A.A. Gasparyan, **A.A. Kuzanyan** "S-band minkowski microstrip fractal antenna" *Izvestie NAS of Armenia, Physics* No 4. pp. 283-288, (2011).
43. A.A. Hakhoumyan, N.G. Poghosyan, A.A. Gasparyan, **A.A. Kuzanyan** "Mutual coupling reduction in fractal patch antenna dased phase array" *Proceedings of the Technique of Microwave and THz Waves and its Application in Biomedical and Radar Technologies and in Remote Sensing (IRPhE 2010)*, Aghveran, Armenia, 23-25 September, 2010, pp.155.158:

PATENTS' LIST

1. Armen Kuzanyan, **Astghik Kuzanyan**, Vahan Nikoghosyan "Thermoelectric detector multilayer sensor" № 3230, IPC - G01J5/00, (2018).
2. Armen Kuzanyan, **Astghik Kuzanyan**, Vahan Nikoghosyan "Thermoelectric detector multilayer sensor" № 3043, IPC - G01J5/00, (2016).
3. Armen Kuzanyan, **Astghik Kuzanyan**, Vahan Nikoghosyan "Multi-layer sensor of thermoelectric detector" № 2946, IPC - G01J5/00; (2015).
4. Armen Kuzanyan, **Astghik Kuzanyan**, Ashot Petrosyan, Silva Petrosyan, Vassilis Stathopoulos "Multi-layer coating of thermal barrier" № 2897, IPC - C23C 4/00; (2014).
5. Armen Kuzanyan, **Astghik Kuzanyan**, Vahagn Petrosyan "System for production of thin films" № 2737, IPC - C23C 14/00, C30B 23/00, B23B 33/0; (2013).
6. Armen Kuzanyan, Vahagn Petrosyan, **Astghik Kuzanyan** "Device to produce thin films" № 2531, IPC - C23C 14/00, C30B 23/00, B32B 33/00; (2011).

LANGUAGES

Armenian, Russian, English

TEACHING

1. Educational experiments in electromagnetism
2. Educational experiments in atomic physics
3. Educational experiments in molecular physics
4. How to write a grant proposal

PROFILS

<https://www.linkedin.com/in/astghik-kuzanyan-56829164/>

<https://scholar.google.com/citations?user=sQ58YOQAAAAJ&hl=en>