CV

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   Yerevan State University, Physics Faculty, 1967-1972 , Physicist
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10. Dr. Sc. degree: **1996 year, Laser Physics**
11. Current subfield of research: **Laser Physics; Optics; Atomic and Molecular Physics; Development of unique high temperature cell for Laser Physics, Magneto-Optical processes in liquids solids and gases; Nonlinear Optics in liquids solids and gases;**
12. Topic(s) of current research: **Laser Physics; Optics; Atomic and Molecular Physics; Magneto-Optical Processes in gases;**
13. Membership in professional societies:

    The member of Ph.D. honour Council in the field of Quantum Electronics and Optics in Institute for Physical Research of NAS.
    The member of an editorial board of Journal of Contemporary Physics (NAS Armenia).
    The member of Program Committee of Intern. Conf. ICONO/LAT,11-15 May, St. Petersburg, Russia, 2005 and of Program Committee of Intern. Conf. Europhysics CLEO/ Europe -EQEC, 12-17 June , Munich, Germany, 2005.
    The Member of the International Advisory Committee of the 14,15,16, 17 Schools on "Laser Physics and Applications", Bulgaria 2006,2008, 2010 and 2012 year.

14. Research grants or fellowships awarded (year/donor):

2010 ANSEF award PS 1868 "Rb Vapor Optical nano-cell for the measurement of a Strong magnetic Field"

2007-2008 INTAS award Grant South-Caucasus Project 06-1000017-9001" Study of atomic vapor layers of nanometric thickness and atom-surface interaction"
2005-2008 SCOPES award Grant IB 7320 -110684/1 "Tunable locking of diode laser radiation frequency to atomic resonance lines using atomic vapor nanolayers"
2007 ANSEF award PS-nano-657" Development and implementation of a new "L=lambda Zeeman technique" for atomic laser spectroscopy"

2006 ANSEF award PS-opt-0813-233 “Formation of Ultra-Narrow Resonances in Optical Domain”

2005 ANSEF award PS-eng-728-31” Atomic Ensemble of Free Rubidium Atoms Confined in an Optical Nano-cell”

2003 Prize of the President of the Republic of Armenia for Scientific Researches in the Field of Physics, Gold medal.

2002 ANSEF award PS18-01 “Laser spectroscopy by Sub-Micron thickness atomic vapor Layer”

15. Partners abroad (Organizations):

Prof.A.Gallagher, JILA, University of Colorado, Boulder, Colorado, USA
Prof.V. Sautenkov, Institute of Quantum Studies,Texas A&M University, USA
Prof. M. Ducloy, Prof. D.Bloch, Paris-Nord University, Villetaneous, France
Prof. M.-A. Bouchiat and her group**,** Laboratory Kastler-Brossel, Paris , France
Prof. G.Pikhler and his group**,** Institute of Physics, Zagreb, Croatia
Prof. S.Cartaleva and her group, Institute of Electronics, Sofia, Bulgaria
Prof. A. Weis, Institute of Physics, Physics Departament, University of Fribourg, Swiss
Prof. M.Auzinsh and his group, University of Latvia, Latvia
Prof.A.Akulshin and his group, Swinburne University of Technology,Hawthorn, Australia

Recent Selected Publications , 2012- 2008 years.

1. **1.** J. Keaveney, A. Sargsyan, U. Krohn, **D.Sarkisyan**, I.G. Hughes C.S.Adams “Cooperative Lamb shift in nanometric thickness atomic vapor layer”, **Phys.Rev. Lett., 108** , 173601 (2012).

2.A. Sargsyan, G. Hakhumyan, C. Leroy, Y.Pashayan-Leroy, A.Papoyan, D. Sarkisyan, “Hyperfine Paschen-Back regime realized in Rb nanocell”, Optics Letters, V.37,1379 (2012).

3.Ch. Carr, M. Tanasittikosol, A. Sargsyan, D. Sarkisyan, C.S. Adams, K. J. Weatherill “Three-photon electromagnetically induced transparency using Rydberg states” Optics Letters V. 37, 3858 (2012).

4.А.Саргсян, Р. Мирзоян, Д.Саркисян,” Расщепление резонанса электромагнитно-индуцированной прозрачности на атомах 85Rb в сильных магнитных полях вплоть до режима Пашена-Бака” Письма в ЖЭТФ, Т. 96 , с.333-337 (2012).

5. A. Sargsyan, C. Leroy , Y. Pashayan-Leroy , D. Sarkisyan , D. Slavov , S. Cartaleva “Electromagnetically Induced Transparency and optical pumping processes formed in Cs sub-micron thin cell”, Optics Communications V. 285, 2090–2095 (2012).

6. G. Hakhumyan, C. Leroy, R. Mirzoyan, Y. Pashayan-Leroy, D. Sarkisyan “Study of "forbidden" atomic transitions on D2 line using Rb nano-cell placed in external magnetic field”, Euro. Phys. Journ. D, V.66, 119 (2012).

7. R Mirzoyan, A Sargsyan, A S. Sarkisyan, D Sarkisyan “Study of the splitting of electromagnetically induced transparency resonance in strong magnetic field using Rb nano-thin cell” Journal of Physics: Conference Series V.350, 012008 (2012).

8. A.Sargsyan, Y. Pashayan-Leroy, C. Leroy, R.Mirzoyan, A.Papoyan, D. Sarkisyan “High contrast D line electromagnetically induced transparency in nanometric-thin rubidium vapor cell” Applied Physics B. Lasers and Optics, V.105, pp. 767-774 (2011).

9. G. Hakhumyan, C. Leroy, Y. Pashayan-Leroy, D. Sarkisyan, M. Auzinsh “High-Spatial-Resolution Monitoring of strong magnetic field Using Rb vapor Nanometric-Thin Cell”, Optics Communications, V. 284 , 4007 (2011).

10. А.Саргсян, Д.Саркисян “Электромагнитно-индуцированная прозрачность в Λ- системе субмикронных столбах атомов Rb линии D2”, Оптика и Спектроскопия, Т.111, с.364–371(2011).

11. M. G. Bason, M Tanasittikosol, A Sargsyan, A K Mohapatra, **D Sarkisyan**, R M Potvliege, Ch. S. Adams "Enhanced electric field sensitivity of rf-dressed Rydberg dark states" **New Journ. of Physics, 12, 065015 (2010).**

12. G. Hakhumyan, **D. Sarkisyan**, A. Sargsyan, A. Atvars, and M. Auzinsh "Investigation of Rb *D*1 Atomic Lines in Strong Magnetic Fields by Fluorescence from a Half-Wave-Thick Cell "**Optics and Spectroscopy, 108, 685 (2010).**

13. A.Sargsyan, M. G. Bason, **D. Sarkisyan,** A. K. Mohapatra, and C. S. Adams" *Electromagnetically Induced Transparency and Two-Photon Absorption in the Ladder System in Thin Columns of Atomic Vapors*" **Optics and Spectroscopy, V. 109, pp. 529–537(2010).**

14. G. Hakhumyan, A. Sargsyan, C.Leroy, Y. Pashayan-Leroy, A.Papoyan, **D. Sarkisyan** *"Essential Features of Optical Processes in Rb submicron Thin Cell Filled with Neon Gas"* **Optics Express, V.18, 14577 (2010).**

15. A. Sargsyan, **D. Sarkisyan**,U. Krohn, J. Keaveney, and Ch. Adams *"Effect of buffer gas on electromagnetically induced transparency in a ladder system using thermal rubidium vapor"***Physical Review A 82, 045806 (2010)**.

16.V. A. Sautenkov,T. S. Varzhapetyan, H. Li, **D. Sarkisyan**, M. O. Scully,*"Selective Reflection of a Laser Beam from a Dilute Rubidium vapor"* **Journal of Russian Laser Research**, **V. 31, 270 (2010).**

17.D. Sarkisyan and A. Papoyan *"Formation of Narrow Optical Resonances using submicron – thin atomic vapor layer"*Invited Talk , Modern Optics and Photonics. Atoms and Structured Media **pp. 257-288, World Scientific Publishing Co., Singapore (2010).**

18. M.Auzinsh, R.Ferber, F.Gahbauer, A.Jarmola, L.Kalvans, A.Papoyan, **D.Sarkisyan** *"Nonlinear magneto-optical resonances at D1 excitation of ^{85}Rb and ^{87}Rb in an extremely thin cell"* **Physical Review A 81, 033408 (2010)**.

19.D.Sarkisyan, A.Papoyan, "Optical processes in micro- and nanometric thin cells containing atomic vapor", **New Trends in Quantum Coherence and Nonlinear Optics** (Horizons in World Physics, vol.263), Ed.: R.Drampyan, Nova Science Publishers, ISBN: 978-1-60741-025-6, **Chapter 3, pp.85-124 (2009).**

20.A. Papoyan, **D.Sarkisyan** "Magneto-optical processes in atomic vapor cells with radiation wavelength-scale thickness" **Invited paper, Proc. of SPIE, V. 7027, 70270E (2008).**

21. S. Cartaleva et al., A. Sargsyan, D.Sarkisyan, "Sub-Doppler spectroscopy of cesium vapor layers with nanometric and micrometric thickness"**J. Opt. Soc. of America B V.26, 1999(2009).**

22. *A. Sargsyan,* et al., **D. Sarkisyan,** "Efficient technique for measuring laser frequency stability" ***European Physycal Journ. Appl. Physics (EPJ AP) v. 48, 20701 (2009).***

23. A. Sargsyan, et al.,**D. Sarkisyan**, "A novel approach to quantitative spectroscopy of atoms in a magnetic field and applications based on an atomic vapor cell with L=λ**"**, ***Appl. Physics Letters, v. 93, 021119 (2008).***

24. A. Sargsyan, **D. Sarkisyan**, et.al. "Saturated absorption spectroscopy: elimination of crossover resonances with the use of a nanocell"**, Laser Physics, v.18, 749-755(2008).**

25. H. Li, et al., **D. Sarkisyan**,"Improvement of spectral resolution by using the excitation dependence of dipole- dipole interaction in a dense atomic gas" **Applied Physics B., v.91, 229 (2008).**

26. A .Laliotis, et al.,**D. Sarkisyan** "Selective reflection spectroscopy at the interface between a calcium fluoride window and Cs vapor" **Applied Physics B 90 ,** pp. 415-420 **(2008).**