

**Yusif Soltan Gasimov**Doctor of Sciences in Mathematics
Azerbaijan University, Vice- rector

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# **Brief biographic information**

- Finished the Suleymanli village Secondary School, Jabrayil dis., 1985
- Joined army in 1986-1988

# Education, scientific degrees and titles

- Doctor of Sciences in Mathematics, 2010
- Ph.D. in Physics and Mathematics, 1996
- Baku State University, Faculty of Mechanics and Mathematics, 1985-1992

## **Professional activity**

- Vice-rector for Science, Azerbaijan University, 2017
- Visiting professor, University of Nantes, France, 2009
- Head of Department, Inverse problems and non-linear equations, Institute of Applied Mathematics, Baku State University, 1997-2017
- Visiting professor, University of Nantes, France, 2006
- Senior researcher, Institute of Applied Mathematics, Baku State University, 1995-1997
- Junior researcher, Institute of Applied Mathematics, Baku State University, 1992-1995

### **Field of interests**

• Spectral theory, inverse problems, variable domain eigenvalue problems, "shape" optimization

#### **Awards**

- Medal of Excellence Fellow in Education
- Certificate of Honor by the Ministry of Communications and High Technologies
- Certificate of Honor by the Ministry of Education
- Certificate of Honor by the Rector of First University (Turkey)
- Certificate of Honor by the Rector of Baku State University

#### Achievements

- 2022 Asia-Pacific Conference on Applied Mathematics and Statistics (AMS 2022), February 20-22, 2022, Soul, South Korea http://www.apcams.org/comm
- International Conference on Mathematics and Mathematics Education, September 16-18, 2021, Ankara, Turkey <a href="http://theicmme.org/">http://theicmme.org/</a>
- 2nd International Conference on Applied Mathematics, Modelling and Intelligent Computing (CAMMIC 2022) <a href="http://www.cammic.org/">http://www.cammic.org/</a>
- Co-organizer of the 1st International Conference on Contemporary Problems of Physics and Mathematics with Applications, 2020
- Scientific secretary of the series of International Conferences COIA-2005, 2008, 2011, 2013, 2015
- Organizer of the International Conference "Inverse problems and shape optimization", University of Nantes, France, 2008
- Organizer of the International Conference "Inverse problems and shape optimization", University of Nantes, France, 2007
- Fellow of the Azerbaijan Mathematical Society
- Co-organizer of II, III, IV, V and VI Congresses of the Turkic World Mathematical Society

#### **Teaching**

• Teaching experiences at the Baku State University and American University in Baku in the Azerbaijani, Russian and English departments.

### **Editorial Activities**

- Guest Editor Special Issue "New Developments of Computational and Analytic Methods in Science and Engineering", Proceedings of IMM, (ISSN 2409-4986).
- https://proc.imm.az/volumes/48-s/
- Guest Editor Special Issue "Entropy and Its Applications across Disciplines III", Entropy (ISSN 1099-4300). <a href="https://www.mdpi.com/journal/entropy/special\_issues/Entropy\_Appl">https://www.mdpi.com/journal/entropy/special\_issues/Entropy\_Appl</a>
- Guest Editor Special Issue "Entropy and Its Applications across Disciplines II", <u>Entropy</u> (ISSN 1099-4300). <a href="https://www.mdpi.com/journal/entropy/special\_issues/Entropy\_Appl">https://www.mdpi.com/journal/entropy/special\_issues/Entropy\_Appl</a>
- Associate Editor <u>2021 Asia-Pacific Conference on Applied Mathematics and Statistics</u> (AMS 2021)

- Editor in-Chief Advanced Mathematical Models and Applications
- Editorial Board member Applied Science University Journal
- Editorial Board Member Applied Mathematics and Information Sciences
- Editorial Board Member Journal of Modern Technology and Engineering
- Editorial Board Member Frontiers in Applied Mathematics and Statistics
- Editorial Board Member Frontiers in Physics
- Editorial Board Member Current State of Scientific Research and Technology in Industry

#### Grants

- European Regional Development Fund Project ID No. KC-PI-2020/36
- Open Society Institute –SOROS Foundation, Grant No.500481HE61
- Open Society Institute –ZUG Foundation, Grant No.17013
- EGIDE-ECONET (France) Grant No.16362VB
- TWAS Grant No.09-006 RG/MATHS/AS I
- PICS Project (CNRS and ANAS), No.4962 Coordinator
- Winner of the Scientist of the Year competition at the Baku State University in 2015
- Winner of "50+50" Internal Grant Competition of Baku State University
- Winner of the NATO Science for Peace and Security Programme Grant competition
- Azerbaijan Science Development Foundation, Grant No. EIF-2011-1(3-82)/25/1-M-29
- Azerbaijan Science Development Foundation, Grant No. EIF-Mob-1-2013-1(7)-16/02/1
- Yusif Gasimov was the co-founder and guest speaker at West Asia Mathematical School-2019 (WAMS-2019), supported by the French International Center for Theoretical and Applied Mathematics (CIMPA) and Nant University (France). <a href="https://www.math.sciences.univ-nantes.fr/WAMS-CIMPA-IZMIR19/">https://www.math.sciences.univ-nantes.fr/WAMS-CIMPA-IZMIR19/</a>

## **Publications**

## **Books**

- Abbasov A.M., Aliev F.A. Gasimov Y.S. et al. English-Russian-Azerbaijanian Terminological Dictionary on Informatics, Telecommunication and Radioelectronics, Publishing House of Azerbaijan State University of Economics, 2003.
- Niftiyev A.A. Gasimov Y.S. Control by Boundaries and Eigenvalue Problems with Variable Domain, Baku University Publishing, 2004, 185p.
- Yusif S. Gasimov. Variable domain eigenvalue problems with applications to some mechanical systems. In: Use of Risk Analysis in Computer-Aided Persuasion, pp. 222-244, NATO Science for Peace and Security Series E: Human and Societal Dynamics, IOS Press, Netherlands, Volume 88, 2011, 327 p.

## **Papers**

- Adeyemo, O. D., Khalique, C. M., Gasimov, Y. S., & Villecco, F. (2023). Variational and non-variational approaches with Lie algebra of a generalized (3+1)-dimensional nonlinear potential Yu-Toda-Sasa-Fukuyama equation in engineering and physics. Alexandria Engineering Journal, 63, 17-43.
- Yusif S. Gasimov, Juan Eduardo Napoles-Valdes. (2022). Some refinements of Hermite-Hadamard inequality using k-fractional Caputo derivatives. Fractional Differential Calculus, 12(2), 209-221.
- Liu, M., Mei, S., Liu, P., Gasimov, Y., Cattani, C. (2022). A new x-ray medical-image-enhancement method based on multiscale Shannon–Cosine wavelet. Entropy, 2022, 24, 1754. https://doi.org/10.3390/e24121754.
- Juraev, D.A., Gasimov, Y.S. (2022). On the regularization Cauchy problem for matrix factorizations of the Helmholtz equation in a multidimensional bounded domain. Azerbaijan Journal of Mathematics, 12(1), 142-161.
- Efendiev, R., Gasimov, Y. (2022). Inverse spectral problem for pt –symmetric Schrodinger operator on the graph with loop. Global and Stochastic Analysis, 9(2), 67-77.
- Carlo Cattani, Yusif Gasimov. (2022). Book Review: Mathematical Modelling by Simon Serovajsky, (2021), Chapman & Hall/Crc. Advanced Mathematical Models & Applications, 7(2), 2022, 249-250.
- Valdes, J.E.N., Gasimov, Y.S., & Aliyeva, A.R. On the oscillatory behavior of some qeneralized differential equation. Punjab University Journal of Mathematics, 53(1), 2021, 71-82.
- Mardanov, M.J., Sharifov, Y.A., Gasimov, Y.S., & Cattani, C. Non-linear first-order differential boundary problems with multipoint and integral conditions. Fractal and Fractional, 5(1), 2021, 15.
- Srivastava, H.M., Iqbal, J., Arif, M., Khan, A., Gasimov, Y.S., & Chinram, R. A new application of gauss quadrature method for solving systems of nonlinear equations. Symmetry, 13(3), 2021, 432.
- Li, J., Singh, G., Ilhan, O.A., Manafian, J., & Gasimov, Y.S. Modulational instability, multiple Exp-function method, SIVP, solitary and cross-kink solutions for the generalized KP equation. AIMS Mathematics, 6(7), 2021, 7555-7584.
- T. Usman, N. U. Khan, M. Aman, Y. Gasimov. A unified family of multivariable Legendre

- Y.S. Gasimov, H. Jafari, M.J. Mardanov, R.A. Sardarova, Y.A. Sharifov. Existence and uniqueness of the solutions of the nonlinear impulse differential equations with nonlocal boundary conditions. Quaestiones Mathematicae, 2021, 1-14.
- Paulo M. Guzman, Juan E. Napoles Valdes, Yusif S. Gasimov. Integral Inequalities within the Framework of Generalized Fractional Integrals. Fractional Differential Calculus, 11(1), 2021, 69-84. https://doi:10.7153/fdc-2021-11-05 (Scopus)
- Can N.H., Nikan O., Rasoulzadeh M.N., Jafari H., Gasimov Y.S. Numerical computation of the time non-linear fractional generalized equal width model arising in shallow water channel. *Thermal Science*, Vol.24, Suppl. 1, 2020, pp.49-S58.
- Pourghanbar S., Manafian J., Ranjbar M., Aliyeva A., Gasimov Y.S. An efficient alternating direction explicit method for solving a nonlinear partial differential equation. *Mathematical Problems in Engineering*, Vol.2020, Article ID 9647416, 12 pages.
- Gasimov Y.S., GuseynovSh.E., Napoles-Valdes J.E. On some properties of limit cycles of the Biryukov equation. Proceedings of the Institute of Mathematics and Mechanics, Vol.46, No.2, 2020, pp.321-345.
- Farjamnia G., Gasimov Y., Kazimov C. An Improved DV-Hop for Detecting Wormhole Attacks in Wireless Sensor Networks. *Journal of Communication Engineering*, Vol.9, No.1, pp.1-24.
- Farjamnia Gh, Gasimov, Y.S., Kazimov, C. Review of the techniques against the wormhole attacks on wireless sensor networks, Wireless Personal Communications, Vol.105, No.4, 2019, pp.1561-1584.
- Gasimov Y.S., Pashayev A., Azizov B., Agamalieva L., Lacinová V., Šmerek M. Application
  of decision-making expert systems in transportation, Naše More-International Journal of
  Maritime & Technology, Vol.66, No.3, 2019, pp. 130-134.
- Safari, Ali R., Sharifov, Yagub A., Gasimov, Yusif S. Necessary optimality condition for the singular controls in an optimal control problem with nonlocal conditions, *FILOMAT*, Vol.32, No.3, 2018, pp.749-757.
- Ghasem Farjamnia, Mehdi Zekriyapanah Gashti, Hamed Barangi, Yusif S. Gasimov. The study of support vector machine to classify the medical, International Journal of Computer Science and Network Security, Vol.17, No.12, December 2017, pp.145-150.
- G.F. Guliyev, Y.S. Gasimov, H.T. Tagiev, T.M. Guseinova, On the inverse problem of finding the right-hand side of the wave equation with a nonlocal condition, Tomsk State University Journal, DOI 10.17223/19988621/49/2.
- Gasimov Y.S., Allahverdiyeva N.A. Shape optimization for the eigenfrequency of the plate, Georgian Mathematical Journal, 2017, DOI: 10.1515/gmj-2017-0005, 6p.

- M.Z. Gashti, Y.S.Gasimov, G.Farjamnia, S. M. Hashemi. New study in the required conditions for using in compression wsns during the data collection, Int. J. Mechantronics, Electrical and Computer Thechnology, DOI: IJMEC/10.225160.
- Xiao-Jun Yang, Yusif S. Gasimov, Feng Gao, Allahverdiyeva N.A., Travelling-wave solutions for Klein-Gordon and Helmholtz equations on Cantor sets, Proceedings of the Institute of Mathematics and Mechanics, Azerbaijan National Academy of Sciences, Vol.43, No.1, 2017, pp.123-131.
- Min Ma, Dumitru Baleanu, Yusif S. Gasimov, Xiao-Jun Yang. New results for multidimensional diffusion equations in fractal dimensional space, Romanian Journal of Physics, Vol.61, No.5-6, 2016, pp.784-794.
- Gasimov Y.S., Allahverdiyeva N.A. Aliyeva A.R. On an optimal shape problem for the eigenfrequency of the clamped plate, TWMS J. Pure Appl. Math., Vol.7, No.1, 2016, pp.28-33.
- Gasimov Yusif, Ghasem Farjamia. Wireless sensor networks architecture, International Research Journal of Computer Science, Vol.3, No.1, 2016.
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- F. Aliev, N.A. Ismailov, Y.S. Gasimov, A.A. Namazov. On a problem of identification of the parameters of dynamical systems, Proceedings of IAM, Vol.3, No.2, 2014, pp.205-211.
- Y.S. Gasimov, N.A. Allahverdiyeva. On an extremal problem for the eigenvalues of the Pauli operator, Proceedings of IAM, Vol.3, No.2, 2014, pp.205-211.
- H.F. Guliyev, Y.S. Gasimov, S.M. Zeynalli, Optimal control method for solving the Cauchy-Neumann problem for the Poisson equation, Journal of Mathematical Physics, Analysis, Geometry, Vol.10, No.4, 2014, pp.32-41.
- H.F.Guliyev, Y.S.Gasimov, S.M.Zeynalli, Application of the optimization methods to solution of the Cauchy-Dirichlet problem for Ppoisson equation, News of Baku University, No.3, 2013, pp.12-18.
- S. I. Kabanikhin, Y. S. Gasimov, D. B. Nurseitov, M. A. Shishlenin, B. B. Sholpanbaev,
   S. Kasenov, Regularization of the continuation problem for elliptic equations, Journal of Inverse and Ill-Posed Problems, Vol.21, No.6, pp.871–884, DOI: 10.1515/jip-2013-0041.
- Gasimov Y.S. On a shape design problem for one spectral functional, Journal of Inverse and Ill-Posed Problems, Vol.21, No. 5, 2013, pp.629–637, DOI: 10.1515/jip-2012-0001
- Aliev F.A., Gasimov Y.S., Velieva N.I., Safarova N.A., Agamalieva L.F. High accuracy

- algorithms to the solution of the optimal output feedback problem for the linear systems, Proceedings of the Romanian Academy, Series A, Vol. 13, N3, 2012, pp.207-214.
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- Aliev F.A., Gasimov Y.S. Application of the shape optimization method to one optimal control problem in oil extraction by gazlift method, Reports of ANAS, Vol. LXVI, N.2, 2010, pp.18-23.
- Gasimov Y.S., Nachaoui A., Niftiyev A.A. Nonlinear eigenvalue problems for p- Laplacian, Optimization Letters, No.4, 2010, pp.67-84.
- Pourgholi R., Azizi N., Gasimov Y.S., Aliev F.A., Khalafi H.K. Removal of numerical instability in the solution of an inverse head conduction problem, Communications in Nonlinear Science and Numerical Simulation, Vol.14, No.6, 2009, pp.2664-2669.
- Mardanov M.J., Nachaoui A., Velieva N.I., Gasimov Y.S., Niftili A.A. Methods for the solution of the optimal stabilization problem for the descriptor systems, Reports of ANAS, Vol. LXIV, No.4, 2008, pp.8-13.
- Aliev F.A., Gasimov Y.S., Nachaoui A., Safarova N.A., Efendiev R.F. An iterative algorithm
  for the solution of the discrete periodic optimal regulator problem, Reports of ANAS, Vol.
  LXIV, No.6, 2008, pp.3-7.
- Gasimov Y.S. An inverse spectral problem W.R.T. domain, Mathematical Physics, Analysis, Geometry, Vol.4, No.3, 2008, pp.358-370.
- Gasimov Y.S. Some shape optimization problems for the eigenvalues, J. Phys. A: Math. Theor. Vol.41, No.5, 2008, pp.521-529.
- Gasimov Y.S. Algorithm to the solution of a shape optimization problem for the eigenvalues, Reports of ANAS, Vol. LXIII, No.6, 2007, pp.15-21.
- Gasimov Y.S. On a convex dependence of the eigenvalues of Schrödinger operator on the domain, News of Baku State University, No.2, 2006, pp.29-33.
- Gasimov Y.S., Ahmadov E. Algorithm to the solution of the discrete problem of the variational calculus with unknown boundaries, Reports of ANAS, Vol. LXI, No.5, 2005, pp.31-37.
- Gasimov Y.S. On one inverse problem for defining of the domain of the plate, Applied and Computational Mathematics, Vol.4, No.2, 2005, pp.41-46.
- Gasimov Y.S. On one inverse problem relatively domain for the plate, Archive: Math.SP/0506442, Vol.1, 2005, 7p.
- Gasimov Y.S. On some properties of the eigenvalues by the variation of the domain, Mathematical Physics, Analysis, Geometry, Vol.10, No.2, 2003, pp.249-255.

- Gasimov Y.S., Niftiyev A.A. On a dependence of the eigenfrequency of the plate under across vibrations, Problems of Durability and Plasticity, 2002, issue 64, pp.91-95.
- Gasimov Y.S., Niftiyev A.A. On a minimization of the eigenvalues of Schrödinger operator relatively domain, Differential Equations, Vol.38, No.6, 2002, pp.842-844.
- Gasimov Y.S. Variation of the eigenvalues of the second order elliptic operator with respect to boundary conditions, Optimization Methods and Applications, Vol.4, 2001, pp. 82-88.
- Gasimov Y.S., Niftiyev A.A. On a minimization of the eigenvalues of Schrödinger operator with respect to domain, Doklady Mathematics, Vol. 380, No.3, 2001, pp.305-307.
- Gasimov Y.S., Niftiyev A.A. On a minimization of the fist eigenvaule of the Laplace operator over domains, The Journal of Mathematics, University of Istanbul, Vol.57-58, 2001, pp.99-102.
- Gasimov Y.S., Niftiyev A.A. Some properties of the eigenvalues and their parametrical dependence on the domain, Theory and Practice of Differential Equations, Vol.6, 2000, pp.70-74.
- Gasimov Y.S. On a minimization of the eigenvalues of Laplace operator with respect to domain, Theory and Practice of Differential Equations, Vol.7, 2000, pp.70-73.
- Niftiyev A.A., Gasimov Y.S. The optimal control problem for the elliptic equation, Statistics, Journal of Turkish Statistical Association, Vol.2, No.3, 1999, pp.175 186.
- Niftiyev A.A., Gasimov Y.S. The optimal control problem for the elliptic equation with unknown boundaries, News of Baku State University, No. 3-4, 1999, pp.124-136.

#### **Conference contributions**

- Gasimov Y.S. Some variable domain eigenvalue problems and applications. Plenary Talk, The First International Conference on New Trends in Applied Mathematics, Beni-Mellal, Morocco, 19-21 May, 2022.
- Sh.E. Guseynov, Y.S. Gasimov, J.E.N. Valdes. A note on the oscillatory nature of generalized Li'enard equation. *1st International Conference on Applied Analysis, Computation and Mathematical Modelling in Engineering*, 24-26 February, 2021, INDIA.
- Yusif Gasimov, Asif Pashayev. Development of effective algorithms for assessment of risks in logistics. International Conference on Problems of Logistics, Management and Operation in the East-West Transport Corridor (PLMO), Baku, 2021.
- Gasimov Y.S., Pashayev A., Azizov B. Modelling of Fuzzy Logic Toolbox is FIS- a structure
  is the system of unclear conclusion (Fuzzy Inference System) using the MATLAB.
  International Conference on Natural Science and Technology, 20-22 August, 2020, Baku,
  Azerbaijan.

- Qasımov Y.S., Paşayev A., Ağamalıyeva L.F., Rəqəmsal iqtisadiyyatın inkişafında milli strategiyanın rolu. "Rəqəmsal İqtisadiyyat: müasir çağırışlar və real imkanlar" beynəlxalq konfransı, UNEC-2020, 13-14 fevral, Bakı, 2020, s.126-128.
- Gasimov Y.S., Agamalieva L.F., Aliyeva A.R. On the existence results for the functionals
  of the eigenvalues of the Pauli operator. International Conference on Modern Problems of
  Mathematics and Mechanics dedicated to the 60th Anniversary of IMM, 23-25 October,
  2019, Baku, Azerbaijan, pp.201-203.
- Gasimov Y.S., Aliyeva A.R. On an existence of the optimal shape for one functional related with the eigenvalues of the Pauli operator. 8th International Eurasian Conference on Mathematical Sciences and Applications, 27-30 August, 2019, Baku, Azerbaijan, pp.92-94.
- Gasimov, Y.S., Pashayev, A., Azizov, B. Application of the decision-making expert systems in the evaluation of the security risks of loads in transportation. *XXXI International Conference "Problems of decision making under uncertainties"*, July 3-8, 2018, Lankaran-Baku, pp.65-66.
- Gasimov Y.S. On a formulation and solution of the inverse spectral problem with respect to the domain. *XXXI international conference on "Problems of decision making under uncertainties"*, July 3-8, 2018, Taras Shevchenko National University of Kyiv (Ukraine), Lankaran State University (Republic of Azerbaijan), Azerbaijan State Oil and Industry University (Republic of Azerbaijan), plenar məruzə.
- Gasimov Y.S., Aliyeva A.R. On a numerical solution of a shape optimization problem for the eigenvalues of Pauli operator, Int. Conf. "Modern Trends in Physics", Baku, 2017, pp.35-37.
- Zekeriyapanah G.M., Farjmnia G., Gasimov Y.S. Study of feature extraction phase techniques in biometric identification based on iris, International Conference on Information Technology, Computer and Telecommunications, Rademan Innovative Institute, vol. 3, 2017.
- Zekeriyapanah G.M., Farjmnia G., Gasimov Y.S. Study of segmentation phase techniques in biometric identification based on iris, International Conference on Information Technology, Computer and Telecommunications, Rademan Innovative Institute, vol. 3, 2017.
- Gasimov Y.S., Agamalieva L.F., Aliyeva A.R. Numerical Algorithm to solution of a shape design problem, The Third International Conference on Applications of Mathematics and Informatics in Natural Sciences and Engineering Dedicated to the 80th Birthday of David Gordeziani, 6-9.12, 2017, Tbilisi Georgia.
- Gasimov Y.S., Allahverdiyeva N.A. On one property of the eigenfrequency of the clamped plate under transverse vibrations, VI Congress of the Turkic World Mathematical Society, Astana Kazakhstan, 02-05 October, 2017.
- Gasimov Y.S., Allahverdiyeva N.A., On a convex dependence of the eigenfrequency of the plate on its form, Int. Conf. "Theoretical and Applied Problems of Mathematics" dedicated to the 55th Anniversary of Sumgait State University, Sumgait, 25-26, May, 2017, pp.106-107.

- Gasimov Y.S., Aliyeva A.R. On a numerical solution of a shape optimization problem for the eigenvalues of Pauli operator, Int. Conf. "Theoretical and Applied Problems of Mathematics" dedicated to the 55th Anniversary of Sumgait State University, Sumgait, 25-26, May, 2017, pp. 34-35.
- Gasimov Y.S., Allahverdiyeva N. Amirova L., On a convexity property of the eigenfrequency of the clamped plate, International Conference on Differential equations and Dynamic systems, Suzdal, Russia, 8-12 July, 2016
- Aliyev A.M., Gasimov Y.S., On an inverse problem relatively domain in a variational formulation, V International Scientific conference "Assymptotical, Topological, and Computer Methods in Mathematics" devoted to the 85 Aniversary of academician M.Imanaliyev, Bishkek, 2016
- Gasimov Y.S., On a solution of the inverse spectral problems on reconstruction of the domain for some operators, 5th International Conference on Mathematics & Information Sciences, 11-13 Feb. 2016, Zeval City, Egypt
- Gasimov Y.S., Farjamia G., Probe selection to reduce the power consumption in wireless sensor networks, International Conference on Electrical Engineering Computer Information Technology, Tabriz, Iran, September, 2016
- Gasimov Y.S., Farjamia G., CS ideas on WSN deployment, International Conference on Electrical Engineering Computer Information Technology, Tabriz, Iran, September, 2016
- Gasimov Y.S., Amirova L.I., Allahverdiyeva N., Investigation of one applied optimization problem by shape optimization method, Scientific Conference "Functional Analysis and Applications" dedicated to the 100th Anniversary of prof. A.Habibzade, Baku, 2016
- Gasımov Y.S., Murtuzayeva A., Aliyeva A. On an inverse problem for the composite type equation, Scientific Conference dedicated to the 100th Anniversary of prof. M.L. Rasulov, Sheki, Azerbaijan, November, 2016
- Gasimov Y.S., A.Aliyeva, On a variation of the eigenvalues of Pauli operator with respect to domain, V Congress of the Turkic World Mathematicians, Kyrgyzstan, "Issyk-Kul Aurora", 5-7 June, 2014, p.70.
- Gasimov Y.S. Allahverdiyeva N.A.On an extremal problem for the eigenvalue of Pauli operator with variable domain, V Congress of the Turkic World Mathematicians, Kyrgyzstan, "Issyk-Kul Aurora", 5-7 June, 2014, p.70.
- H.F. Guliyev, Y.S. Gasimov, S.M. Zeynalli. On a determination of the right hand side of the string vibratiions equation, Int. Conf. "Mathematics and ICT Applications: New Training Technologies", Ganja, Azerbaijan, 5-6 June, 2014, pp.198-199.
- F.A.Aliev, N.A.Ismailov, Y.S.Gasimov, M.M.Mutallimov Mathematical modeling, control and stabilization of gas-lift process, V Congress of the Turkic World Mathematicians,

- Gasimov Y.S., Allahverdiyeva N.A.On an optimal shape design problem for the eigenvalues of the biharmonic operator, Extended abstracts of the 4th International Conference on Control and Optimization with Industrial Applications, 10-12 July, 2013, Borovets, Bulgaria.
- Guliyev H.F., Gasimov Y.S. Optimal control method to solving the Cauchy-Dirichlet problem for elliptic equation, Extended abstracts of the 4th International Conference on Control and Optimization with Industrial Applications, 10-12 July, 2013, Borovets, Bulgaria.
- Gasimov Y.S., Allahverdiyeva N.A. Algorithm to solution of the shape optimization problem for the eigenvalues, 2nd International Eurasian Conference on Mathematical Sciences and Applications, 26-29 September, 2013, Sarajevo, Bosnia and Herzegovina.
- Gasimov Y.S., Amirova L.I. On a shape design problem for the eigenfrequency of the membrane with fixed boundary length, The 1st Eurasian Conference on Mathematical Sciences and Applications, September 03-07, 2012, Pristine, Kosovo, p.144.
- Aliev F.A., Gasimov Y.S., Velieva N.I., Agamalieva L.F. A method for the solution of the optimal control problem for the linear descriptor systems, The 1st Eurasian Conference on Mathematical Sciences and Applications, September 03-07, 2012, Pristine, Kosovo, p.107.
- Aliev F.A., Gasimov Y.S., Velieva N.I., Safarova N.A., Agamalieva L.F. High accuracy algorithm to the solution of the optimal output feedback problem for the linear systems, 9th Seminar on Differential Equations and Dynamical Systems, July 11-13, 2012, Tabriz, Iran, pp.353-354.
- Gasimov Y.S., Mardanov I.J., Safarova N.A. On a minimization of the first eigenfrequency of the plate with respect to its domain, IV Congress of the Turkic World Mathematical Society, Baku, Azerbaijan, 1-3 July, 2011, p.353.
- Aliev F.A., Ismayilov F.S., Ismayilov N.A., Gasimov Y.S. On a problem of identification in the linear stationary case, The 3th International Conference on Control and Optimization with Industrial Applications, Ankara, Turkey, 2011, pp. 134-135.
- Gasimov Y.S., Safarova N.A. On an optimization problem with respect to domain for the eigenfrequency of the vibrating plate, The 3th International Conference on Control and Optimization with Industrial Applications, Ankara, Turkey, 2011, pp.87-88.
- Aliev F.A., Velieva N.I., Gasimov Y.S. High-accuracy algorithm to the solution of the optimal control output feedback problem, The 3th International Conference on Control and Optimization with Industrial Applications, Ankara, Turkey, 2011, p. 97.
- Gasimov Y.S. Variable domain eigenvalue problems with applications to some mechanical systems, The NATO Science for Peace and Security Programme Workshop on Use of the Risk Analysis in Computer-Aided Persuasion, Antalya, Turkey, 22-26 May 2011.

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