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Eğitim:

- Yüksek Mühendislik Derecesi M.Sc.(Eng.)** Elektromekanik Mühendisliği (Otomasyon ve Kontrol Mühendisliği), Üniversite Birinciliği (Lenin Bursu), Azerbaycan Devlet Neft ve Sanayi Üniversitesi, Bakü, 1964 - 1969
- Ph.D.** Teknik Sibernetik ve Enformasyon Teorisi (Kontrol Mühendisliği), Sibernetik Enstitüsü ve Matematik Enstitüsü, Azerbaycan Bilimler Akademisi, Bakü, 1972
- Kıdemli İlimi İşçi** Sistem Teorisi, Otomatik Tanzimleme ve Kontrol Teorisi, Sistem Analizi (Mat. Bilimleri), Moskova VAK, 1979
- D.Sc.(Eng.):** Teknik Sibernetik ve Enformasyon Teorisi (Kontrol Mühendisliği), MIEM-LETI, Moskova, SSCB, 1982

Deneyim:

- Ph.D. Öğrencisi** NIPINeftekhimAvtomat Ar-Ge Enstitüsü, Cihazlar ve Kontrol Sistemleri Bakanlığı (MinPribor SSSR), Eylül 1970- Aralık 1972
- Mühendis, Kıdemli İlimi Emekdaş, Lab Müdürü** NIPINeftekhimAvtomat Ar-Ge Enstitüsü: Mühendis, Baş İlimi İşçi ve "Değişken Yapılı Proses Kontrol Mühendisliği" Lab. Müdürü, Sumgait, Azerbaycan 1969-1984
- En İyi Mucit Rütbesi** MinPribor SSSR Moskova, 1980
- Profesör** Otomasyon ve Robotik Sistemler (Avtomatika) (Otomasyon ve Kontrol Mühendisliği), Moskova, 1986
- Bölüm Başkanı** Otomasyon ve Robotik Sistemler (Avtomatika) Bölümü, Azerbaycan Teknik Üniversitesi 1984-1996
- Danışman Profesör** Beijing Havacılık ve Uzay Mühendisliği Üniversitesi BUAA, Çin, 1993
- Profesör** Uçak Mühendisliği Bölümü, İstanbul Teknik Üniversitesi, Türkiye 17.11.1996-halen
- Misafir Profesör** Nürnberg George Simon Uygulamalı Bilimler Üniversitesi, Almanya, 2001

Özgeçmiş

Elbrus Mahmudovlu Caferov 15.12.1946 tarihinde, Gökçe ilinin (Batı Azerbaycan) Basarkeçer r. Kerkibaş köyünde doğmuştur. Kerkibaş köyünde 7 yıllık iptidai mektebini bitirdikten sonra Çahırlı köyünde 11 yıllık orta mektebinden (lise) altın madalyayla 1964 yılında mezun olmuştur. Aynı yılda girdiği Azerbaycan Neft ve Kimya Enstitüsü'nden (şimdi: Azerbaycan Devlet Neft ve Sanayi Üniversitesi), Bakü, Üniversite Birinciliği (kırmızı diploma) ve Lenin Bursu ile 1969 yılında mezun olarak Elektromekanik Yüksek Mühendisliği (Otomasyon ve Proses Kontrol Mühendisliği) derecesini kazanmıştır. İşe başladığı NIPINefteKhimAvtomat (Sumgait) Enstitüsü'nde tamamladığı Ph. D. tezini, Azerbaycan Bilimler Akademisi (Bakü) Sibernetik Enstitüsü ve Matematik Enstitüsü ile TsNIIKAutomation (Moskova) Merkezi Enstitüsünde 1972'de savunmuş, Teknik Sibernetik ve Enformasyon Teorisi (Kontrol Mühendisliği) alanında Ph.D. ünvanını Moskova VAK'tan almıştır. Teknik Sibernetik ve Enformasyon Teorisi (Kontrol Mühendisliği) alanındaki üst bilim doktora derecesini (D.Sc. Eng.) ise, NIPINefteKhimAvtomat (Sumgait) kurumunda tamamladığı üst doktora tezini MIEM (Moskova)-LETI (Leningrad) Enstitülerinde 1982'de savunarak Moskova VAK'tan almıştır.

Ph. D. Caferov'un bilim doktora tezi, Trapeznikov Moskova Kontrol Problemleri Enstitüsü (IAT) ve MIEM-LETI tarafından, Kontrol Teorisi alanında yeni istikamet olarak değerlendirilmiştir. D.Sc. Caferov, Lenin ödüllü (1972) Petrov-Emelyanov-Utkin'in kurucusu oldukları ünlü Rus-Sovyet Değişken Yapılı Sistemler Teorisi ekolünün ikinci nesil mensubu olarak, Değişken Yapılı Kontrol Teori ve Pratiği'ne ciddi katkılarda bulunmuştur. Bu katkıları şöyle özetlemek mümkündür:

- Değişken yapıları kontrol sistemlerinin, kayma kipinin kararlılığı ve mevcudluğu koşulları altında parametrik optimizasyon ve sentez yöntemlerinin geliştirilmesi;
- Değişken yapıları sistemlere zaman gecikmesi kavramının ilk kez dâhil edilmesi ve uyarlanmış Lyapunov-Krasovskii fonksiyonelleri aracılığıyla ilgili sistemlerin kararlılığının çözümlenmesi;
- Yeni pnömatik değişken yapıları P, PD, PI, PID tabanlı, üniversal, multi-yapılı, adaptif, optimal (Pontryagin'in bang-bang kontrol kuramı tabanlı), bozucu kompenze edici (Petrov'un envaryantlık ilkesi tabanlı) kontrolörler setinin ve sistemlerinin geliştirilmesi (bu icatlar 25 Sovyet patent sertifikası ile tasdiklenmiştir);
- Prototipleri seri üretilmiş olan kayma kipli kontrolörlerin, membran tipli eyleyici valflerine sahip sanayi süreçlerinde uygulanması ve gürbüzlüğü sağlayan çatırtı olayının pratik açıdan etkili olduğunun sanayi ortamında ilk kez olarak kanıtlanması; bunun sonucu olarak kayma kipli kontrolün sanayi uygulamalarının önünün açılması.

1969-1984 yılları arasında, NIPINefteKhimAvtomat (Sumgait) Ar-Ge Enstitüsü'nde, baş tekniker, mühendis, büyük mühendis, baş ilmi işçi ve kurucusu olduğu "Değişken Yapılı Proses Kontrol Mühendisliği" Laboratuvarı Müdürü görevlerinde çalışmıştır. Paralel olarak, 1974-1984 arasında, Azerbaycan Neft ve Kimya Enstitüsü'nün Uygulamalı Matematik Bölümü'nde ders vermiştir. 1984-1996 aralığında, Azerbaycan Teknik Üniversitesi'nde (Bakü) "Otomasyon ve (kurucusu olduğu) Robotik Sistemler" Bölümü (Avtomatika) Başkanı ve Otomasyon ve Kontrol Mühendisliği Problem Laboratuvarı Müdürü görevlerinde bulunmuştur.

D.Sc. Caferov, Otomasyon ve Robotik Sistemler (Avtomatika) (Otomasyon ve Kontrol Mühendisliği) alanında Moskova VAK'tan profesörlük ünvanını 1986 yılında almıştır. Beijing Havacılık ve Uzay Mühendisliği Üniversitesi'nde (BUAA) (Çin) misafir profesör olarak bulunduğu 1993 yılında, kendisine orada danışman profesörlük ünvanı verilmiştir. 2001 yılında Nürnberg George Simon Uygulamalı Bilimler Üniversitesi'nde (Almanya) misafir profesör olarak çalışmıştır. Sovyetler Birliği çöktükten sonra, 1996 yılından bu yana, İstanbul Teknik Üniversitesi Uçak ve Uzay Bilimleri Fakültesi Uçak Mühendisliği Bölümü'nde sözleşmeli profesör olarak görev yapmaktadır. 2000-2010 yılları arasında, İstanbul Bilgi Üniversitesi (kurucularından olduğu) Bilgisayar Bilimleri Bölümü'nde dersler vermiştir.

Profesör Caferov “**VARIABLE STRUCTURE CONTROL AND TIME-DELAY SYSTEMS**” (WSEAS Press, 2009) adlı kitap ile “**ROBUST CONTROL: THEORY AND APPLICATIONS** (InTech Open Access Publisher, 2011) (**6373** kez indirilmiştir)” ve “**ADVANCES IN SPACECRAFT SYSTEMS AND ORBIT DETERMINATION** (InTech Open Access Publisher, 2012) (**4952** kez indirilmiştir)” adlı kitaplarda birer bölümün yazarıdır. 200’ü aşkın bilimsel dergi makalesi, uluslararası ve ulusal konferans bildirisi ve 25 Sovyet patent sertifikası bulunmaktadır. Bunlardan 100 kadarı SCI’s: ISI Web of Science, Scopus, Engineering Village, Derwent Innovations Index, IEEE Explore, Elsevier, Google Scholar vb. veri tabanlarında taranmaktadır. Ayrıca birçok teknik rapor ve öğretim föyü yazmıştır. Taranan 40 yayınından **562** kez atıf almıştır ve h-endeksi **10**’dur (Kaynak: Google Scholar).

Profesör Caferov’un kontrol teorisi (kayma kipli ve gürbüz kontrol) ile hava ve uzay araçları dinamiği ve kontrolü alanlarında vermiş olduğu bilimsel katkıları şöyle özetlemek mümkündür:

- Hava ve uzay araçları (uçak, füze, uydu, helikopter)dinamiğinin çok değişkenli ve belirsizlik içeren bir kontrol sistemi olarak ele alınması ve bu dinamik sistemlere kayma kipli gürbüz kontrol yöntemlerinin uygulanması;
- Hava araçları ve roket motor dinamiğine zaman gecikmesinin dâhil edilmesi ve bu tür belirsiz dinamik sistemler için kayma kipli kontrol yöntemlerinin geliştirilmesi;
- “Lagrange’ın ortalama değer teoremi”nin uyarlanarak ilk kez zaman gecikmeli sistemlerde kullanılması ve kontrol yöntemlerinin geliştirilmesi; zaman gecikmeli sistemleri için yeni kararlılık kriterlerinin türetilmesi;
- Tam ve indirgenmiş mertebeli belirsiz sistemler için kayma kipli gözlemleyicilerin geliştirilmesi
- Çok değişkenli robot sistemleri için çeşitli kayma kipli kontrol kural ve yöntemlerinin geliştirilmesi.

D.Sc. Caferov, SCI, EI, Elsevier, Scopus veri tabanlarında taranan birçok dergi ile uluslararası birçok kurum ve kuruluşta hakem, ekspert ve editör sıfatlarıyla yoğun olarak hizmet vermektedir. Kendisi, Journal of the Franklin Institute dergisinin kalitesine istisnai katkılarda bulunan hekamlik hizmetinden ötürü, “Hakemlikte Mükemmellik Sertifikası 2013 (Certificate of Excellence in Reviewing 2013) ile ödüllendirilmiştir.

Kurum ve kuruluş üyelikleri:

- Senior member of IEEE ABD (2011),
- IEEE Control Systems Society, IEEE Aerospace and Electronic Systems Society ABD (2011)
- WSEAS Academy (Greece) (1999); IASTED (Canada 1999)
- International Technological Cybernetics Academy (Saint Petersburg 1993)
- International Society of Automation (ISA) (2012)
- The New York Academy of Sciences (October 2010)
- American Mathematical Society (AMS) (April 2013)
- Emerald Literati Network (London) and European Aeronautics Science Network (EASN) (May 2009)
- Society of Satellite Professionals International.(2010)
- Society for Industrial and Applied Mathematics (SIAM) (October 2013)
- International Qur’anic Studies Association (IQSA) (May 2014)
- International Scientific Academy of Engineering & Technology (ISAET) (March 2015)
- The International Academy of Astronautics (IAA) (Temmuz 2015’te Corresponding Member olarak seçilmiştir)

Dergi Editörler Kurulu üyelikleri:

- Associate Editor of the Springer-Verlag Control Theory and Technology (CTT) (2013) (<http://www.springer.com/engineering/control/journal/11768?detailsPage=editorialBoard>),
- Associate Editor of WSEAS Transactions on Systems and Control (2010) (<http://wseas.org/wseas/cms.action?id=4073>),
- Associate Editor of Global Science and Technology Forum (GSTF) Journal on Aviation Technology (JAT) (2015) (<http://www.globalstf.org/publications/jat/editorialboard/>)
- Board of Directors member of North Atlantic University Union (NAUN) (October 2013)

(<http://www.naun.org/cms.action?id=2050>)

- Bentham The Open Electrical and Electronic Engineering Journal (2010)
(<http://benthamopen.com/toeej/index.htm>)
- Bentham Open Engineering Sciences Journal (2014)
(<http://benthamopen.com/engineering/index.htm>)
- Journal of Advanced Science and Engineering Research (JASER) (2008)
(<http://www.sign-ific-ance.co.uk/dsr/index.php/JASER>),
- Associate Editor of GSTF Journal on Aviation Technology (JAT) (2013)
(<http://globalstf.org/journal-jat.php>)

Etraflı bir özgeçmişı 2006 yılından beri Marquis Who's Who in the World (ABD) adlı otobiyografi ansiklopedisinde yer almaktadır. Araştırma ve öğretim alanındaki güncel ilgisi kontrol kuramı, otomatik kontrol, deęişken yapıll sistemler ve kaym kipli kontrol, zaman gecikmeli sistemler, hava ve uzay araçları dinamięi ve kontrolü, robot kontrolü, gürbüz kontrol, optimal kontrol, süreç kontrolü vb.

Havacılık ve uzay mühendislięi, robotik, otomasyon ve kontrol mühendislięi ve bilgisayar mühendislięi alanlarında 5+2 Ph.D., 6+4 M.Sc. (50'si 1996 öncesinde), yaklaşık 50 B.Sc. tez çalışmasına danışmanlık yapmıştır. Ayrıca, İstanbul Teknik Üniversitesi'nde, Uçuş Dinamięi ve Kontrolü ile Uzay Aracı Mekanięi ve Kontrolü dallarında yapılan doktora yeterlik sınavlarına jüri üyesi olarak hizmet vermektedir.

Özel ilgi alanı olarak, dost ve kardeş Türkiye ile Azerbaycan akademik çevrelerinde insani ve kültürel ilişkilerin geliştirilmesine katkı sağlamaya çalışmaktadır.

Kendisini geliştirmek amacıyla, görelilik kuramı, kuantum fizięi, tarih, divan edebiyatı ve tasavvuf ile ilgilenmektedir. "**Haber Çata Ağrıdağ'a** (Gençlik, Bakü, 1995)" adlı şiir kitabı Mahmudoęlu mahlasıyla yayımlanmıştır. Chesapeake University of Theology'den (Chesapeake, Virginia, ABD) İslami Bilimler (BIS) dalında alınmış önlisans "associate2012" ve bakalavr (2014) **B.Sc. Theology** dereceleri (fakülte birincilięiyle) bulunmaktadır.

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MAJOR PUBLICATIONS

Book, Book Chapters and Paragraphs

- 1) E.M. Jafarov, VARIABLE STRUCTURE CONTROL AND TIME-DELAY SYSTEMS, Ed.: Prof. Nikos Mastorakis, A Series of Reference Books and Textbooks, Europe Office, Greece, WSEAS Press, 330 pages, 2009 (ISBN: 978-960-474-050-6).
- 2) E.M. Jafarov, Robust Delay-Independent/Dependent Stabilization of Uncertain Time-Delay Systems by Variable Structure Control, Chapter 8 (pp. 163-196) of ROBUST CONTROL: THEORY AND APPLICATIONS, Edited by Andrzej Bartoszewics, Authors: K. Halbaoui, E. Joelianto, H.-P. Pang, E.M. Jafarov, V. Vesely, H. Zhang, etc., InTech Open Access Publisher, 2011, Europe Office, Croatia, InTech, 678 pages (ISBN: 978-953-307-229-6).
- 3) E. Abdulhamitbilal and E.M. Jafarov, Design of Sliding Mode Attitude Control for Communication Spacecraft, Chapter 7 (pp. 153-174) of ADVANCES IN SPACECRAFT SYSTEMS AND ORBIT DETERMINATION, Edited by Rushi Ghadawala, Authors: C. L. Kuo, T. A. Sands, P. Xiaogang, F.-K. Yeh, X. Li, E. Abdülhamitbilal, E.M. Jafarov, etc., InTech Open Access Publisher, 2012, Europe Office, Croatia, InTech, 264 pages (ISBN: 978-953-51-0380-6).
- 4) Jafarov, E. M., Delay-dependent stability and alpha-stability criteria for linear time-delay system, Paragraph in RECENT ADVANCES IN INTELLIGENT SYSTEMS AND SIGNAL PROCESSING (pp. 12-21), Ed.: Prof. Nikos Mastorakis, etc., Electrical and Computer Engineering Series, A Series of Reference Books and Textbooks, Europe Office, Greece, WSEAS Press, 372 pages, 2003 (ISBN: 960-8052-87-4).
- 5) Jafarov, E. M. Robust stabilization of continuous and discontinuous MIMO control systems with parameter perturbations and external disturbances, Paragraph in ADVANCES IN PHYSICS, ELECTRONICS AND SIGNALS PROCESSING APPLICATIONS (pp. 389-395), Ed: Prof. Nikos Mastorakis, Mathematics and Computers in Science and Engineering, A Series of Reference Books and Textbooks, Europe Office, Greece, WSEAS Press, 419 pages, 2000 (ISBN: 960-8052-

17-3).

- 6) Abdullayev A.A., Dzhafarov-Jafarov, E.M., Fayazov M.M., and Abdullayev F.S., 1979, Application experiences of industrial variable structure systems, In Collection of Papers on "Experience in Development and Applications of Automatic and Automated Control Systems", Part 1, State-of-the-art Problems and Perspectives, Izd. "ILIM", Frunze, pp.137-144,(in Russian).
- 7) Dzhafarov-Jafarov, E.M., Fayazov, M.M., Abdullayev, F.S., Quasiinvariant variable structure control of a petrochemical process with varying parameters exposed to unmeasurable perturbations, Trudy of the Fifth Conference on Invariance Theory and Its Applications, Part 1, Kiev, Izd. "Naukova Dumka", pp. 130-139,1979 (in Russian).

Ms.Eng., Ph.D., and D.Sc.Eng. Theses

- 8) Caferov-Jafarov, E.M., Automatization of Catalytic Cracking Installation with Powdery Catalyzator, Ms.Eng.Sc. Thesis, Supervisor: Ph.D. N. G. Farzane, in Archives of Azerbaijan Oil and Chemicals Institute (now Azerbaijan State Oil Academy), July 1969, 98 pages (in Azeri-Turkish).
- 9) Dzhafarov-Jafarov, E.M., Theoretical Problems and Industrial Implementation of Optimal Variable Structure Control Systems, Ph.D. Thesis, Research Institute NIPINefteKhimAvtomat 1972, (Supervisors: Prof. A.A. Abdulayev and Ph.D. R.A. Aliev; Adviser: Prof.V.I.Utkin) IMM and Institute of Cybernetics, Joined Scientific Council (Chairman: Academician Z. Khalilov and Vice Chairman: Academician J. Allahverdiev) of Physics-Technics and Mathematics Division of Academy of Sciences of Azerbaijan SSR (Reviewer: Ph.Dr. N.Dagkesamanski; Opponents: Prof. G.M.Ulanov, Ph.Dr. S. Musayev); TsNIIKA (Opponents: Prof. Ye.Dudnikov, Ph. Dr. O. Sobolev) Moscow, VNTIITzentr, Total 203 pp (in Russian).
- 10) Dzhafarov-Jafarov, E.M., Theoretical Problems and Industrial Implementation of Optimal Variable Structure Control Systems, Avtoreferat Ph.D. Thesis, Tipografiya "Krasniy Vostok", 27 pages, Baku, 1972 (in Russian).
- 11) Dzhafarov-Jafarov, E.M., 1982, Multistructural Control of Continuous Processes: Theory, Implementation and Application, D.Sc. (Eng) Thesis, NIPINNefteKhimAvtomat, (Azerbaijan) 1981, Institute of Control Sciences Moscow, (Adviser: Prof. V.I. Utkin) MIEM-LETI, 1982 VNTIITzenter, Moscow 450 pp (in Russian).
- 12) Dzhafarov-Jafarov, E.M., 1981, Multistructural Control of Continuous Processes: Theory, Implementation and Application, Avtoreferat of D.Sc. (Eng) Thesis, MIEM, Moscow, 50 pages (in Russian).

Journal Papers

- 13) A. Sofyalı and E.M.Jafarov, Magnetic Sliding Mode Attitude Controller Design with Momentum Exchange Augmentation (AAS 17-855), Advances in the Astronautical Sciences, Volume 161, pp. 73-85, Univelt, Inc., Publisher for the American Astronautical Society.
- 14) A. Sofyalı, E. M. Jafarov, New Sliding Mode Attitude Controller Design Based on Lumped Disturbance Bound Equations, Volume 31, Issue 1, January 2018, 15 pp. (04017082).
- 15) A. Sofyalı, E. M. Jafarov, R. Wisniewski, Robust and Global Attitude Stabilization of Magnetically Actuated Spacecraft through Sliding Mode, submitted for publication in Aerospace Science and Technology, December 2016.
- 16) M.N.A. Parlakçı and E. Caferov, New static output feedback stabilization and multivariable PID-controller design methods for unstable linear systems via an ILMI optimization approach, Turkish Journal of Electrical Engineering & Computer Sciences, Volume 25, 2017, pp. 1563-1573, doi:10.3906/elk-1507-195.
- 17) E.M. Jafarov, On stability delay bounds of simple input-delayed linear and non-linear systems: Computational results, International Journal of Automation and Computing (IJAC), Volume 10, Issue 4, August 2013,pp.327–334.
- 18) A. Sofyalı and E.M. Jafarov, Variable structure attitude controller design for solely magnetically actuated small satellites subject to environmental disturbances, WSEAS Transactions on Systems and Control, Volume 7, Issue 4, October 2012, pp. 150-163.
- 19) E. Abdülhamitbilal, E.M.Jafarov., "Gain scheduled automatic flight control systems design for a light commercial helicopter model", WSEAS Transactions on Systems and Control, vol. 6, no. 12, December 2011,pp.440-455.

- 20) Jafarov Elbrous M., Robust reduced-order sliding mode observer design, INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE Volume: 42 Issue: 4 Pages: 567-577, 2011.
- 21) E.M. Jafarov, Robust Stabilization of Input-Delayed Systems with Design Example for Rocket Motor Control, Aircraft Engineering and Aerospace Technology: An International Journal, vol. 80, no.1, Jan. 2008 (pp.59-65). Celebrating 80 years,1929-2008.
- 22) E.M. Jafarov, "Delay-dependent stabilization of input-delayed systems by linear control: A new design methodology, Scientific Inquiry: A Journal of the International Institute for General Systems Studies Inc., vol. 8, no. 2, June 2007 (pp.153-164).
- 23) E. M. Jafarov, Robust sliding mode controllers design techniques for stabilization of multivariable time- delay systems with parameter perturbations and external disturbances, International Journal of Systems Science, vol. 36, no. 7, pp. 433-444,2005 June.
- 24) Jafarov, E. M. and Taşaltın, R., "Design of Robust Autopilot-Output Integral Sliding Mode Controllers for Guided Missile Systems", International Journal of Aircraft Eng. and Aerospace Technology, vol 73, No: 1, pp.16-25, 2001.
- 25) Jafarov, E. M. and Taşaltın, R., "Robust Sliding Mode Control for the Uncertain MIMO Aircraft Model F-18", IEEE Transactions on Aerospace and Electronic Systems, Vol. 36, No:4, pp. 1127-1141, 2000.
- 26) K. Türkoğlu, U. Özdemir, M. Nikbay, E. M. Jafarov., "PID Parameter Optimization of an UAV Longitudinal Flight Control System", Proceedings (Journal) of World Academy of Science, Engineering and Technology, Volume 45, September 2008, ISSN: 2070-3724, pp. 341-346.
- 27) E. M. Jafarov, "Delay-Dependent Stability and alpha-stability Criteria for Linear Time-Delay Systems, WSEAS Transactions on Systems, Issue 4, Volume 2, pp. 1138-1147, October 2003.
- 28) M.N.A. Parlakci, E. M. Jafarov and Y. Istefanopulos, "Robust Position and Tracking Variable Structure PD-Controllers Design Methods for Robot Manipulators with Parameter Perturbation", WSEAS Transactions on Systems, Issue 4, Volume 2, pp. 771-779, October 2003.
- 29) M.N.A. Parlakci, E. M. Jafarov and Y. Istefanopulos, "Robust Relay and PD-Sliding Mode Controllers Design Methods for Robot Position Systems with Parameter Perturbations", WSEAS Transactions on Systems, Issue 3, Volume 2, pp. 666-675, July 2003.
- 30) Jafarov Elbrous M., Robust stabilization of input-delayed systems with design example for rocket motor control, AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY Volume: 80 Issue: 1 Pages: 59-65, 2008.
- 31) Jafarov E.M., Design modification of sliding mode observers for uncertain MIMO systems without and with time-delay, ASIAN JOURNAL OF CONTROL Volume: 7 Issue: 4, Pages: 380-392, DEC 2005.
- 32) Jafarov E.M.; Parlakci M.N.A; Istefanopulos Y, A new variable structure PID-controller design for robot manipulators, IEEE TRANSACTIONS ON CONTROL SYSTEMS TECHNOLOGY Volume: 13 Issue: 1 Pages: 122-130, JAN 2005.
- 33) Jafarov, E.M., Synthesis of standard variable structure systems with time delay, Problemy Upravleniya / Informatiki (Avtomatika), n 4, p 5-14, 2001.
- 34) Dzhafarov, E.M., LYAPUNOV'S DIRECT METHOD OF SYNTHESIS OF SELF-ADAPTIVE AUTOMATIC CONTROL SYSTEMS WITH A STANDARD MODEL FOR NONSTATIONARY OBJECTS WITH LAG, Soviet automatic control, v 15, n 1, p 18-22, Jan-Feb 1982.
- 35) Dzhafarov, E.M., Approximate Computational Method of Combined Systems with Variable Structure and Commutated Actions on the Basis of Measured Disturbance. (PRIBLIZHENNYI METOD RASCHETA KOMBINIROVANNYKH SISTEM S PEREMENNOI STRUKTUROI S KOMMUTIRUEMYMI VOZDEISTVIYAMI LISH' PO IZMERYAEMOMU VOZMUSHCHEHIYU.), Izvestiya Vysshikh Uchebnykh Zavedenii, Elektromekhanika, n 4, p 369-371, Apr 1979, Novocherkask, Language: Russian.
- 36) Dzhafarov, E.M., PROBLEM OF OPTIMIZATION OF SYSTEMS WITH VARIABLE STRUCTURE, Eng Cybern, v 16, n 3, p 138-142, May-Jun 1978.
- 37) Abdullaev, A.A., Dzhafarov, E.M., FREQUENCY CRITERION OF STABILITY OF VARIABLE-STRUCTURE SYSTEMS WITH DELAY, Automation and Remote Control, v 40, n 6 pt 2, p 939-944, Jun 1979.

- 38) Dzhafarov, E.M., Yusifov, B.M., Optimal Control for Plants Described in Partial Derivatives. (OB OPTIMAL'NOM UPRAVLENII DLYA OB "EKTOV, OPISYVAEMYKH V CHASTNYKH PROIZVODNYKH.), Izv Vyssh Uchebn Zaved Elektromekh, n 7, p 770-775, Jul 1978, Language: Russian.
- 39) Dzhafarov, E.M., Iskenderov, I.A., OPTIMIZATION OF DOUBLY CONNECTED VARIABLE-STRUCTURE SYSTEMS FOR AUTOMATIC REGULATION, Sov Autom Control v 11 n 3 p 37-42 (AVTOMATIKA, v 11, n 3, p 44-49), May-Jun 1978.
- 40) Turkoglu, K., Jafarov, E.M., Application of H inf. Loop Shaping Robust Control system design on longitudinal dynamics of Hezarfen UAV with classical PI(D) and pole placement methods: A comparison analysis - (S/T), WSEAS Transactions on Systems 6 (1), pp. 206-213, 2007.
- 41) Turkoglu, K., Jafarov, E.M., 14 Lateral Robust Control system design of Hezarfen UAV via H^∞ loop shaping approach and sensitivity / co-sensitivity analysis, WSEAS Transactions on Systems 5 (9), pp. 2040-2047, 2006.
- 42) M.N.A Parlakçi, E.M. Jafarov, and Y. Stephanopulos, 2004, New variable structure PD-controllers design for robot manipulators with parameter perturbations. International Journal of Robotics and Automation, vol 19, is 3, pp.134-142.
- 43) Jafarov, E.M., Robust sliding mode control of multivariable time-delay systems, Systems Science 29 (3), pp. 17-36, 2003.
- 44) Parlakci, M.N.A., Jafarov, E.M., PD-sliding mode controller for robot manipulators: A comparison analysis , Istefanopulos, Y., Systems Science 29 (2), pp. 145-155, 2004.
- 45) Elbrous M. Jafarov, Delay-Dependent Stabilization of Input-Delayed Systems by Linear Control: A New Design Methodology, Scientific Inquiry: A Journal of the International Institute for General Systems Studies, Inc., vol. 8, No. 2, pp. 153-164, December 2007.
- 46) Dzhafarov, E M, The Synthesis of the Direct Lyapunov Method of Automatic Self-Adjusting Control Systems with a Reference Model for Nonstationary Objects with Delay, AVTOMATIKA , no. 1, pp. 20-24, 1982(in Russian).
- 47) Elbrous M. Jafarov, Robust Coupling Linear State Observer-Controller Design for MIMO Systems with Mismatched and Unstructured Uncertainties, The Online Journal on Electronics and Electrical Engineering (OJEEE), Vol. (2) – No. (1), pp. 155-158, January, 2010.
- 48) Dzhafarov-Jafarov, E.M., 1977, Industrial variable structure systems for sulfur acid alkylation, Khimicheskaya Promyshlennosti (Chemical Industry) no.2, pp.150-151(in Russian).
- 49) Dzhafarov-Jafarov, E.M., 1978, Optimization of variable structure systems, Izv. AN SSSR Tekhnicheskaya Kibernetika (Engineering Cybernetics), no. 3, pp. 171-175, Moscow(in Russian).
- 50) Dzhafarov-Jafarov, E.M., 1980, Stability of variable structure systems with an unstable linear plant, Novel Trends in the Theory of VSS, Trudy VNIISI AN SSSR, Emelyanov, S.V. (Editor), no. 4, pp. 28-30, Moscow (in Russian).
- 51) Dzhafarov-Jafarov, E.M., and Iskenderov, I.A., 1978, Optimization of double-connected variable structure control systems, Avtomatika, no. 3, pp. 44-49, Kiev (in Russian).
- 52) Abdulayev A.A. and Dzhafarov-Jafarov, E.M., 1979, A frequency stability criterion for variable structure systems with time-delay, Avtomatika i Telemekhanika (Automatica and Remote Control), no. 6, pp. 198-205, Moscow (in Russian).
- 53) Utkin, V.I., Vostrikov, A.S., Dzhafarov-Jafarov, E.M., Kostyleva, N.E., Sabanovic, A, Bondarev, S.A., Spivak, L.M. and Izosimov, D.B., 1985, Applications of sliding modes in automation of technical plants, Izmereniya, Kontrol and Avtomatizatsia IKA (Measurement, Control and Automation), 53, no. 1, pp. 74-84, Moscow (in Russian).
- 54) Dzhafarov,E.M, Yusifov,B.M., Optimal control of processes described by integral differential equations, Differentsialniye Uravneniya, T. 13, no. 12, pp. 2276-2279, 1977(in Russian).
- 55) Jafarov-Dzhafarov, E.M, 1980, Stability analysis of variable structure systems with time-delay. Novel Trends in the Theory of VSS. Emelyanov, S.V. (Ed.), Trudy VNIISI AN SSSR, no. 4, Moscow, pp. 24-28 (in Russian).
- 56) Dzhafarov-Jafarov, E.M., 1978, Stability of multidimensional variable structure systems with delay, Doklady AN AzSSR, no.10, pp.24-27(in Russian).
- 57) Dzhafarov-Jafarov, E.M., 2001, Synthesis of variable structure systems with time-delay, Journal of Automation and Information Sciences (Avtomatica) vol.33, no5-8, pp.1-9.
- 58) Dzhafarov-Jafarov, E.M. and Mamedov, V.A., 1971, Optimization of variable structure system with respect to integral performances, Journal of Za Teknicheskiy Progres, no. 2, pp. 18-19, Baku, (in Russian).

- 59) Aliev, R.A., Dzhafarov-Jafarov, E.M. and Mamedov, V.A., 1972, Construction of pneumatic differentiating devices with variable structure, Journal of Za Tekhnicheskii Progres, no. 4, pp. 2-4, Baku (in Russian).
- 60) Aliev, R.A. and Dzhafarov-Jafarov, E.M., 1973, Speed(Time)-optimal control of variable structure systems, Journal of Za Tekhnicheskii Progres, no. 5, pp.1-3, Baku, (in Russian).
- 61) Dzhafarov-Jafarov, E.M., On determining the optimal parameters of sliding motions in variable structure systems, Izv. VUZov SSSR, Elektromekhanika, no. 6, pp. 701-704, Novochoerkassk,1977(in Russian).
- 62) Dzhafarov-Jafarov, E.M., Fayazov, M.M. Abdullayev, F.S., Ismailov, V., Design of a variable structure control system for a sulfur acid alkylation reactor, Avtomatizatsiya i Kontrolno-Izmeritelnye Pribory (Automation and Instrumentation) TsNIITENEFTEKHIM, no. 10, pp. 10-17, Moscow, 1977 (in Russian).
- 63) Dzhafarov-Jafarov, E.M., Fayazov, M.M., Abdullayev, F.S., Industrial application of variable structure control systems in butylacrylate production, Promyshlennost SK TsNIITEVNEFTEKHIM, no. 7, pp. 11-14, Moscow, 1977 (in Russian).
- 64) Dzhafarov-Jafarov, E.M., Mamedov, V.A., Identification of a petro-chemical reactor using regularization method of non-correct problem statement, Journal of Za Tekhnicheskii Progres, no. 6, pp. 10-14, Baku,1976(in Russian).
- 65) Dzhafarov-Jafarov, E.M., Sadikhov, Z.A., Calculation method of optimal parameters of a class of automatic regulation system with variable structure, Journal of Za Tekhnicheskii Progres, no. 3, pp. 1-5, Baku,1977(in Russian).
- 66) Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Equations of motion of floating drilling plant as an interconnected system, Izvestiya AN AzSSR Serya Fiz.Tech.i Math. nauk, no. 6, pp. 58-64, Baku, 1977(in Russian).
- 67) Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Dynamic characteristics of anchored floating drilling plant as an automatic control system, Izv. VUZov SSSR, Elektromekhanika, no. 6, pp. 608-611, Novochoerkassk, 1978(in Russian).
- 68) Dzhafarov-Jafarov, E.M., Rzayev, A.G., A variable structure system for temperature control of n-Butylene Dehydration into Divynyl, Avtomatizatsiya i Kontrolno-Izmeritelnye Pribory (Automation and Instrumentation) TsNIITENEFTEKHIM, No. 10, pp. 7-9, Moscow, 1978 (in Russian).
- 69) Dzhafarov-Jafarov, E.M., Execution of one logical control algorithm, Avtomatizatsiya i Kontrolno-Izmeritelnye Pribory (Automation and Instrumentation) TsNIITENEFTEKHIM, No. 1, pp. 26-28, Moscow, 1975(in Russian).
- 70) Dzhafarov-Jafarov, E.M., Fayazov, M.M., Execution of pneumatic variable structure controllers, Avtomatizatsiya i Kontrolno-Izmeritelnye Pribory (Automation and Instrumentation) TsNIITENEFTEKHIM, No. 3, pp. 20-23, Moscow, 1975(in Russian).
- 71) Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Determination of static characteristics of anchored system of floating drilling plant, Nauch.Tech. Journal "Sudostroeniye", no. 3, pp. 26-27, Leningrad, 1977(in Russian).
- 72) Dzhafarov-Jafarov, E.M., Stability of multidimensional variable structure systems with time-delay, Doklady AN AzSSR, no. 10, pp. 24-27, Baku, 1978(in Russian).
- 73) Abdullaev, A.A., Dzhafarov-Jafarov, E.M., A Frequency Criterion for Stability of Variable Structure Systems with Delay, Avtomatika i Telemekhanika, vol. 40, no. 6, pp. 198-205, 1979(in Russian).
- 74) Chinayev, P.I., Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Optimization of multidimensional variable structure systems, Kibernetika i Vychislitel'naya Tekhnika, no. 43, pp. 16-24, 1979(in Russian).
- 75) Dzhafarov-Jafarov, E.M., Askerov, D.A., Pneumatic variable structure controller including relay component, Information Sheet of Paper, TsNIITENEFTEKHIM, Baku, N0019-78, Series 03-17, 3 pages, 1978 (in Russian).
- 76) Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Synthesis of variable structure system for position stabilization of a class of mobile plant, Izv. VUZov SSSR, Elektromekhanika, no. 5, pp. 522-526, Novochoerkassk,1980(in Russian).
- 77) Dzhafarov-Jafarov, E.M., Study and synthesis of optimal control law for a second-order aperiodic plant with time-delay in presence of phase constraint, J. of "Uchenie Zapiski", Azerbaijan Technical University, Baku, no. 1, pp. 86-100, 1992 (in Russian).
- 78) Dzhafarov-Jafarov, E.M., Gasanov, Y., Establishing of inner feedback loop in a hydrolic distributor and analysis of its static accuracy, Sbornik of Azerbaijan Politechnical Institute, Baku, 1991 (in Russian).
- 79) Dzhafarov-Jafarov, E.M., Farhadov, V.G., Nonlinear equations of kinematics and dynamics of a robot manipulation mechanism in spherical coordinates, J. of "Uchenie Zapiski", Azerbaijan Technical University, Baku, no. 2, 1993 (in Russian).

- 80) Dzhafarov-Jafarov, E.M., Synthesis of variable structure systems with sliding modes for control of an electrically driven robot, J. of "Uchenie Zapiski", Azerbaijan Technical University, Baku, no. 4, pp. 62-71, 1992 (in Russian).
- 81) Dzhafarov-Jafarov, E.M., Guo, Tyanshi., Synthesis of a bilinear variable structure system by using Lyapunov function method, J. of "Uchenie Zapiski", Azerbaijan Technical University, Baku, no. 1, 1993 (in Russian).
- 82) Dzhafarov-Jafarov, E.M., Al-Nabulsi, Mahir Afif Sabah, Structural and parametric synthesis of a multiconnected robot control system in cylindrical coordinate system, J. of "Uchenie Zapiski", Azerbaijan Technical University, Baku, no. 3, 1993 (in Russian).
- 83) Dzhafarov-Jafarov, E.M., Utkin, V.I., Review of the book "Fundamentals of Variable Structure Control Theory" by Gao Weibin, Avtomatika i Telemekhanika, no. 1, pp. 186-187, 1994, Moscow (in Russian); Avtomatika, no. 6, 1995, Beijing (in Chinese).
- 84) Dzhafarov-Jafarov, E.M., Guo, Tyanshi., Synthesis of a variable structure system with sliding mode for control of electrically driven robot, Transactions of Sitzhian Institute of Light Chemical Industry, Sitzhian, People's Republic of China, 1995 (in Chinese).

Patents and USSR Inventor's Certificates

- 85) Patent Number: SU868704-B 1982-63345E
Title: Catalytic copolymerisation control system - with compensators for concentration of catalyst soln. and flow rate of ethylene vapours
Assignee: DZHAFAROV E M
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
Citing Patents: 1
- 86) Patent Number: SU905799-B 1982-08941J
Title: Catalytic alkylation control appts. - with adders, ammonia-pressure transducer and compensator and sulphuric acid conc. compensator
Assignee: DZHAFAROV E M
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 87) Patent Number: SU769489-B 1981-H1464D
Title: Pneumatic variable-structure process controller - has pulse signal generator with output taken to control chamber of valve with flow chamber connected to OR-gate and nozzle
Assignee: OIL CHEM IND AUTOM
Inventor(s): DZHAFAROV E M, ABDULLAEV F S, FAIYAZOV M M
- 88) Patent Number: SU752229-B 1981-E0012D
Title: Process control pneumatic variable structure regulator - has comparator switching=in integral section for linear proportional integral operation during large disturbances
Assignee: NEFTEKHIMAVTOMATIKA
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 89) Patent Number: SU746412-B 1981-C7697D
Title: Pneumatic proportional regulator - has pressure divider comprising fixed and variable chokes, with comparison element as amplifier and multiplier
Assignee: PETRO CHEM IND COMP
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 90) Patent Number: SU742872-B 1981-B8737D
Title: Pneumatic adaptive regulator unit - has compressed air pressure signals sent to first minus and second plus summator chambers
Assignee: PETROL CHEM IND AUT
Inventor(s): DZHAFAROV E M, ABDULLAEV F S
- 91) Patent Number: SU752243-B 1981-31927D
Title: Rectification column temp. and still level pneumo-control appts. - has adders and correctors in loops for regulating temp. and level and acting as compensation for nonlinear variation
Assignee: NEFTEKHIMAVTOMATIKA
Inventor(s): ABDULLAEV A A, DZHAFAROV E M, ASKEROV D A, ISKENDEROV I A, FAIYAZOV M M, ABDULLAEV F S
- 92) Patent Number: SU679939-A 1980-D7635C
Title: Variable structure pneumatic regulator for automatic control - is useful e.g. in oil-refining with output from OR-gate to warning circuit with output to negative chamber of three-

- membrane comparator
Assignee: PETROCHEM PROC AUTOMN
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 93) Patent Number: SU661505-A 1980-B0823C
Title: Adaptive pneumatic regulator for e.g. petrochemical industry - has regulated valve and comparator as multiplier connected to integrator and adder replacing three-and five-membrane elements
Assignee: PETRO CHEM IND AUTO
Inventor(s): DZHAFAROV E M, FAIZOV M M, ABDULLAEV F S
- 94) Patent Number: SU684508-A 1980-34016C
Title: Variable structure pneumatic process controller - has comparator connected to variable disturbance reference pressure input channels, with output taken to equivalence element
Assignee: PETROL CHEM IND AUT
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 95) Patent Number: SU656022-A 1979-L8239B
Title: Petrochemicals industry adaptive pneumatic regulator - has adaptive unit with valve control chamber communicating with output from adder with inputs taken from setter
Assignee: PETROCHEM PROC AUTOMN
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 96) Patent Number: SU646313-A 1979-K3830B
Title: Floating drilling plant position control system - has outputs taken from mismatch sensors to two parallel circuits with adders, differentiators, logic and switches
Assignee: DZHAFAROV E M
Inventor(s): DZHAFAROV E M, ISKENDEROV I A, ABDULLAEV F S
- 97) Patent Number: SU631869-A 1979-H2310B
Title: Variable structure pneumatic regulator for industrial processes - uses precedence and proportionate units for improved regulation dynamic characteristics during control of non-stationary objects
Assignee: PETROCHEM PROC AUTOMN
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV S A
- 98) Patent Number: SU631868-A 1979-H2309B
Title: Variable structure pneumatic regulator - uses modulus computing block and precedence block to improve regulator dynamic characteristics
Assignee: PETROCHEM PROC AUTOMN
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 99) Patent Number: SU622046-A 1979-F6655B
Title: Pressure parameters variable structure regulator - uses second switching relay with first nozzle connected to reference pressure channel and second to summator output
Assignee: DZHAFAROV E M
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULLAEV F S
- 100) Patent Number: SU596963-A 1979-B0083B
Title: Pneumo-automation pneumatic computing unit - uses three membrane comparator with positive chamber connected to input channel, first through-chamber and supply, via jet
Assignee: PETRO CHEM IND AUTO
Inventor(s): DZHAFAROV E M, ABDULLAEV F S
- 101) Patent Number: SU601660-A 1979-15423B
Title: Pneumatic proportional regulator of modular structure - has two input channels with adders and gain processor of output amplifier
Assignee: PETR CHEM IND AUTOM
Inventor(s): DZHAFAROV E M, ABDULLAEV F S, FAIYAZOV M M
- 102) Patent Number: SU589589-A 1978-K7692A
Title: Variable-structure regulators pneumatic logic unit - uses three-diaphragm chambers and LC link for dynamic pressure difference handling

- Assignee:** PETROL CHEM AUTOMAT
Inventor(s): DZHAFAROV E M, ABDULIAEV F S
- 103) Patent Number: SU582494-A 1978-J2992A
Title: Automation non-stationary processes pneumatic regulator - has data preparation appts. input chambers connected to modulus calculator output, and output to controlled throttle anechoic chamber
Assignee: PETR CHEM IND AUTOM
Inventor(s): DZHAFAROV E M, FAIYAZOV M M, ABDULAEV F S
- 104) Patent Number: SU582493-A 1978-J2991A
Title: Automation relay controlled pneumatic regulator - has input chambers of first pneumatic summator coupled to controlled parameter channel, programmer and reference pressure source
Assignee: PETR CHEM IND AUTOM
Inventor(s): DZHAFAROV E M, ABDULLAEV F S
- 105) Patent Number: SU566238-A 1978-E5054A
Title: Variable structure pneumatic regulator - has second output of proportional unit connected to second input of OR=gate, to simplify circuitry
Assignee: PETRO CHEM IND AUTO
Inventor(s): DZHAFAROV E M, ABDULLAEV F S, FAIYAZOV M M
- 106) Dzhafarov-Jafarov, E.M. and Fayazov M.M., 1976, Pneumatic variable structure controller, USSR Inventor's Certificate, A.C. No.533910, Bulletin Izobret (Invention Bulletin), vol.40, Moscow(in Russian).
- 107) Dzhafarov-Jafarov, E.M., 1977, Pneumatic variable structure controller, USSR Inventor's Certificate, A.C. No.542171, Bulletin Izobret (Invention Bulletin), vol.1, Moscow(in Russian).
- 108) Abdullaev, F.M., Dzhafarov-Jafarov, E.M. and Fayazov M.M., 1976, Pneumatic variable structure controller, USSR Inventor's Certificate, A.C. No.540256, Bulletin Izobret (Invention Bulletin), vol.47, Moscow(in Russian).
- 109) Patent Number: SU1285429 A1 1987
Title: Pneumatic adaptive variable structure controller
Assignee: PETRO CHEM IND AUTO
Inventor(s): DZHAFAROV E M, ABDULLAEV F S, FAIYAZOV M M .Bulletin Izobret (Invention Bulletin), vol.3, Moscow(in Russian).

International Conference Proceedings and Papers

- 110) A. Sofyalı and E.M.Jafarov, Magnetic Sliding Mode Attitude Controller Design with Momentum Exchange Augmentation (IAA-AAS-DyCoSS3-066), 3rd IAA Conference on Dynamics and Control of Space Systems (DyCoSS 2017), May 30-June 1, 2017, Moscow, Russia.
- 111) A. Parlakci and E.M.Jafarov, An Output Feedback Multivariable PD-Controller Design Method for Time Delay Systems: A New LMI Approach, Proc. of the IFAC 13th Workshop on Time Delay Systems (TDS2016) (6 pages), June 22–24, 2016, İstanbul Technical University, İstanbul, Türkiye.
- 112) Y. Paralı and E.M.Jafarov, Higher Order Sliding Mode Control Applications with Output Redefinition for Nonminimum Phase Missile System, Proc. of the IEEE International Workshop on Recent Advances in Sliding Modes (RASM 2015) (8 pages), April 9-11, 2014, İstanbul, Türkiye.
- 113) A. Sofyalı, E.M. Jafarov, and R. Wisniewski, Time-Varying Sliding Mode in Rigid Body Motion Controlled by Magnetic Torque, Proc. of the IEEE International Workshop on Recent Advances in Sliding Modes (RASM 2015) (6 pages), April 9-11, 2015, İstanbul, Türkiye.
- 114) A. Sofyalı and E.M. Jafarov, Integral Sliding Mode Control of Small Satellite Attitude Motion by Purely Magnetic Actuation, Proc. of the 19th IFAC World Congress (IFAC 2014) (DOI: 10.3182/20140824-6-ZA-1003.01679), August 24-29, 2014, Cape Town, South Africa, pp. 7947-7953.
- 115) A. Sofyalı and E.M. Jafarov, Nonlinear performance evaluation of altitude autopilot designed via root locus compensation (AIAC-2013-116), Proc. of the 7th Ankara Inter-national Aerospace

- Conference (AIAC 2013) (ISBN: 978-605-64131-2-4), September 11-13,2013, METU, Ankara, Turkey.
- 116) I.C. Karagöz and E.M. Jafarov, Sliding mode robust tracking control for complete flight envelope of an UCAV with parameter uncertainties, Proc. of the 15 th WSEAS Inter-national Conference on Automatic Control , Modelling and Simulation (ASMOS'13), June 1-3,2013, Brasov, Romania, WSEAS Press, ISSN: 1790-5117, ISBN: 978-1-61804-189-0, pp. 253-258.
 - 117) A. Sofyalı, E. M. Jafarov, "Purely magnetic spacecraft attitude control by using classical and modified sliding mode algorithms", in Proceedings of 12th IEEE International Workshop on Variable Structure Systems (VSS 2012), Indian Institute of Technology (IIT), Mumbai, India, 12-14 January 2012, pp. 117-123.
 - 118) E. Abdülhamitbilal, E. M. Jafarov, "Robust sliding mode speed hold control system design for full nonlinear aircraft model with parameter uncertainties: A step beyond", in Proceedings of 12th IEEE International Workshop on Variable Structure Systems (VSS 2012), Indian Institute of Technology (IIT),Mumbai, India, 12-14 January 2012,pp. 7-15.
 - 119) E. Abdülhamitbilal, E. M. Jafarov, "Adaptive Integrated Dutch-Roll SAS Design for a Rotorcraft", in Proceedings of 6th Ankara International Aerospace Conference (AIAC 2011), 14-16 September 2011, Ankara.
 - 120) E. M. Jafarov, "Variable Structure Control and Time-Delay Systems: A Survey", Proceedings of the 6th WSEAS International Conference on Dynamical Systems & Control (CONTROL '10), Mouradi Hotel, Kantaoui, Sousse, Tunisia, May 3-6, 2010, May 30-June-1, 2009.
 - 121) Jafarov Elbrous M., Robust Sliding Mode Control of Multivariable Time-Delay Systems, Editor(s): Demiralp M; Baykara NA; Mastorakis NE, 11th WSEAS International Conference on Automatic Control, Modelling and Simulation, Istanbul, TURKEY, May 30-June-1, 2009, pp. 430-437.
 - 122) A. Sofyalı, E.M. Jafarov, "Computational Phase Portrait Analysis of Two Nonlinear Small Satellite Models", Proceedings of 4. IEEE International Conference on Recent Advances in Space Technology RAST 2009, Istanbul, Turkey, June 11-13, 2009, pp. 491-496.
 - 123) E. Abdulhamitbilal, E.M. Jafarov, M.Ş. Kavsaoğlu, "Matlab-Simulink Nonlinear Modeling and Simulation of Aircraft Longitudinal Dynamics", 6th Eurosim Congress on Modelling and Simulation, Eurosim 2007, Ljubljana, Slovenia, September 9-13, 2007.
 - 124) K. Turkoglu, and E.M. Jafarov, "H inf. Loop Shaping Robust Control vs. Classical PI(D) Control: A case study on the Longitudinal Dynamics of Hezarfen UAV", Proceedings of the 2nd WSEAS International Conference on Dynamical Systems and Control, Bucharest, Romania, October 16-17, 2006, pp. 105-110 (Received "The Best Student Paper Award" by WSEAS Conference Committee).
 - 125) E. Abdulhamitbilal and E.M. Jafarov, Performances comparison of linear and sliding mode attitude controllers for flexible spacecraft with reaction wheels, Proceedings of the 9th IEEE International Workshop on Variable Structure Systems (VSS '06), Alghero-Sardinia, June 5-8, 2006, pp. 351-358.
 - 126) E. Abdulhamitbilal and E.M. Jafarov, Linear attitude stabilization of a geosynchronous communication satellite with small inner torquers. RAST-2005, Proceedings of 2nd International Conference on Recent Advances in Space Technologies, June 9-11, 2005, Istanbul, Turkey, pp.185-188.
 - 127) E. Abdulhamitbilal, E.M. Jafarov and L. Güvenç, Nonlinear helicopter model and trim analysis for forward flight. AIAC-2005, 3rd Ankara International Aerospace Conference, Abstracts & Proceedings, 22-25 August 2005, Ankara, Turkey, Abstract pp. 64.
 - 128) E.M. Jafarov, 2004, Delay-dependent Stability Analysis and Design of Input-delayed Systems by Smooth Sliding Mode Control: Lagrange Theorem Approach, Proceedings of the 8th IEEE International Workshop on Variable Structure Systems (VSS '04), Barcelona, Spain.
 - 129) Jafarov, E. M., Delay-dependent stability and alpha-stability criterions for linear time-delay system, 4th WSEAS Int. Conf. on Fuzzy Sets and Fuzzy Systems (FSFS '03), Vouliagmeni, Athens, Greece, May 29-31, 2003.
 - 130) E.M. Jafarov,2002, Design of New Robust Sliding Mode Observers for Uncertain MIMO and SISO systems with and without time-delay,Proceedings of the 7th IEEE Inter-national Workshop on Variable Structure Systems (VSS '02),Sarejova,July17-19, 2002.

- 131) Jafarov, E. M. and Taşaltın, R., Output integral sliding mode controllers for acceleration of a missile system with parameter perturbations, In Preprints of 15th IFAC Symposium on Automatic Control in Aerospace (Ed.: G. Bertoni), Bologna/Forli, September 2-7, 2001, pp. 487-492.
- 132) Jafarov, E. M. and Taşaltın, R., "Robust Guided Missile Autopilot-Output Sliding Mode Controller Design", NATO AVT Symposium on Unmanned Vehicles (UV) for Aerial, Ground and Naval Military Operations, Ankara, October 9-13, 2000.
- 133) Jafarov, E. M., "Design of Sliding Mode Control for Multi-Input Systems with Multiple State Delays", Proceedings of American Control Conf., Chicago, pp.1139-1143, 2000.
- 134) Jafarov, E. M., Robust stabilization of continuous and discontinuous MIMO control systems with parameter perturbations and external disturbances, 4th WSEAS Multi-Conference on Circuits, Systems, Communications and Computers (CSCC 2000), Vouliagmeni (Athens), Greece, July 9-16, 2000, pp. 389-401.
- 135) Jafarov E.M. and Taşaltın R. "Robust Sliding Mode Control Flight Control Systems for the Uncertain MIMO Aircraft Model F-18", Proceedings of the 2nd Ankara International Aerospace Conference, METU, Ankara, pp 187-199, 1998.
- 136) Jafarov E.M., "State Feedback Sliding Mode Control for SISO Systems with Time-Delay", Proceedings of 8th IFAC Symposium on Large Scale Systems: Theory and Applications, University of Patros, Rion, Greece, pp.195-200, 1998.
- 137) Jafarov E.M., "Analysis and Synthesis of Robust Variable Structural Control for Uncertain MIMO Systems", Proceedings of National Conference on Automatic Control, İstanbul, İ.T.Ü., pp.47-50, 1998.
- 138) Jafarov E.M. and Kalyon M., "Design of Relay and Variable Structure Observers for MIMO Systems with Time-Lag", Proceedings of the 12th IEEE International Symposium on Intelligent Control, İstanbul, IEEE, pp. 355-360, 1997.
- 139) E. M. Jafarov, "Robust Sliding Mode Control of Multivariable Time-Delay Systems", Proceedings of the 11th WSEAS International Conference on Automatic Control, Modelling and Simulation, İstanbul, Turkey, May 30-June-1, 2009, (pp. 430-437).
- 140) E. M. Jafarov, "Robust Coupling Linear State Observer-Controller Design for MIMO Systems with Mismatched and Unstructured Uncertainties", Proceedings of the 2009 IEEE World Congress on Electronics and Electrical Engineering WCEEENG'09, Cairo, Egypt, April 6-9, 2009.
- 141) K. Türkoğlu, U. Özdemir, M. Nikbay, E. M. Jafarov., " PID Parameter Optimization of an UAV Longitudinal Flight Control System", Proceedings of the International Conference on Control, Automation, Robotics and Vision ICCARV 2008, Paris, France, November 21-23, 2008.
- 142) A. Sofyalı, E. M. Jafarov, "Three-Axis Attitude Stabilization of a Small Satellite Actuated by Reaction Wheels via Linear and Variable Structure Control", Proceedings of 5. Ankara AIAA International Aerospace Conference AIAC 2009, METU, Ankara, Turkey, August 17-19, 2009.
- 143) E. Abdulhamitbilal, E. M. Jafarov, "Dynamic Longitudinal Stability Analysis and Control at Hover With and Without Ground Effect of a Light Commercial Helicopter", Proceedings of 5. Ankara AIAA International Aerospace Conference AIAC 2009, METU, Ankara, Turkey, August 17-19, 2009.
- 144) E. Abdulhamitbilal, E. M. Jafarov., "Sliding mode attitude controller design for nonlinear flexible geosynchronous satellite with thrust jets", Proceedings of the 10th IEEE International Workshop on Variable Structure Systems VSS '08 , Antalya, Turkey, May 8-10, 2008, pp.221-226.
- 145) E.M. Jafarov, "Robust delay-dependent stabilization of uncertain time-delay systems by variable structure control", Proceedings of the 10th IEEE International Workshop on Variable Structure Systems VSS '08, Antalya, Turkey, May 8-10, 2008, pp.250-255.
- 146) U. Özdemir, E. M. Jafarov, M. Ş. Kavsaoğlu, " Calculation of the Longitudinal Stability Derivatives of a Transport Aircraft and Analysis of Longitudinal Modes", Proceedings of the 9th WSEAS International Conference on Automatic Control, Modeling & Simulation, İstanbul, Turkey, May 27-29, 2007, pp.105-110.
- 147) E. Abdulhamitbilal, E. M. Jafarov and L. Güvenç., " Gain scheduled LQ optimal control of a parametric light commercial helicopter model at sea level", Proceedings of the 9th WSEAS

- International Conference on Automatic Control, Modeling & Simulation, Istanbul, Turkey, May 27-29, 2007, pp. 290-297.
- 148) K. Turkoglu and E.M. Jafarov, "Augmented optimal LQR control system design as an application on the longitudinal flight dynamics of an UAV: Inner and outer loop concepts", Proceedings of the 9th WSEAS International Conference on Automatic Control, Modeling & Simulation, Istanbul, Turkey, May 27-29, 2007, pp.99-104.
 - 149) K. Koşar, S. Durmaz, and E.M. Jafarov, " Longitudinal dynamics analysis of Boeing 747-400", Proceedings of the 9th WSEAS International Conference on Automatic Control, Modeling & Simulation, Istanbul, Turkey, May 27-29, 2007, pp. 81-86.
 - 150) K. Koşar, S. Durmaz, and E.M. Jafarov, " Longitudinal displacement autopilot design for Boeing 747-400 by root-locus", Proceedings of the 9th WSEAS International Conference on Automatic Control, Modeling & Simulation, Istanbul, Turkey, May 27-29, 2007, pp. 87-92.
 - 151) Abdulhamitbilal Erkan; Jafarov Elbrous M.; Guvenc Levent, Computer based simulation of Bell 205 helicopter Matlab-Simulink model, 15th IASTED International Conference on Applied Simulation and Modelling, Rhodes, GREECE, JUN 26-28, 2006.
 - 152) K. Turkoglu, E. M. Jafarov, Lateral Robust Control System Design of Hezarfen UAV via H^∞ Loop Shaping Approach and Sensitivity/Co-Sensitivity Analysis, 10th WSEAS World Congree, Atina 2006, Greece, July, 2006.
 - 153) Abdulhamitbilal E.; Jafarov E. M., Performances comparison of linear and sliding mode attitude controllers for flexible spacecraft with reaction wheels, 9th International Workshop on Variable Structure Systems Location: Alghero, ITALY, pp. 351-358, Date: JUN 05-07, 2006.
 - 154) Jafarov EM, Comparative analysis of simple improved delay-dependent stability criterions for linear time-delay systems: An augmented functional approach, American Control Conference (ACC), ARLINGTON, VA Date: JUN 25-27, 2001, pp. 3389-3394.
 - 155) E. M. Jafarov, "Design of sliding mode control for multi-input systems with multiple state delays," Proc. American Control Conference 2, Chicago, Illinois, USA, 1139-1143, June 28-30, 2000.
 - 156) Sofyali, A.; Jafarov, E.M.; Three-axis attitude control of a small satellite by magnetic PD-like controller integrated with passive pitch bias momentum method, 5th International Conference on Recent Advances in Space Technologies (RAST), 2011, Publication Year: 2011 , Page(s): 307 – 311.
 - 157) Jafarov, E.M.; Tasaltın, R.; Design of longitudinal variable structure flight control system for the F-18 aircraft model with parameter perturbations, Proceedings of the 1999 IEEE International Symposium on Computer Aided Control System Design, 1999, Publication Year: 1999 , Page(s): 607 – 612.
 - 158) Bogosyan, O.S.; Gokasan, M.; Jafarov, E.M.; A sliding mode position controller for nonlinear time-varying motion control system, The 25th Annual Conference of the IEEE Industrial Electronics Society, 1999. IECON '99 Proceedings, Volume: 2, Publication Year: 1999 , Page(s): 1008 - 1013 vol.2.
 - 159) E.M. Jafarov, Analysis and synthesis of multidimensional variable structure systems with delays in sliding modes, Proc. 11th IFAC World Congress, Tallinn, vol. 6, pp. 46-49, 1990.
 - 160) Dzhafarov-Jafarov, E.M., Theoretical Bases and Construction Principals of Multidimensional Variable Structure Systems with Delay, Preprints of 7th International Conference on Control Systems and Computer Science, Polytechnical Institute of Bucharest, Bucharest, pp. 1-8, 27-30 May 1987.
 - 161) Elbrous M. Jafarov; Yorgo Istefanopulos; M. N. Alpaslan Parlakci; A new variable structure PID-controller for robot manipulators with parameter perturbations: An augmented sliding surface approach; Proceedings of the 15th IFAC World Congress, Volume # 15 | Part# 1, Barcelona, Spain, 2002.
 - 162) E.M.Jafarov, "Sliding mode observer for uncertain MIMO systems with time-delay," Summaries Volume p. 525, Proc. European Control Conference ECC'99, Karlsruhe, Germany, 1999.
 - 163) Parlakci, M. N. A., E. M. Jafarov, Y. Istefanopulos, ve O. Belegradek, "A novel design of roburst relay-discontinuous sliding mode controller for robot manipulators with parameter perturbations," Proc. European Control Conference ECC'01, Porto, Portugal, 968-974, 2001.
 - 164) Istefanopulos, Y., E. M. Jafarov, ve M. N. A. Parlakci, "A new variable structure-PD controller for robot manipulators with parameter perturbations," Proc. IASTED Int. Conference on Robotics and Applications, Tampa, USA, 163-168, 2001.

- 165) Istefanopulos, Y., E. M. Jafarov, ve M. N. A. Parlakci, "A new robust continuous sliding mode control for robot manipulators with parameter perturbations," Proc. American Control Conference, Anchorage, USA, 3202-3206, 2002.
- 166) Parlakci, M. N. A., E. M. Jafarov, ve Y. Istefanopulos, "PD-sliding mode controller for robot manipulators: a comparison analysis," Proc. 16th Int. Conference on Systems Engineering, Coventry, Vol. II, 548-552, 2003.
- 167) Parlakci, M. N. A., E. M. Jafarov, ve Y. Istefanopulos, "Robust Relay and PD-Sliding Mode Controllers Design Methods for Robot Position Systems with Parameter Perturbations," Proc. 4th WSEAS Int. Conference on Neural Networks and Applications, Vouliagmeni, Athens, Greece, 2003.
- 168) Jafarov, E.M. (1999). Robust sliding mode observer for uncertain MIMO systems with time-delay. In Proc. of the IASTED International Conference Control and Applications, Banff, Canada, July 25-29, pp.572-577.
- 169) Jafarov, E.M., 2003, Robust sliding mode controller of multivariable time-delay systems, Proc. 16th Int. Conference on Systems Engineering, ICSE'2003, Coventry Univ. UK, 5-11 September, pp.288-296.
- 170) Sofyali, A. and Jafarov, E.M.; Three-axis attitude control of a small satellite by magnetic PD-like controller integrated with passive pitch bias momentum method; 5th IEEE International Conference on Recent Advances in Space Technology, 2011, pp. 307-311.
- 171) Dzhafarov-Jafarov, E.M., Mamedov, V.A., Design of optimal variable structure systems, In Abstracts of Papers at All-Union Conference on Application of Data Processing and Controlling Facilities to Comprehensive Automation of Petrochemical Processes, TsNIITEIpriborosstroyeniya, p. 31, Moscow, 1970.
- 172) Dzhafarov-Jafarov, E.M., Fayazov, M.M., Abdullayev, F.S., Quasiinvariant variable structure control of a petrochemical process with varying parameters exposed to unmeasurable perturbations, In Abstracts of Papers at the Fifth Conference on Invariance Theory and Its Applications, p. 79, Kiev, 1976 (in Russian).
- 173) Abdullayev A.A., Dzhafarov-Jafarov, E.M., Fayazov M.M., and Abdullayev F.S., 1977, A case study in using industrial variable structure systems, In Abstracts of an All-Union Conference "Experience in Development and Applications of Automatic and Automated Control Systems, Frunze, pp. 50-51 (in Russian).
- 174) Abdullayev A.A. and Dzhafarov-Jafarov, E.M., 1977, Development and application of industrial variable structure systems for high-performance control of typical oil refining and petrochemical processes, In Proceedings of 7th All-Union Conference on Control Sciences, Minsk, book 3, p. 100, Izd. Nauka, Moscow (in Russian).
- 175) Dzhafarov-Jafarov, Development of ways to design variable structure systems for the oil refining and petrochemical processes, In Abstracts of Papers at All-Union Conference "Experience in Development, Perspectives, and Applications of Automated Control Systems, in Oil and Petrochemical Industries, Sumgait, TsNIITEIpriborosstroyeniya, pp. 40-41, Moscow, 1977 (in Russian).
- 176) Abdullayev A.A., Utkin, V.I., Dzhafarov-Jafarov, E.M., Fayazov M.M., and Abdullayev F.S., 1978, A set of new pneumatic variable structure controllers, In Proceedings of 13th All-Union Conference on Pneumoautomatics, Donetsk, pp. 144-146, Izd. "Nauka", Moscow (in Russian).
- 177) Dzhafarov-Jafarov, E.M., Determining the existence conditions of sliding modes in multidimensional discontinuous delayed systems by the direct Lyapunov method, In Abstracts of Papers at the 4th All-Union Conference on Control of Multivariable Systems, pp. 23-24, Moscow, 1978 (in Russian).
- 178) Dzhafarov-Jafarov, E.M., Iskenderov, I.A., An approximate design method and utilization of a multidimensional variable structure system in regulation of the rectification process of styrene production, In Abstracts of Papers at the 4th All-Union Conference on Control of Multivariable Systems, pp. 182-183, Moscow, 1978 (in Russian).
- 179) Dzhafarov-Jafarov, E.M., Elements of theory of nonlinear discontinuous delayed systems with deliberately introduced sliding modes, In Abstracts of Papers at the All-Union Conference on Systems Theory and Development in Automated Control Systems, pp. 14-15, Dilizhan, 1979 (in Russian).
- 180) Dzhafarov-Jafarov, E.M., Development of pneumatic multi-structure controllers, In Abstracts of Papers at the All-Union Conference on Development and Applications of Automated Control Systems on the Oil Recovery and Refining and Petrochemical Industries, Sumgait, TsNIITEIpriborosstroyeniya, pp. 81-82, Moscow, 1980 (in Russian).
- 181) Dzhafarov-Jafarov, E.M., Fayazov M.M., and Abdullayev F.S., Construction and industrial application of pneumatic control systems for copolymerization process by utilizing new variable

- structure control devices, In Abstracts of Papers at the Technical Workshop "Construction Principles of System Pneumo-automatics in Chemical and Petrochemical Industry", Tbilisi, Izd. "Sabchata Adzhara", pp. 42-44, 1976 (in Russian).
- 182) Dzhafarov-Jafarov, E.M., On constructing of a class of optimal variable structure systems with time-delay, In Abstracts of Papers at the First Conference on Automatic Control for Caucasian Young Scientists, Tbilisi, Izd. "Metzhniereba", pp. 21-23, 1977 (in Russian).
 - 183) Chinayev, P.I., Dzhafarov-Jafarov, E.M., Iskenderov, I.A., Control of a moveable plant, In Abstracts of Papers at the 7th All-Union Conference on Control Sciences, Minsk, Book 3, p. 85, 1977 (in Russian).
 - 184) Dzhafarov-Jafarov, E.M., Elements of the theory and techniques of optimal control systems for industrial plants in presence of phase state constraints, In Abstracts of Papers at the Second Conference on Automatic Control for Caucasian Young Scientists, Tbilisi, Izd. "Metzhniereba", pp. 160-163, 1980 (in Russian).
 - 185) Dzhafarov-Jafarov, E.M., Structural synthesis of multi-structural systems, In Abstracts of Papers at the Republic Conference on Ways of Increasing of Effectiveness of Automated Control Systems on the Oil Recovery and Refining and Petrochemical Industries, Bakü, AZNIITI, pp. 28-31, 1981 (in Russian).
 - 186) Dzhafarov-Jafarov, E.M., Design Principals and Realization Methods of the Set of Multistructural Automatic Systems and Controllers with Sliding Modes, In Abstracts of Papers at the 10th All-Union Conference on Control Sciences (Alma-Ata), Moscow, pp. 41-42, 1980 (in Russian).
 - 187) Dzhafarov-Jafarov, E.M., Adaptation in Variable Structure Systems, In Summaries of Papers at the Coordination Workshop on Adaptation Processes and XI. Seminar on Adaptive Systems, Frunze, 1982, Avtomatika i Telemekhanika, no. 9, p. 172, 1983 (in Russian).
 - 188) Dzhafarov-Jafarov, E.M., Optimization Synthesis of Variable Structure Systems with Scalar Control, In Abstracts of Papers at the Conference on Systems Theory and Development of Automated Control Systems for Manufacturing, MEI, Moscow, pp. 72-73, 1982 (in Russian).
 - 189) Dzhafarov-Jafarov, E.M., Qualitative Analysis of Nonlinear Dynamic Models for a Class of Petrochemical Reactors, In Abstracts of Papers at the All-Union School-Seminar on Mathematical Modeling in Science and Technology, Perm, pp. 118-119, 1986 (in Russian).
 - 190) Dzhafarov-Jafarov, E.M., Identification of Linear Systems with Time Delay, In Abstracts of Papers at the All-Union Scientific and Technical Conference on Dynamic Modeling of Complex Systems (Grodno), Moscow, pp. 115-116, 1987 (in Russian).
 - 191) Dzhafarov-Jafarov, E.M., On Constructing of Invariant Self-tuning Control Systems for a class of Non-stationary Plants with Time-varying Delay, In Abstracts of Papers at the 7th All-Union Conference on Theory of Invariance, Theory of Sensitivity, and Their Applications (Baku), Moscow, pp. 150-151, 1987 (in Russian).
 - 192) Dzhafarov-Jafarov, E.M., Novel construction principals of combined automatic systems with variable structure control for a class of technological polymerization processes, In Abstracts of Papers at the 2nd All-Union Scientific Conference on Cybernetic Methods for Technological Petro-Chemical Processes, Baku, p. 91, 1987 (in Russian).
 - 193) Dzhafarov-Jafarov, E.M., Mugarab-Samedi, K.G., Badalov, F.A., Dual-channel automated system instrumentation and control of technological process of material heat treatment, In Abstracts of Papers at the 2nd All-Union Scientific Conference on Cybernetic Methods for Technological Petro-Chemical Processes, Baku, p. 96, 1987 (in Russian).
 - 194) Dzhafarov-Jafarov, E.M., Al-Nabulsi, Mahir Afif Sabah, Nonlinear kinematical and dynamical equations for 5-link "Versatran-type" robot, In Collection of Papers on Actual Problems in Fundamental Sciences, Vol.2, Izd. MGTU, Moscow, p. 158, 1991 (in Russian).
 - 195) Jafarov, E.M., Multidimensional non-linear problems of Lourie-Postnikov (Azerbaijan Polytechnical Institute, USSR), International Symposium on the Mathematical Theory of Networks and Systems (MTNS91), International Conference Center Kobe, Kobe, Japan, June 17-21, 1991.
 - 196) Jafarov, E.M., Methods of synthesis for one class of selftuning systems with delay and standard model on the basis of Lyapunov-Krasovskii functional and principles of their construction, 8th IFAC/IFORS Symposium on Identification and System Parameter Estimation, Beijing, China, August 27-31, 1988.
 - 197) Jafarov, E.M., Sliding modes and stability in variable structure systems with several simplest distributed units, 5th IFAC Symposium on Control of Distributed Parameter Systems, Perpignan, France, June 26-29, 1989.

National Conference Proceedings and Papers

- 198) Öztürk, M. Ve Caferov, E. M., Antropomorfik Robotların Dinamiği ve Uyarlamalı Kontrol Uygulamaları, Otomatik Kontrol Ulusal Toplantısı TOK-2014, Bildiriler Kitabı, Eylül 11-13, ss. 307-312, Kocaeli, Türkiye, 2014.
- 199) Sofyalı, A. ve Caferov, E. M., Düzenli (Regüler) Biçimde Uzay Aracı Yönelme Dinamiği ve İntegral Kayma Kipli Salt Manyetik Yönelme Kontrolü, Otomatik Kontrol Ulusal Toplantısı TOK-2013, Bildiriler Kitabı, Eylül 26-28, ss. 394-401, Malatya, Türkiye, 2013.
- 200) Hacıbeyoğlu, E.P., Kuzucuoğlu, A.E. ve Caferov, E.M., Gerçek Verili Ani ve Kısa Süreli Bozucu Durumlarında Yolcu Uçağının Yunuslama Açısının Karşılaştırmalı Denetimi, Otomatik Kontrol Ulusal Toplantısı TOK-2013, Bildiriler Kitabı, Eylül 26-28, ss. 770-775, Malatya, Türkiye, 2013.
- 201) Sofyalı, A. ve Caferov, E.M., Salt Manyetik Eyleme ve Kayma Kipi Yaklaşımı ile Uzay Aracı Yönelme Kontrolü, Otomatik Kontrol Ulusal Toplantısı TOK-2012, Bildiriler Kitabı Cilt 1, Ekim 11-13, ss. 138-143, Niğde, Türkiye, 2012.
- 202) Hacıbeyoğlu, E.P., Kuzucuoğlu, A.E., ve Caferov, E.M., Bulanık Mantıklı ve PID-Denetleyicilerinin Yolcu Uçağı Modelleri Üzerinde Karşılaştırmalı Simülasyonu, Otomatik Kontrol Ulusal Toplantısı TOK-2012, Bildiriler Kitabı Cilt 2, Ekim 11-13, ss. 734-739, Niğde, Türkiye, 2012.
- 203) Sofyalı, A. ve Caferov, E.M., Köklerin Yer Eğrisi Yöntemiyle Tasarlanan Yunuslama Otopilotunun Başarımının Doğrusal Olmayan Benzetim Ortamında Sınanması, IV. Ulusal Havacılık ve Uzay Konferansı UHUK 2012, Eylül 12-14, 8 s., Hava Harp Okulu, Yeşilyurt, İstanbul, Türkiye, 2012.
- 204) Karagöz, İ.C. ve Caferov, E.M., A4 Askeri Uçağının Hareket Modları ve Durum Uzayında Karşılaştırmalı PID, LQR, İç-Dış Çevrim, Kök Yerleştirme ve Dayanıklı Kontrolcü Tasarım Uygulamaları, IV. Ulusal Havacılık ve Uzay Konferansı UHUK 2012, Eylül 12-14, 16 s., Hava Harp Okulu, Yeşilyurt, İstanbul, Türkiye, 2012.
- 205) A. Sofyalı, E. M. Caferov, "Küçük Uyduların Yönelme Edinimi Probleminin Manyetik PD-Benzeri Kontrolcü ile Çözümü", III. Ulusal Havacılık ve Uzay Konferansı (UHUK 2010), Anadolu Üniversitesi, Eskişehir, 16-18 Eylül, 2010.
- 206) K. Türkoğlu, E. M. Caferov, "Hezarfen İnsansız Hava Aracının Yanlamasına Hareket Modları ve Yer Kök Eğrisi Yöntemi ile Kontrol Sistemi Tasarımı: İç ve Dış Döngü Yaklaşımı", I. Ulusal Havacılık ve Uzay Konferansı (UHUK 2006), ODTÜ, Ankara, 21-23 Eylül, 2006.
- 207) Kâmuran Türkoğlu, Erkan Abdülhamitbilal, Raziye Tekin, Serkan Kale ve Elbrus Caferov, Longitudinal dynamic modelling of Hazerfen unmanned aerial vehicle and PID controller design, HaSeM'06 KAYSERİ VI. HAVACILIK SEMPOZYUMU, 12-14 MAYIS 2006, Dedeman Kapodakya Otel, NEVŞEHİR.
- 208) E. Abdulhamitbilal, E. Caferov ve L. Güvenç, Doğrusal olmayan helikopter modeli ve asılı hal için trim analizi. TOK-2005, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 2-3 Haziran 2005, Maslak, İstanbul, ss. 533-538.
- 209) Parlakçı, M. N. Alpaslan, İstefanopulos, Y., Caferov, E., Değişken yapılı gürbüz PD-robot kontrol sistem tasarımı yöntemi. TOK-2002, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 9-11 Eylül 2002, Orta Doğu Teknik Üniversitesi, Ankara, ss. 517-525.
- 210) Zengin, U., Caferov, E., F-4 uçağının çapraz etkileşimli 5 döngülü çok değişkenli (sapma oranı, yalpa oranı ve yana kayış) kontrol sisteminin parametrik optimizasyonu. TOK-2002, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 9-11 Eylül 2002, Orta Doğu Teknik Üniversitesi, Ankara, ss. 403-412.
- 211) Parlakçı, M. N. Alpaslan, İstefanopulos, Y., Caferov, E., Gürbüz kayma kipli yeni bir robot denetleyicisi tasarımı, 4. GAP Mühendislik Kongresi Bildiriler Kitabı, 2002, ss. 622-629.
- 212) Zengin, U, Caferov, E., F-4 savaş uçağının çapraz etkileşimli yanlamasına (sapma, yalpa ve yana kayma) hareketinin çok değişkenli kontrol sisteminin tasarımı, 4. GAP Mühendislik Kongresi Bildiriler Kitabı, 2002, ss. 1710-1716.
- 213) Parlakçı, M. N., Caferov, E., İstefanopulos, Y., Belirsiz parametrelili robot manipülatörleri için gürbüz PD-süreksiz kayma kipli denetleyicinin tasarımı. TOK-2000, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 21-22 Eylül 2000, Hacettepe Üniversitesi, Ankara, ss. 187-196.
- 214) Caferov, E., Taşaltın, R., Belirsiz parametrelili güdümlü füze sistemlerinde gürbüz integral kayma kipli denetleyicinin tasarımı. TOK-2000, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 21-22 Eylül 2000, Hacettepe Üniversitesi, Ankara, ss. 248-260.
- 215) Caferov, E., Belirsiz MIMO sistemler için gürbüz değişken yapıli kontrolün analizi ve sentezi. TOK-1998, Otomatik Kontrol Ulusal Toplantısı Bildiriler Kitabı, 15-16 Ekim 1998, İstanbul Teknik Üniversitesi, İstanbul, ss. 47-50.