

## RESUME

### Personal information:

- Name: Massoud Amini
- DOB: February 1966
- Address: Home : Unit 8, No 55, North Sindokht St., West Fatemi Ave., Tehran, Iran,  
Work : Department of Mathematics, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran 14115-134, Iran
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- E-mail: mamini@modares.ac.ir

### References:

- Zhong-Jin Ruan, Professor of Mathematics, University of Illinois, Urbana, z-ruan@illinois.edu
- Alireza Medghalchi, Professor of Mathematics (President of Iranian Mathematical Society in the past run), Kharazmi University, Tehran, a\_medghalchi@saba.tmu.ac.ir
- Tony Lau, Professor of Mathematics, University of Alberta, Edmonton, anthonyt@ualberta.ca

### Education:

- post-doctorate: Mathematics, University of Saskatchewan, Saskatoon, Canada, 2001
- Ph.D.: Mathematics, University of Illinois, Urbana, USA, 1998
- M.Sc.: Mathematics, Teacher Training University, Tehran, Iran, 1991
- B.Sc.: Mathematics, Mashhad University, Mashhad, Iran, 1988

### Theses:

- Local structures of operator algebras, Ph.D. thesis, University of Illinois, 1998
- Applications of quantum computations in business, case study of financial sector, Sharif University of Technology, 2008
- A degree theory for compact operators, M.Sc. thesis, Teacher Training University, 1991
- Automatic continuity of  $C^*$ -algebra homomorphisms, B.Sc. Project, Mashhad University, 1989

### Honors and Prizes:

- Rank two in National Mathematics Olympiad, Iranian Mathematical Society, 1987
- Rank one among graduates of the Faculty of Science, Mashhad University, 1988
- Rank three in the National Exam for Studying Abroad, MCHE, 1991
- Scholarship, Government of Australia (not used), 1991-95
- Scholarship, University of Sydney (not used), 1991-95
- Rank one among PhD students in the Department of Mathematics, University of Alberta, 1992-94
- Fellowship, University of Alberta, 1992-94
- Research fellowship, Fields Institute, 1995-96
- Research fellowship, University of Illinois, 1996-97
- Chen Prize for best Ph.D. thesis, University of Illinois, 1997
- Distinguished researcher, Tarbiat Modares University, 2004
- Distinguished lecturer, Faculty of Science, Tarbiat Modares University, 2005
- Distinguished researcher, Tarbiat Modares University, 2008
- Hashtroudi Prize, for best geometry paper, Iranian Math. Society, 2014

### Work Experience:

- Head of the Department of Mathematics, Shahed University, Tehran, Iran , 1990-92
- Acting Vice President in Programming, Shahed University, Tehran, Iran, 1991-92

- Member of the University Education Committee , Shahed University, 1990-92
- Teaching Assistant, University of Alberta, Edmonton, Canada, 1992-94
- Research Fellow, Fields Institute, Waterloo, Canada, 1995-96
- Research Assistant, University of Illinois, Urbana, USA, 1996-98
- Member of NCG Research Group, IPM, Tehran, Iran, 1998-99
- Member of Research Committee, Shahid Beheshti University, Tehran, Iran , 1999-2001
- Member of Doctoral Program Committee, Iranian Mathematical Society, Tehran, Iran, 1999-2000
- Member of Seminar Committee, Iranian Mathematical Society, Tehran, Iran, 1999-2000
- Assistant Professor, Shahid Beheshti University, Tehran, Iran, 1998-2002
- Visiting Professor, University of Saskatchewan, Saskatoon, Canada, 2000-2002
- Sessional Lecturer, St. Peter's College, Munster, Canada, 2000-2002
- Visiting Professor, University of Calgary, Canada, 2003
- Visiting Professor, Seoul National University, South Korea, 2004
- Visiting Professor, University of Bordeaux, France, 2005
- Assistant Professor, Tarbiat Modares University, Tehran, Iran, 2003-2005
- Visiting Professor, University of Malaya, Malaysia, 2007
- Visiting Professor, Queen Mary College, London, 2009
- Visiting Professor, University of Putra Malaysia, Malaysia, 2010
- Visiting Professor, Hausdorff Institute, Bonn, Germany, 2012
- Managing Editor, Bulletin of Iranian Mathematical Society, 2005-2008
- Editor, Bulletin of Iranian Mathematical Society, 2011-now
- Chief Editor, Journal of Iranian Mathematical Society, to be launched
- Associate Professor, Tarbiat Modares University, Tehran, Iran, 2005-2014
- Professor, Tarbiat Modares University, Tehran, Iran, 2014-now
- Head of Department of Mathematics, Tarbiat Modares University, Tehran, Iran, 2006-2009
- Dean of Research, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran, Iran, 2011-2014
- Senior Research Fellow, Institute for Researches in Fundamental Sciences (IPM), Tehran, Iran, 2011-now
- Dean, Faculty of Mathematical Sciences, Tarbiat Modares University, Tehran, Iran, 2014-now

**Teaching Experience:**

- Mashhad University, assistant lecturer, 1988
- Teacher Training University, assistant lecturer, 1990
- Shahed University, lecturer, 1989-92
- University of Alberta, assistant lecturer, 1992-94
- University of Illinois, lecturer, 1996-97
- Shahid Beheshti University, assistant professor, 1998-2000
- University of Saskatchewan, sessional lecturer, 2001-2002
- St. Peter's College, sessional lecturer, 2001-2002
- University of Calgary, sessional lecturer, 2003
- Tarbiat Modares University, assistant professor 2003-2005; associate professor 2005-2014, professor 2014-now,

**Graduate Students:**

- Mohamadi Roozbehani, Mohmood, Applications of Harmonic Analysis in Quantum Computation, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2004
- Joveini, Reza, Windowed Fourier Transform and Wavelet Transform, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2005

- Rahimi Nia, Ali, Graph Theory and Entanglement, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2006
- Jafari, Ali Asghar, Wavelet Dimension Function, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2007
- Rashidi Kouchi, Mehdi, Multi-resolution Analysis and Wavelet Sets, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2007
- Rezaie, Saber, Wavelet Sets on Abelian Groups, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2007
- Ghorbanpour, Asghar, Operator Algebras and Non commutative Spaces, M.Sc. Thesis, Sharif University, Tehran, 2007
- Saiedi, Soltan, Quantum Dynamical Systems with Discrete Quasi-Spectrum, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2008
- Alavizadeh, Razi, Interplay between Harmonic Analysis and Data Compression, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2008
- Kalantar, Mehrdad, Locally Compact Quantum Groups, M.Sc. Thesis, Sharif University, Tehran, 2008
- Naderi, Foad, Hecke  $C^*$ -algebras, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2009
- Ahmadi, Bijan, Nonlinear Analysis on Hadamard Spaces, PhD Dissertation, Tarbiat Modares University, Tehran, 2009
- Shams Yousefi, M., Order Amenability of Banach Order Algebras, PhD Dissertation, Tarbiat Modares University, Tehran, 2010
- Rezavand, Reza, Module Operator Amenability, PhD Dissertation, Tarbiat Modares University, Tehran, 2010
- Hassan Myrnouri, Abelian Groupoids, PhD Dissertation, Azad University, Tehran, 2010
- Keramati, Leila, Spectral Characterization of Scalars and Radicals in Banach Algebras, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2011
- Parsania, Samane, Unitary Banach Algebras, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2011
- Shirinkalam, Ahmad, Harmonic Analysis on Groupoids, M.Sc. Thesis, Tarbiat Moalem University, Tehran, 2011
- Shahbaz, Fatemeh, Orthogonal Sequences in Non-Archimedean Frechet Spaces, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Habibi, Roya, Weak Compactness and Fixed Points of Affine Maps, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Ramezani, Keyvan, Numerical Solution of Fredholm Integro-Differential Equations using Legendre Polynomials, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Khosravi, Fatemeh,  $C^*$ -modules with no Frame, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Zavaar Sefide Khaani, Injective Operator Spaces, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Ghasemi Nazari, Somayeh, Ambiguity Functions of Pure States on Abelian Groups, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Reiss Safari, Mahboobeh, On Fukui Conjecture, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Sadeghi, Banafsheh, Repeat Space, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2012
- Saiedi Gholikandi, Sarah, Homology of Topological Solenoids, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2013
- Mojahdi, Sadegh, Harmonic Functions in Quantum Groups, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2013
- Hamid, Nafiya, Non-harmonic Wavelet Expansion, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2014
- Golestani, Nasser, The Category of Bratteli Diagrams of AF-algebras, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2014

- Shams Alketabi, Khashayar, Riemann Zeta Function of Spectral Triples on AF-algebras, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2015
- Shfiei, Ahmad, Transformation Equations in Cell Population Dynamics, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2015
- Meyasami, Majid, Fourier Analytic, Combinatorial and Ergodic Methods in Analytic Number Theory, Case of Szemerédi Theorem, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2014
- Asgari Haaruni, Hamid, Diagonal matrices and Annihilators on AW\*- algebras, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2014
- Reiss Jafari, Elham, Locally compact Local groups, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2014
- Sattari Gholbaghi, Behzad, Homoclinic Class with  $C^1$ -stability, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2014
- Bigdeli, Majid, The cyclic homology of the group algebras, M.Sc. Thesis, Tarbiat Modares University, Tehran, 2015
- Khatoon Abadi, Alireza, Free entropy model of image identification, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2016
- Salehi sarvestani, Masoud,  $C^*$ -algebras of Toeplitz and composition operators, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2016
- Naghavi, Zahra, Ideals and centers of operator algebras on groups and homogeneous spaces, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2018
- Jamali, Saeid, Exotic crossed products of  $C^*$ -algebras, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2017
- Bakan, Mehdi, Entropy and relative entropy of states on operator algebras, Ph.D. Thesis, Tarbiat Modares University, Tehran, 2017

**Research Projects:**

- Non commutative topology, Research Group, Institute for Researches in Theoretical Physics and Mathematics, Tehran, 1998-99
- Amenability of inverse semigroup Banach algebras, Research Project (joint with Professor Medghalchi), Institute for Researches in Theoretical Physics and Mathematics, Tehran, 1999
- Fourier algebras on semigroups, Research Project, Shahid Beheshti University, Tehran, 2000
- Tensor hypergroups, Research Project, Shahid Beheshti University, Tehran, 2001
- Universal groupoids, Research Project (joint with Professor Khoshkam), University of Saskatchewan, Saskatoon, summer 2002
- Spectrum of Fourier and Fourier-Stieltjes algebras on semigroups, Research Project (joint with Professor Medghalchi), Teacher Training University, Tehran, 2003
- Harmonic analysis on right topological (left) groups, Research Project (joint with Professor Medghalchi), Teacher Training University, Tehran, 2003
- Harmonic analysis on compact groupoids, Research Project, Tarbiat Modares University, Tehran, 2004
- Quantum computation on finite hypergroups, Research Project, Institute for Researches in Theoretical Physics and Mathematics, Tehran, 2005
- $C^*$ -algebras on groupoids, Institute for Researches in Theoretical Physics and Mathematics, Tehran, 2007
- Amenability of hypergroup algebras, Research Project (joint with Professor Medghalchi), Teacher Training University, Tehran, 2009
- Jordan triples and hyper-symmetric spaces, Research Project, Institute for Researches in Theoretical Physics and Mathematics, Tehran, 2010
- Module amenability, Research Project, Institute for Researches in Theoretical Physics and Mathematics, Tehran, 2011
- Lie hypergroups, Azad University, Tehran, 2011
- Fukui conjecture for nanotubes and nanocones, Iran National Science Foundation, Tehran, 2012

- Representations of quantum groups and semigroups, Research Project, Institute for Researches in Fundamental Sciences, Tehran, 2012
- Tannaka Krein duality for compact hypergroups, Iran National Science Foundation, Tehran, 2013
- Lie hyperalgebras, Azad University, Tehran, 2013
- $C^*$ -algebras of 2-groupoids, Research Project, Institute for Researches in Fundamental Sciences, Tehran, 2013
- Discretization of topological spaces, Research Project, Institute for Researches in Fundamental Sciences, Tehran, 2014
- Finite dimensional approximation properties of operator algebras and modules, Research Project, Institute for Researches in Fundamental Sciences, Tehran, 2015
- The Thermodynamic Formalism for Expanding Maps and Entropy: Locally Compact Case, ISMO, Tehran, 2016
- Approximation properties of semifinite traces on operator algebras, Research Project, Institute for Researches in Fundamental Sciences, Tehran, 2017

### **Conference Participation:**

- Annual Iranian Mathematical Society Conferences (1985-1991, 1999-2007)
- Analysis Seminar, Shahid Beheshti University, Tehran, 1989; Isfahan University (invited speaker), Isfahan, 2002; IUST (invited speaker), Tehran, 2004, University of Maragheh (invited speaker), Maragheh, 2012
- First National Conference in Applied Math, IUST, Tehran, 1990
- First National Congregation of Graduate Students, Zahedan, 1990
- International Conference on Logic, IPM, Tehran, 1991
- Canadian Mathematical Society Conference, Edmonton, 1994
- The one year program on K-theory of Operator Algebras, Fields Institute, 1994-95
- Workshop on the Baum-Connes Conjecture, Fields Institute, 1994
- Workshop on Dynamical Systems and  $C^*$ -algebras, Fields Institute, 1994
- Workshop on Classifications of  $C^*$ -algebras, Fields Institute, 1994 (wrote one of proceeding papers)
- Workshop on Free Products and Random Matrices, Fields Institute, 1995
- Workshop on Subfactors, Fields Institute, 1995
- Workshop on Low Dimensional Topology, Fields Institute, 1995
- Workshop on Quantum Groups, Fields Institute, 1995
- 23<sup>rd</sup> Canadian Annual Symposium on Operator Algebras, Waterloo, 1995
- Wabash Mini Conferences, Wabash, 1997-98
- Fifth Iran-France Joint Seminar, IPM, Tehran, 1998
- International Workshop on Theoretical Computer Sciences, IPM, Tehran, 2000
- International Workshop on Group Theory, IASAS, Zanjan, 2000
- Balticon01, Banach Algebra 2001, invited lecturer, Odense, 2001 (couldn't participate)
- Canada-China Mathematics Congregation, regular talk in Operator Algebra session, Vancouver, 2001
- Aspects of Symmetry, Banff, 2001
- ICM 2002, Beijing, 2002 (couldn't participate)
- Quantum Computation and Quantum Information, Calgary, 2003
- Banach algebra 2003, invited lecturer, Edmonton, 2003 (lecture delivered by co-author)
- Workshop on Nano Technology, AKUT, Tehran, 2003
- Workshop on Neural Networks, IPM, Tehran, 2003
- International Conference in Logic and Arithmetics, invited, IPM, Tehran, 2003
- Workshop on Information Technology, AKUT, Tehran, 2004
- International conference on Information Management, Sharif University, Tehran, 2004
- International Conference on Dynamical systems and Related Topics, invited speaker, Daejeon, South Korea, 2004

- Workshop on Quantum Entanglement, Decoherence, Information, and Geometrical Phases in Complex Systems, ICTP, Trieste, Italy, 2004
- Banach algebra 2005, invited lecturer, Bordeaux, France, 2005
- International school on noncommutative geometry (NCG2005), IPM, Tehran, 2005
- CIMPA China school on Differential Geometry and its Applications, invited speaker, Shanghai, China, 2006
- $C^*$ -algebras and their invariants, contributed paper, Barcelona, Spain, 2007
- Operator algebras and their applications, Marrakech, Morocco, 2008
- EQUALS2, Kuala Lumpur, Malaysia, 2009
- ICM, International Congress of Mathematicians, Bangalore, Bombay, India, 2010
- ICA11, Istanbul, Turkey, 2011
- 6GTS, Bonab, Iran, 2011
- Operator Algebras and their Applications, RIMS, Kyoto, 2011-12
- Poisson'12, Utrecht, the Netherlands, 2012
- Harmonic Analysis, Convolution Algebras and Special Functions, Technische Universitat Muenchen, Germany, 2012
- Classification of non simple purely infinite  $C^*$ -algebras, Copenhagen, Denmark, 2013
- Banach algebras and its applications, Goteborg, Sweden, 2013
- ICM, International Congress of Mathematicians, Seoul, Korea, 2014
- ICM Satellite on Operator Algebras and Applications, Cheongpung, Korea, 2014
- International Conference on Mathematics, Chungnam National University, Daejeon, Korea, 2015
- Symposium on the Mathematical legacy of Uffe Haagerup, Copenhagen University, Copenhagen, Denmark, 2016
- Workshop on Fundamentals on Quantum Transport, Trieste, Italy, 2017

**Conference Organization:**

- (jointly with Jean Blissard) Fifth Iran-France Joint Seminar, IPM, Tehran, 1998
- (jointly with Masoud Khalkhali) International School on Noncommutative Geometry (NCG2005), IPM, Tehran, 2005
- (jointly with Ebrahim Samei) Workshop on Operator Structure of Fourier Algebras, IPM, Tehran, 2013
- (jointly with Ebrahim Samei) 2nd Seminar on Harmonic Analysis and its Applications, IPM, Tehran, 2014
- (jointly with Masoud Khalkhali, Giovanni Landi) International School on Noncommutative Geometry (NCG2015), IPM, Tehran, 2015
- (jointly with Ansgar Schneider) International Workshop on Operator Algebras, IPM, Tehran, 2015
- (jointly with Sven Raum) International Workshop on  $C^*$ -dynamics, IPM, Tehran, 2016

**Conference Presentations:**

- Degree theory and periodic solutions of PDE's, First national congregation of graduate students, Zahedan, 1990
- Non standard Analysis and Rolle's theorem, Tehran University, 1990
- On the functional analytic Proof of the existence of Haar measure, Univ. of Alberta, Edmonton, 1993
- Lectures on Kac algebras, Fields Institute, Waterloo, 1995
- A characterization of multipliers of Pedersen's ideal of  $C^*$ -algebras, Univ. of Illinois, 1997
- Five lectures on operator algebras, Fifth joint Iran-France seminar, IPM, Tehran, 1998
- Non commutative Mathematics, Iranian Math. Soc. annual conference, Tehran, 1998
- (invited Colloquium lecturer) Non commutative geometry, Sharif University, Tehran, Iran, 1999
- (invited lecturer) Quantum groups, IHU, Tehran, 1999
- (invited addressee) Groupoid  $C^*$ -algebras, IASAS, Zanjan, 2000
- (invited lecturer) Groupoid  $C^*$ -dynamical systems (not presented), Mashad University, Mashad, 2001

- (invited lecturer) Fourier Algebra on  $*$ -semigroups (not presented), BALTICON 2001, Odense, 2001
- Locally compact Pro- $C^*$ -algebras, Canada-China Mathematics Congregation, Vancouver, 2001
- (Colloquium lecturer) Module amenability of semigroup algebras, University of Saskatchewan, Saskatoon, 2002
- (invited lecturer) Crossed products by groupoids and inverse semigroups (not presented), Mashad University, Mashad, 2003
- Module amenability of semigroup algebras, 13th Analysis Seminar, Isfahan, Iran, 2003
- (presented by A. Medghalchi) On tensor hypergroups, Banach Algebra 03, Edmonton, 2003
- (presented by A. Medghalchi) Analysis on double coset spaces, 34th IMS Conference, STU, Shahrood, 2003
- On dual Sidon sets, 14th Analysis Seminar, IUST, Tehran, 2004
- (Colloquium lecturer) Inverse semigroup dynamical systems, Seoul National University, Seoul, South Korea, 2004
- (invited lecturer) Dynamical Systems over Algebraic Structures, International Conference on Dynamical systems and Related Topics, Daejeon, South Korea, 2004
- $C^*$ -algebras on groupoids and inverse semigroups, Banach Algebra 05, Bordeaux, 2005
- (invited speaker) On metric geometry, CIMPA-China school on Differential Geometry and its Applications, Shanghai, China, 2006
- (contributed paper) On nuclearity of semigroup  $C^*$ -algebras,  $C^*$ -algebras and its invariants, CRM, Barcelona, Spain, 2007
- (invited speaker) Towards Tannaka-Krein duality for compact groupoids, ICOAA08, Marrakech, Morocco, 2008
- Hidden subhypergroup problem, EQUALS2, Kuala Lumpur, Malaysia, 2009
- Operator amenability of Fourier algebras on inverse semigroups, ICM, International Congress of Mathematicians, Bangalore, Bombay, India, 2010
- Hermit polynomial solutions of Fredholm equations, ICA11, Istanbul, Turkey, 2011
- Connes amenability of multiplier algebras, Banach Algebra Seminar, Damghan University, Damghan, 2012
- Harmonic functions on hypergroups, 20<sup>th</sup> Analysis Seminar, Maragheh, 2012
- Amenability of compact hypergroup algebras, Harmonic Analysis, Convolution Algebras and Special Functions, Technische Universitat Muenchen, Germany, 2012
- Lie theories on group-like structures, Frontier in Mathematical Sciences, Sharif University of Technology, Tehran, 2012
- (Colloquium lecturer) Symmetries of symmetries, Institute for Research in Fundamental Sciences (IPM), Tehran, 2013
- (invited lecturer)  $C^*$ -algebras of 2-groupoids, Banach algebras and its applications, Goteborg, Sweden, 2013
- (joint with M. Shahparasti, M. Mohamadian, A. Yazdian Varjani) A novel single loop control structure for standalone inverter with multi loop harmonic compensation, Power Electronics, Drive Systems and Technologies Conference (PEDSTC), Feb. 2013
- (contributed lecture) From quantum groups to quantum semigroups and vice-versa, International Congress of Mathematicians, Satellite Conference on Operator Algebras, Cheongpung, Korea, 2014
- (contributed lecture) Descretization of topological and quantum spaces, International Congress of Mathematicians, Seoul, Korea, 2014
- (contributed lecture) From quantum semigroups to quantum groups and vice versa, ICM Satellite on Operator Algebras and Applications, Cheongpung, Korea, 2014
- (invited lecturer) Dynamics and ordered diagrams, International Conference on Mathematics, Chungnam National University, Daejeon, Korea, 2015
- (invited lecturer) Noncommutative Mathematics, an personal perspective, Tehran University, Tehran, Iran, 2016
- (invited lecturer) Functional analysis, a historical perspective, zanzan, Iran, 2017

**Books:**

- (joint with George Elliott) Lectures on Operator Theory, Fields Institute Monographs, 13, George A. Elliott, Peter A. Fillmore, and B. V. Rajarama Bhat (Editors), American Mathematical Society and Fields Institute, 1999. ISBN-10: 0821808214, ISBN-13: 978-0821808214. Chapters 24-25.
- (joint with Mehrdad Kalantar, Hassan Myrnouri and Mahmood M. Roozbahani) Fourier transform on group-like structures, a chapter in: Fourier Transforms, Approach to Scientific Principles, Goran Nikolic (Editor), InTech, 2011, ISBN 978-953-307-231-9. Chapter 18.
- (joint with Alireza Medghalchi, Masumeh Cheraqi, Zahra Razavi, Ali Memar Hamedani) Amenability and Compactification of Semigroups, TMU, 2015
- (joint with Nafya Hameed Mohammad) Gabor-Fourier Analysis, a chapter in: Fourier Transform, ISBN 978-953-51-4166-2 Salih Salih (Editor), InTech, 2015.

**Papers:**

- (joint with R. Saadati) Topics in fuzzy metric spaces, The Journal of Fuzzy Math., vol. 11, no. 4 (2003), 765-768.
- (joint with A.R. Medghalchi) Amenability of the algebras  $R(S)$ ,  $F(S)$  of a topological semigroup  $S$ , Scientiae Math. Japonicae, 60 (2004) 469-473.
- (joint with A.R. Medghalchi) Fourier Algebra on foundation topological  $*$ -semigroups, Semigroup Forum 68 (2004), 322-334.
- (joint with R. Saadati) Some properties of continuous  $t$ -norms and  $s$ -norms, International J. Pure Applied Math. 16(2) (2004), 157-164.
- (joint with H.B. Hosseini, R. Saadati) Alexandroff theorem in fuzzy metric spaces, Math. Sci. Res. J. 8(12) (2004), 357-361.
- Locally compact pro  $C^*$ -algebras, Cand. J. Math. 56 (1) (2004), 3-22.
- Dual Sidon sets on amenable groups, Proc. 14th seminar on Math. Anal, IUST, (2004), 16-23.
- Uniform closure of dual Banach algebras, J. Operator Theory, 52 (2004), 1-10.
- Module amenability for semigroup algebras, Semigroup Forum 69 (2004), 243-254.
- (joint with A.R. Medghalchi) Harmonic analysis on tensor hypergroups, Contemporary Mathematics 363 (2004), 1-14.
- (joint with D. Ebrahimi Bagha) Weak module amenability for semigroup algebras, Semigroup Forum 71 (2005), 18-26.
- Graph of unbounded multipliers, Studia Sci. Math. Hungarica, 42 (2005), 31-40.
- (joint with A.R. Medghalchi) Restricted algebras on inverse semigroups  $I$ , Math. Nachrichten 279(16) (2006), 1-10.
- (joint with A.R. Medghalchi) Spectrum of the Fourier-Stieltjes algebra of a semigroup, Iranian Journal of Mathematical Sciences and Informatics 1(2) (2006), 1-8.
- Tannaka-Krein duality for compact groupoids I, Representation theory, Advances in Mathematics, 214 (1) (2007), 78-91.
- Fourier transform of unbounded measures on hypergroups, Bull. Ital. Union Math. 8 (2007), 819-828.
- (joint with H. Rahiminia) On separability of graphs with some entangled edges, Quantum Info. Comput. 8 (2008), 664-670.
- (joint with R. Rezavand, M.H. Sattari, D.E. Bagha) Module Arens regularity for semigroup algebras, Semigroup Forum 77 (2008), 300-305.
- Control/Target property on abelian groups, Malaysian Journal of Math. Sciences 3(2) (2009), 135-146.
- (joint with R. Joveini) Yet another generalization of frames and Riesz bases, Involve 2 (4) (2009), 395-407.
- Quantum algorithms for decision and planning problems, Oriental J. Math 1 (2010), 27-49.
- Non commutative topology and local structure of Kac algebras, Int. Math Forum 5 (5-8) (2010), 213-224.
- On generalized Stone's theorem, Advances in Math. Phys. 4 (2010), 39-45.



- (joint with M. Mehran) Amenability of restricted semigroup algebras, *Int. J. Math. Math. Analysis* 4(1)(2010), 17-28.
- Quantum Algorithms, *MathDigest* 2 (2010), 6-14.
- (joint with A. Bodaghi, D.E. Bagha) Module amenability of the second dual and module topological center of semigroup algebras, *Semigroup Forum* 88 (2010), 302-312.
- (joint with M. Shams Yousefi, F. Sady) Complete order amenability of the Fourier algebra, *Indian J. Pure Appl. Math.* 41 (2010), 485-504.
- (joint with B. Hayati) Connes amenability of multiplier Banach algebras, *Kyoto Math. J.* 50 (2010), 41-50.
- (joint with A. R. Medghalchi) Fourier and Herz algebras of a compact tensor hypergroup, *Acta Mathematica Vietnamica* 35 (2010), 263-274.
- Error correction codes on abelian groups, *IJMSI* 5 (2010), 55-67.
- Tannaka-Krein duality for compact groupoids II, duality, *Operators and Matrices* 4 (2010), 573-592.
- Induced representations of groupoid crossed products, *An. St. Univ. Ovidius Constanta* 18 (2010), 23-40.
- (joint with B. Ahmadi Kakavandi) Duality and subdifferential for convex functions on complete  $CAT(0)$  metric spaces, *Nonlinear Analysis Series A* 73 (2010), 3450-3455.
- (joint with A. Bodaghi) Module amenability and weak module amenability for second dual of Banach algebras, *Chamchuri J. Math.* 2 (2010), 57-71.
- (joint with D.E. Bagha) Module amenability for Banach modules, *Cubo* 13 (2011), 127-137.
- (joint with B. Ahmadi Kakavandi) Non linear ergodic theorems in complete non positive curvature metric spaces, *Bull. Iran. Math. Soc.* 37 (2011), 11-20.
- $C^*$ -algebras of generalized Hecke pairs, *Mathematica Slovaca* 61 (2011), 645-652.
- (joint with Cho-Ho Chu) Harmonic functions on hypergroups, *Jour. Functional Analysis* 261 (2011), 1835-1864.
- (joint with M. Shams Yousefi, F. Sady) Order Structure of the Fig'-Talamanca-Herz Algebra, *ISRN Geometry* (2011), doi:10.5402/2011/531023.
- (joint with A.R. Medghalchi, A. Shirinkalam)  $L^1$ -algebra of a locally compact groupoid, *ISRN Algebra* (2011), doi:10.5402/2011/856709.
- (joint with A. Bodaghi, R. Babaee) Module Derivations into iterated duals of Banach algebras, *Proc. Romanian Academy, Series A* 12 (2011), 277-284.
- (joint with A.R. Medghalchi) Restricted algebras on inverse semigroups II, Positive definite functions, *Inter. J. Math. Math. Sci.* (2011), doi:10.5402/2011/531023.
- Crossed product of  $C^*$ -algebras by hypergroups via group coactions, *Mathematica Slovaca* 62 (2012), 587-593.
- (joint with G.I. Ibragimov, M. Salimi) Evasion from many pursuers in simple motion differential game with integral constraints, *European J. Operational Research* 218 (2012), 505-511.
- (joint with K. Khanaki) Haar measure and integral logic, *Mathematical Logic Quarterly* 58 (2012), 294-302.
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