რამაზ ხომერიკი

khomeriki@hotmail.com • თბილისი, მოსაშვილის ქ. 14-16; ტელ: 2915681, ფაქსი: 2230967
დაბადების თარიღი – 13 ივნისი 1964

განათლება

- თბილისის სახელმწიფო უნივერსიტეტის დიპლომი თეორიულ ფიზიკაში (1986 წ.)
- ფიზ.-მათ. მეცნიერებათა კანდიდატი, თეორიული ფიზიკა (1995 წ.)
- ფიზ.-მათ. მეცნიერებათა დოქტორი, თეორიული ფიზიკა (2002 წ.)

სამუშაო გამოცდილება

- 2016 - 2020 ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, ზუსტ და საბუნებისმეტყველო მეცნიერებათა ფაკულტეტის დეკანი
- 2009 - დღემდე ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, ასოცირებული პროფესორი
- 2006 - 2008 ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, ასისტენტ პროფესორი
- 2006 – 2007 ფლორენციის უნივერსიტეტი, იტალია
- 2005 – 2006 მონპელიეს უნივერსიტეტი, საფრანგეთი
- 2000 – 2001 ოკლაჰომას უნივერსიტეტი, აშშ
- 1992 – 2006 ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, მეცნიერ-თანამშრომელი

საერთაშორისო სამეცნიერო სტიპენდიები

- Marie-Curie Fellowship award, 2005, Dipartimento di Energetica, University of Florence, Italy
- CNR-NATO senior fellowship award, 2004, Italy
- FRANCE-NATO Visiting Fellowship award 2004, France.
- Associate membership of International Centre of Theoretical Physics (ICTP), 2003, Italy
- NATO expert award, 2002, Italy
- NSF-NATO visiting scientist postdoctoral fellowship award, 2000, USA
- DAAD-NATO visiting scientist fellowship award, 1999, Germany
- CNR-NATO research fellowship award, 1999, Italy

საერთაშორისო და ადგილობრივი სამეცნიერო გრანტები

- შოთა რუსთაველის ეროვნული სამეცნიერო ფონდის გრანტი ფუნდმენტური მეცნიერებებისთვის, 2020 (grant No FR-19-4049) - ხელმძღვანელი
- შოთა რუსთაველის ეროვნული სამეცნიერო ფონდის გრანტი გამოყენებითი მეცნიერებებისთვის, 2020 (grant No FR-19-4058).) - კოორდინატორი
- Joint Grant from Georgian SRNSF and CNR (Italy), 2016 (grant No 04/24) - ხელმძღვანელი

- Joint grant from Georgian SRNSF and CNRS (France), 2016 (grant No 04/01) - ხელმძღვანელი
- შოთა რუსთაველის ეროვნული სამეცნიერო ფონდის გრანტი ფუნდამენტური მეცნიერებებისთვის, 2015 (grant No FR/25/6-100/14) - ხელმძღვანელი
- Grant from Science and Technology Centre in Ukraine (STCU), (2015), # 6084- ხელმძღვანელი
- შოთა რუსთაველის ეროვნული სამეცნიერო ფონდის გრანტი გამოყენებითი მეცნიერებებისთვის, 2013, #30/12 – ხელმძღვანელი
- Joint Grant from RNSF (Georgia) and CNRS (France), 2012, # 09/08 ხელმძღვანელი
- Two-year grant from Science and Technology Centre in Ukraine (STCU), (2010), # 5053 ხელმძღვანელი
- Two-year grant from Civilian Research and Development Foundation (CRDF), (2006), USA ხელმძღვანელი
- NATO Reintegration grant, 2003-2006 ხელმძღვანელი
- Marie-Curie International fellowship award, EU, 2006-2007 ხელმძღვანელი
- Two-years grant from Civilian Research and Development Foundation (CRDF), USA, 2006-2008 ხელმძღვანელი
- Two years grant from Civilian Research and Development Foundation (CRDF), 2002-2004, USA – ხელმძღვანელი
- Long term research grant from International Science Foundation No MXK200 1996, Georgia ხელმძღვანელი
- Long term research grant from International Science Foundation No MXK000 1995, Georgia ხელმძღვანელი
- Individual research grant from International Science Foundation (Soros Foundation), 1994, Georgia

✓ სამეცნიერო ჟურნალის "Communications in Nonlinear Science and Numerical Simulations" სარედაქციო საბჭოს წევრი, ასოცირებული რედაქტორი - 2019-2020.

✓ ციტირებების რაოდენობა **google scholar**-ის მიხედვით - 1298, h-ინდექსი - 21

პუბლიკაციები იმპაქტ ფაქტორიან ჟურნალებში

(1) V. Loladze, T. Dauxois, **R. Khomeriki**, S. Ruffo (2020), "Effective negative specific heat by destabilization of metastable states in dipolar systems", Physical Review E, **101**, 030102(R). https://journals.aps.org/pre/abstract/10.1103/PhysRevE.101.030102

(2) G.N.B. Chendjou, J.P. Nguenang, A. Trombettoni, T. Dauxois, **R. Khomeriki**, S. Ruffo (2019), "Pulse solutions of the fractional effective models of the Fermi–Pasta–Ulam lattice with long-range interactions", Journal of Statistical Mechanics: Theory and Experiment, **2019**, 104015. https://iopscience.iop.org/article/10.1088/1742-5468/ab47fd

(3) V. Jandieri, T. Onoprishvili, **R. Khomeriki**, D. Erni, J. Pistora (2019), "Digital signal processing in coupled photonic crystal waveguides and its application to an all-optical AND logic gate", Optical and Quantum Electronics, **51**, 121. https://doi.org/10.1007/s11082-019-1833-9

(4) V. Jandieri, **R. Khomeriki**, J. Berakdar, D. Erni (2019),"Theory of soliton propagation in nonlinear photonic crystal waveguides", Optics Express, **27**, 29558, https://doi.org/10.1364/OE.27.029558

(5) G. N. B. Chendjou, J. P. Nguenang, A. Trombettoni, T. Dauxois, **R. Khomeriki**, S. Ruffo (2018) "Fermi-Pasta-Ulam chains with harmonic and anharmonic long-range interactions", Commun. Nonlinear Sci. Numer. Simulat. **60**, 115. https://doi.org/10.1016/j.cnsns.2018.01.006

(6) V. Jandieri, **R. Khomeriki**, D. Erni (2018), "Realization of true all-optical AND logic gate based on nonlinear coupled air-hole type photonic crystal waveguides", Optics Express, **26**, 19845. https://doi.org/10.1364/OE.26.019845

(7) S. Flach, **R. Khomeriki** (2017), "Fractional Lattice Charge Transport", Scientific Reports **7**, 40860. http://www.nature.com/articles/srep40860

(8) G. Miloshevich, J.P. Nguenang, T. Dauxois, **R. Khomeriki**, S. Ruffo (2017), "Traveling solitons in long-range oscillator chains", J. Phys. A: Math. Theor. **50**, 12LT02. https://doi.org/10.1088/1751-8121/aa5fcf

(9) V. Jandieri, **R. Khomeriki**, D. Erni, W. Cho Chew (2017), "Realization of All-Optical Digital Amplification in Coupled Nonlinear Photonic Crystal Waveguides", Progress In Electromagnetics Research, **158**, 63. http://www.jpier.org/PIER/pier.php?paper=17010704

(10) V. Loladze and **R. Khomeriki** (2017) "Landau-Zener tunneling of solitons" Phys. Rev. E, **95**, 042204. https://journals.aps.org/pre/abstract/10.1103/PhysRevE.95.042204

(11) **R. Khomeriki** and Sergej Flach (2016), "Landau-Zener Bloch Oscillations with Perturbed Flat Bands", Phys. Rev. Lett., **116**, 245301. http://journals.aps.org/prl/abstract/10.1103/PhysRevLett.116.245301

(12) **R. Khomeriki**, L. Chotorlishvili, I. Tralle, and J. Berakdar (2016), "Positive–Negative Birefringence in Multiferroic Layered Metasurfaces", Nano Letters, **16**, 7290. http://pubs.acs.org/doi/abs/10.1021/acs.nanolett.6b03936

(13) L. Chotorlishvili, S.R. Etesami, J. Berakdar, **R. Khomeriki**, Jie Ren,(2015), "Electromagnetically controlled multiferroic thermal diode", Phys. Rev. B **92**, 134424. http://dx.doi.org/10.1103/PhysRevB.92.134424

(14) M. Malishava, **R. Khomeriki** (2015), "All-Phononic Digital Transistor on the Basis of Gap-Soliton Dynamics in an Anharmonic Oscillator Ladder", Phys. Rev. Lett., 115, 10430. http://dx.doi.org/10.1103/PhysRevLett.115.104301

(15) G. Miloshevich, J.P. Nguenang, Th. Dauxois, **R. Khomeriki**, S. Ruffo, (2015) "Instabilities and relaxation to equilibrium in long-range oscillator chains", Phys. Rev. E **91**, 032927. http://dx.doi.org/10.1103/PhysRevE.91.032927

(16) V. Jandieri, **R. Khomeriki**, (2015) "Linear Amplification of Optical Signal in Coupled Photonic Crystal Waveguides", Photonics Technology Letters, IEEE, **27**, 639. http://dx.doi.org/10.1109/LPT.2014.2388354

(17) **R. Khomeriki**, L. Chotorlishvili, J. Berakdar (2015), "Landau–Zener tunneling in multiferroic composites", New Journal of Physics, **17**, 013030. http://dx.doi.org/10.1088/1367-2630/17/1/013030

(18) **R. Khomeriki**, L. Chotorlishvili, B. Malomed, J. Berakdar (2015), "Creation and amplification of electromagnon solitons by electric field in nanostructured multiferroics", Phys. Rev. B. **91**, 041408(R). http://link.aps.org/doi/10.1103/PhysRevB.91.041408

(19) G. Miloshevich, Th. Dauxois, **R. Khomeriki**, S. Ruffo (2013), "Dipolar needles in the microcanonical ensemble: Evidence of spontaneous magnetization and ergodicity breaking", Europhys. Lett., **104**, 17011. http://iopscience.iop.org/0295-5075/104/1/17011

(20) L. Chotorlishvili, **R. Khomeriki**, A. Sukhov, S. Ruffo, J. Berakdar (2013), "Dynamics of Localized Modes in a Composite Multiferroic Chain", Phys. Rev. Lett. **111**, 117202. http://prl.aps.org/abstract/PRL/v111/i11/e117202

(21) Ramaz Khomeriki, Jérôme Leon (2013), "All-optical amplification in metallic subwavelength linear waveguides", Phys. Rev. A, **87**, 053806. http://pra.aps.org/abstract/PRA/v87/i5/e053806

(22) **R. Khomeriki**, L. Tkeshelashvili (2012), "Negative refraction and spatial echo in optical waveguide arrays," Opt. Lett. **37**, 4419. http://www.opticsinfobase.org/ol/abstract.cfm?uri=ol-37-21-4419

(23) S. Flach, M. Ivanchenko, **R. Khomeriki**, (2012) "Correlated metallic two-particle bound states in quasiperiodic chains", Europhys. Lett., 98, 66002. http://iopscience.iop.org/0295-5075/98/6/66002

(24) J.-P. Nguenang, S. Flach, **R. Khomeriki**, (2012), "Resonant invisibility with finite range interacting fermions", Phys. Lett, A, 376, 472, http://www.sciencedirect.com/science/article/pii/S0375960111014332

(25) D.O. Krimer, **R. Khomeriki**, (2011), "Realization of discrete quantum billiards in a two-dimensional optical lattice", Phys. Rev. A, **84**, 041807, http://link.aps.org/doi/10.1103/PhysRevA.84.041807

(26) D.O. Krimer, **R. Khomeriki**, S. Flach, (2011), "Two interacting particles in a random potential", JETP Letters, 94, 438, http://www.jetpletters.ac.ru/ps/1946/article_29517.shtml

(27) **R. Khomeriki** (2011), "Multiple Landau-Zener tunnelling in two weakly coupled waveguide arrays", European Physical Journal D, 61, 193, http://dx.doi.org/10.1140/epjd/e2010-10447-9

(28) **R. Khomeriki** (2010), "Solitonic Bloch oscillations in two-dimensional optical lattices", Phys. Rev. A, 82, 033816. http://dx.doi.org/10.1103/PhysRevA.82.033816

(29) **R. Khomeriki** (2010), "Nonlinear Landau-Zener tunneling in coupled waveguide arrays", Phys. Rev. A, 82, 013839. http://dx.doi.org/10.1103/PhysRevA.82.013839

(30) **R. Khomeriki**, D.O. Krimer, M. Haque, S. Flach (2010), "Interaction-induced fractional Bloch and tunneling oscillations", Phys. Rev. A, 81, 065601. http://dx.doi.org/10.1103/PhysRevA.81.065601

(31) M. Gogberashvili, **R. Khomeriki**, (2009), "Trapping of Nonlinear Gravitational Waves by Two-Fluid Systems", Modern Phys. Lett. A, 24, 2761. http://dx.doi.org/10.1142/S0217732309032083

(32) **R. Khomeriki**, J. Leon, (2009), "Chaotic spatial soliton rays in smooth two Dimensional optical lattices", Optics Letters 34, 3376. http://www.opticsinfobase.org/ol/abstract.cfm?URI=ol-34-21-3376

(33) R. Khomerki, (2009), "Frequency divider by underdamped Josephson transmission line", Eur. Phys. J. B, 72, 257. http://dx.doi.org/10.1140/epjb/e2009-00295-y

(34) **R. Khomeriki**, J. Leon, (2009), "Gap soliton dynamics in an optical lattice as a parametrically driven pendulum", Phys. Rev. A, 80, 033822. http://link.aps.org/doi/10.1103/PhysRevA.80.033822

(35) D.O. Krimer, **R. Khomeriki**, S. Flach, (2009), „Delocalization and spreading in a nonlinear Stark ladder", Phys. Rev. E, 80, 036201. http://link.aps.org/abstract/PRE/v80/e036201

(36) **R. Khomeriki**, J.Leon, (2009), "Fluxon Dynamics in Boundary Driven Josephson Transmission Line", Journal of Physics: Conference Series, 150, 022035. http://www.iop.org/EJ/abstract/1742-6596/150/2/022035

(37) G. Miloshevich, **R. Khomeriki**, S. Ruffo, (2009), "Stochastic Resonance in the Fermi-Pasta-Ulam Chain", Phys. Rev. Lett., 102, 020602. http://link.aps.org/doi/10.1103/PhysRevLett.102.020602

(38) **R. Khomeriki**, J. Leon, (2008), "Tri Stability in the Pendula Chain", Phys. Rev. E, 78, 057202. http://link.aps.org/abstract/PRE/v78/e057202

(39) **R. Khomeriki**, A. Ugulava, L. Chotorlishvili, (2008), "Self Chaotization in Coupled Optical Waveguides", Journal of Optical Society of America B, 25, 1265. http://www.opticsinfobase.org/abstract.cfm?URI=josab-25-8-1265

(40) **R. Khomeriki**, J. Leon (2007), "Driving Light Pulses with Light in Two-Level Media", Phys. Rev. Lett. 99, 183601. http://link.aps.org/abstract/PRL/v99/e183601

(41) **R. Khomeriki**, J. Leon, S. Ruffo, S. Wimberger (2007), "Nonlinear dynamics in double square-well potentials", *Theor. Math. Phys.* 152, 1122. http://dx.doi.org/10.1007/s11232-007-0096-y

(42) T. Dauxois, **R. Khomeriki**, S. Ruffo (2007), "Modulational instability in isolated and driven Fermi-Pasta-Ulam lattices", *Europ. Phys. J.: Special Topics,* 147, 3. http://dx.doi.org/10.1140/epjst/e2007-00200-2

(43) A. Campa, **R. Khomeriki**, D. Mukamel, S. Ruffo (2007) "Long-range effects in layered spin structures", *Phys. Rev. B,* 76, 064415. http://link.aps.org/abstract/PRB/v76/e064415

(44) **R. Khomeriki**, S. Ruffo, S. Wimberger (2007), "Driven collective quantum tunneling of ultracold atoms in engineered optical lattices" Europhys. Lett., 77, 40005. http://dx.doi.org/10.1209/0295-5075/77/40005

(45) **R. Khomeriki**, J. Leon, M. Manna (2006), "Bistable magnetization profiles in magnetic thin films driven in the allowed band", Phys. Rev. B, 74, 094414. http://dx.doi.org/10.1103/PhysRevB.74.094414

(46) **R. Khomeriki**, J. Leon, S. Ruffo (2006), "Coexistence of Josephson Oscillations and Self-Trapping Regime in Optical Waveguide Arrays", Phys. Rev. Lett, 97, 143902. http://dx.doi.org/10.1103/PhysRevLett.97.143902

(47) D. Chevriaux, **R. Khomeriki**, J.Leon (2006), "Theory of a Josephson junction parallel array detector sensitive to very weak signals", Phys. Rev. B, 73, 214516. http://dx.doi.org/10.1103/PhysRevB.73.214516

(48) **R. Khomeriki**, L. Tkeshelashvili, T. Buishvili, Sh. Revishvili (2006), "Directed transport in quantum Hall bilayers", European Physical Journal B, 51, 421. http://dx.doi.org/10.1140/epjb/e2006-00234-6

(49) D. Chevriaux, **R. Khomeriki**, J. Leon (2006), "Bistable Transmitting Nonlinear Directional Couplers", Modern Phys. Lett. B, 20, 515. http://dx.doi.org/10.1142/S0217984906011190

(50) **R. Khomeriki**, D. Chevriaux, J.Leon (2006), "Quantum Hall Digital Amplifier", European Physical Journal B, 49, 213. http://dx.doi.org/10.1140/epjb/e2006-00053-9

(51) **R. Khomeriki**, J. Leon (2005), "Bistability in sine-Gordon: the Ideal Switch", Phys. Rev. E, 71, 056620. http://link.aps.org/abstract/PRE/v71/e056620

(52) **R. Khomeriki**, J. Leon (2005), "Bistable light detectors nonlinear waveguide arrays", Phys. Rev. Lett., 94, 243902. http://link.aps.org/abstract/PRL/v94/e243902

(53) T. Dauxois, **R. Khomeriki**, F. Piazza, S. Ruffo (2005), "Anti FPU problem", Chaos 15, 015110. http://dx.doi.org/10.1063/1.1854273.

(54) **R. Khomeriki**, S. Ruffo (2005), "Nonadiabatic Landau-Zener Tunneling in Waveguide Arrays with a Step in the Refractive Index", Phys. Rev. Lett., 94, 113904. http://link.aps.org/abstract/PRL/v94/e113904

(55) **R. Khomeriki**, S. Lepri, S. Ruffo (2004), "Nonlinear supratransmission and bistability in the Fermi-Pasta-Ulam model", Physical Review E, 70, 066626. http://link.aps.org/abstract/PRE/v70/e066626

(56) **R. Khomeriki**, L. Tkeshelashvili (2004), "Interaction of Spatial Solitons in Nonlinear Optical Medium", The Journal of American Optical Society, 21, 2175. http://josab.osa.org/abstract.cfm?URI=josab-21-12-2175

(57) **R. Khomeriki** (2004), "Self focusing Magnetostatic Beams in Thin Magnetic Films", European Physical Journal B, 41, 219. http://dx.doi.org/10.1140/epjb/e2004-00313-8.

(58) M. Abolfath, **R. Khomeriki**, K. Mullen (2004): "Theory of tunneling resonances of bilayer electron systems in a strong magnetic field", Phys. Rev. B, 69, 165321, 6 pages. http://link.aps.org/abstract/PRB/v69/e165321

(59) Yu.A. Kosevich, **R. Khomeriki**, S. Ruffo (2004): "Supersonic Discrete Kink-Solitons and Sinusoidal Patterns with ``Magic" Wavenumber in Anharmonic Lattices", Europhysics Letters, 66, 21-27. http://dx.doi.org/10.1209/epl/i2003-10156-5.

(60) R.Khomeriki (2004): "Nonlinear Bandgap Transmission in Optical Waveguide Arrays", Phys. Rev. Lett., 92, 063905, 4 pages. http://link.aps.org/abstract/PRL/v92/e063905

(61) **R. Khomeriki**, K. Mullen, Sh. Revishvili, (2003): "Goldstone mode kink-solitons in double layer quantum Hall systems", Physica E, 18, 124, (2003). http://dx.doi.org/10.1016/S1386-9477(02)01043-3

(62) **R. Khomeriki**, L. Tkeshelashvili (2002): "Stable magnetostatic solitons in yttrium iron garnet film waveguides for tilted in-plane magnetic fields", Physical Review B, 65, 134415, http://link.aps.org/abstract/PRB/v65/e134415

(63) **R. Khomeriki**, M Abolfath, K. Mullen (2002): "Solitons in polarized double layer systems", Physical Review B, 65, 121310(R), 4 pages. http://link.aps.org/abstract/PRB/v65/e121310

(64) **R. Khomeriki** (2002): "Interaction of a Kink-soliton with a Breather in a Fermi-Pasta-Ulam Chain", Physical Review E, 65, 026605, 6 pages. http://link.aps.org/abstract/PRE/v65/e026605

(65) **R. Khomeriki**, S. Lepri, S. Ruffo (2002): "Excitation of traveling multibreathers in anharmonic chains", Physica D, 168-169C, 152-158. http://dx.doi.org/10.1016/S0167-2789(02)00503-1

(66) T. Buishvili, **R. Khomeriki**, L. Tkeshelashvili (2001): "Parametrical NMR instability in simple metals at nanokelvin temperatures", Physical Review B, 64, 012405, 4 pages. http://link.aps.org/abstract/PRB/v64/e012405.

(67) **R. Khomeriki**, S. Lepri, S. Ruffo (2001): "Pattern Formation and Localization in Forced-Damped Fermi-Pasta-Ulam Lattice", Physical Review E, 64, 056606, 8 pages. http://link.aps.org/abstract/PRE/v64/e056606.

(68) **R. Khomeriki**, L. Tkeshelashvili (2000): "Generalized approach to the magnetization soliton interaction in yttrium iron garnet films", Journal of Physics - Condensed Matter, 12, 8875-8882. http://stacks.iop.org/0953-8984/12/8875.

(69) **R. Khomeriki** (1999): „Magnetic instability in diamagnets under parallel NMR pumping", Physica B, 284, p.1714-1715. http://dx.doi.org/10.1016/S0921-4526(99)02995-6

(70) T. Buishvili, N. Giorgadze, **R. Khomeriki**, L. Tkeshelashvili (1999): "Ordered phase of nuclear spins in uniaxial ferromagnets," European Physical Journal B, 10, 99-104. http://www.edpsciences.org/articles/epjb/abs/1999/24/b9070/b9070.html.

(71) N. Giorgadze, **R. Khomeriki** (1999): "Envelope solitons in diamagnets," Journal of Low Temperature Physics, 116, 383-394. http://www.phy.duke.edu/~hm/JLTP/Conts-Recent/116_5_6.html.

(72) N. Giorgadze, **R. Khomeriki** (1999): "Nonlinear transit of defects in quantum crystals," Physical Review B, 59, 14001-14004. http://link.aps.org/abstract/PRB/v59/p14001.

(73) N. Giorgadze, **R. Khomeriki** (1999): "Interaction of envelope solitons in yttrium iron garnet films," Physical Review B, 60, 1247-1251. http://link.aps.org/abstract/PRB/v60/p1247.

(74) **R. Khomeriki** (1999): "Route to and from NMR chaos in diamagnets," European Physical Journal B, 10, 99-104. http://www.edpsciences.org/articles/epjb/abs/1999/13/b8578/b8578.html.

(75) N. Giorgadze, **R. Khomeriki** (1998): "Nonresonant interaction of noncollinear weakly nonlinear modulated waves of magnetization," Journal of Magnetism and Magnetic Materials, 186, 239-247. http://dx.doi.org/10.1016/S0304-8853(98)00054-7

(76) L. Buishvili, N. Giorgadze, **R. Khomeriki** (1998): "Parametrical instability in nuclear spin-system with dipole-dipole interaction," Journal of Magnetic Resonance, 130, 82-85. http://dx.doi.org/10.1006/jmre.1997.1281

(77) N. Giorgadze, **R. Khomeriki** (1998): "Solitons of magnetization in magnetic media with "simple spiral" structure," Physica B, 252, 274-285. http://dx.doi.org/10.1016/S0921-4526(98)00158-6

(78) N. Giorgadze, **R. Khomeriki** (1998): "Weakly nonlinear short wave solitons in ferromagnets," Physica Status Solidi (b), 207, 249-258. http://www3.interscience.wiley.com/cgi-bin/abstract/40001422/ABSTRACT

(79) N. Giorgadze, R, Khomeriki (1997): "Nonresonant interaction of magnetization solitons in "easy-plane" type antiferromagnets," Physica Status Solidi (b), 201, 235-247. http://www3.interscience.wiley.com/cgi-bin/abstract/88012485/ABSTRACT

(80) L. Buishvili, T. Buishvili, **R. Khomeriki** (1997): "Nuclear spin-system dynamics caused by NMR saturation for arbitrary spin temperatures," Progress of Theoretical Physics, 98, 795-805. http://ptp.ipap.jp/link?PTP/98/795/

(81) A.I. Abashidze, L.L. Buishvili, T.L. Buishvili, **R.R. Khomeriki** (1996): "Variation of polarization induced by a varying magnetic field at low spin temperatures," Fizika Nizkikh Temperatur, 22, 400-401.

(82) N.P. Giorgadze, **R.R. Khomeriki** (1996): "The nonresonant interaction of weakly nonlinear waves of magnetization in "easy plane" type antiferromagnets," Fizika Tverdogo Tela, 38, 2451-2460.

(83) A.I. Abashidze, L.L. Buishvili, N.M. Sozashvili, **R.R. Khomeriki** (1996): "Nuclear spin-system dynamics at low spin temperatures," Zhurnal Eksperimentalnoij I Teoreticheskoij Fiziki 110, 1121-1126.

(84) N.P. Giorgadze, **R.R. Khomeriki** (1995): "The weakly nonlinear waves of magnetization in nuclear spin systems with dipole-dipole interactions," Fizika Tverdogo Tela, 37, 929-935.

(85) L.L. Buishvili, N.P. Giorgadze, **R.R. Khomeriki** (1995): "Onset of magnetic ordering in nuclear spin-systems with dipole-dipole interaction in the presence of low-temperature NMR saturation," Fizika Nizkikh Temperatur, 21, 621-627,

(86) G.T. Adamashvili, **R.R. Khomeriki** (1992): "Two-phonon self-induced transparency in anisotropic paramagnets," Akusticheski Zhurnal 38, 170-171

(87) G.T. Adamashvili, **R.R. Khomeriki** (1992): "The acoustic self-induced transparency in hyrotropic media," Fizika Tverdogo Tela, 34, 3273-3276.

(88) Z.G. Berezhiani, M.Yu. Khlopov, **R.R. Khomeriki** (1990): "On the possible test of quantum avordynamics in the searches for rare decays of heavy particles," Iadernaia Fizika, 52, 538-543.

(89) Z.G. Berezhiani, M.Yu. Khlopov, **R.R. Khomeriki** (1990): "Cosmic nonthermal electromagnetic background from axion decays in the models with low scale of family symmetry breaking," Iadernaia Fizika, 52, 104-109.