Tsisana Gavasheli

Personal information

DOB: 28.03.1967

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Professional experience

20.10.2011 -	Main specialist
	Department of Scientific Research and Development
	Ivane Javakhishvili Tbilisi State University, TSU
01.10.2006 -	Invited Professor
	Faculty of Exact and Natural Sciences, TSU
21.03.2011-20.10.2011	Chief specialist
	Scientific Department, TSU
20.08.2007-21.03.20011	Laboratory assistant
	Faculty of Exact and Natural Sciences, TSU
16.10.2006 - 16.10.2008	Assistant Professor
	Faculty of Exact and Natural Sciences, Sokhumi State University (Branch
	of TSU)
28.12.2004 - 01.09.2006	Teacher
	Faculty of Physics, department of radiophysics and Electronics, TSU

Scientific/Academic degree

02.12.1992-28.12.2004

1995 Candidate of Physical-Mathematical Sciences, Ph.D. / Academic doctor

Education

09.1995 Ph.D. in Radio Physics, Diploma # 000927

Research staff

1989-1992 Ph.D. Student

Specialty - Radiophysics, Faculty of Physics, TSU

Faculty of Physics, department of radiophysics and Electronics, TSU

1989 MS in Radiophysics (diploma with honor HB Nº069482)

Faculty of Physics, TSU

Academic experience

2003 - Lectures and Practical courses:

Linear systems and signals theory

Physics of magnetism Semiconductor physics

Electronics

Area of research experience

Long-term Memory and Magnetoacoustic Effects at Excitation of

Magnetostrictive Materials Low temperature physics

Problems of NMR Spin-Echo Spectroscopy

Multiple echo in magnetic materials

The echo structure and potential applications Pulsed EPR spectroscopy of monocrystal

NMR, EPR and magnetometer investigation of nanostructures

Trainings/Workshops

7-8.05.2014 The Center for International Projects of the Academy of Science of Moldova

(CIP) and the Center of Social Innovation (ZSI) Workshop "Evaluation and Expertise for Scientific Excellence in the EaP Region" (Chisinau, Moldova)

10-11.03.2014 Word Intellectual Property Organization and National Intellectual property

Center of Georgia Region Workshop "Commercialization of intellectual property

and Promoting knowledge transfer" (Tbilisi Georgia)

19-22.02.2014 CRDF GLOBAL (The U.S. Civilian Research & Development Foundation), AUTM

(Association of University Technology Managers) 2014 Annual Meeting "AUTM Startup Business Development Course" Received Certificate (San Francisco, USA)

19-20.04.2013 Science&Tecnology Enterpreneurship Progam (STEP) Technology

Commercialization Practicum CRDF /GRDF /GNSF. Received Certificate

(Tbilisi, Georgia)

31.05. – 02.06.2011 4th Commercialization Reactor, Workshop, Virtual CEO Ltd/LIAA (Riga, Latvia)

Awards, honors

02. 2014 travel grant to the U.S as a winner of the Essay & Case Study Competition

conducted at the conclusion of the CRDF Global STEP Technology

Commercialization Practicums. (San Francisco, USA)

09.2012

Award for the recognition of the remarkable young scientist paper presentation at the XII International Seminar/Workshop "Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory" (Diped-2012, Tbilisi,Georgia)

Participation in scientific projects

see attachment

Conferences

see attachment

Publications

see attachment

Skills

Foreign languages

English - fluent

Russian - fluent

Computer skills

Windows XP/7/Vista, Microsoft office (Word, Excel, Power Point, Outlook), Adobe Photoshop, Adobe Acrobat Professional

Scientific Projects

2013-2015	TSU Team member
TEMPUS IV	Development of Embedded System Courses with implementation of Innovative
6 th Call	Virtual approaches for integration of Research, Education and Production in UA,
	GE, AM - DESIRE 544091-TEMPUS-1-2013-1-BE-TEMPUS-JPCR
16-23.02. 2014	Grantee
Civilian Research &	Science&Technology Enterpreneurship Program
Development	Visit leading innovation hubs and technology commercialization offices and
Foundation /travel	receive professional training at world-class universities
grant	
2009-2012	Project Research Staff
Shota Rustaveli	"Study of hydrogen influence on martensitic transformations in alloys having
National Science	the shape memory effect"
Foundation	
GNSF/ST08-123/#410	
2009-2011	Project Research Staff
Shota Rustaveli	"Investigation of the latest high-temperature superconductor on the basis of
National Science	iron"
Foundation	
GNSF/ST08-416/	
#636/17	

Conferences

- 1. AUTM (Association of University Technology Managers) 2014 Annual Meeting, "AUTM Startup Business, Development Course", February 19-22,2014, San Francisco, USA
- 2. "The development of physical dating methods in Archaeology in Georgia" Interdisciplinary Archaeology II, dedicated to the 95 the anniversary of University, Iv. Javakhishvili Tbilisi State University Faculty of Humanities, Institute of Archeology Archaeological Association of Georgia, November 10-11, 2013 Tbilisi, Georgia
- 3. "Technology for production of carbon nanoparticles doped with magnetic clusters" XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory, (DIPED), September 24-27, 2012, Tbilisi, Georgia
- 4. Long-term memory and magnetoacoustic responses at excitation of magnetostrictive materials by RF pulses using pulsed NMR technique Proceedings of XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), September 24-27, 2012, Tbilisi, Georgia
- 5. The MAS based simulation of plane wave angular incident on two-dimensional dielectric sphere array", Proceedings of XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), 2012 September 24-27, Tbilisi, Georgia
- 6. "NMR Spin-Echo Spectroscopy in Magnets Using Arbitrary Length Radio-Frequency Pulses" 3rd International conference on superconductivity and magnetism ICSM2012, 29 April 4 May 2012, Istanbul Turkey
- 7. Timing and Spectral Diagrams of Magnetic Video-Pulse Excitation Influence on NMR Spin-Echo in Magnets" 3rd International conference on superconductivity and magnetism ICSM2012, 29 April 4 May 2012, Istanbul-Turkey
- 8. "Magnetoacoustic responses at excitation of magnetostrictive material", International scientific conference deducted 90th anniversary of Georgian Technical University, "Basic Paradigms in Scientific and Technology Development for the 21th Century", Georgian Technical University, Tbilisi, Georgia, September 19-21, 2012
- 9. "Technology for production of carbon nano particles" International scientific conference dedicated 90th anniversary of Georgian Technical University "Basic Paradigms in Scientific and Technology Development for the 21th Century", Georgian Technical University, Tbilisi, Georgia, September 19-21, 2012
- 10. "Water cleaning synergistic device" Latvian Investment and Development Agency (LIAA) and "FNG Invest" Virtual CEO International technology and business promotion event "Commercialization Reactor", May 31- June 3, 2011, Riga, Latvia
- 11. "NMR and magnetometry study of nanosized cobalt powders synthesized with electron-beam technology" Int. Conf. Recent trends in Nanomagnetism, Spintronics and their Applications (RTNSA), 1-4, June 2011, Ordizia, Basque Country, Spain.

- 12. "Magnetoacoustic and memory effects in magnetostrictive materials studied by pulsed NMR and magnetic video-pulse excit", Advances in Applied Physics and Materials Science Congress (APMAS2011), 12-15 May 2011, Antalya, Turkey.
- 13. Inductive excitation of magnetoelectric responses in layered magnetoelectric composite materials using a magnetic video-pulse excitation" First International Conference for Students and Young Scientists on Materials Processing Science (1ICSYS), Georgian Ceramic Society. Georgian Technical University, 10-13 October, 2010.
- 14. "Magnetometry and NMR study of nanomaterials" Fist International Conference for Students and Young Scientists on Materials Processing Science (IIcsys), Georgian Ceramic Society, Georgian Technical University, 10-13 October, 2010.
- 15. The receiving and study of hematite nanoparticles for hyperthermia" Fist International Conference for Students and Young Scientists on Materials Processing Science (1Icsys), Georgian Ceramic Society, Georgian Technical University, 10-13 October, 2010.
- 16. "Magnetic video-pulse influence on domain wall NMR in magnetic materials", 55th Annual Conference on Magnetism & Magnetic Materials MMM-, 14-18 November, 2010, Atlanta, Georgia, USA
- 17. "Complex physical methods of dating in archeology", International conference "Georgian archaeology at the turn of the 21 century: results and perspectives" 10-12 November, Tbilisi, Georgia
- 18. "Multiple NMR spin echo in magnets", International Conference on Functional Materials, 5-10 October, 2009, Crimea, Ukraine.
- 19. "Multiple NMR spin echoes in magnets: the echo structure and potential applications", 53 rd Annual conference on magnetism and magnetic materials (2008MMM), 12-15 September, 2008, Austin, Texas, US
- 20. "Multiple echoes in magnets", The International Conference in Physics dedicated to the 90th Anniversary of Ivane Javakhishvili Tbilisi State University (TSU), 25-26 september, 2008, Tbilisi, Georgia
- 21. "Ligand superfine interaction with hole center in CaF2:Na", Magnetic Resonance-91, 5-8 may, 1991, Kazan

Publications

- 1.G. Mamniashvili, T. Gegechkori, M. Okrosashvili, E. Kutelia, A. Akhalkatsi, **T. Gavasheli**, D. Daraselia, D. Djaparidze, A. Shengelaya, A. Peikrishvili, D. Lesuer "Production of cobalt nanopowders by electron-beam technology and their NMR and magnetometry study", Journal of Magnetism and Magnetic Materials, Available online 8 April 2014, http://www.sciencedirect.com/science/article/pii/S030488531400287X
- G.I. Mamniashvili, T.O. Gegechkori, A.M. Akhalkatsi, **Ts. A. Gavasheli.** "On the mechanism of formation of multiple echo in magnetic materials" "Physics of Metals and Metallography" Volume 114, Number 10, 2013, pp.833-837.

http://link.springer.com/article/10.1134/S0031918X13100074#page-1

- 3. M.D. Zviadadze, G.I. Mamniashvili ,T.O. Gegechkori, A.M. Akhalkatsi, **T.A. Gavasheli**, "NMR Spin Echo Spectroscopy in Magnets Using Arbitrary Duration Radio-Frequency Pulses" Journal of Superconductivity and Novel Magnetism. Volume: 26 Issue: 4 Special Issue: SI Pages: 1405-1409 Published: APR 2013.http://link.springer.com/article/10.1007/s10948-012-2039-6#page-1
- 4 . G.I.Mamniashvili, T.O.Gegechkori, A.M. Akhalkatsi, **T.A.Gavasheli**, E.R. Kutelia, L.N. Rukhadze, D.I. Gventsadze, "Timing and Spectral Diagrams of Magnetic Video-Pulse Excitation Influence on NMR Spin–Echo in Magnets", Journal of Superconductivity and Novel Magnetism. Volume: 26 Issue: 4 Special Issue: SI Pages: 1401-1404 Published: APR 2013 http://link.springer.com/article/10.1007/s10948-012-1869-6
- 5. M.D. Zviadadze, G.I. Mamniashvili, T.O. Gegechkori, A.M. Akhalkatsi, **T.A. Gavasheli,** "Two-pulse stimulated echo in magnets", "Physics of Metals and Metallography" Volume: 113 Issue: 9
 Pages: 849-854 Published: SEP 2012, http://link.springer.com/article/10.1134/S0031918X12090165
 G.I. Mamniashvili, Y.G. Sharimanov, T.O. Gegechkori, A.M. Akhalkatsi, **T.A.Gavasheli,** Long-term Memory and Magnetoacoustic Effects at Excitation of Magnetostrictive Materials by RF and Magnetic Pulses Using Pulsed NMR Technique" Advances in Applied Acoustics (AIAA) Vol.2, N1, pp.34-43, 2013, http://www.seipub.org/AIAAS/paperInfo.aspx?ID=5636
- 7 V.Llicheli, A.Akhalkatsi, **T.Gavasheli,** G.Mamniashvili, T.Gegechkori, M.Gogebashvili, "The divelopment of physical dating methods in Archaeology in Georgia" Interdisciplinary Archaeology II, dedicated to the 95 th anniversary of University, Iv. javakhishvili Tbilisi State University Faculty of Humanities, Institute of Archeology Archaeological Associeation of Georgia, p. 81-83, ISSN 1987-8281, 2013, Publishing House "Universal" Tbilisi,

http://www.nplg.gov.ge/ec/en/bibl/browse.html?pft=biblio&from=9698

A.M. Akhalkatsi, **T.A. Gavasheli**, D.M. Daraselia, D.L. Djaparidze, A.D. Shengelaya, G.I .Mamniashvili, T.O. Gegechkori, E.R. Kutelia, L.N. Rukhadze, D.I. Gventsadze, "<u>Technology for production of carbon nanoparticles doped with magnetic clusters</u>", Proceedings of XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory(DIPED), pp.119-122, September 24-27, 2012, Tbilisi, Georgia http://ewh.ieee.org/r8/ukraine/georgian/DIPED/DIPED%20Program.pdf

- G.I. Mamniashvili, Y.G. Sharimanov, T.O Gegechkori, A.M. Akhalkatsi, **T.A. Gavasheli,** D.I. Gventsadze, "Long-term memory and magnetoacoustic responses at excitation of magnetostrictive materials by RF pulses using pulsed NMR technique", Proceedings of XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory,(DIPED), pp. 131-135, 2012 September 24-27, Tbilisi, Georgia http://ewh.ieee.org/r8/ukraine/georgian/DIPED/DIPED%20Program.pdf
- 10. D. Kakula, A. Lomia, T. Gogua, G. Ghvedashvili, **T. Gavasheli,** "The MAS based simulation of plane wave angular incident on two-dimensional dielectric sphere array", Proceedings of XVIIth International Seminar/Workshop on Direct and Inverse Problems of Electromagnetic and Acoustic Wave Theory (DIPED), pp. 63-67, 2012 September 24-27, Tbilisi, Georgia http://ieeexplore.ieee.org/xpl/login.jsp?tp=&arnumber=6344101
- 11. G.I. Mamniashvili, T.O. Gegechkori, A.M. Akhalkatsi, **T.A. Gavasheli,** E.R. Kutelia, L.G. Rukhadze, D.I. Gventsadze, "Peculiarities of timing and spectral diagrams of magnetic video-pulse excitation influence on NMR spin-echo in magnets", arXiv preprint arXiv:1204.5844, 2012/4/26, http://arxiv.org/ftp/arxiv/papers/1204/1204.5844.pdf
- 12. MD Zviadadze, GI Mamniashvili, TO Gegechkori, AM Akhalkatsi, **TA Gavasheli,** "Formation mechanisms and relaxation of NMR spin-echo signals excited by two arbitrary duration radio-frequency pulses in magnets", arXiv preprint arXiv:1204.5344, 2012/4/24 http://arxiv.org/abs/1204.5344
- 13. G.I. Mamniashvili, T.O. Gegechkori, T.N. Khoperia, T.I.Zedgenidze, F.K.Akopov, A.M. AKhalkatsi, **T.A.Gavasheli,** ""New developments in Materials Science" p.35-42 materials science and tecnologies ,ISBN 978-1-61668-852-3, Nova Science Publishers, Inc. New York, 2011, https://www.novapublishers.com/catalog/product_info.php?products_id=14239
- 14. E.R.Kutelia , L.N.Rukhadze , N.I.Maisuradze , B.G.Eristavi , D.I.Gventsadze ,A.M. Akhalkatsi , T.A.Gavasheli , D.M.Daraselia ,D.L. Djaparidze , A.D.Shengelaya ,G.I. Mamniashvili and T.O.Gegechkori." Investigation of morphology and magnetic properties of carbon powder nanoparticles doped with iron and cobalt atoms", Georgian Engineering News (Founded in 1996 Issued quarterly in English and Russian) No. 3. (vol.55), 2010 p.75- 82 . GFID GEN LTD http://www.tech.caucasus.net/gen/inf48.htm
- 15. A. M. Akhalkatsi, **Ts.A. Gavasheli**, T.O. Gegechkori et al." Enhanced resolution NMR spin echo method to study cobalt nanopowders and half metals using additional magnetic video-pulse excitation.

Georgian Electronic Scientific Journals (GESJ): Physics. Date: 2009-03-26; ID: 1529 #.1(1) pp 35-40 . http://gesj.internet-academy.org.ge/ge/list_artic_ge.php?b_sec=phys&issue=2009-06

16. M. Zviadadze, G. Mamniashvili, **T. Gavasheli** and et al. "NMR Spin-Echo Spectroscopy in Magnets Using Arbitrary Length Radio-Frequency Pulses" 3rd International conference on superconductivity and magnetism – ICSM 2012, 29 April – 4 May 2012, Istanbul-Turkey. Abstract M-0-350, Book of Abstracts, p. 292 (2012) http://www.icsm2012.org/

http://link.springer.com/article/10.1007/s10948-012-2039-6#page-1

17. G.I.Mamniashvili, **T.A.Gavasheli**, E.R.Kutelia, D.I.Gventsadze and oth." "Timing and Spectral Diagrams of Magnetic Video-Pulse Excitation Influence on NMR Spin-Echo in Magnets" 3rd International conference on superconductivity and magnetism – ICSM201229 April – 4 May 2012, Istanbul-Turkey. Abstract M-P-547, Book of Abstracts, p. 445 (2012)

http://link.springer.com/article/10.1007/s10948-012-1869-6

18. G.Mamniashvili, Y.Sharimanov, T.Gegechkori, A.Akhalkatsi, **T.Gavasheli,** D.Gventsadze, E.Kutelia, Sh.Nachkebia, "Long-term memory and magnetoacoustic responses at excitation of magnetostrictive material", International scientific conference deducated 90th annyversary of Georgian Technical University "Basic Paradigms in Scientific and Technology Development for the 21th Century", Georgian Technical University, Tbilisi, Georgia, September 19-21, 2012. Transactions, pp. 268-276]

http://gesj.internet-academy.org.ge/conf gtu90/ge/program ge.php

19. A.M.Akhalkatsi, **T.A.Gavasheli,** D.M.Daraselia, D.L.Djaparidze, A.D.Shengelaya, G.I.Mamniashvili, T.O.Gegechkori, E.R.Kutelia, L.N.Rukhadze, D.I.Gventsadze "Technology for production of carbon nanoparticles doped with magnetic clusters". Proceddings of the International scientific conference deducated 90th annyversary of Georgian Technical University "Basic Paradigms in Scientific and Technology Development for the 21th Century", Georgian Technical University, Tbilisi, Georgia, September 19-21, 2012.

http://gesj.internet-academy.org.ge/conf gtu90/ge/program ge.php

- 20. **T.A.Gavasheli,** G.I.Mamniashvili , "Water cleaning synergistic device", Latvian Investment and Development Agency (LIAA) and "FNG Invest" Virtual CEO International technology and business promotion event "Commercialization Reactor", (Proceedings) Riga, Latvia, May 31- June 3, 2011 http://virtualceo.eu/ru/4th-commercializationreactor--3105-02062011-riga-37600
- G.I. Mamniashvili, E.R. Kutelia, **T.A. Gavasheli** and others." NMR and magnetometry study of nanosized cobalt powders synthesized with electron-beam technology" Int. Conf. Recent trends in Nanomagnetism, Spintronics and their Applications (RTNSA), 1-4, June 2011, Ordizia, Basque Country, Spain. Book of Abstracts, p.154.

http://www.ehu.es/ocs/public/conferences/19/schedConfs/14/accommodation-32.pdf

J. Aneli, D. Gventsadze, G. Mamniashvili, Yu. Sharimanov, **T. Gavasheli** and other, "Magnetoacoustic and memory effects in magnetostrictive materials studied by pulsed NMR and magnetic video-pulse excit", Advances in Applied Physics and Materials Science Congress (APMAS2011), 12-15 May 2011, Antalya, Turkey. Book of Abstracts. vol.2. p. 241 http://www.apmas2011.org/; www.aiaa-journal.org

M. Chikovani, A. Akhalkatsi, **T. Gavasheli** and others. "Inductive excitation of magnetoelectric responses in layered magnetoelectric composite materials using a magnetic video-pulse excitation" First International Conference for Students and Young Scientists on Materials Processing Science (1ICSYS), Georgian Ceramic Society. Georgian Technical University, 10-13 October, 2010.

Programme and Book for Manuscripts, p.94-98 (2010).

http://keramika.gtu.ge/pdf/konferencia 2010.pdf

- M.A.Chikovani, A.M.Akhalkatsi, **T.A.Gavasheli,** D.M.Daraselia, D.L.Djaparidze, A.D.Shengelaya, G.I.Mamniashvili, T.O.Gegechkori. M.O.Okrosashvili, E.R.Kutelia. A,B.Peikrishvili, "Magnetometry and NMR study of nanosized cobalt powders synthesized with electron-beam technology", First International Conference for Students and Young Scientists on Materials Processing Science (IIcsys), Georgian Technical University, 10-13 October, 2010, Programme and Book for Manuscripts, p.88-94 (2010). http://keramika.gtu.ge/pdf/konferencia 2010.pdf
- 25. G.Donadze, G.Mamniashvili, A.Akhalkatsi, D.Daraselia, D.Japaridze, O.Romelashvili, A.Shengelaia, **T.Gavasheli,** J.G.Heinrich, Z.Kovziridze, "The receiving and study of hematite nanoparticles for hyperthermia", First International Conference for Students and Young Scientists on Materials Science (1ICSYS), Georgian Ceramic Society. Georgian Technical University, 10-13 October, 2010, Programme and Book for Manuscripts, p. 37-45 (2010). http://keramika.gtu.ge/pdf/konferencia 2010.pdf
- G.I. Mamniashvili, T.O. Gegechkori, A.M. Akhalkatsi, **T.A. Gavasheli**. "Magnetic video-pulse influence on domain wall NMR in magnetic materials" 55th Annual Conference on Magnetism & Magnetic Materials MMM-, 14-18 November, 2010, Atlanta, Georgia, USA. Report GP-13. http://www.magnetism.org/55thprogram.pdf
- <u>27.</u> Mamniashvili G.I., Akhalkatsi, A. M.; **Gavasheli, T. A.;** Gegechkori, T. O.; et al., "Multiple NMR spin echoes in magnets: The echo structure and potential applications", Journal of Applied Physics Volume: 105 Issue: 7 Article Number: 07D303 Published: APR 1 2009,

 $\underline{http://ieeexplore.ieee.org/xpl/login.jsp?tp=\&arnumber=5131736\&url=http\%3A\%2F\%2Fieeexplore.iee}\\ \underline{e.org\%2Fxpls\%2Fabs} \ all.jsp\%3Farnumber\%3D5131736$

A.M.Akhalkatsi, **T.A.Gavasheli**, T.O.Gegechkori, G.I.Mamniashvili, Z.G.Shermadini, W.G.Clark, "Multiple NMR spin echo in magnets", International Conference on Functional Materials, (Proceedings) DP-1P/46, p.66-70, October 5 – 10, 2009, Crimea, Ukraine http://icfm.crimea.edu/sites/default/files/program/icfm program 2009.pdf

A.M.Akhalkatsi, **T.A.Gavasheli**, T.O.Gegechkori, G.I.Mamniashvili, Z.G.Shermadini, W.G.Clark. "Multiple NMR spin echoes in magnets: the echo structure and potential applications" (Proceedings) 53 rd Annual conference on magnetism and magnetic materials (2008) MMM. EU-06. P.161-165, Austin, Texas, US.2008

http://www.magnetism.org/53rdprogram.pdf

A.Akhkalkatsi, **T.Gavasheli**, T.Gegechkori, G.Mamniashvili, Z.Shermadini, ""Multipulse echoes in magnets".Materials of the International Conference in Physics dedicated to the 90th Anniversary of Ivane Javakhishvili Tbilisi State University (TSU)25-26 september 2008 http://www.phys08.tsu.ge/Materials.htm

31. **Ts. A. Gavasheli,** D.M. Daraseliya, D.L. Dzhaparidze, R.I. Mirianashvili, O.V. Romelashvili, T.I. Sanadze, "A method for estimating the local lattice distortions near a magnetic ion from ligand hyperfine parameters: Yb3+ trigonal centers in SrF2 and BaF2", Physics of the Solid State, Volume: 48 Issue: 1 Pages: 58-62 Published: JAN 2006,

http://link.springer.com/article/10.1134/S1063783406010124

32. **Ts. A. Gavasheli,** D.M. Daraseliya, D.L. Dzhaparidze, R.I.Mirianashvili, O.V. Romelashvili, T.I. Sanadze, "Method for estimating local lattice distortions near a magnetic ion based on the parameters

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33.. **T.A. Gavasheli**, D.M. Daraseliya, D.L. Dzhaparidze, R.I. Mirianashvili, T.I. Sanadze, "Pulsed EPR spectroscopy of the V_{KA} center in CaF2: Na ",Physics of the Solid State ,Volume: 40 Issue: 9 Pages: 1470-1473 Published: SEP 1998,

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34. **Gavasheli, Ts. A.**; Daraseliya, D. M.; Mirianashvili, R. I.; Sanadze, T. I., "Hyperfine and quadrupole interaction of a Na+ion with a hole center in CaF₂:Na", Physics of the Solid State, Volume 36, Issue 6, June 1994, pp.979-980

http://adsabs.harvard.edu/abs/1994PhSS...36..979G

- 35. **T.A. Gavasheli**, R.I. Mirianashvili, O.V. Romelashvili, T.I. Sanadze "Electron spin resonance of a hole center in CaF₂:Na", Physics of the Solid State, Volume: 34 Issue: 2 Pages: 672-675 Published: FEB 1992, http://cat.inist.fr/?aModele=afficheN&cpsidt=5494073
- 36. **T.Gavasheli,** D.Daraselia, R.Mirianashvili, T.Sanadze, "Ligand superfine interaction with hole center in CaF2:Na". Magnetic Resonance-91, p.23-29, symposium materials, 6-8 september, 1991 Kazan.