D. Jishiashvili

Publications

1. I. R. Metskhvarishvili, Melita Menelaou, D. L. Surmanidze, T. E. Lobzhanidze; A. D. Tchankvetadze; B. G. Bendeliani; G. N. Dgebuadze; V. M. Gabunia; M. R. Metskhvarishvili; D. A. Jishiashvili. Influence of As_2O_3 vapor pressure on phase formation and superconducting properties of Tl-2212 HTS. Low Temp. Phys. 52, 85–89 (2026). https://doi.org/10.1063/10.0042171
2. D. Jishiashvili, Z.Shiolashvili, E. Sanaia, N. Makhatadze, A. Jishiashvili. Morphological Changes in ZnO Nano- and Microstructures Synthesized by Pyrolytic Technology. Materials Science Forum, V.1166, pp. 71-81. (2025) https://doi.org/10.4028/p-91KM4Z
3. Z.Mestvirishvili, E, Sanaia, N, Jalagonia, T, Kuchukhidze, N,Darakhvelidze, T, Prikhna, M,Rizhamadze, G.Giorganashvili, D.Jishiashvili. Production of ZrB2-SiC Based UHTCs with Addition of Boron Carbide and Graphene. Materials Science Forum. V1165, pp. 51-62. (2025). https://doi.org/10.1063/10.0034645
4. A. Jishiashvili, M. Chikhradze, E. Sanaia, Z.Shiolashvili, N. Makhatadze, A. Sichinava, D.Jishiashvili. Organic Dye-Polluted Water Treatment Using ZnO Nanocatalysts. Proceedings CAUSummit 2025, Antalya, Turkey. pp. 1-7. (2025). https://doi.org/10.3897/ap.9.e0001
5. I.R.Metskhvarishvili, M.Menelaou, T.E. Lobzhanidze, G.N. Dgebuadze, D.L. Surmanidze, B.G. Bendeliani, V.M. Gabunia, M.R. Metskhvarishvili, D.A. Jishiashvili. Effect of Dy_2O_3 on the phase formation and electrical properties of Tl-1223 HTS. Low Temperature Physics,5 1, 59–63 (2025). https://doi.org/10.1063/10.0034645
6. T.Dadiani, T.Tchabukiani, D.Jishiashvili, D.Daraselia, D.Japaridze, F. La Matina, A. Shengelaya. Transport and magnetic properties of Magneli phase tungsten oxide $WO_{2.29}$ prepared by spark plasma sintering. Journal of Superconductivity and Novel Magnetism. V.38, 58, 7 pages. (2025). https://doi.org/10.1007/s10948-025-06900-3
7. D. L. Surmanidze,T. E. Lobzhanidze, I. R. Metskhvarishvili, G. N. Dgebuadze, V. M. Gabunia, B. G. Bendeliani, M. R. Metskhvarishvili, D. A. Jishiashvili. The effect of O_2 pressure on phase formation and superconductivity properties of Tl-based HTS. Low Temperature Physics, 50, 34–38 (2024). doi.org/10.1063/10.0023889
8. G. Gelashvili, D. Gelenidze, D. Jishiashvilia, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, V. Gobronidze. Photocatalytic activity of ZnO nanomaterials with different morphologies. Digest Journal of Nanomaterials and Biostructures V. 18, N. 3, pp. 1085 – 1092 (2023). https://doi.org/10.15251/DJNB.2023.183.1085
9. A.Jishiashvili, N. Mitagvaria, A. Chirakadze, D.Jishiashvili. Photocatalytic activity and environmental toxicity of ZnO microcrystals with different morphologies. Bulletin of the Georgian National Academy of Sciences, vol. 16, no. 1, 81-86, (2022).
10. E. Gelagutashvili, N. Bagdavadze, D. Jishiashvili, A. Gongadze, M. Gogebashvili, N. Ivanishvili. Effect of Cu(II), Pb(II), Mg(II) ions on gamma-irradiated *Spirulina platensis.* 2022. https://doi.org/10.48550/arXiv.2204.02307 arXiv:2204.02307 [physics.bio-ph]. 8 გვერდი.
11. A.Jishiashvili, A.Chirakadze, Z.ShiolashvilI, N.Makhatadze, V.Gobronidze, D.Jishiashvili. Vapor synthesis of ZnO nanocrystal-based hollow microspheres. Proceedings of the 7th International Conference MTP-2021: Modern Trends in Physics. December 15-17, 2021 Baku State University, Baku, Azerbaijan. V.1, pp.125-131.
12. A. Jishiashvili, Z. Shiolashvili, N. Makhatadze, A. Chirakadze, V. Gobronidze, T. Gagnidze, D. Jishiashvili. Morphological changes in vapor grown Zn AND ZnO nano- and microstructures. . Nano Studies, 21/22, pp.141-146, 2021–2022.

13. A. Jishiashvili, Z. Shiolashvili, D. Jishiashvili, A. Chirakadze, N. Makhatadze. Growth of ZnO Microcrystals from Zn and Cu Chloride Precursors. Bulletin of the Georgian National Academy of Sciences, vol. 15, no. 2, 53-58, 2021.
14. A.Chirakadze, N.Mitagvaria, D. Jishiashvili, M. Devdariani, G. Petriashvili, L. Davlianidze, N. Dvali, K. Chubinidze, A. Jishiashvili, Z. Buachidze, I. Khomeriki. Development and Testing of Nanoparticles for Treatment of Cancer Cells by Curie Temperature Controlled Magnetic Hyperthermia. Bulletin of the Georgian National Academy of Sciences, vol. 15, no. 1, 91-98, 2021.
15. E.S. Gelagutashvili, N.V. Bagdavadze, D. Jishiashvili, E.N. Ginturi, A.D. Gongadze, M.E. Gogebashvili, N.I. Ivanishvili. Influence of metal ions after one year repeated irradiation of spirulina platensis. Journal of Radiobiology and Radiation Safety, Vol.1, №2, 43-48. 2021.
16. A.Chirakadze, N.Mitagvaria, D. Jishiashvili, G. Petriashvili, N.Dvali, Z. Shiolashvili, K.Chubinidze, N.Makhatadze, A. Jishiashvili, Z.Buachidze, I. Khomeriki. Microwave Synthesis, Characterization and Testing of Acute Toxicity of Boron Nitride Nanoparticles by Monitoring of Behavioral and Physiological Parameters. Bulletin of the Georgian National Academy of Sciences, vol. 15, no. 2, 120-126, 2021.
17. A. Jishiashvili, Z. Shiolashvili, D. Jishiashvili, N. Makhatadze, A. Chirakadze, V. Gobronidze. Scanning electron microscopic study of ZnO crystallites. Nano Studies, 20, 105-110, 2020.
18. M. Nadareishvili, G. Mamniashvili, D. Jishiashvili, G. Abramishvili, C. Ramana, J. Ramsden. Investigation of the Visible Light-Sensitive ZnO Photocatalytic Thin Films. Engineering, Technology & Applied Science Research, V10,N2, pp. 5524-5527, 2020.
19. D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, A. Chirakadze, V. Gobronidze. A study of the condensed coppercontaining nanomaterials. Nano Studies, 19, 285-290, 2019.
20. D.Jishiashvil, A.Chirakadze, Z.Shiolashvili, N.Makhatadze, A.Jishiashvili, V.Gobronidze. Vapor-phase synthesis of copper-based nanostructures. Conference Proceedings – Modern Trends In Physics. Baku, 01-03 May, 2019.
http://apps.webofknowledge.com/Search.do?product=UA&SID=F5RZIzhwZF3w7oSRYgc&search_mode=GeneralSearch&prID=65fc023b-a7f4-432b-9d52-488c04a96397
21. A.Chirakadze, D.Jishiashvili, N.Mitagvaria, I.Lazrishvili, Z.Shiolashvili, A.Jishiashvili, N.Makhatadze, Z.Buachidze, N.Khuskivade. Studies of the comparativelylow-temperature synthesis and preliminary toxic characteristics of silver doped lanthanum manganite nanoparticles using conventionaland microwave heating. Conference Proceedings – Modern Trends In Physics. Baku, 01-03 May, 2019.
http://apps.webofknowledge.com/Search.do?product=UA&SID=F5RZIzhwZF3w7oSRYgc&search_mode=GeneralSearch&prID=65fc023b-a7f4-432b-9d52-488c04a96397
22. D. Jishiashvili, Z. Shiolashvili, A. Chirakadze,N. Makhatadze, V. Gobronidze, A. Jishiashvili, K.Gorgadze, D. Kanchaveli. Pyrolytic synthesis of boron nitride nanoflakes. Nano Studies, 2018, v. 17/18, 67-70.
23. A. Jishiashvili, Z. Shiolashvili, N. Makhatadze, D.Jishiashvili, D. Kanchaveli, D. Sukhanov. Synthesis of indium phosphide / zinc phosphate core-shell nanowires. Digest Journal of Nanomaterials and Biostructures. 2018, v. 13, N. 2, 535 – 542.
24. D. Jishiashvili, A. Chirakadze, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, D. Kanchaveli, D. Sukhanov, V. Gobronidze. Growth of InP based composite nanowires. Journal of Low Dimensional Systems, 2018, v. 2 (1), 23-27.
25. A. Chirakadze, D. Jishiashvili, Z. Buachidze, K. Gorgadze, Z. ShiolashvilI,A. Jishiashvili, N. Mitagvaria, I. Lazrishvili. New approaches to development of new nanomaterials for magnetic hyperthermia of cancer cells and prospectives of combined treatment of cancer in Georgia. Journal of Low Dimensional Systems, 2018, v. 2 (1), 8-22.

26. Jishiashvili A., Shiolashvili Z., Makhatadze N., Jishiashvili D., Chirakadze A., Sukhanov D., Kanchaveli D. Influence of water on the growth process of Ge_3N_4 and InP nanowires. Oriental Journal of Chemistry, 2017, 33, 3,1103-1110. http://dx.doi.org/10.13005/ojc/330306
27. D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, D. Sukhanov, V. Gobronidze. Growth of nitride and phosphide nanowires in the presence of water molecules.In: Proceedings of ICANM 2016: Int. Conf. Exh. Adv. Nano Mater., 2016, Montreal, IAEMM, 73-80.
28. D. Jishiashvili, Z. Shiolashvili, A. Chirakadze, A. Jishiashvili, N. Makhatadze, K. Gorgadze. Development of low temperature technology for the growth of wide band gap semiconductor nanowires. AIMS Materials Science, 3(2), 2016. pp. 470-485. DOI: 10.3934/matersci.2016.2.470
29. P. Kervalishvili, A. Chirakadze, Z. Buachidze, D. Jishiashvili, T. Bjalava, G. Kervalishvili, W. Toscano, V. Gvakharia, G. Sergeenko. Microwave in Environmental Technologies and Synthesis of Nano-materials: The Georgian Experience. Chapter In book: Nuclear Radiation Nanosensors and Nanosensory Systems, Published by Springer, P.O. Box 17, 3300 AA Dordrecht, The Netherlands , 2016, pp.91-150. DOI: 10.1007/978-94-017-7468-0_8
30. P. Kervalishvili, A. Chirakadze, A. Gigineishvili, Z. Buachidze, D. Jishiashvili, M. Wireman, W. Toscano,G. Kervalishvili, G. Sergeenko, V. Gvakharia. Microwave Enhanced Producing of High-Purity Metallic Manganese and Composite Manganese Based Alloy. Chapter In book: Nuclear Radiation Nanosensors and Nanosensory Systems, Published by Springer, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, 2016, pp. 151-160.
31. D. Jishiashvili, L. Chkhartishvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, B. Buadze. On the morphology of indium phosphide based nanowires. Nano Studies, V.12. 2015, pp.79-86.
32. L. Chkhartishvili, D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, B. Buadze. Temperature-dependent morphological changes in InP based nanowires. ICANM2015 Proceedings (August 10-12, 2015, Ottawa, Canada). A publication of the International Academy of Energy, Minerals & Materials. 937 Portobello Blvd. PO Box 17029, Ottawa, Ontario. 2015, pp.1-7.
33. D.Jishiashvili, Z. Shiolashvili, N. Makhatadze, A.Jishiashvili, V.Gobronidze, D. Sukhanov. Vapor-Solid growth of InP and Ga2O3 based composite nanowires. European Chemical Bulletin, V.4, N1, 2015, 24-29.
34. D.Jishiashvili, L. Chkhartishvili, Z. Shiolashvili, N. Makhatadze, V.Gobronidze, A. Jishiashvili. Growth mechanism and morphology of germanium nitride nanowires. Nano Studies, V.10, 2014, 55-63.
35. D. Jishiashvili1, L. Kiria, Z. Shiolashvili, N. Makhatadze, E. Miminoshvili, A. Jishiashvili. Formation of Germanium Nitride Nanowires on the Surface of Crystalline Germanium. Journal of Nanoscience. V. 2013, 2013, Article ID 641734, 10 pages. http://dx.doi.org/10.1155/2013/641734
36. D. Jishiashvili1,L.Chkhartishvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, V.Gobronidze. Ge- and In-based one-dimensional nanostructures: Self-catalytic growth. Nano Studies, V.7, 2013, 47-51.
37. G. R. Patzke, R. Kontic, Z. Shiolashvili, N. Makhatadze, D. Jishiashvili. Hydrazine-assisted formation of indium phosphide (InP)-based nanowires and core-shell composites. Materials,V. 6, pp. 85–100, 2013. http://www.mdpi.com/1996-1944/6/1/85
38. D.Jishiashvili, L.Kiria, Z. Shiolashvili, N. Makhatadze, E. Miminoshvili, A.Jishiashvili, D. Sukhanov. Pyrolytic growth of one-dimensional oxide and nitride nanomaterials. Nano Studies. V. 6, 2012. pp. 115-120.
39. D. Jishiashvili, L. Kiria, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, D. Sukhanov. The morphology of vapor–liquid–solid grown nitride nanowires. Proceedings of the 2nd International Conference “Nanotechnologies” Nano-2012. Tbilisi, Georgia, 2012;

40. D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, L. Kiria. One Dimensional Nanomaterials Synthesized Using Hydrazine Vapor. Bulletin of TICMI. V.15, 2011, 55-56.
41. D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, L. Kiria, A. Jishiashvili, V. Gobronidze. Growth of germanium nitride nanowires. Nano Studies, V.4,, 2011, 133-138.
42. Джишиашвили Д. А., Шиолашвили З. Н., Махатадзе Н. К., Кирия Л. Т., Джишиашвили А. Д., Гобронидзе В. В. Нанокристаллы тетрагонального германия, полученные при выращивания нанопроволок нитрида германия. Microwave & Telecommunication Technology,IEEE Catalog number: CFP11788, 2011, 731-732.
43. N. Makhatadze, Z.Shiolashvili, V. Gobronidze, A. Jishiashvili, D. Sukhanov. Synthesis of tetragonal germanium nanocrystals embedded in amorphous matrices. Proceedings of the First International Conference on Nanochemistry and Nanotechnologies (March 23-24, 2010. Tbilisi, Georgia).2010 . pp. 186-192.
44. D. Jishiashvili1, V. Kapaklis, X. Devaux, C. Politis, E. Kutelia, N. Makhatadze, V. Gobronidze, and Z. Shiolashvili. Germanium Nitride Nanowires Produced by Thermal Annealing in Hydrazine Vapor. Advanced Science Letters, Vol.2, No.1, 2009, pp.40-44.
45. D. Jishiashvili, E. Kutelia, V. Gobronidze, Z. Shiolashvili, N. Makatadze, G. Tcertcvadze. Pores in the Phase-Separated Ge:Ge_{O2} Films. Bulletin of the Georgian Academy of Sciences. v.173, N 3, 2006, pp.507-509. (იმპაქტ ფაქტორიანი)
46. D. Jishiashvili, E. Kutelia, V. Gobronidze, Z. Shiolashvili, N. Makatadze. Water treatment of the nanocrystalline Ge:GeO_2. Georgian Engineering News, N1, 2006, p.103-104. (In Russian).
47. D. Jishiashvili, B. Eristavi, V. Gobronidze, Z. Shiolashvili, A. Jishiashvili, N. Makatadze. Auger analysis of the nanocrystalline Ge:GeO_2 films. Georgian Engineering News, N1, 2006, p.100-102. (In Russian).
48. Jishiashvili D., Gobsch G., Ecke G., Gobronidze V., Mtsceradze G., Shiolashvili Z. Surface passivation of GaAs using Ge interface control layer.- Phys. Stat. Sol.(a)., 2005, v.202, N9. pp. 1778-1785. (იმპაქტ ფაქტორიანი)
49. Jishiashvili D., Gobronidze V., Shiolashvili Z., Mtskeradze G. Segregation of Ge Nanocrystals in the Germanium Oxide Film. Georgian Engineering News, N3, 2005, p.109-111.
50. Jishiashvili D., Gobronidze V., Shiolashvili Z., Eristavi B., Mosidze L. Fabrication of the IV-Group Semiconductor Nanocrystals in Metal Oxide Matrices. Georgian Engineering News, N3, 2005, p.15-17.
51. Jishiashvili D., Gobronidze V., Shiolashvili Z., Berishvili Z., Skhiladze G. Formation of Ge quantum dots in GeO_2 films. Proceedings of the International conference "Modern information and electronic technologies", Odessa, May 23-27, 2005. pp. 371-374. (In Russian).
52. Shiolashvili Z., Jakeli K., Kristesashvili V., Jishiashvili D., Gobronidze V. Submicron Diffusion Layers in Si Produced by Pulse Photon Annealing. Bulletin of the Georgian Academy of Sciences. V.168, N3, 2003, pp.497-500. (იმპაქტ ფაქტორიანი)
53. D.Jishiashvili, I. Nakhutsrishvili, V. Gobronidze, Z. Shiolashvili. Vacuum sublimation of germanium monoxide. Bulletin of thr Geirgian academy of sciences. Chemistry. V. 27, №1-2, 2001. pp. 134-139.(In Rusian). (იმპაქტ ფაქტორიანი)
54. I. Nakhutsrishvili, D.Jishiashvili, Z. Mkervalishvili. Fabrication of the germanium oxynitride films in NH_3. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V. 39, №8, 2003. pp. 971-973. (In Russian) (იმპაქტ ფაქტორიანი)
55. D.Jishiashvili, Z. Shiolashvili, V. Gobronidze, I. Nakhutsrishvili. A study of solid phase reactions at the Ge-GeO_2 interface. Proceedings of the International Symposium and Exhibition on Advanced Packaging Materials. Evergreen Marriot Conference Resort. Stone Mountain Park, GA March 3-6, 2002. USA. pp.112-115. (იმპაქტ ფაქტორიანი)
56. Jishiashvili D., Gobronidze V., Shiolashvili Z. Passivation of GaAs by Ge Oxinitride Films. Proceedings of the 2^{th} International Symposium Electrochemistry Of Manganese, Electrodeposition, Corrosion and Passivity Of Materials. Tbilisi. October 17-20, 2001. PP.32-33.

57. Jishiashvili D., Gobsch G., Ecke G., Shiolashvili Z., Gobronidze V., Nakhutsrishvili I. AES study of thermally treated GeO_2(111)/GaAs structures Proceedings of the International Semiconductor Conference CAS-2001 (October 9-13, 2001), Sinaia, Romania. pp.327-330.
58. ShiolashviliZ., Jishiashvili D., Eterashvili T., Gobronidze V. Application of the zinc-silicate glass and GeO_2 thin films as diffusion sources and encapsulants for GaAs and InP. 3rd international conference "MicroMat 2000". Berlin. April 17-19, 2000. (იმპაქტ ფაქტორიანი)
59. I. Nakhutsrishvili, D.Jishiashvili, E. Miminoshvili, M. Mushkudiani. Formation of Ge_3N_4 films at the Ge surface. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V. 36, №10, 2000. pp. 1340-1341. (In Russian) (იმპაქტ ფაქტორიანი)
60. ShiolashviliZ., Jishiashvili D. A low-temperature source for Zn pulse photon diffusion in GaAs . Georgian Engineering News, N4, December, 1999, pp. 97-100.
61. Jishiashvili D., Nakhutsrishvili I., Dzhanelidze R., Katsiashvili M Mechanism of germanium oxynitride film formation. Bulletin of the Georgian Academy of Sciences, 1999, v.159, №3, pp.431-434. (იმპაქტ ფაქტორიანი)
62. Jishiashvili D., Kutelia E., Eristavi B., Gobronidze V., Tskhovrebashvili K. Auger electron spectroscopy study of the amorphous GeOx film structure. Bulletin of the Georgian Academy of Sciences, 1998, №1, pp.103-106. (იმპაქტ ფაქტორიანი)
63. Jishiashvili D., Shiolashvili Z., Dzhanelidze R., Mosidze L. Zinc diffusion from a reactively sputtered glass source in GaAs. Proceedings of the 20th International conference semiconductors /October 7-11/, Romania, Sinaia, 1997, pp. 267-270.
64. Jishiashvili D., Dzhanelidze R., Gobronidze A., Shiolashvili Z., Kutelia E. Surface passivation of GaAs for MIS-structure-based microsistems. Key Interface, 1997, №1, pp.14-16.
65. Jishiashvili D., Gobronidze A., Dzhanelidze R., Shiolashvili Z., Kutelia E., Nakhutsrishvili I., Mosidze L. Development of the amorphous, high resistivity Ge: (O,N) films for radiation-hardened MIS device applications. Proceedings of the 19th International conference semiconductors /October 9-12/, Romania, Sinaia, 1996, pp. 328-331.
66. Jishiashvili D., Kutelia E., Dzhanelidze R., Shiolashvili Z., Gobronidze A. AES study of the GaAs-germanium oxinitride interface. Materials Science Forum, 1995, v.185-188, pp.165-170. (იმპაქტ ფაქტორიანი)
67. Jishiashvili D., Kutelia E., Dzhanelidze R., Shiolashvili Z., Gobronidze V.V. Passivation of monoayomic and compound semiconductors by GeO_xN_y films. Proceedings of the 18th International conference semiconduc-tors /October 11-14/, Romania, Sinaia, 1995, pp. 145-148.
68. I. Nakhutsrishvili, D. Jishiashvili, D. Mogilianskii. Fabrication of α– and β-germanium nitride. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V. 30, N 12, 1994. pp. 1504-1506. (In Russian). (იმპაქტ ფაქტორიანი)
69. G. Bagrstishvili, M. Kaciashvili, D. Mogilianskii, D. Jishiashvili. X-ray analysis of germanium nitride. Bulletin of the Georgian Academy of Sciences. V. 150, N 2, 1994. pp. 272-274. (In Georgian).
70. I. Nakhutsrishvili, D. Jishiashvili, M. Kaciashvili, D. Mogilianskii, Nitride formation at the hydrazine vapor treated Ge surface. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V. 30, N 12. 1994. pp.1507-1509. (In Russian).
71. D. Jishiashvili, R. Dzhanelidze, Z. Shiolashvili, B. Eristavi, E. Kuelia, L. Mosidze, I. Nakhutsrishvili, M. Kaciashvili. Investigation of GaAs/Ge oxynitride interface. Bulletin of the Georgian Academy of Sciences. V. 150, N 3, 1994. pp. 95-98. (In Georgian).
72. I. Nakhutsrishvili, D. Mogilianskii, D. Jishiashvili, V. Osipov. The phase composition of the germanium and hydrazine vapour interaction products. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V.29, N 3, 1993. pp.358-360. (In Russian).
73. D. Jishiashvili, D. Mogilianskii, I. Nakhutsrishvili, M. Kaciashvili. The composition and structure of hydrazine vapour deposited germanium nitride. Bukketin of the Georgian Academy of Sciences. V. 148, N 1, 1993. pp. 57-59. (In Georgian).

74. D. Jishiashvili, G. Bagratishvili, T. Jibuti, E. Kutelia, D. Metreveli. Changes in GeO_x thin film structure after electron beam treatment. Surface (Physics, chemistry, mechanics). N 7, 1992. pp. 55-58. (In Russian).
75. G. Bagratishvili, Z. Shiolashvili, D. Kurcikidze, D. Jishiashvili, L. Mosidze, R. Dzahanelidze. Boron diffusion in the $Si_xC_y(N+O)_z$ thin films. Bulletin of the Georgian Academy of sciences. V. 142, N3, 1997. pp.400-402. (In Russian).
76. G. Bagratishvili, I. Nakhutsrishvili, M. Kaciashvili, D. Jishiashvili. The phase composition of the amorphous GeO_x films. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V.27, N6, 1991. pp. 1247-1250. (In Russian).
77. D. Jishiashvili, G. Bagratishvili, D. Kochiashvili, E. Kutelia, T. Bahman.IR spectra and structure of the amorphous germanium oxide films. Bulletin of the Russian Academy of Sciences. Inorganic Materials. V. 26, N 10, 1990. pp. 2131-2134. (In Russian).
78. Jishiashvili D.A, Kutelia E.R Infrared spectroscopic study of GeO_x films. - Phys. Stat. Sol.(b)., 1987, v.143, pp. K147-K150.
79. Jishiashvili D.A, Kutelia E.R. Electrophysical properties of the silicon- GeO_x interface. Bulletin of the Georgian Academy of sciences. V. 128, N2, 1987. pp.279-300. (In Russian).
80. D. Jishiashvili, E. Kutelia, B. Eristavi, T. Eterashvili. Composition and structure of the nonstochiometric germanium oxynitride. Bulletin of the Georgian Academy of sciences. V. 125, N3, 1987. pp.533-536. (In Russian).
81. Bagratishvili G.D., Dzhanelidze R.B., Eterashvili T.V., Jishiashvili D.A, Kutelia E.R. Properties and structure of silicon oxinitride films obtined in a Hydrazine plasma. - Phys. Stat. Sol.(a)., 1985, v.87, pp.435-440.
82. G. Bagratishvili, R. Dzhanelidze, D. Jishiashvili. Plasma etching of semiconductor surfaces. Bulletin of the Georgian Academy of sciences. V. 112, N2, 1983. pp.325-328. (In Russian).
83. G. Bagratishvili, I. Baumberg, R. Dzhanelidze, D. Jishiashvili, M. Kadagidze, N. Kurdiani. O. Saksaganskii. Investigation of thin film MIS transistor on GaAs. Сообщения АН ГССР, т.114, N1, с. 69-72. Bulletin of the Georgian Academy of Sciences. V.114, N 1, 1983. pp. 69-72. (In Russian).
84. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A Nonstoichiometric germanium nitride a new material for MIS microelectronics. II. Composition, properties and the interface with semiconductors. - Phys. Stat. Sol.)a)., 1983, v.78, pp.391-400.
85. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A Nonstoichiometric germanium nitride a new material for MIS microelectronics.I. The choice of insulator and deposition. - Phys. Stat. Sol.(a)., 1983, v.78, pp.115-123.
86. ShiolaShvili Z., Bagratishvili G., Jishiashvili D.. Investigation of ion-plasma deposited borosilicate thin films. Bulletin of the Georgian Academy of Sciences. V. 107, N 1, 1982. pp.73-76. (In Russian).
87. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Piscanovskii L.V., Zyuganov A.N., Mikhelashvili V.M., Smertenko P.S. Mechanizm of charge flow through the M-GeN-GaAs structure.-Phys. Stat. Sol. (a)., 1981, v.65, pp.701-707.
88. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Piskanovskii L.V. Germanium nitride thin films deposited by reactive sputtering in hydrazine plazma.- Bulletin of the Georgian Academy of Sciences. V.99, N 3, 1980. pp. 641-644. (In Russian).
89. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Ziuganov A.N., Mikhelashvili B.M., Smertenko P.C. The conductance of Al-Ge_3N_4-Ge structures. Bulletin of the Georgian Academy of Sciences. V.98, N 3, 1980. pp. 565-568. (In Russian).
90. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Piscanovskii L.V., Shiolashvili Z.N. Boron diffusion from the reactiveli sputtered glass source. - Phys. Stat. Sol.(a), 1979, v.56, p.27-35.

91. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Piscanovskii L.V., Shiolashvili Z.N. Boron diffusion from the reactively sputtered borosilicate glass. Bulletin of the Georgian Academy of Sciences. V.87. N 2, 1977. pp. 325-328. (In Russian).
92. Bagratishvili G.D., Dzhanelidze R.B., Jishiashvili D.A., Piscanovskii L.V., Shiolashvili Z.N. Physico-chemical properties of the borosilicate thin films. Bulletin of the Georgian Academy of Sciences. V.85, N 3, 1977. pp.621-624. (In Russian).