

ვალერიან გობრონიძე - პუბლიკაციები

სამეცნიერო სტატიები

N	პუბლიკაციის დასახელება	გამომცემლობა	თანაავტორები
1	Scanning Electron Microscopic Study of ZnO Crystallites	Nano Studies, 2020, 20, 105-110; Tbilisi, Georgia	A. Jishiashvili, Z. Shiolashvili, D. Jishiashvili, N. Makhatadze, A. Chirakadze
2	A study of the condensed copper-containing nanomaterials	Nano Studies. V.19, Part 2, 2019, pp.285-290, Tbilisi, Georgia	D. Jishiashvil, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, A. Chirakadze
3	Pyrolytic synthesis of boron nitride nanoflakes	NanoStudies, 2018, v. 17/18, 67-70. Tbilisi, Georgia;	D. Jishiashvili, Z. Shiolashvili, A. Chirakadze, N. Makhatadze, A. Jishiashvili, K.Gorgadze, D.Kanchaveli
4	Growth of InP based composite nanowires	Journal of Low Dimensional Systems, 2018, v. 2 (1), 23-27. Azerbaijan, Baku State University	D. Jishiashvili, A. Chirakadze, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili, D. Kanchaveli, D. Sukhanov
5	Carnot cycle	Georgian Technical University, „GANATLEBA“, 2017, N1(17), 224-229	Bochorishvili M, Bibiluri M
6	Vapor-Solid growth of InP and Ga ₂ O ₃ based composite nanowires	European Chemical Bulletin, 2015, V.4, N1, 24-29	D.Jishiashvili, Z. Shiolashvili, N. Makhatadze, A.Jishiashvili, V.Gobronidze, D. Sukhanov
7	Growth mechanism and morphology of germanium nitride nanowires	Nano Studies, 2014, V.10, 55-63	D.Jishiashvili, L. Chkhartishvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili

8	Ge- and In-based one-dimensional nanostructures: Self-catalytic growth	Nano Studies, 2013, V.7, 47-51	D. Jishiashvili, L.Chkhartishvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili
9	Growth of Germanium Nitride Nanowires	Nano Studies, 2011, v.4, pp. 133-138.	D. Jishiashvili, Z.Shiolashvili, N. Makhatadze, L. Kiria, A. Jishiashvili
10	Нанокристаллы тетрагонального германия, полученные при выращивании нанопроволок нитрида германия.	Microwave & Telecommunication Technology, IEEE Catalog number: CFP11788, 2011, 731-732	Джишиашвили Д.А., Шиолашвили З.Н., Махатадзе Н.К., Кирия Л.Т., Джишиашвили А.Д
11	Germanium Nitride Nanowires Produced by Thermal Annealing in Hydrazine Vapor.	Advanced Science Letters, Vol. , N2, 2009. pp.40-44.	D. Jishiashvili, V. Kapaklis, X. Devaux, C. Politics, E. Kutelia, N. Makhatadze and Z. Shiolashvili.
12	Fabrication of internally – strained layers for producing one -dimension nanostructures.	Proceedings of the Institute of Cybernetics, 2006.	D. Jishiasvili, E. Kutelia, D. Kanchaveli, G. Kiladze.
13	Nanopores in the Phase-Separated Ge:GeO ₂ Films.	Bulletin of the Georgian Academy of Sciences. V173, N3, 2006, p.507-509.	D. Jishiashvili, E. Kutelia, Z. Shiolashvili, N. Makatadze, G. Tcertcvadze.
14	Взаимодействие нанокристаллических пленок Ge:GeO ₂ с водой.	Georgian Engineering News, N1, 2006, p.103-104.	Д.А. Джишиашвили, Э.Р. Кутелия, З.Н. Шиолашвили, Н.К. Махатадзе.
15	Оже Анализ Нанокристаллической пленки Ge:GeO ₂ .	Georgian Engineering News, N1, 2006, p.100-102.	Д.А. Джишиашвили, Б.Г. Эристави, З.Н. Шиолашвили, А.Д. Джишиашвили, Н.К. Махатадзе.
16	Segregation of Ge Nanocrystals in the Germanium Oxide Film.	Georgian Engineering News, N3, 2005, p.109-111.	Jishiashvili D., Shiolashvili Z., Mtskeradze G.
17	Fabrication of the IV-Group Semiconductor Nanocrystals in Metal Oxide Matrices.	Georgian Engineering News, N3, 2005, p.15-17.	Jishiashvili D., Shiolashvili Z., Eristavi B., Mosidze L.
18	Surface passivation of GaAs using Ge interface control layer.	Phys. Stat. Sol.(a)., 2005, v.202, N9, 1778-1785.	Jishiashvili D., Gobsch G., Ecke G., Mtsceradze G., Shiolashvili Z.
19	Ge Nanocrystals Embedded in the Germanium Dioxide Thin Film.	Proceedings of the Institute of Cybernetics. Vol. 3, N 1-2, 2004, pp. 227-232.	Jishiashvili D., Z. Shiolashvili, T. Eterashvili and L. Sakhvadze.
20	Submicron Diffusion Layers in Si Produced by Pulse Photon Annealing.	Bulletin of the Georgian Academy of Sciences. V.168, N3,2003,pp.497-500.	Shiolashvili Z., Jakeli K., Kristesashvili V., Jishiashvili D.,

21	Синтез и Исследование Координационных Соединении Меди и Цинка с Динитробензоатами предельных Вторичных Аминов.	Georgian Engineering News. N3, 2002. pp.111-113.	Амирханашвили К., Сакварелидзе Т., Адеишвили Г., Миминошвили К., Миминошвили Э.,
22	Исследование испарения монооксида германия в вакууме.	Известия академии наук грузии. Серия химическая. т. 27, №1-2, 2001. с. 134-139.	Джишиашвили Д.А., Нахуцришвили И.Г., Шиолашвили З.Н.
23	Auger electron spectroscopy study of the amorphous GeO _x film structure	Bulletin of the Georgian Academy of Sciences, 1998, №1, pp.103-106.	Jishiashvili D., Kutelia E., Eristavi B., Tskhovrebashvili K.
24	Surface passivation of GaAs for MIS-structure-based microsistems	Key Interface, 1997, №1, pp.14-16.	Jishiashvili D., Dzhanelidze R., Shiolashvili Z., Kutelia E.
25	Development of the amorphous, high resistivity Ge: (O,N) films for radiation-hardened MIS device applications.	Proceedings of the 19 th International conference semiconductors /October 9-12/, Romania, Sinaia, 1996, pp. 328-331.	Jishiashvili D., Dzhanelidze R., Shiolashvili Z., Kutelia E., Nakhutsrishvili I., Mosidze L.
26	AES study of the GaAs-germanium oxinitride interface.	Materials Science Forum, 1995, v.185-188, pp.165-170.	Jishiashvili D., Kutelia E., Dzhanelidze R., Shiolashvili Z.,

კონფერენციებში (კონგრესებში, სიმპოზიუმებში) მონაწილეობა

	პუბლიკაციის დასახელება	ღონისძიების დასახელება	თანავტორები
1	Vapor-phase synthesis of copper-based nanostructures	Conference Proceedings Modern Trends in Physics, Baku State University, 01-03 May, 2019, pp. 43-46 (Proceedings are indexed in the Web of Science Clarivate Analytics System, ISSN 2522-4352)	D.Jishiashvil, A.Chirakadze, Z.Shiolashvili, N.Makhatadze, A.Jishiashvili
2	Synthesis of Nitride Nanomaterials in Presence of Hydrazine and Ammonium Chloride Vapor	5th International Conference “Nanotechnologies”; November 19-22, 2018. Tbilisi, Georgia	D. Jishiashvili, Z. Shiolashvili, A. Chirakadze, D. Jishiashvili, Z. Shiolashvili, A. Chirakadze, N. Makhatadze, A. Jishiashvili;
3	Growth of nitride and phosphide nanowires in the presence of water molecules	ICANM 2016: International conference & exhibition on advanced and nanomaterials. 2016, August 1-3, Montreal, Canada, IAEMM, 73-80	D. Jishiashvili, Z. Shiolashvili, N. Makhatadze, A. Jishiashvili
4	Nuclear Radiation Nanosensors and Nanosensory Systems	International Conference “Tbilisi-spring-2014”, The NATO Science for Peace and Security Programme. Synthesis of Nanowire Networks for Chemical Gas Sensor Applications.	D.Jishiashvili, Z.Shiolashvili, N.Makhatadze, A.Jishiashvili, L.Kiria

		2014, March 5-9	
5	Self-catalytic growth of germanium and indium based 1D nanostructures - P-41	International Conference & Exhibition on Advanced & Nano Materials, ICANM2013, Laval University, Quebec City, Canada, August 12-14 2013. http://iaemm.com/ICANM2013	D. Jishiashvili, L.Chkhartishvili, L.Kiria, Z.Shiolashvili, N.Makhatadze, A.Jishiashvi
6	Fabrication of Indium based nanowires for gas-sensor applications	International Scientific Conference - Modern Issues of Applied Physics. Tbilisi. 30 March, 2011	D. Jishiashvili, Z.Shiolashvili, N. Makhatadze, L. Kiria, A. Jishiashvili, D. Sukhanov
7	Synthesis of tetragonal germanium nanocrystals embedded in amorphous matrices	1 st International Conference on Nanochemistry and Nanotechnologies, March 23-24, Tbilisi., Georgia. 2010. pp. 186-192	D. Jishiashvili, N. Makhatadze, Z.Shiolashvili, A. Jishiashvili, D. Sukhanov
8	Synthesis of germanium nitride nanowires.	International Semiconductor Conference CAS-2009. 12-14 oct 2009, Sinaia, Romania	D. Jishiashvili, N.Makhatadze, Z. Shiolashvili, A. Jishiashvili.
9	Vapor-Liquid Solid (VLS) Growth of Tapered Germanium Nitride Nanowires.	The International Conference For NanoTechnology Industries (NANO Conference 2009, King Saud University) April 5-7, 2009, Riyadh, Saudi Arabia.	D. Jishiashvili, X. Devaux, N. Makhatadze, A. Jishiashvili Z. Shiolashvili.
10	Germanium Nitride Nanowires Produced by Thermal Annealing in Hydrazin Vapore.	1st International Conference from Nanoparticles and Nanomaterials to Nanodevices and Nanosystems. June 16-18, Halkidiki, Greece.2008. http://www.uta.edu/ic4n/2008/Conference%20Program.pdf	D. Jishiashvili, V. Kapaklis, X. Devaux, C. Politis, E. Kutelia, N. Makhatadze and Z. Shiolashvili.
11	Synthesis of Germanium Nitride Nanowires and Spherical Particles	The 4th International Congress of Nanotechnology. November 5-8, 2007. San Francisco , USA http://www.nanotechcongress.com/C7leantech.htm	D. Jishiashvili, E. Kutelia and E. Mimoshvili
12	Si and Ge Nanocrystals. Embedded in the Alumina Film.	13 th International Metallurgy-Materials Congress, IMMC 2006, 09-12 November 2006, Istanbul, Turkey, Abstract book, p. 307-311	Jishiashvili D., Shiolashvili Z., Kanchaveli D.
13	Formation of macro porous and micro tubes in the nanocrystalline Ge:GeO ₂ films.	The international Congress of Nanotechnology ICNT 2006, October 30-November 2, San-Francisco, California, USA.2006.	D. Jishiasvili, E. Kutelia, D. Kanchaveli.
14	Nanoporous films produced by the magnetron sputtering of Ge in oxygen plasma.	International workshop on nanostructured materials. Nanomat 2006, Antalya, Turkey, June 21-23, 2006. www.metucenter.metu.edu.tr/nano2006	D. Jishiashvili, E. Kutelia, Z. Shiolashvili, D. Kanchaveli.
15	ნანოფორების წარმოქმნა ორფაზიან Ge:GeO ₂ ფირში	ფოტონიკა-2005, კონფერენციის თეზისები. თბილისი, 27-28 დეკემბერი, 2005. გვ.13	დ. ჯიშიაშვილი, ზ. შიოლაშვილი, ნ.მახათაძე, ლ.სახვამე
16	Получение германиевых квантовых точек в пленке	Труды международной конференций "Современные	Д. А. Джишиашвили, З. Н. Шиолашвили, З. В.

	GeO ₂ .	информационные и электронные технологии". г. Одесса, 23-27 мая, 2005 г, с. 371.	Беришвили, Л. Г. Сахвадзе.
17	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.	D.Jishiashvili, Z. Shiolashvili, I. Nakhutsrishvili.
18	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.	Jishiashvili D., Shiolashvili Z.
19	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.	Jishiashvili D., Gobsch G., Ecke G., Shiolashvili Z., Nakhutsrishvili I.
20	Development of new thin film materials for nanoelectronic.	Thesis of Conferences on Modern Problems of Computer Science, Tbilisi, 21-22 November, 2000. p.20.	Jishiashvili D., Shiolashvili Z., Nakhutsrishvili I., Mushkudiani M.
21	Application of the zinc-silicate glass and GeO ₂ thin films as diffusion sources and encapsulants for GaAs and InP.	3 rd international conference "MicroMat 2000". Berlin. April 17-19, 2000.	Shiolashvili Z., Jishiashvili D., Eterashvili T.
22	Development of the amorphous, high resistivity Ge: (O,N) films for radiation-hardened MIS device applications.	Proceedings of the 19 th International conference semiconductors /October 9-12/, Romania, Sinaia, 1996, pp. 328-331.	Jishiashvili D., Dzhanelidze R., Shiolashvili Z., Kutelia E., Nakhutsrishvili I., Mosidze L., Katsiashvili M
23	New type of insulating material for radiation-hardened Metal-Insulator-Semiconductor Integrated Circuits.-	Georgian Symposium for project development and conversion /May 15-18/, collection of reports, Tbilisi, 1995, pp.136-138	Jishiashvili D., Kutelia E.R., Dzhanelidze R., Shiolashvili Z., Razmadze Z.
24	Passivation of monoatomic and compound semiconductors by GeO _x N _y films .	Proceedings of the 18 th International conference semiconductors /October 11-14/, Romania, Sinaia, 1995, pp. 145-148	Jishiashvili D., Kutelia E., Dzhanelidze R., Shiolashvili Z.

გამოგონებები (საავტორო მოწმობები ან პატენტები)

	პუბლიკაციის დასახელება	გამომცემლობა	თანაავტორები
1	Method of fabricating tetragonal germanium nanocrystals	GE P 5202, 2011	D. Jishiashvili, Z. Shiolashvili N. Makhatadze A. Jishiashvili

2	Method of fabricating germanium nitride nanofibers	GE P 4320, 2008	D. Jishiashvili Z. Shiolashvili
3	Method of making rolled-up nanotubes	GE P 4195, 2007	D. Jishiashvili Z. Shiolashvili
4	Method of fabricating group IV nanocrystals in the metal oxide matrices	GE P 3725 B, 2006	D. Jishiashvili B. Eristavi Z. Shiolashvili
5	Method for passivating the GaAs surface	GE P 2610, 2000	D. Jishiashvili
6	Method of making semiconductor devices	GE P 2594, 2000	D. Jishiashvili I. Nakhutsrishvili Z. Shiolashvili

სამეცნიერო საგრანტო პროექტებში მონაწილეობა

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1	2009-2012	Executor	IZ73Z0_127943 Hydrazine-assisted Routed to 1D Nitride and Oxide Nanomaterials for Environmental and Energy Application	Swiss National Science Foundation
2	2004-2005	შემსრულებელი	ამორფულ დიელექტრიკულ ფირებში გერმანიუმის ნანოკრისტალური ჩანართების მიღების ტექნოლოგიის შემუშავება	საქართველოს მეცნიერებათა აკადემია
3	2002-2005	Executor	G-719 Investigation of destruction mechanisms in the reactor steels.	International Science Technology Center (ISTC)
4	2002-2003	შემსრულებელი	ნახევარგამტარული ნაერთების ლეგირების ეფექტური მეთოდის შემუშავება	საქართველოს მეცნიერებათა აკადემია
5	2000-2001	Executor	G-258 Development of the new surface passivation technology for the microwave integrated circuits on GaAs	International Science Technology Center (ISTC)
6	2000-2001	შემსრულებელი	ახალი ტექნოლოგიების შემუშავება $A^{III}B^V$ ტიპის ნახევარგამტარული ნაერთების საფუძველზე შექმნილი გამოთვლითი ტექნიკის ელემენტებისთვის	საქართველოს მეცნიერებათა აკადემია