

**List of scientific and learning and teaching works 2025-1985**

**Manana Mamulashvili**

#	Name of scientific work	Printed	Publishing house or journal	Number of pages	Names of co-authors
1	Environmental safety and rational use of natural resources		Georgian Engineering News 2025 Submitted for printing		Andguladze Sh.N, Mchedlishvili G.S., Mamulashvili M.A
2	PARTICLE SIZES IN THE LIQUID PHASE OF VARYING CONCENTRATIONS OF POLYMERS	Printed	Georgian Engineering News № 1 vol . 2024 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	71-73	Bibileishvili G.V., MamulaShvili M.A., Javashvili Z.D., Butkhuzi T.G. Gogiberidze I.B.
3	Investigation of the effect of polymer conformation on the characteristics of microfiltration membranes.	Printed	Georgian Engineering News № 1 vol . 2024 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	78-81	Bibileishvili G.V., Gogesashvili N.N., Kezherashvili M.G., Mamulashvili M.A. Kakabadze E.G.
4	EFFECT OF DIFFERENT SOLVENTS AND FORE-FORMING AGENTS ON MORPHOLOGY AND PERFORMANCE OF POLYETHERSUPHONE MEMBRANES	Printed	Oxidation Communications 47(3) (2024) Sofia, BULGARIA Impact Factor 0.541	534-542	Bibileishvili G.V., Kezherashvili M.G. Mamulashvili M.A
5	Experimental study of the dependence of viscosity on productiviti in filtration solutions	Printed	Georgian Scientists vol. 6 N 3, 2024 <a href="https://doi.org/10.52340/g_s_2024.06.04.34">https://doi.org/10.52340/g_s_2024.06.04.34</a> E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	371-374	Manana Mamulashvili, George Bibileishvili, Tinatin Butkhuzi, Zaza Javashvili Elene Kakabadze, Liana Ebanoidze
6	Analysis of local and international patents for microfiltration process of different types of wine material	Printed	Georgian Scientists vol. 6 N 3, 2024 <a href="https://doi.org/10.52340/g_s_2024.06.04.34">https://doi.org/10.52340/g_s_2024.06.04.34</a> E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	375-378	Elene Kakabadze, George BibileiSvili, Leila Tananashvili, Zaza Javashvili, Manana MamulaShvili, Liana Ebanoidze

7	THE ORETICAL AND EXPERIMENTAL STUDY OF THE GEOMETRY AND PARAMETERS OF THE HYDRODYNAMIC REGIME OF THE PRESSURE CHAMBER OF A FLAT-PARALLEL TYPE MEMBRANE DEVICE FOR MICROFILTRATION OF WINE AND ULTRAFILTRATION OF WATER	Printed	Georgian Engineering News № 2 vil.98 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	84-88	Bibileishvili G.V., Kezherashvili M.G. Mamulashvili M.A
8	A STUDY OF THE NANOFILTRATION PROCESS IN NATURAL, FRESH WATER DISSOLVED TO SEPARATE 0.2% MgSO <sub>4</sub> and 15% NaCl	Printed	Georgian Engineering News № 3 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	66-68	Bibileishvili G.V., MamulaShvili M.A., Kakabadze E.G., Kezherashvili M.G. Javashvili Z.D
9	STUDYING THE OPTIMAL MODE PARAMETERS OF THE MICROFILTRATION SEPARATION PROCESS AND THE MECHANISM OF SEDIMENT FORMATION ON THE MEMBRANE SURFACE UNDER HYBRID FLOW CONDITIONS	Printed	Georgian Engineering News № 3 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	69-72	Bibileishvili G.V., Kezherashvili M.G., Kuparadze L.P., Mamulashvili M.A. and Ebanoidze L.O.
10	STUDY OF THE QUALITY OF ELECTRICAL CONDUCTIVITY OF DEIONIZED WATER OBTAINED FROM NATURAL WATER	Printed	Georgian Engineering News № 3 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	64-65	Bibileishvili G.V., Butkhuzi T.G., Mamulashvili M.A. Javashvili Z.D.
11	BACTERIOLOGICAL RESEARCH OF NATURAL WATER AND WINE MATERIALS USING MICRO- AND ULTRAFILTRATION PROCESSES	Printed	Georgian Engineering News № 3 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	71-72	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G. Kakabadze E.G
12	DETERMINATION OF TURBIDITY INDEX OF WINE AND FRUIT JUICES BEFORE FILTRATION AND AFTER MICROFILTRATION	Printed	Georgian Engineering News № 3 2023 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a> ISSN /1512-0187	73-74	Bibileishvili G.V., Butchuzi T.G., Mamulashvili M.A. Kakabadze E.G.

13	Environmental lead pollution and its impact on human health	Printed	Georgian Scientists Vol. 5 No. 4 (2023) <a href="https://doi.org/10.52340/g s.2023.05.04.17">https://doi.org/10.52340/g s.2023.05.04.17</a> E-ISSN: 2667-9760 Cite Factor IMPACT FACTOR 0,62	188-195	Mamulashvili M.A Matsaberidze E.L
14	EFFECT OF HARDNESS SALTS ON THE Z-POTENTIAL AND CONDUCTIVITY OF NATURAL WATER	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,95 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	107-108	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G. and Kakabadze E.G.
15	Study of the influence of acids on the phase inversion process of the formation of membranes from polymer compositions	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	82-83	Bibileishvili G.V., Gogesashvili N.N., Kezherashvili M.G., Mamulashvili M.A.
16	Some issues of drinking and wastewater treatment by baromembrane processes	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	87-88	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Kakabadze E.G.
17	Study of the chemical composition of apple juice and Saperavi wine material	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	117-119	Bibileishvili G.V., Mamulashvili M.A., Butchuzi T.G., Javashvili Z.D.
18	Sterile microfiltration and microbiological analysis of Saferavi wine material	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	111-112	Bibileishvili G.V., Mamulashvili M.A., Kezherashvili M. G., Bibileishvili I.V.
19	Analysis of the influence of the angle of immersion of a polymer composition into a bath on the phase inversion process.	Printed	Georgian Engineering News ISSN 1512-0187 № 1 vol,96 2022 <a href="https://doi.org/10.36073">https://doi.org/10.36073</a>	80-81	Bibileishvil G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A, Ebanoidze L.O.
20	CALCULATION OF INITIAL THERMODYNAMIC PARAMETERS THROUGH THE MODIFIED ADDITIVITY RULE	Printed	Oxidation communications vol. 45, №4 2022 Sofia, BULGARIA Impact Factor 0.541	595-599	E.L.Matsaberidze M.A.Mamulashvili

21	PREDICTION AND ITS IMPORTANCE IN NATURE USE	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	81-85	Mchedlishvili G.S. Mamulashvili M.A.
22	Study of organic component of Georgian therapeutic mud-fortofotes by infrared spectroscopy	electronic	International Journal of Progressive Sciences and Technologies (IJPSAT) ISSN: 2509-0119. July2021 Vol. 27, №2	ImpactFactor:icv=80,38 SJIF=6,662 IFSII7,625	Liana Ebanoidze, Ekaterine Matsaberidze, Manana Mamulashvili
23	STUDY OF THE INFLUENCE OF VISCOSITY ON THE MORPHOLOGY OF POLYETHERSULFONE (PES) MEMBRANES	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	104-106	Bibileishvili G.V., Kezherashvili M.G., Gogesashvili N.N. Mamulashvili M.A.
24	STUDY OF THE EFFECT OF POLYMER ADDITIVE ON THE STRUCTURE OF MEMBRANES OBTAINED FROM ALIPHATIC AMIDES	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	107-109	Bibileishvili G.V., Gogesashvili N.N., Mamulashvili M.A. Javashvili Z.D.
25.	INVESTIGATION OF MORPOLOGICAL PROPERTIES OF MEMBRANE FILM FOR POLYETHERSULFONE UNDER THE INFLUENCE OF ORGANIC ADDITIVES	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	118-120	Bibileishvil G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A, Ebanoidze L.O.
26	Microbiological study of Black Sea water and use of ultrafiltration method to provide ecologically clean water to the resort area of Georgia.	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	115-117	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Butchuzi T.G.
27	Microbiological study of fresh natural water treated with ultrafiltration membranes	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	113-114	Bibileishvili G.V., Mamulashvili M.A., Javashvili Z.D., Kakabadze E.G.
28	Study of the effect of microgel particle size in a polymer composition on the morphology and characteristics of membranes	Printed	Georgian Engineering News ISSN 1512-0287 № 2 2021	121-122	Bibileishvili G.V., Kezherashvili M.G., Gogesashvili N.N., Mamulashvili M.A., Ebanoidze L.O.

29.	INFLUENCE DEBARINATION-DEFLUORINATION OF BORJOMI MINERAL WATER ON CALCIUM	Printed	Georgian Engineering News № 2 vol .91 2020	145-146	Bibileishvili G.V., Mamulashvili M.A. and Butchuzi T.G.
30	INFLUENCE DEBARINATION-DEFLUORINATION OF BORJOMI MINERAL WATER ON CHLORINE	Printed	Georgian Engineering News № 2 vol.91 2020	147-148	Bibileishvili G.V., Mamulashvili M.A. and Butchuzi T.G
31	Elaboration of the Process of Debarination – Defluorination of Molecular and Ionic Systems by Creation of Nanotechnologies and Nanosystems	electronic	International Journal of Progressive Sciences and Technologies (IJPSAT) ISSN: 2509-0119. © 2020 International Journals of Sciences and High Technologies <a href="http://ijpsat.ijshjournals.org">http://ijpsat.ijshjournals.org</a> Vol. 23 No. 2 November 2020,	533-540	Giorgi Bibileishvili, Manana Mamulashvili, Zaza Javashvili
32	STUDY OF THE PROCESS OF ELECTRODIALYSIS PURIFICATION OF THE WASTE WATERS FOR THE LEAD CHROME PRUDUCTION	Printed	GTU Collection of Scientific works ISSN 1512-0996 №1(511) Tbilisi 2019	112-118	N.Chkhubianishvil G. Mchedlishvili M.Mamulashvili
33	Purification of waste waters polluted by lead and chromium ions using nanofiltration method	Printed	Georgian Chemical Journal, ISSN 1512-0686 VOL.19 №1 2019	66-67	G.Bibilashvili, M. Mamulashvili, M. Kezherashvili, Z.Javashvili, E.Kakabadze
34.	Baromembrane processes for processing Grape and tangerine juice	Printed	Georgian Chemical Journal ISSN 1512-0686 VOL.19 №1 2019	91-92	G.Bibilashvili, M. Mamulashvili, M. Kezherashvili, Z.Javashvili, E.Kakabadze
35	PURIFICATION OF LEAD THROUGH WATER ELECTRODIALYSIS METHOD	Printed	Georgian Chemical Journal, 2018. Vol.18. N1 ISSN 1512-0686	139-142	N. Chkhubianishvili, M. Mamulashvili G. Mchedlishvili, L. Kristesashvili
36	RESEARCH OF NANOFILTRATION PROCESSES WITH QUANTITATIVE DEFINITION OF CHEMIKAL ELEMENT CALCIUM (Ca <sup>2+</sup> )	Printed	Georgian Chemical Journal, 2018. Vol.18. N1 ISSN 1512-0686	116-117	N.Gogesashvili M. Mamulashvili N.Mumladze L.Ebanoidze E.Kakabadze T.Bitkhuzi Z.Javashvili

37	DETERMINATION OF THE LIMIT CONCENTRATION FOR THE CONCENTRATE COMPARTMENT SOLUTION	Printed	Georgian Engineering News, 2'18 ISSN 1512-0287	73-74	Chkhubianishvili N.G Mamulashvili M.A. Mchedlishvili G.S Kristesashvili L.V Kurtskhalia S.S
38	ELABORATION OF THE TECHNOLOGICAL PROCESS OF THEMETHOD OF ELECTRODIALYSIS FOR LEAD CROCOITE WASTE WATER TREATMENT	Printed	Georgian Engineering News, 2'18 ISSN 1512-0287	71-72	Chkhubianishvili N.G Mamulashvili M.A. Mchedlishvili G.S Kristesashvili L.V
39	Weighted and Chemicals in Tbilisi sea water Regulation of component quantity by Baromembraneous processes	Printed	Georgian Chemical Journal, 2017. Vol.17. N1	181-182	M.Mamulashvili
40	Investigation of chemical stability and mechanical properties of ion-exchange membranes in lead crocoites containing industrial waste waters	Printed	Georgian Engineering News, №4, vol. 80. 2016	116-120	N. Chkhubianishvili, G. Mchedlishvili, L. Kristesashvili, M. Mamulashvil J. Kerkadze
41	The operation of the hydraulic removal system for pyrite calcine at the Cherepovets Chemical Plant.	Printed	Ministry of Higher and Secondary Special Education, State Pedagogical Institute named after VI. Lenin, scientific work, No. 5 (347), Tbilisi, 1989		Sh.N. Andguladze M.I. Chkonia, L.L. Kashakashvi-li M.A. Mamulashvili G.G.Gimshelishvili
42	Method for cleaning flue gases from sulfur dioxide and solid dispersed particles.	Printed	Author's certificate #1563742. 13.01.1988.15.05. 1990, Bulletin No.18		Sh.N. Andguladze, M. I. Chkonia, L. L. Kashakashvili, M. Mamulashvili G. G. Dzimshelishvili
43	Cation-exchange treatment of industrial effluents from the Kutaisi Lithopon Plant	Printed	Analytical Control and Environmental Protection Techniques" Scientific Proceedings of the Lenin State Research Institute No. 6(228) 1985	43-45	V.N. Gaprindashvili N.A.Khurtsidze M.A.Mamulashvili S.P.Gogichaeva

### Helper Manual

1.	Laboratory practicum of industrial facility monitoring. (Helping handbook)	Printed	GTU. Protocol №2. Tbilisi, Publ. House "Technical University", ISBN 978-9941-20-721-1 <b>2016</b>	71pp	D. Eristavi, M. Mamulashvili E. Matsaberidze
2.	Laboratory practicum of natural object monitoring (Helping handbook)	Printed	GTU. Protocol №2. Tbilisi, Publ. House "Technical University" ISBN 978-9941-20-722-8 <b>2016</b>	114 pp	D. Eristavi, M. Mamulashvili E. Matsaberidze
3.	Methods and means of environmental protection analysis. Lab. Practice II part.	Printed	Stu. Publishing House "Technical University" ISBN978-99940-955-2-0 (Part II) Tbilisi. 2007	80 pp	L. Gverdtsiteli I. Bazghadze, J. Gugeshidze, M. Mamulashvili
4.	Fundamentals of Engineering Ecology. (Helping handbook)		GTU 2025 Submitted for printing	181 pp	Sh. Andguladze, G. Mchedlishvili, M.Mamulashvili

### Conferences 2024-1985

1	INFLUENCE OF GOAGULATION BATH TEMPERATURE ON THE MORPHOLOGY OF THE POLYAMIDE MEMBRANE	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Abstract Book EDITOR Ms. Leslie Robinson ISBN: 978-625-367-820-3 August 23-25, 2024 Trabzon, Turkiye	41	Mzia Kezherashvili George Bibileishvili Manana Mamulashvili
2	CREATION OF MEMBRANE NANOTECHNOLOGIES AND NANOSYSTEMS	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Zoom Meeting ID: 860 5266 6988 Zoom Passcode: 123456 <a href="https://us02web.zoom.us/j/86052666988?">https://us02web.zoom.us/j/86052666988?</a> August 23-25, 2024 Trabzon, Turkiye	40	Manana Mamulashvili George Bibileishvili Mzia Kezerashvili Zaza Javashvili Ia Gogiberidze

3	ECONOMIC APPROACHES TO OBTAINING AND MAINTAINING QUALITY, STERILE DRINKING WATER FROM NATURAL WATERS THROUGH THE USE OF NANOTECHNOLOGICAL MEMBRANE	Printed	6TH INTERNATIONAL BLACK SEA MODERN SCIENTIFIC RESEARCH CONGRESS Zoom Meeting ID: 860 5266 6988 Zoom Passcode: 123456 <a href="https://us02web.zoom.us/j/86052666988?">https://us02web.zoom.us/j/86052666988?</a> August 23-25, 2024 Trabzon, Türkiye	43-44	George Bibileishvili Mzia Kezerashvili Manana Mamulashvili
4	Purification of wastewater from lead crocoite production by electro dialysis method	Printed	Al Farabi 13th International Scientific Research and Innovation Congress October 17-18, 2024 / Tekirdağ, Türkiye IKSAD PUBLISHING HOUSE® All rights of this book belong IKSAD Publishing House Authors are responsible both ethically and juridically IKSAD Publications – 2024© Issued: 15.11.2024 ISBN: 0000000000000	70-71	Manana Mamulashvili Ekaterine Matsaberidze
5	Obtaining high-quality, sterile drinking water from natural waters based on membrane nanotechnologies	Printed	6. INTERNATIONAL ENVIRONMENTAL CHEMISTRY CONGRESS 05-08 November 2024 Trabzon, Türkiye CONGRESS	63	George Bibileishvili, Manana Mamulashvili, Ia Gogiberidze, Elene Kakabadze, Tinatin Butkhuzi
6	Research on formation and phase inversion process of polymer composition of natural water microfiltration membrane	Printed	6. INTERNATIONAL ENVIRONMENTAL CHEMISTRY CONGRESS 05-08 November 2024 Trabzon, Türkiye CONGRESS	87	George Bibileishvili, Mzia Kezherashvili, Manana Mamulashvili
7	Recycling of used waste vegetable oils into biofuels	Printed	The international scientific conference “Environmental protection and sustainable development” dedicated to professor Victor Eristavi’s memory. WORKS 2024 <a href="https://doi.org/10.36073/978-9941-512-47-6">https://doi.org/10.36073/978-9941-512-47-6</a>	275-282	Manana Mamulashvili Ekaterine Matsaberidze Giorgi Lazarashvili

8	Research of baromembrane processes based on cellulose acetate membrane	Printed	The international scientific conference “Environmental protection and sustainable development” dedicated to professor Victor Eristavi’s memory. WORKS 2024 <a href="https://doi.org/10.36073/978-9941-512-47-6">https://doi.org/10.36073/978-9941-512-47-6</a>	128-135	Giorgi Bibileishvili Nana Gogesashvili Mzia Kezherashvili Liana Kuparadze Liana Ebanoidze Manana Mamulashvili
9	Processing of water and fruit juices by micro- and ultrafiltration.	Printed	Collection of Abstracts of the International Scientific-Methodological Conference “Chemistry - Achievements and Prospects” Dedicated to the 90th Anniversary of the Birth of Academician Givi Tsintsadze GTU Tbilisi 20/04/2023		Bibileishvili G.V., Gogesashvili N.N. Kezherashvili M.G., Kuparadze L.P., Mamulashvili M.A. Ebanoidze L.
10	Calculation of thermodynamic initial parameters by the modified additivity method	Printed	Collection of Abstracts of the International Scientific-Methodological Conference “Chemistry - Achievements and Prospects” Dedicated to the 90th Anniversary of the Birth of Academician Givi Tsintsadze GTU Tbilisi 20/04/2023		E.L.Matsaberidze M.A.Mamulashvili
11	The use of polymer membranes in the technological process of wine processing	Printed	International Scientific-Practical Conference "Aspects of Innovative Research in Agrarian Sciences" Tbilisi 20-21 November 2021	194-196	Bibileishvil G.V., Gogesashvili N.N. . Kezherashvili M.G., Mamulashvili M.A, Ebanoidze L.O.
12.	PURIFICATION OF LEAD CROCOITE PRODUCTION WASTE TECHNOLOGY PROCESSING	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory WORKS Tbilisi 2020	104-107	Mamulashvili M.A.

13	The chocolate we eat	Printed	87th Open International Conference of GTU Students 2020	138	M. Mamulashvili N.Chkoidze-student
14	Development of technology of lead crocoite production waste waters treatment	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory ABSTRACTS Tbilisi 2019	52-53	Mamulashvili M.A. Chkhubianishvili N.G Mchedlishvili G.S
15	Creation and processing of polymeric membranes to produce high quality water	Printed	The international scientific conference “ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVOPMENT” dedicated to professor VICTOR ERISTAVI’S memory ABSTRACTS Tbilisi 2019	57-58	G.Bibileishvili M. Kezherashvili N.Gogesashvili M.mamulashvili
16	HARMFUL EFFECT OF HOUSEHOLD CHEMISTRY ON HUMAL	Printed	PROCEEDINGS OF INTERNATIONAL SCIENTIFIC-PRACTIKAL CONFERENCE “SCIENCE ANDINNOVATIVE TECHNOLOGIES” VOLUME II KUTAISI-2018	179-183	E.Matsaberidze M.Mamulashvili
17	PURIFIKATION OF LEAD CROCOITE PRODUKTION WASTE WATERS THROUGH ELECTRODIALYSIS METHOD USING IONEXCHANGE MEMBRANES	Printed	PROCEEDINGS OF INTERNATIONAL SCIENTIFIC-PRACTIKAL CONFERENCE “SCIENCE ANDINNOVATIVE TECHNOLOGIES” VOLUME II KUTAISI-2018	172-174	M.Mamulashvili Chkhubianishvili N.G Mchedlishvili G.S Matsaberidze E.L. Kristesashvili L.V
18	Purification of lead crocoite-containing waters using ion-exchange membranes	Printed	86 th International Student Scientific Conference Collection of theses Tbilisi 2018	123	M.Mamulashvili

19	Study of hexavalent chrome And lead concentration in the waste waters during electro dialysis	Printed	"Chemistry - Achievements and Perspectives" International Scientific-Methodological Conference dedicated to the 85th anniversary of Academician Givi Tsintsadze Tbilisi 2018	211-213	N.Ghkubianishvili, M. Mamulashvil G.Mchedlishvili
20	Eiectrik equipment and eiectromagnetik radiation	Printed	"Chemistry - Achievements and Perspectives" International Scientific-Methodological Conference dedicated to the 85th anniversary of Academician Givi Tsintsadze Tbilisi 2018	213-215	M. Mamulashvili E.Matsaberidze, N.Rachvelishvili
21	Nanotechnology method for water disinfection	Printed	II International conference: Modern Technologies and Methods of Inorganic Materials Science. Collection of reports. Tbilisi. 2015	301-302	D. Eristavi, N. Bibiluri Sh. Andguladze M. Gugeshidze E. Matsaberidze M. Mamulashvili
22	Purification of wastewater for ice cream and waffle production	Printed	International Scientific-Technical Conference. Environment Protective and sustainable Development.Work Tbilisi.Stu.2010	71-79	L. Gverdtsiteli J. Gugeshidze E. Mezvrishvili M. Mamulashvili
23	Technological scheme of waste gas cleaning Rachinsky GHZ. Abstracts of the IV Resp.	Printed	Scientific and Technical Conference "Chemistry and Scientific and Technical Progress", Kutasi, 1988		Sh.N. Andguladze D.R. Lomidze. M.A. Mamulashvili