

Scientific Productivity

Cited Index: H Index

Monographs

1. Man and atmosphere. - Tb., "ცოდნა", 1976, 30 p.
2. Modern problems of atmospheric dustiness - Obninsk: VNIIGMI - World Data Center, 1978, 61 p.
3. Issues of atmospheric pollination research.-tb., "Soviet Georgia", 1978, 40 p.
4. Forecast of hydrometeorological conditions of the Colchis lowland after drainage - (State of the natural environment). - L.: Gidrometeoizdat, 1983, 247 p. (With the collective of authors).
5. Issues of monitoring air pollution on the territory of Georgia. - L.: Gidrometeoizdat, 1985, 84 p.
6. Climate of Tbilisi - (Meteorological aspects of air pollution in the city). – St. Petersburg, Gidrometeoizdat, 1992, 230 p. (With the collective of authors).
7. Meteorological aspects of ecological monitoring of the atmosphere. - Tb., Georgian Academy of Sciences, HMI, 2005, 265 p. ISBN 99928-885-3-9
8. Mathematical modeling of possible emergency situations during the transportation and storage of petroleum products (on the example of the Kulevi terminal) - Tbilisi, HMI, 2009, 112p. (With the collective of authors). ISSN 1512 - 0902 ISBN 99928-885-5-5
9. Ecological Monitoring. - Tbilisi, HMI, 2019, 244, p. ISBN 978-9941-8-1490-7
10. Explanatory Glossary of Terms on Basics of Ecology
In the field of sciences about Earth and Environment HMI, 2024, 275, p. ISBN 978-9941-8-6228-1

List of scientific works published in 2010-2024

- 1. Gunia G. et al. 2010.** Influence of foehn phenomena on air pollution in mountain areas. - M: Meteorology and hydrology, **2010**, N.6, pp.67-74 ISSN 0130 - 2906 DOI: [10.3103/S1068373910060075](https://doi.org/10.3103/S1068373910060075)
- 2. Gunia G., Svanidze Z., Gersamia A., Svanidze L. 2010.** Questions of an estimation of results of technogenic loading of environment of cultural tourism for the purpose of assistance to the policy of economic development of the country. - In: Proceedings of the Annual Scientific International Conference of Georgian Technical University, Open Diplomacy Association and Scientific Magazine "Authority and Society (History, Theory, Practice)", 12.06.10., - Tbilisi, "Authority and Society", **2010**, #2(14), pp. 64-79. ISSN 1512-374X
- 3. Svanidze Z., Guniya G., Svanidze L., Beruashvili T.** Investigation of the content of heavy metal impurities in the river waters of some industrial districts in the mountainous conditions of Georgia. - Materials of the VI International Symposium "Human Ecology and Medical and Biological Safety of the Population" (Greece, Thessaloniki, October 24 - November 3, 2010). - Moscow, **2010**, pp. 137-143. (Russian, English). ISBN 978-5-9902441-1-5
- 4. Gunia G., Svanidze Z. 2010.** Methodical Questions of Research of Time Distribution of Concentration of Microimpurity of Atmosphere and Sources of their Emissions. – In: Proceedings of the International Scientific-Technical Conference "Sustainable Development and Protection of Environment", 10-11 November 2010 – Tbilisi, Georgian Technical University, 2010, pp.429-431 ISBN: 978-9941-14-868-2
- 5. Gunia G., Svanidze Z. 2011.** About the basic questions of reliability and uniformity of databases of monitoring of factors of climate change and technogenic loading of environment /Proceedings of International Scientific Conference "Environment and Global Warming"- Vakhushti Bagrationi Institute of Geography of Ivane Javakhishvili Tbilisi State University, Georgia, 15-16/ 09/2011 – Collected papers "New Series", **2011**, N3(82), pp.71-76. ISSN 2233-3347
- 6. Gunia G., Svanidze Z. 2011.** About the Basic Questions of Uniformity and Reliability of Datababases of Eco-Meteorological Monitoring of Environment / Proceedings of International Scientific-Technical Conference "Actual problems of Hydrometeorology and Ecology ", dedicated to the 90th anniversary of birth Academician Givi Svanidze:", 27-29/09/2011, Tbilisi/- Transactions of the Institute of Hydrometeorology at the GT – Tbilisi, 2011,v.117, pp 118-121. ISSN 1512 – 0902
- 7. Gunia G., Svanidze Z., Gersamia A., Svanidze L. 2011.** Working out of questions of complex monitoring of environment for the purpose of an estimation of the investment environment with high

reliability. /Proceedings of Annual Scientific International Conference “Authority and Society 2011” – Scientific magazine “Authority and Society (History, Theory, Practice)” GTU, v.I, #4(20), pp.81-94
EISSN 1512-4029

8. Gunia G., Svanidze Z., 2012. Questions of an assessment of features of influence of the hydroelectric constructions in mountain regions on an ecological condition of adjacent territories. - /Proceedings of International Conference dedicated to the 90-th anniversary of Georgian Technical University “Transactions“ “Basic Paradigms in Science and Technology Development for the 21st Century”, Tbilisi, September 19-21, 2012 – Tb., 2012, V.I, pp. 42 - 47. (Rus.) **ISSN 1512-0996**

9. Gunia G., Svanidze Z, Svanidze L, Cercvadze T. 2012. Sustainable development requirements in the field of natural environment protection of Georgia /Proceedings of Annual Scientific International Conference “Authority and Society”, 22.12. **2012**, GTU, Tbilisi – Scientific magazine “Authority and Society (History, Theory, Practice)”, v.I, #4(24), pp.65-75. EISSN 1512-4029

10. Gunia G., Svanidze Z 2013. Modern Ecological Aspects of Ensuring Sustainable Economic Development of Georgia /Proceedings of International Scientific and technical conference "Actual Environmental and Hydrometeorological Problems"- 28-30/05/2013. /Transactions of the Institute of Hydrometeorology at the GTU, **2013**, v.#119, pp.303-308 (Rus.) ISSN 1512 – 0902

11.Svanidze Z., Gunia G., Svanidze L.2013. About monitoring of metal impurity in environments of areas of intensive anthropogenous influence of Georgia /International Scientific and technical conference "Actual Environmental and Hydrometeorological Problems"- 28-30/05/ **2013**,v.119, pp.207-211. (Eng ., Summ. Georg., Eng., Russ.). ISSN 1512 – 0902

12. Gunia G., Svanidze Z., Gersamia A. 2013. Environmental problems in the conditions of sustainable economic development of Georgia /Proceedings of the International conference “Modern Problems of Geography”, 7-9/11/2013, Georg.Acad. Sci.Tbilisi,- Collected Papers of Vakhushti Bagrationi Institute of Geography, **2013**, N5(84), pp.220-222. (Geo.) ISSN 1512-1224.

13. Gunia G., Svanidze Z., Svanidze L. 2013. Some Results of Monitoring of the Content of Microimpurity in Environments of Areas of Intensive Anthropogenous Influence of Georgia and Methods of Reduction of their Technogenic Loading /Proceedings of Annual Scientific International Conference of Business-Engineering faculty of Georgian Technical University, Open Diplomacy Association and Scientific Magazine "Authority and Society (History, Theory, Practice)" “Authority and Society - 2013”, Tbilisi, GTU, 16/11/2013 – Tb., GTU, 2013, No. 4(28), pp.121-130. (Rus.) EISSN 1512-4029.

14. Svanidze Z. Gunia G., Tsertsvadze T. Svanidze L. 2013 . Research of the content of arsenic in territories, adjacent to Lukhumi's arsenical fields and the recommendation about his reduction. – Tb."Mining Journal", 2013, No. 1(30), pp.39-42. ISSN 1512-407X

15. Svanidze Z. Gunia G., Svanidze L., Tsertsvadze T. 2013. The Content of Toxic Metals in Vegetables and Frutts of Some Regions of Georgia and Observance of Ecological Safety. - Tb."Mining Journal", 2013, No. 1(30), pp.43-46. ISSN 1512-407X

16. Gunia G. 2014. About Environmental Problems in the Conditions of Sustainable Economic Development of the Country/ Reports, presented on the International Scientific Conference 80 years of the M.Nodia Institute of Geophysics “Advanced Problems in Geophysics”, Tbilisi,9-10/12/2013.- Tb., **2014**, pp.80-85. http://dSPACE.nplg.gov.ge/bitstream/1234/53480/1/Internacional_Conference.pdf

17. Gunia G., Svanidze Z., Svanidze L.2014. Environmental Problems of Sustainable Development of Modern Energetics in the Mountain Regions. /Annual Scientific International Conference “Authority and Society - 2014” -Scientific magazine “Authority and Society (History, Theory, Practice)”, 2014, v.1, № 4 (32), pp. 99–111. ISSN 1512-374X

18. Gunia G, Svanidze Z. 2015. About environmental problems of sustainable development of hydropower systems in mountain regions. - Proceedings of the International Scientific-Technical Conference "Extreme Hydrometeorological and Ecological Phenomena in the South Caucasus", Tbilisi, HMI - GTU, 2015/28/05, Hydrometeorological Institute of Georgian Technical University Transactions, 2015, v.121, pp.70-75. ISSN 1512 – 0902

19. Gunia G., Svanidze Z. 2015. Estimates of risks and characteristics of sustainable renewable power sources of large hydroelectric dams in mountainous regions of Georgia. /Annual Scientific International Conference “Authority and Society - 2015” -Scientific magazine “Authority and Society (History, Theory, Practice)”, 2015, v.I, #4(36), pp.232-243. EISSN 1512-4029

- 20. Gunia G., Svanidze Z. 2015.** Results of monitoring the ecological state of natural environments in a number of mining regions of Georgia. - Mining Journal (სამთო ჟურნალი), 2015, N1 (34), 96-100 pp. (Rus.). ISSN 1512-407X
- 21. Gunia G., Svanidze Z.** On the Monitoring of Abiotic Factors of the Environment, in Order to Produce Eco-Friendly Products in the Crop Production./Proceedings of the International Scientific Conference “Modern Technologies to Produce Ecologically Pure Products for Sustainable Development of Agriculture” on 28-30/09/2016, Tbilisi, **2016**, pp.138-141. (ISBN 978-9941-0-9099-8)..
- 22. Gunia G., Svanidze Z. 2016.** Problems of pollution of the natural environment by microimpurities technogenic origin. /Annual Scientific International Conference of Business-Technologies Faculty of Georgian Technical University, Open Diplomacy Association and Scientific Magazine “Authority and Society (History, Theory, Practice)” – 2016” - Scientific magazine “Authority and Society (History, Theory, Practice)”, GTU, 2016, #4(40), v.1, pp.148-160. ISSN 1512-374X
- 23. Gunia G., Svanidze Z. 2017.** Issues of monitoring and evaluation of the mechanism and degree of pollution of agricultural products with toxic metals. - Pressing problems in hydrometeorology and ecology: Transactions of the In-te of Hydrometeorology at the Georgian Technical University, v.124, 2017, pp.62-67. ISSN 1512 – 0902
- 24. Gunia G., Svanidze Z. 2017.** Issues of assessing the representativeness of databases of eco-meteorological monitoring of the natural environment.- Mining Journal, # 1(38), 2017, pp. 203-207. (Rus.). ISSN 1512-407X)
- 25. Gunia G., Svanidze Z. 2017.** To the Questions of Monitoring of Food Products Pollution by Micro Impurities. - 11- th Annual Scientific International Conference of Business-Technologies Faculty of Georgian Technical University, Open Diplomacy Association and Scientific Magazine “Authority and Society (History, Theory, Practice)” - 25/11, 2017. - Scientific Magazine “Authority and Society ”, GTU, № 4(44), **2017**, v.I, pp158-170. ISSN 1512-374X
- 26. G.Gunia, Z.Svanidze. 2018.** To Questions of Evaluating of Background Air Pollution of Resort Areas of the Black Sea Coast of Georgia. Scientific magazine of The Open Diplomacy Association “Authority and Society ”, GTU, v.I, № 2(46), 2018, pp.176-187. (ISSN 1512-374X)
- 27. Svanidze Z., Gunia G., Svanidze T., Kakhniashvili L. 2018.** Monitoring of lead contamination of Tbilisi's air basin. - Mining Journal 2(41), 2018, pp. 93-96 (ISSN 1512-407X)
- 28. G.Gunia, Z.Svanidze. 2018.** Environmental Factors and General Issues of Their Impact. 12- th Annual Scientific International Conference of Business-Technologies Faculty of Georgian Technical University, Open Diplomacy Association and Scientific Magazine “Authority and Society (History, Theory, Practice)”, “Authority and Society - 2018”, GTU, №4(48), 2018, ტ. II, გვ. 170-180. ISSN 1512-374X
- 29. G.Gunia, Z.Svanidze. 2018.** On Modern Problems of Ecological Monitoring of Environment Pollution by Metallic Impurities. - Bulletin of Russian Academy of Natural Sciences (PAEH), 2018, N5, pp 85-89 ISSN 1682–1696
- 30. G.Gunia.** Ecological Monitoring. Tbilisi, HMI, **2019**, 244 p. ISBN 978-9941-8-1490-7
- 31. G.Gunia, Z.Svanidze. 2019.** Evaluations of the ecological - economic efficiency of the construction of artificial reservoirs in mountainous regions. - Ivane Javakishvili TSU Vakhushti Bagrationi Institute of Geography, International Scientific Conference: "Current Problems of Geography", 7-8 /11/2019, pp.71- 75. (Engl.) ISBN 978-9941-13-885-0
- 32. G.Gunia, Z.Svanidze. 2019.** Ecological aspects of sustainable socio-economic development. International scientific and technical conference "Nature Protection and Sustainable Development", Faculty of Chemical Technology and Metallurgy of the Technical University of Georgia - 11-12 / 11/2019, pp.85-89. ISBN 978-9941-8-1875-2
- 33. Gunia G. 2019.** Aspects of surface monitoring of environmentally “dangerous” meteorological phenomena in Georgia. International Scientific Conference „Natural Disasters in Georgia: Monitoring, Prevention, Mitigation“, Dedicated to the 175th and 120th anniversary of the organization of regular magnetic-meteorological and seismic observations in Georgia. Tbilisi, December 12-14, 2019, pp.155-158. ISBN 978-9941-13-899-7
- 34. Gunia G. 2019.** Aspects of monitoring biomedical and physico-chemical characteristics of atmospheric dust particles. // Transactions HMI, GTU – 2019, V.127, pp.72-75. - Georg. Abst.: Georg., Eng., Russ.

- 35. Gunia Garry. 2020.** Questions of Assessing the Ecological Load of the Cultural Tourism Environment. International Scientific Conference „Modern Problems of Ecology“ Proceedings, Tbilisi-Telavi, Georgia, 26-28 September, **2020**, v.7, pp.412-414. ISSN 1512-1976
- 36. Gunia Garry.2020.** Features of atmospheric dust. /Scientific Reviewed Proceedings of the IHM, GTU. - 2020 - vol.129 - pp.67-70. Georg.; Abst.: Georg., Eng., Rus. ISSN 1512 – 0902
- 37. Gunia Garry. 2020.** To the issues of assessing the spatio-temporal distribution of the indicator of the ecological load of the atmosphere. /Scientific Reviewed Proceedings of the IHM, GTU. - 2020 - vol.129 - pp.71-76. Georg.; Abst.: Georg., Eng., Rus. ISSN1512 - 0902
- 38. Gunia G.S, Svanidze Z.S** Results of Monitoring the Ecological Impact of the Natural Environment of a Number of Anthropogenic Impact Areas of Georgia /Proceedings of the International Scientific and Practical Conference on the 100th Anniversary of the Hydrometeorological Service of the Republic of Uzbekistan “Hydrometeorology, climate change and environmental monitoring: Actual problems and ways to solve them”, May 7, **2021**, Tashkent, Uzbekistan, 2021, pp. 5-7. ISSN 2181- 1261
- 39. Gunia G. S.** Modern ecological problems of sustainable economic development of the country. - Scientific refereed collection of works of the Institute of Hydrometeorology of the Georgian Technical University. Problems of Hydrometeorology and Ecology, No. 131, **2021**, pp. 51 - 55. ISSN 1512 – 0902
- 40. Gunia Garry .** On the development of a dictionary - reference book of terms and definitions of the fundamentals of ecology. - International Scientific Conference „Natural Disasters in the 21st Century: Monitoring, Prevention, Mitigation“ Proceedings. Tbilisi, Georgia, December 20-22, **2021**, Publish House of Iv. Javakhishvili Tbilisi State University,**2021**,pp.113-116. ISBN 978-9941-491-52-8
- 41. Gunia Garry S.** On the elaboration of a dictionary-reference book of unified terms and definitions of the fundamentals of ecology.- Pressiding Problems in Hydrometeorology and Ecology Dedicated to the 100th Anniversary of the Georgian Technical University - Collection of works IHM, GTU, **2022**, v.132, pp 42 – 46. (Georg. Abst.: Georg., Eng., Russ.) ISSN 1512 – 0902 doi.org/10.36073/1512-0902
- 42. Gunia Garry, Svanidze Zizi.** To questions of eko-meteorological monitoring of factors of climate change and technogenic loading of environment.(Engl.) //Proceedings of the International Scientific Conference „Modern Problems of Ecology“. Batumi,Georgia, October 16-17, **2022**, pp.54- 58. ISSN 1512-1976
- 43. Svanidze Zizi, Gunia Garry.** The monitoring of intensively polluted areas of groundwater with heavy metals of some region of Geogegia. /16Annual Scientific International Conference of Business-Technologies Faculty of Georgian Technical University, Open Diplomacy Association and Scientific Magazine “Authority and Society (History, Theory, Practice)” “Authority and Society - 2022” (28 October 2022). – **2022**, pp25 – 31 ISSN 1512-374X <http://odageorgia.ge/> <https://doi.org/10.36073/1512-374X>
- 44. Gunia G., Svanidze Z.** On ecological and bioclimatic conditions for the development of cultural tourism in Georgia. - Transactions IHM, GTU, **2023**. V.133., pp, 96 - 99. (Georg., Summ.: Georg., Eng.) ISSN 1512 – 0902 doi.org/10.36073/1512-0902
- 45. Svanidze Zizi, Gunia Garry.** Geographic distribution of some heavy metals (Cd, Zn, Cu, Pb) in Georgia. - Georgian Technical University, Scientific magazine “Authority and Society (History, Theory, Practice)”, **2023**, № 2 (66), pp.128 - 144 ISSN 1512-374X doi.org/10.36073/1512-374X
- 46. Svanidze Zizi, Gunia Garry.** Monitoring of heavy metals (Cd, Zn, Cu, Pb) pollution of some rivers of Georgia. - Georgian Technical University, Scientific magazine “Authority and Society (History, Theory, Practice))”, **2023**, №4(68), pp.102 – 114. ISSN 1512-374X doi.org/10.36073/1512-374X