

2022 Call Research Grants for Young Scientists
Ranking Lists in accordance with the scientific fields

1. Natural Sciences

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-171	The Little Ice Age Glacier-Climate Reconstruction in the Greater Caucasus	Ilia State University	26
2	YS-22-1062	Hail study on the territory of Georgia	Ivane Javakhishvili Tbilisi State University	25
3	YS-22-415	Large-scale Mapping and Assessing of the Riparian Forest Landscapes within the Eastern Georgian Lowland Area	Ivane Javakhishvili Tbilisi State University	25
4	YS-22-407	Initiation of coronal mass ejections by massive coronal rain	EVGENI KHARADZE GEORGIAN NATIONAL ASTROPHYSICAL OBSERVATORY	24
5	YS-22-245	Photogrammetry of the Platform Karst of Georgia	Ivane Javakhishvili Tbilisi State University	24
6	YS-22-2100	Investigation of possible synergistic and antagonistic effects of phage-antibiotic combinations on members of Klebsiella genus	G. Eliava Institute of Bacteriophages, Microbiology and Virology	24
7	YS-22-826	Landslide process detection and motion dynamics modelling using satellite inSAR and simulation model within the Tbilisi area	Ilia State University	23
8	YS-22-1184	Structural properties of sets and degrees of unsolvability	Ivane Javakhishvili Tbilisi State University	23

9	YS-22-267	The deep structure of the Gare Kakheti central part, using seismic profiles, Georgia	Ivane Javakhishvili Tbilisi State University	22
10	YS-22-1989	Investigation of radon radioactive emission in Tbilisi subway stations	Ivane Javakhishvili Tbilisi State University	22
11	YS-22-998	Testing Dark Universe through Cosmological Observations	EVGENI KHARADZE GEORGIAN NATIONAL ASTROPHYSICAL OBSERVATORY	22
12	YS-22-1362	Investigation of Some Important Properties for Unranked Theories	Ivane Javakhishvili Tbilisi State University	22
13	YS-22-492	Investigation of radiation defects of n-type monocrystalline Si _{1-x} Gex (x≤0.05) alloys by optical spectroscopy and internal friction methods	Ilia Vekua Sukhumi Institute of Physics and Technology	21
14	YS-22-369	The single-primer Quadruplex priming amplification	Ilia State University	21
15	YS-22-1941	Boundary Value Problems for the Lamé Equation in an Angular Domain	The University of Georgia	20
16	YS-22-1898	Bacteriophages as a Potential Tools for Biocontrol of Listeria monocytogenes in Food Products	G. Eliava Institute of Bacteriophages, Microbiology and Virology	20
17	YS-22-266	Chemical research of the wine industrial production residues and the Prospects of the use of new functional products based on innovative technologies for the purposes of valorization.	Batumi Shota Rustaveli State University	20
18	YS-22-417	Increase the SNR of the phase spectrophotometer	Batumi Shota Rustaveli State University	20
19	YS-22-1152	Colloidal nanocarriers based on pluronics: Study of drug release kinetics in vitro	Ivane Javakhishvili Tbilisi State University	19

20	YS-22-3268	Development of "green" innovative technologies for the production of natural low-calorie sweeteners from stevia (stevia rebaudiana Bertoni) for the valorization of production waste	Batumi Shota Rustaveli State University	19
21	YS-22-1346	Point-charge wakefield calculations from finite length bunch wake potentials for different geometrical structures	LEPL-Kutaisi International University	17
22	YS-22-496	The novel macroheterocyclic nanocontainers bearing non-toxic metabolic moieties	Agricultural University of Georgia	16
23	YS-22-1952	Electronic atlas of viticulture and winemaking of Kakheti region and geo-information system	Ivane Javakhishvili Tbilisi State University	15
24	YS-22-1174	Implementation of Digital Pathology workflow for primary diagnostic, remote consultation and education purposes within the academic institution	Ivane Javakhishvili Tbilisi State University	14
25	YS-22-3554	Evaluation of Soil Erosion Processes in Duruji River Catchment Basin Using GIS technologies	Georgian Technical University	13
26	YS-22-183	Fejer means and T means on Martingale Hardy spaces	The University of Georgia	13

2. Engineering and Technology

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-1443	Improving modern methods of restoring the electrical properties of high-speed electronic devices and components	Alte University	25

2	YS-22-221	Obtaining high quality concentrate of precious metals by flotation method of enrichment	LEPL G.Tsulukidze Mining Institute	25
3	YS-22-175	Impact of BN and TiN nanoinclusions on the microstructure and superconducting properties of Y(LRE)Ba ₂ Cu ₃ O _y HTSs (LRE= Sm and Eu)	Georgian Technical University	24
4	YS-22-385	Monitoring deformations of the Enguri dam using satellite-based geodetic and remote sensing techniques	Ivane Javakhishvili Tbilisi State University	24
5	YS-22-2666	Creating a wastewater treatment technology line based on biological tools	Agricultural University of Georgia	24
6	YS-22-927	Research of imbalance in natural gas accounting due to natural and climatic factors and development of balancing methodology	Georgian Technical University	23
7	YS-22-3384	Building symmetric algorithms and cryptanalysis using genetic operations	Sokhumi State University	22
8	YS-22-423	Synthesis and in vitro anticancer effects evaluation of Doxorubicin-loaded / Iron oxide colloidal nanocomposites on human triple-negative breast cancer cells	Georgian Technical University	21
9	YS-22-4190	Obtaining new armor composite materials and researching their properties	Georgian Technical University	21

10	YS-22-375	Research into tribological and dynamical processes of the locomotive – rail-track interaction and development of the bogie new design	Raphiel Dvali Institute of Machine Mechanics	20
11	YS-22-934	Post-quantum encryption schemes and their use in 5G and beyond networks	Caucasus University	20
12	YS-22-664	Mobile Phone Antenna Matching Study on Human for Different RF Exposure Scenarios	Ivane Javakhishvili Tbilisi State University	20
13	YS-22-605	High-temperature thermochemical treatment of amortized tires and producing nanocrystalline carbon black	Ferdinand Tavadze Institute of Metallurgy and Materials Science	20
14	YS-22-234	Synthesis and Electromagnetic Properties of Hybrid Polymer Nanocomposites	Ilia Vekua Sukhumi Institute of Physics and Technology	20
15	YS-22-695	Study of antibacterial liposomes made with new nanotechnology and determine the effectiveness of action on bacteria	Ivane Javakhishvili Tbilisi State University	19
16	YS-22-1394	An Ability to use a new element base for safe movement systems of rolling stock	Georgian Technical University	18
17	YS-22-1319	A New Method for Calculating Composite Spatial Constructions, Algorithm and Software	Georgian Technical University	17
18	YS-22-195	Exploring the anti-lipase activity of Georgian berries and preparation of a highly active medicine from them	Agricultural University of Georgia	15

19	YS-22-454	Obtaining super thin layers by modernizing existing technologies	Ferdinand Tavadze Institute of Metallurgy and Materials Science	14
20	YS-22-1310	Elaboration of the technology of ecological rational enrichment gold containing ores on the basis of statistical modeling	LEPL G.Tsulukidze Mining Institute	13

3. Medical and Health Sciences

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-814	Equipping primary care sector to address youth marijuana use in Georgia	David Tvildiani Medical University	27
2	YS-22-3254	Study of the effects of Deep Brain Stimulation of the Medial Septum on memory function and hippocampal morphology and neurochemistry in rat model of aging induced by administration of D-galactose	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	25
3	YS-22-1663	Assessment and prevention of pain-associated chemotherapy-induced neuropathy in oncology settings: where we are now and where we can come?	Ivane Javakhishvili Tbilisi State University	24
4	YS-22-3231	Study of the effect of Deep Brain Stimulation of the nucleus basalis magnocellularis on autism related behavior and prefrontal cortex morphology and neurochemistry and in valproic acid induced rat model of autism	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	24

5	YS-22-4142	Study of effects of environmental enrichment on the gender-specific behavioral, structural and molecular alterations in an animal model of autism induced by prenatal exposure to valproic acid	LEPL IVANE BERITASHVILI CENTER OF EXPERIMENTAL BIOMEDICINE	23
6	YS-22-1675	Subgroups and risk stratification of high grade B cell Lymphomas	Scientific-Research Center-Mega-Lab	22
7	YS-22-3061	Evaluation of plasma circulating p28 / gankirin and micro-RNA markers in the diagnosis of renal cell carcinoma and its recurrence	Ivane Javakhishvili Tbilisi State University	22
8	YS-22-1091	The spectrum of nosocomial infections and the study of the antibiotic resistance profile in patients infected with COVID-19	Batumi Shota Rustaveli State University	18
9	YS-22-1852	The role of the new biological markers in determining the prognosis of heart failure	HealthCare Innovation and Implementation Research Platform (აბრევიატურა: HCRP)	18
10	YS-22-2833	Development of nanocomposite gel and film based on Ispani Sphagnum peat peloid antibacterial water for Recurrent aphthous stomatitis (RAS)	Tbilisi State Medical University	14
11	YS-22-1235	Genotyping of CYP2A6*1 and CYP2A6*4 in Georgian Population for assessment tobacco-induced Lung cancer risks and evaluation of activity of ribosomal cistrons in smokers and in lung cancer patients	Ivane Javakhishvili Tbilisi State University	14
12	YS-22-193	Harmonization of regulatory legislation on assisted reproductive technologies in Georgia with world practice	Caucasus University	13
13	YS-22-283	Inhibition of Cutaneous Melanoma Cells Proliferation by Titanium Dioxide Nanoparticles Sensitized with Fluorescent Dyes	Georgian Technical University	13

4. Agricultural Sciences

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-2184	Using New Adsorbent Georgian Bentonite Clay “Askangel” in Trout Feed	Agricultural University of Georgia	21
2	YS-22-599	The effect of crop rotation on potato wart disease (E. endobioticum)	Batumi Shota Rustaveli State University	20
3	YS-22-2011	Using of Innovation Methods for Protection Reclamation Objects from Floods (on the example of Dusheti Municipality)	ECOCENTER FOR ENVIRONMENTAL PROTECTION	20
4	YS-22-2907	The Study Influence of Irrigation Water Polluted with Heavy Metals at the Quality of Agricultural Crops	ECOCENTER FOR ENVIRONMENTAL PROTECTION	20
5	YS-22-1116	Creating a predictable model of natural restoration for subalpine birch forest	Scientific-Research Centre of Agriculture	14
6	YS-22-3865	The Effectiveness of Innovative Drainage System and Its Practical Use for Improvement Amelioration Properties of Soil-ground in the West Georgia Wetland Soils	ECOCENTER FOR ENVIRONMENTAL PROTECTION	11

5. Social Sciences

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-565	Digital Trust Formation in Sharing Economy – Transition to Digital Economy (The Case of Georgia)	Business and Technology University	25
2	YS-22-1085	Gender bias in Court	Ilia State University	24

3	YS-22-548	The crisis of small and medium business subjects and its prevention in the post-pandemic period in Georgia	Batumi Shota Rustaveli State University	24
4	YS-22-426	Supporting Teaching and Research of Global Animal Law in Georgia	Academician Levan Aleksidze Foundation	24
5	YS-22-1672	Ex-Ante Economic Evaluation of the Free Trade Agreement between Georgia and the United States	Caucasus University	23
6	YS-22-268	Between the Sea and the Land: Work and Family Lives of Georgian Sailors	Ilia State University	23
7	YS-22-482	The Use of Solar Energy In The Real Estate Market	Georgian Technical University	22
8	YS-22-4197	Reading the Ruins of Tao-Klarjeti	Ilia State University	22
9	YS-22-3228	Between past and Future: Unequal Inheritance Distribution as Gender Based Economic Exploitation and Structural Violence	Ilia State University	22
10	YS-22-1076	Parenting and identity formation in different socio-economic contexts – multi-informant, mixed-method study	Ilia State University	22
11	YS-22-784	Ensuring Georgia's cyber security in the context of global digital transformation	Batumi Shota Rustaveli State University	20
12	YS-22-616	Gender and Creativity: Different Roads to Creative Achievements	Ivane Javakhishvili Tbilisi State University	20
13	YS-22-1909	Georgian Competition Law: The Past, Present, and Future	Ilia State University	19

14	YS-22-3085	Attitudes towards Russia and Vaccination during War in Ukraine and Global Pandemic: Cognitive-motivational Model	Ilia State University	18
15	YS-22-3367	Systematic Arrangement of Professional Trainings of Judicial Candidates and Trainings of Judges as a Prerequisite for an Independent and Effective Judiciary	Alte University	16
16	YS-22-1068	Agrarian cluster as a possible solution to the supply chain problems in Georgian agriculture	Ivane Javakhishvili Tbilisi State University	15

6. Humanities

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-1400	Contemporary socio-cultural transformation of the Georgian traditional music	V. Sarajishvili Tbilisi State Conservatoire	27
2	YS-22-753	Archival Legacy of Barbara and Nino Kipiani – Textual and Historical-Cultural Studies	Korneli Kekelidze Georgian National Centre of Manuscripts	25
3	YS-22-219	The research of burial, memorial and relic monuments of Duruji riverbank temple complex in religious and cultural context	The Georgian National Museum	24
4	YS-22-1975	Georgia's Trade Relations in XIII-XV cc.	Ivane Javakhishvili Tbilisi State University	24

5	YS-22-348	Linguopolitological Analysis of Oral Georgian Political Speech from Gender Perspective	Batumi Shota Rustaveli State University	24
6	YS-22-953	"Georgian-English translations of Svan Tales"	Ivane Javakhishvili Tbilisi State University	24
7	YS-22-511	Scholarly Edition of the Collection "The Golden Spring" Composed by Gabriel Mtsire	Association for Textual and Editorial Studies and Digital Humanities	24
8	YS-22-220	Mountainous Colchis (Lechkhumi/Kvemo Svaneti): Its importance in the development of metallurgy in the ancient world	Tsageri Historical Museum	23
9	YS-22-154	Political Discourse in Irish Modernist and Post-Modernist Literature (James Joyce, Flann O'Brien, Frank McGuinness)	Ivane Javakhishvili Tbilisi State University	20
10	YS-22-169	The problem of self-movement of the soul and its self-knowledge in ancient, late ancient and Ioane Petritsi's philosophy	Ilia State University	19
11	YS-22-3281	The social life of Davit Gareji monastery complexes	The Georgian National Museum	18
12	YS-22-152	Subsistence, activities and mobility patterns of Early Holocene hunter-gatherers of South-Western Georgia and their role in the transition to agriculture in the Caucasus	Batumi Shota Rustaveli State University	18
13	YS-22-1464	The Autobiographical Narrative of Prison: Georgian Experience of the 20th Century	Ivane Javakhishvili Tbilisi State University	18
14	YS-22-319	Deleuze and contemporaneity	Ivane Javakhishvili Tbilisi State University	16

15	YS-22-1092	Postcolonialism, Utopia and Georgian Literature	Ilia State University	15
16	YS-22-924	The Attitudes towards Catholicism in the Georgian Orthodox Ecclesiastical Literature	Caucasus University	15
17	YS-22-4228	New Media and CGI	Shota Rustaveli Theater and Film Georgia State University	14
18	YS-22-201	Research of Georgian historical shoes and leather accessories for the development of traditional and modern design-construction	Akaki Tsereteli State University	14
19	YS-22-199	Ambrose Nekreseli, Book of Cards (H-1334), Textological Analysis, Source Studies (Monograph)	Korneli Kekelidze Georgian National Centre of Manuscripts	11
20	YS-22-2105	The language of the war - how do we understand it?	Batumi Shota Rustaveli State University	9

7.Georgian Studies

N	Project ID	Project Title	Host institution	Final Score
1	YS-22-209	Fazli Beg Khuzani Isfahani's "A chronicle of the reign of Shah Abbas" – a new source for studying the history of Georgia and Georgian-Iranian relations in the first half of the 17th century (study, translation, commentaries)	Ilia State University	25
2	YS-22-679	Debt in Feudal Georgia	Ivane Javakhishvili Tbilisi State University	21
3	YS-22-2294	Developing Domestic Strategies for Regulating the Securities Markets and Protecting Investors - Challenges and Recommendations	Ilia State University	21

4	YS-22-2249	Soviet language policy in Georgia (30s of XX century)	Sokhumi State University	21
5	YS-22-2176	Didactic Materials for Functional Grammar of Georgian as a Foreign Language (For Levels A1 and A2)	Ilia State University	16