## List of scientific works of

## prof. Tornike Kupatadze

N	Title of scientific works	Printed or handwritten	Publishing house, magazine (number, year) or copyright certificate number printed	Number of pages or plate	Last name of the co- author
1	2	3	4	5	6
1	Limiting the speed of movement and the length of long descents in areas with steep slopes when designing railways	printed	Technical University of Georgia Scientific works 16(372) Tbilisi 1990	5-10	Koniashvili A.F. Kvantaliani G.G.
2	Protection of deep excavations from snow drifts on high-mountain sections of railways	printed	"Transport construction"  Nº4 Moscow 17 1992		Koniashvili A.F. Lomidze I.N.
3	On the principles of using catching dead ends	printed	"Transport construction"  Nº10 Moscow  1992 8-9		Koniashvili A.F.
4	Actual problems of reconstruction and development of Georgian railways	printed	Scientific-technical conference "Georgia's transport problems" Abstracts of reports 1992	38-39	O. Kutsnashvili R. Shalamberidze
5	Opinions for strengthening the Surami Pass section of the Georgian Railways	printed	scientific-technical conference "Transport problems of Georgia"  Abstracts of reports 1992		A. Koniashvili R. Shalamberidze
6	Calculating the strength and stability of the track superstructure	printed	methodical instructions for completing the course and diploma project for students of railway construction, track and track management specialty No. 7(16) Tbilisi 1992.	1-37	E.Moistsrapishvuli
7	Analysis of the capacity of the Poti-Senak railway section and measures to ensure its strengthening	printed	Georgian Technical University 80-82 Works 2 (407) Tbilisi 1995		P.Tsagareishvili
8	Some opinions about increasing the capacity of	printed	"Legia and company's" university papers 2 volumes		A. Baliashvili G.Zaqareishvili

	development of transport		Tbilisi 1998	207-	
	network of Georgia			212	
	About the construction of		"Legia and company's"		
9	railway lines connecting	printed	university papers		A. Baliashvili
	Georgia-Turkey railways		2 volumes	215-	
	(Tbilisi-Kars)		Tbilisi 1998	217	
	Reinforced concrete shoral		Path	00.00	7.0 1:1 1
10	new type	_	Moscow 1992 No. 5 2000	32-33	Z. Oragvelidzedze
		printed			
	The issue of the		"Transport"		
11	construction of the Black		1-4 Tbilisi	34-36	
	Sea railway line	printed	2003		
	The main stages of the				
12	development of the	printed	"Chronicler"		
	Transcaucasian railway,		Tbilisi 2004	1-586	
	part I (from the 60s of the		Mo no g r a p h		
	19th century to the 20s of		_		
	the 20th century)				
	The problem of the		"Transportation"		
13	Samtredia-Batumi railway	printed	3-4 Tbilisi 2003	32-36	
	and its construction	1			
	Construction of Tkibuli-		"Transportation"		
14	Kutaisi railway line	printed	3-4 Tbilisi 2003		
1.1	itataisi faifway fific	printed	5 1 1511151 2005		
	Construction of a bypass		Mechanical problems		
15	road at the pass section	printed	No. 1 (18) Tbilisi 2005	92-97	T. Churadze
	Development of the		Mechanical problems		
16	Transcaucasian railway in		No. 1 (18) Tbilisi 2005	98-103	
	the southern direction	printed			
17	Railway construction fever		"Intellect"	39-41	
	•	printed	No. 1 (21) Tbilisi 2005		
18	Construction of Borjomi		"Intellecti"	42-43	
	railway line	printed	No. 1 (21) Tbilisi 2005		
	Construction of	•			
	transcaucasian railway	printed	"Clio"		
19	necessary environmental	-	No. 25, Tbilisi, 2005		
	and economic conditions				
	Construction of the Poti-				
20	Tbilisi railway line and		"Clio"		
	attracting private capital for	printed	No. 25, Tbilisi, 2005		
	its implementation	•			
	The beginning of railway		"clio"		
21	construction in the Russian	printed	No. 26, Tbilisi, 2005		
	Empire				
	The influence of the first				
22	results of the operation of	printed	"Science and Technology"		

23	the Transcaucasian railway on the development of the region until the beginning of the 20th century Borjomo-Kars-Olthu railway construction issues	printed	No. 4-6 Tbilisi 2005  "Science and Technology"  No. 4-6 Tbilisi 2005		
24	An attempt to connect the railways of Transcaucasia and the North Caucasus in the direction of Sukhumi-Senaki in the second half of the twentieth century (plan by Professor Yu. Protsenko)	printed	Mechanical problems No. 2 (19) Moscow 2005		
25	Problems of Kavkasioni transshipment railways until the 20s of the twentieth century	printed	Mechanical problems No. 1 (19) Moscow 2005		
26	Caucasus Pass Railway according to the project of F. Ridzevski and V. Furtseladze	printed	"intelligence" No. 2 (22) Tbilisi 2005		
27	Construction of the Tbilisi- Baku railway line printed "intelligence"	printed	"intelligence" No. 2 (22) Tbilisi 2008		
28	An attempt to electrify a section of the Suramskaya pass railway	printed	,,Transport" No. 7 Moscow 2005		
29	A natural phenomenon in the history of the Transcaucasian railway	printed	,,Transport" No. 7 Moscow 2005		
30	Kakheti private Railway	printed	"Clio" No. 27, Tbilisi, 2005		
31	Construction of the Suram Pass Railway and Tunnel	printed	"Transport construction" No. 11 Moscow 2005	29-32	T. Churadze
32	Principles of developing an optimal investment program on the Georgian railways	printed	"Science and Technology" No. 4-6 Tbilisi 2006	57-60	P. Tsagareishvili G. Gvenetadze
33	The influence of steep, long descents on the safety of train traffic	printed	"Transport and Machine Building" No. 2 Tbilisi 2006	28-31	G. Kvantaliani N. Kupatadze
34	Steam powered railway transport	printed	"Transport and machine building" N 2 Tbilisi 2006	71-76	G. Kvantaliani N. Kupatadze

35	Construction of the Rion- Kutaisi railway branch	printed	"Transport and machine building" N 1(25)Tbilisi 2007	64-66	G. Kvantaliani N. Kupatadze
36	Traction of the heat pump in the Surami pass area	printed	ransport and machine building #1(9) 2008	118- 124	N. Kupatadze
37	Reasons for loss of train control	printed	Transport and machine building N 1(9) 2008	51-55	N. Kupatadze
38	Criteria and analysis of the mode of movement with braking in the case of traction of the heater on the pass area	printed	"intelligence" N 1(30) Tbilisi 2008	39-41	N. Kupatadze
39	The movement of the heat exchanger in the small-radius curves of the pass and the sanitary ecological condition	printed	intelligence N 1(30) Tbilisi 2008	42-43	N. Kupatadze
40	Determining the weight norm of the truck composition in mountainous conditions	printed	Transport and machine building N 2(10)2008.	142- 147	G. Kvantaliani N. Kupatadze
41	Railway research and planning	printed	Text-book Georgian Technical University Tbilisi 2009	1-137	N. Kupatadze
42	Determining the maximum descent length based on pad wear	printed	Transport N 3-4 (43-44) 2011	33-35	G. Kvantaliani N. Kupatadze
43	Determination of the maximum lifting length based on the heating of electric motors	printed	Transport N 3-4 (43-44) 2011	35-36	G. Kvantaliani N. Kupatadze
44	Investigation of the thermal mode of braking of freight trains on a steep rocky descent	printed	construction N1(24) 2012	41-46	G. Kvantaliani N. Kupatadze
45	Determining the maximum running length of double-track railways in difficult mountainous conditions	printed	construction N 2 (25) 2012	57-61	G. Kvantaliani N. Kupatadze
46	Determining the optimal length of single-track railways	printed	construction N2 (25) 2012	42-46	G. Kvantaliani N. Kupatadze
47	Problems of production of materials for Georgian Railways and ways to overcome them	printed	Transport and machine building N3(28) 2013	73-78	Z. Kupatadze

48	Placement of dividing points		Science and Technology		A.Kakabadze
10	in mountainous terrain	printed	2015	78-82	G. Kvantaliani
		princed		70 02	B.Didebashvili
49	Trains run southbound	printed	Construction N1 (36) 2015	58-62	O. Bichiashvili
50	Safety issues of train traffic		Construction #1 (36)		O. Bichiashvili
	on the Marabda-Akhalkalaki railway section	printed	2015	95-98	G. Kvantaliani
51	Metropolitan as a type of		construction		G. Kvantaliani
	railway transport	printed	# 4 (43) 2016	58-60	N. Kupatadze
	Tunnels in transport		construction		G. Kvantaliani
52	construction	printed	N 4 (43) 2016	125-	N. Kupatadze
	printed			128	
53	The beginning of the		construction		
	construction of the metro in Tbilisi	printed	2017		N. Kupatadze
54	To the question of the design		Транспорт		
	of catching dead ends	printed	N 1-4 (69-72)	11-12	N. Kupatadze
			2018 წ.		
	The beginning of the		"Construction"	45.40	N. Kwastadas
56	construction of the metro in Tbilisi	printed	N 4(43) 2017	45-48	N. Kupatadze
	I DIIISI		2017		
57	On the issue of designing		Transport		N. Kupatadze
	catch dead ends		N 1-4 (69-72) 2018 წ.	11-12	
		printed			
58	Construction of the railway		Ca at at 'a !!		D. Nilled at also dit
	in Transcaucasia and its role in the development of the	printed	,,Construction" No. 1(54), 2020	63-66	R. Nikoleishvili N. Kupatadze
	region	printed	NO. 1(34), 2020		N. Kupatauze
59	From the history of				
	construction of Tbilisi Metro:	printed	"construction"		
	Continuation of construction	-	No. 3(63)	90-94	N. Kupatadze
	of Tbilisi Metropolitan		2022		
60	Some measures for the		construction"		T Kunatadaa
	protection of railway land vacates and ecological safety	printed	,,construction" No. 1(64)	70.74	T. Kupatadze N. Kupatadze
	issues		2023	70-74	A. Kupatadze
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