## Scaentific works of

## N. T. Kupatadze

		Printed or	·····	Number of	
N	Title of scientific works	manuscript publishing	magazine (n umber, year) or copyright certificate number	printed plate or pages	Last name of the co-author
1	2	3	4	5	6
1	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
2	Steam powered railway transport	printed	"Transport and machine building" N 2 Tbilisi 2006	71-76	G. Kvantaliani N. Kupatadze
3	Construction of the Rion- Kutaisi railway branch	printed	"Transport and machine building" N 1(25)Tbilisi 2007	64-66	G. Kvantaliani N. Kupatadze
4	Traction of the heat pump in the Surami pass area	printed	ransport and machine building #1(9) 2008	118-124	N. Kupatadze
5	Reasons for loss of train control	printed	Transport and machine building N 1(9) 2008	51-55	N. Kupatadze
6	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
7	The movement of the heat exchanger in the small- radius curves of the pass and the sanitary ecological condition	printed	intelligence N 1(30)	42-43	N. Kupatadze

			Tbilisi 2008		
8	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
9	Railway research and planning	printed	Text-book Georgian Technical University Tbilisi 2009	1-137	N. Kupatadze
10	Determining the maximum descent length based on pad wear	printed	Transport N 3-4 (43-44) 2011	33-35	G. Kvantaliani N. Kupatadze
11	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
12	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
13	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
14	Determining the optimal length of single-track railways	printed	construction N2 (25) 2012	42-46	G. Kvantaliani N. Kupatadze
15	Metropolitan as a type of railway transport	printed	construction # 4 (43) 2016	58-60	G. Kvantaliani N. Kupatadze
16	Tunnels in transport construction printed	printed	construction N 4 (43) 2016	125-128	G. Kvantaliani N. Kupatadze

17	The beginning of the construction of the metro in Tbilisi	printed	construction 2017		N. Kupatadze
18	To the question of the design of catching dead ends	printed	Транспорт N 1-4 (69-72) 2018 წ.	11-12	N. Kupatadze
19	The beginning of the construction of the metro in Tbilisi	printed	,,Construction'' N 4(43)2017	45-48	N. Kupatadze
20	Construction of the railway in Transcaucasia and its role in the development of the region	printed	,,Construction" No. 1(54), 2020	63-66	R. Nikoleishvili N. Kupatadze
21	From the history of construction of Tbilisi Metro: Continuation of construction of Tbilisi Metropolitan	printed	,,construction" No. 3(63) 2022	90-94	N. Kupatadze
22	Some measures for the protection of railway land vacates and ecological safety issues	printed	,,construction" No. 1(64) 2023	70-74	T. Kupatadze N. Kupatadze A. Kupatadze