

# Lev B Rapoport

## List of Publications by Year in descending order

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Version: 2024-02-01

36  
papers

866  
citations

1162367

8  
h-index

996533

15  
g-index

45  
all docs

45  
docs citations

45  
times ranked

462  
citing authors

#	ARTICLE	IF	CITATIONS
1	Criteria of asymptotic stability of differential inclusions and periodic motions of time-varying nonlinear control systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 1996, 43, 219-229.	0.1	80
2	Estimation of attraction domains in wheeled robot control. Automation and Remote Control, 2006, 67, 1416-1435.	0.4	27
3	Asymptotic stability and periodic motions of selector-linear differential inclusions. , 1996, , 269-285.		25
4	Motion control for a wheeled robot following a curvilinear path. Journal of Computer and Systems Sciences International, 2008, 47, 987-994.	0.2	22
5	Construction of invariant ellipsoids in the stabilization problem for a wheeled robot following a curvilinear path. Automation and Remote Control, 2009, 70, 219-232.	0.4	14
6	Stabilization problem for a wheeled robot following a curvilinear path on uneven terrain. Journal of Computer and Systems Sciences International, 2010, 49, 672-680.	0.2	12
7	Canonical representation of a nonstationary path following problem. Journal of Computer and Systems Sciences International, 2015, 54, 656-670.	0.2	12
8	Canonical representation of the path following problem for wheeled robots. Automation and Remote Control, 2013, 74, 785-801.	0.4	11
9	Smoothing curvature of trajectories constructed by noisy measurements in path planning problems for wheeled robots. Journal of Computer and Systems Sciences International, 2008, 47, 812-819.	0.2	9
10	Lyapunov stability and sign definiteness of a quadratic form in a cone. Prikladnaya Matematika I Mekhanika, 1986, 50, 515-520.	0.4	8
11	Coverage Path Planning for 3D Terrain with Constraints on Trajectory Curvature Based on Second-Order Cone Programming. Communications in Computer and Information Science, 2021, , 258-272.	0.4	6
12	Semidefinite Relaxation and New Conditions for Sign-Definiteness of the Quadratic Form under Quadratic Constraints. Automation and Remote Control, 2018, 79, 2073-2079.	0.4	3
13	Navigation and Control Problems in Precision Farming. , 2021, , .		3
14	Lurie Systems Stability Approach for Attraction Domain Estimation in the Wheeled Robot Control Problem. Lecture Notes in Computer Science, 2020, , 224-238.	1.0	3
15	Stability of the equilibrium of a system with single-sided constraints and the sign-definiteness of a pencil of quadratic forms in a cone. Prikladnaya Matematika I Mekhanika, 1992, 56, 501-507.	0.4	2
16	Estimating the attraction domain of the invariant set in the problem of wheeled robot control. Automation and Remote Control, 2008, 69, 1859-1872.	0.4	2
17	The periodic solution of two-dimensional linear nonstationary systems and estimation of the attraction domain boundary in the problem of control of a wheeled robot. Automation and Remote Control, 2011, 72, 2339-2347.	0.4	2
18	Path deformation method for robot motion planning problems in the presence of obstacles. Automation and Remote Control, 2013, 74, 2163-2172.	0.4	2

#	ARTICLE	IF	CITATIONS
19	Fast algorithm of LTE RACH detection based on sparse fourier transform. , 2015, , .		2
20	Semidefinite relaxation and new conditions of signdefiniteness of quadratic forms under quadratic constraints. , 2018, , .		2
21	Global Energy Fairing of B-Spline Curves in Path Planning Problems. , 2007, , 1133.		1
22	The GNSS/INS integrated system: Experimental results and its application in control of mobile robots. Gyroscopy and Navigation, 2010, 1, 98-106.	0.7	1
23	Ellipsoidal Approximations of Invariant Sets in Stabilization Problem for a Wheeled Robot Following a Curvilinear Path. , 2009, , .		1
24	Using of the SDP Relaxation Method for Optimization of the Satellites Set Chosen for Positioning. , 0, , .		1
25	Optimization of the operating regimes of VAR and ESR furnaces. Metallurgist, 1988, 32, 379-380.	0.2	0
26	EXTENSION OF S-PROCEDURE IN THE ANALYSIS OF MULTIVARIABLE CONTROL SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 203-208.	0.4	0
27	An estimate of the attraction domain with a specified exponential stability index in a wheeled robot control problem. Prikladnaya Matematika I Mekhanika, 2007, 71, 221-228.	0.4	0
28	Periodic solution of the selector-linear differential inclusion and estimation of invariant regions in the wheeled robot control problem. , 2010, , .		0
29	Periodic Motions for Estimation of the Attraction Domain in the Wheeled Robot Stabilization Problem. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 5878-5883.	0.4	0
30	Implementation of quasi-maximum-likelihood detection based on semidefinite relaxation and linear programming. , 2012, , .		0
31	Estimation of the Attraction Domain for Nonlinear Single-Input System with Constrained Control * *This work was supported by Program I.31 "Actual problems of robotics" of the Presidium of Russian Academy of Sciences.. IFAC-PapersOnLine, 2017, 50, 8139-8144.	0.5	0
32	Application of the Method of Semidefinite Relaxation for Determining the Orientation of a Solid Body in Space. Automation and Remote Control, 2019, 80, 773-780.	0.4	0
33	Attitude Determination with Multiple Antennas Using SDP Relaxation. , 0, , .		0
34	Semidefinite Relaxation and Sign-Definiteness of Quadratic Forms on the Cone. Communications in Computer and Information Science, 2020, , 32-42.	0.4	0
35	An Approximate Solution of a GNSS Satellite Selection Problem Using Semidefinite Programming. Communications in Computer and Information Science, 2020, , 137-149.	0.4	0
36	Coverage Path Planning with Constraints on Normal Curvature for a Three-dimensional Terrain with Obstacles. , 2022, , .		0