

# Vakhtang Lomadze

## List of Publications by Year in Descending Order

**Source:** <https://exaly.com/author-pdf/7824298/vakhtang-lomadze-publications-by-year.pdf>

**Version:** 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

50  
papers

145  
citations

6  
h-index

9  
g-index

51  
ext. papers

149  
ext. citations

1.6  
avg, IF

3.44  
L-index

#	Paper	IF	Citations
50	Duality for Multidimensional Linear Systems with Homological Dimension $\leq 1$ . <i>SIAM Journal on Control and Optimization</i> , <b>2021</b> , 59, 417-433	1.9	
49	Non-catastrophicity in multidimensional convolutional coding. <i>Discrete Mathematics</i> , <b>2020</b> , 343, 111789	0.7	
48	Continuous dependence of linear differential systems on polynomial modules. <i>Mathematics of Control, Signals, and Systems</i> , <b>2020</b> , 32, 385-409	1.3	1
47	Polynomial solutions to linear PDEs with constant coefficients. <i>Georgian Mathematical Journal</i> , <b>2019</b> , 26, 287-293	0.5	2
46	The predictable degree property and minimality in multidimensional convolutional coding. <i>Discrete Mathematics</i> , <b>2019</b> , 342, 784-792	0.7	1
45	KW Models for (Multivariate) Linear Differential Systems. <i>SIAM Journal on Control and Optimization</i> , <b>2018</b> , 56, 456-472	1.9	
44	On the Wiener-Hopf factorization of rational matrices. <i>Transactions of A Razmadze Mathematical Institute</i> , <b>2018</b> , 172, 73-81		
43	On the reduction of high order linear PDEs to first order. <i>Linear Algebra and Its Applications</i> , <b>2017</b> , 530, 1-14	0.9	
42	Converting high order linear PDEs to first order: Noncommutative case. <i>Systems and Control Letters</i> , <b>2017</b> , 109, 49-52	2.4	
41	Taylor approximations of multidimensional linear differential systems. <i>International Journal of Control</i> , <b>2016</b> , 89, 1091-1095	1.5	
40	Proper representations of (multivariate) linear differential systems. <i>Systems and Control Letters</i> , <b>2016</b> , 94, 25-30	2.4	3
39	Converting high order linear PDEs to first order. <i>Systems and Control Letters</i> , <b>2016</b> , 94, 107-110	2.4	3
38	Addendum to (Singular) state models and (singular) LTID systems. <i>International Journal of Control</i> , <b>2014</b> , 87, 1312-1315	1.5	
37	Characterization of linear differential systems (in several variables). <i>Systems and Control Letters</i> , <b>2014</b> , 68, 20-24	2.4	2
36	(Singular) state models and (singular) LTID systems. <i>International Journal of Control</i> , <b>2014</b> , 87, 567-580	1.5	
35	"Reduced Polynomial Matrices" in Several Variables. <i>SIAM Journal on Control and Optimization</i> , <b>2013</b> , 51, 3258-3273	1.9	4
34	The PBH test for multidimensional LTID systems. <i>Automatica</i> , <b>2013</b> , 49, 2933-2937	5.7	4

33	A note on Ehrenpreis's fundamental principle. <i>Linear Algebra and Its Applications</i> , <b>2013</b> , 438, 2083-2089	0.9	2
32	Duality in the behavioral systems theory. <i>Automatica</i> , <b>2013</b> , 49, 1510-1514	5.7	5
31	Axiomatic characterization of linear differential systems (and operators). <i>Automatica</i> , <b>2012</b> , 48, 815-819	5.7	4
30	Behaviors and symbols of rational matrices. <i>Systems and Control Letters</i> , <b>2012</b> , 61, 98-106	2.4	1
29	Controllability as Minimality. <i>SIAM Journal on Control and Optimization</i> , <b>2012</b> , 50, 357-367	1.9	4
28	Lifting discrete trajectories. <i>Applied Mathematics Letters</i> , <b>2012</b> , 25, 1716-1720	3.5	2
27	Rational differential operators and their kernels. <i>Linear Algebra and Its Applications</i> , <b>2011</b> , 435, 2870-2888	0.9	1
26	On Homotopy and Similarity in Linear Systems Theory. <i>Acta Applicandae Mathematicae</i> , <b>2011</b> , 116, 87-105	1.1	2
25	A note on interconnections. <i>Applied Mathematics Letters</i> , <b>2011</b> , 24, 1835-1839	3.5	1
24	Smooth/impulsive linear systems: controllability. <i>International Journal of Control</i> , <b>2011</b> , 84, 679-692	1.5	1
23	First order representations of Fliess models. <i>Linear Algebra and Its Applications</i> , <b>2011</b> , 434, 1027-1057	0.9	
22	State representations of ARMA-models. <i>International Journal of Control</i> , <b>2010</b> , 83, 2091-2097	1.5	1
21	Linear systems, and ARMA- and Fliess models. <i>International Journal of Control</i> , <b>2010</b> , 83, 2165-2180	1.5	3
20	Smooth/impulsive linear systems: Axiomatic description. <i>Linear Algebra and Its Applications</i> , <b>2010</b> , 433, 1997-2009	0.9	6
19	Relative completeness and specifiedness properties of continuous linear dynamical systems. <i>Systems and Control Letters</i> , <b>2010</b> , 59, 695-703	2.4	4
18	ARMA-models and their equivalences. <i>International Journal of Control</i> , <b>2009</b> , 82, 2034-2039	1.5	4
17	(Generalised) autoregressive models and their trajectories. <i>International Journal of Control</i> , <b>2009</b> , 82, 1929-1936	1.5	4
16	On some basics of linear systems theory. <i>Systems and Control Letters</i> , <b>2009</b> , 58, 83-90	2.4	7

15	Linear systems with locally integrable trajectories. <i>Linear Algebra and Its Applications</i> , <b>2009</b> , 430, 2277-2289	2.8	3
14	How to define the dual of a higher-dimensional linear system. <i>Linear Algebra and Its Applications</i> , <b>2009</b> , 431, 2084-2101	0.9	2
13	Singular 2D Behaviors: Fornasini-Marchesini and Givone-Boesser Models. <i>Georgian Mathematical Journal</i> , <b>2009</b> , 16, 105-130	0.5	3
12	When are linear differentiation-invariant spaces differential?. <i>Linear Algebra and Its Applications</i> , <b>2007</b> , 424, 540-554	0.9	19
11	State and internal variables for linear systems. <i>Linear Algebra and Its Applications</i> , <b>2007</b> , 425, 534-547	0.9	8
10	On the regular feedback interconnection problem. <i>International Journal of Control</i> , <b>2006</b> , 79, 858-865	1.5	5
9	On duality for partial differential (and difference) equations. <i>Journal of Algebra</i> , <b>2004</b> , 275, 791-800	0.6	7
8	Singular Linear Behaviors and Their AR-Representations. <i>Mathematics of Control, Signals, and Systems</i> , <b>2001</b> , 14, 194-211	1.3	3
7	Convolutional Codes and Coherent Sheaves. <i>Applicable Algebra in Engineering, Communications and Computing</i> , <b>2001</b> , 12, 273-326	0.6	4
6	Linear constant coefficient differential (or difference) equations. <i>Journal of Pure and Applied Algebra</i> , <b>2000</b> , 147, 143-157	0.6	2
5	Fractional representations of linear systems. <i>Systems and Control Letters</i> , <b>2000</b> , 39, 275-281	2.4	3
4	Applications of vector bundles to factorization of rational matrices. <i>Linear Algebra and Its Applications</i> , <b>1999</b> , 288, 249-258	0.9	10
3	A Behavioral Approach to Singular Systems. <i>Acta Applicandae Mathematicae</i> , <b>1998</b> , 54, 331-344	1.1	2
2	Linear system theory: An algebraist's point of view. <i>Systems and Control Letters</i> , <b>1996</b> , 29, 73-79	2.4	2
1	Continuity of the solution set to a linear PDE with constant coefficients. <i>International Journal of Control</i> , <b>1995</b> , 61, 1-5	1.5	