Vakhtang Lomadze

List of Publications by Citations

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	When are linear differentiation-invariant spaces differential?. *Linear Algebra and Its Applications*, **2007**, 424, 540-554	0.9	19
49	Applications of vector bundles to factorization of rational matrices. *Linear Algebra and Its Applications*, **1999**, 288, 249-258	0.9	10
48	State and internal variables for linear systems. *Linear Algebra and Its Applications*, **2007**, 425, 534-547	0.9	8
47	On some basics of linear systems theory. *Systems and Control Letters*, **2009**, 58, 83-90	2.4	7
46	On duality for partial differential (and difference) equations. *Journal of Algebra*, **2004**, 275, 791-800	0.6	7
45	Smooth/impulsive linear systems: Axiomatic description. *Linear Algebra and Its Applications*, **2010**, 433, 1997-2009	0.9	6
44	Duality in the behavioral systems theory. *Automatica*, **2013**, 49, 1510-1514	5.7	5
43	On the regular feedback interconnection problem. *International Journal of Control*, **2006**, 79, 858-865	1.5	5
42	Axiomatic characterization of linear differential systems (and operators). *Automatica*, **2012**, 48, 815-819	5.7	4
41	''Reduced Polynomial Matrices□n Several Variables. *SIAM Journal on Control and Optimization*, **2013**, 51, 3258-3273	1.9	4
40	The PBH test for multidimensional LTID systems. *Automatica*, **2013**, 49, 2933-2937	5.7	4
39	Controllability as Minimality. *SIAM Journal on Control and Optimization*, **2012**, 50, 357-367	1.9	4
38	ARMA-models and their equivalences. *International Journal of Control*, **2009**, 82, 2034-2039	1.5	4
37	(Generalised) autoregressive models and their trajectories. *International Journal of Control*, **2009**, 82, 1929-1936	1.5	4
36	Relative completeness and specifiedness properties of continuous linear dynamical systems. *Systems and Control Letters*, **2010**, 59, 695-703	2.4	4
35	Convolutional Codes and Coherent Sheaves. *Applicable Algebra in Engineering, Communications and Computing*, **2001**, 12, 273-326	0.6	4
34	Linear systems, and ARMA- and Fliess models. *International Journal of Control*, **2010**, 83, 2165-2180	1.5	3

33	Linear systems with locally integrable trajectories. *Linear Algebra and Its Applications*, **2009**, 430, 2277-2289	0.9	3
32	Singular 2D Behaviors: Fornasini-Marchesini and Givone-Roesser Models. *Georgian Mathematical Journal*, **2009**, 16, 105-130	0.5	3
31	Singular Linear Behaviors and Their AR-Representations. *Mathematics of Control, Signals, and Systems*, **2001**, 14, 194-211	1.3	3
30	Fractional representations of linear systems. *Systems and Control Letters*, **2000**, 39, 275-281	2.4	3
29	Proper representations of (multivariate) linear differential systems. *Systems and Control Letters*, **2016**, 94, 25-30	2.4	3
28	Converting high order linear PDEs to first order. *Systems and Control Letters*, **2016**, 94, 107-110	2.4	3
27	Characterization of linear differential systems (in several variables). *Systems and Control Letters*, **2014**, 68, 20-24	2.4	2
26	A note on Ehrenpreis' Fundamental principle. *Linear Algebra and Its Applications*, **2013**, 438, 2083-2089	0.9	2
25	Lifting discrete trajectories. *Applied Mathematics Letters*, **2012**, 25, 1716-1720	3.5	2
24	On Homotopy and Similarity in Linear Systems Theory. *Acta Applicandae Mathematicae*, **2011**, 116, 87-105	1.1	2
23	How to define the dual of a higher-dimensional linear system. *Linear Algebra and Its Applications*, **2009**, 431, 2084-2101	0.9	2
22	A Behavioral Approach to Singular Systems. *Acta Applicandae Mathematicae*, **1998**, 54, 331-344	1.1	2
21	Linear constant coefficient differential (or difference) equations. *Journal of Pure and Applied Algebra*, **2000**, 147, 143-157	0.6	2
20	Linear system theory: An algebraist's point of view. *Systems and Control Letters*, **1996**, 29, 73-79	2.4	2
19	Polynomial solutions to linear PDEs with constant coefficients. *Georgian Mathematical Journal*, **2019**, 26, 287-293	0.5	2
18	Behaviors and symbols of rational matrices. *Systems and Control Letters*, **2012**, 61, 98-106	2.4	1
17	Rational differential operators and their kernels. *Linear Algebra and Its Applications*, **2011**, 435, 2870-2888	0.9	1
16	A note on interconnections. *Applied Mathematics Letters*, **2011**, 24, 1835-1839	3.5	1

15	State representations of ARMA-models. *International Journal of Control*, **2010**, 83, 2091-2097	1.5	1
14	Smooth/impulsive linear systems: controllability. *International Journal of Control*, **2011**, 84, 679-692	1.5	1
13	Continuous dependence of linear differential systems on polynomial modules. *Mathematics of Control, Signals, and Systems*, **2020**, 32, 385-409	1.3	1
12	The predictable degree property and minimality in multidimensional convolutional coding. *Discrete Mathematics*, **2019**, 342, 784-792	0.7	1
11	On the reduction of high order linear PDEs to first order. *Linear Algebra and Its Applications*, **2017**, 530, 1-14	0.9	
10	Non-catastrophicity in multidimensional convolutional coding. *Discrete Mathematics*, **2020**, 343, 111789	0.7	
9	KW Models for (Multivariate) Linear Differential Systems. *SIAM Journal on Control and Optimization*, **2018**, 56, 456-472	1.9	
8	Taylor approximations of multidimensional linear differential systems. *International Journal of Control*, **2016**, 89, 1091-1095	1.5	
7	Addendum to (Singular) state models and (singular) LTID systems *International Journal of Control*, **2014**, 87, 1312-1315	1.5	
6	Converting high order linear PDEs to first order: Noncommutative case. *Systems and Control Letters* , **2017**, 109, 49-52	2.4	
5	(Singular) state models and (singular) LTID systems. *International Journal of Control*, **2014**, 87, 567-580	1.5	
4	First order representations of Fliess models. *Linear Algebra and Its Applications*, **2011**, 434, 1027-1057	0.9	
3	Continuity of the solution set to a linear PDE with constant coefficients. *International Journal of Control*,1-5	1.5	
2	Duality for Multidimensional Linear Systems with Homological Dimension $leq 1$. *SIAM Journal on Control and Optimization*, **2021**, 59, 417-433	1.9	
1	On the Wiener–Hopf factorization of rational matrices. *Transactions of A Razmadze Mathematical Institute*, **2018**, 172, 73-81		