Paolo Rapisarda

List of Publications by Year in Descending Order

65 papers	911 citations	15 h-index	28 g-index
77 ext. papers	1,198 ext. citations	2.3 avg, IF	4.45 L-index

#	Paper	IF	Citations
65	State for Linear Time-Varying Systems, with Applications to Dissipative Systems. *SIAM Journal on Control and Optimization*, **2022**, 60, 147-167	1.9	
64	Data-Driven Dissipativity Analysis: Application of the Matrix S-Lemma. *IEEE Control Systems*, **2022**, 42, 140-149	2.9	0
63	A Loewner Matrix Approach to the Identification of Linear Time-Varying Systems **2022**, 79-94		
62	On the switching control of the DCDC zeta converter operating in continuous conduction mode. *IET Control Theory and Applications*, **2021**, 15, 1185-1198	2.5	2
61	Rational orthonormal bases,state transformations, and dissipativity. *IEEE Transactions on Automatic Control*, **2021**, 1-1	5.9	
60	Partial Discharges Identification and Localisation within Transformer Windings. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2020**, 27, 2095-2103	2.3	3
59	From Dirac structure to state model: identification of linear time-varying port-Hamiltonian systems **2019**,		1
58	Discrete Roesser state models from 2D frequency data. *Multidimensional Systems and Signal Processing*, **2019**, 30, 591-610	1.8	2
57	Critical analysis of partial discharge dynamics in air filled spherical voids. *Journal Physics D: Applied Physics*, **2018**, 51, 125601	3	35
56	On the Identification of Self-Adjoint Linear Time-Varying State Models. *IFAC-PapersOnLine*, **2018**, 51, 251-256	0.7	3
55	Data-driven control: A behavioral approach. *Systems and Control Letters*, **2017**, 101, 37-43	2.4	31
54	Improving models of partial discharge activity using simulation **2017**,		1
53	On Lyapunov functions and data-driven dissipativity. *IFAC-PapersOnLine*, **2017**, 50, 7783-7788	0.7	14
52	A Gröbner Basis Approach to Solve a Rank Minimization Problem Arising in 2D-identification. *IFAC-PapersOnLine*, **2017**, 50, 1834-1839	0.7	1
51	Consensus for linear agents with unknown parameters. *IFAC-PapersOnLine*, **2017**, 50, 2505-2510	0.7	1
50	Investigating the dependence of partial discharge activity on applied field structure **2016**,		2
49	State-Space Modeling of Two-Dimensional Vector-Exponential Trajectories. *SIAM Journal on Control and Optimization*, **2016**, 54, 2734-2753	1.9	5

48	Reprint of "A bilinear differential forms approach to parametric structured state-space modelling" *Systems and Control Letters*, **2016**, 95, 77-82	2.4	
47	Dissipative Switched Linear Differential Systems. *IEEE Transactions on Automatic Control*, **2016**, 61, 3813-3825	5.9	9
46	A categorical approach to open and interconnected dynamical systems **2016**,		13
45	A bilinear differential forms approach to parametric structured state-space modelling. *Systems and Control Letters*, **2016**, 92, 14-19	2.4	1
44	Failure identification for linear repetitive processes. *Multidimensional Systems and Signal Processing*, **2015**, 26, 1037-1059	1.8	5
43	Modeling Approaches for DC–DC Converters With Switched Capacitors. *IEEE Transactions on Industrial Electronics*, **2015**, 62, 953-959	8.9	34
42	Failure identification for 3D linear systems. *Multidimensional Systems and Signal Processing*, **2015**, 26, 481-502	1.8	9
41	A duality perspective on Loewner rational interpolation and state-space modelling of vector-exponential trajectories **2015**,		6
40	Physical models for field based partial discharge measurements **2015**,		4
39	Bilinear Differential Forms and the Loewner Framework for Rational Interpolation. *Lecture Notes in Control and Information Sciences*, **2015**, 23-43	0.5	3
38	Algorithms for polynomial spectral factorization and bounded-real balanced state space representations. *Mathematics of Control, Signals, and Systems*, **2013**, 25, 231-255	1.3	2
37	Realization of Lossless Systems Via Constant Matrix Factorizations. *IEEE Transactions on Automatic Control*, **2013**, 58, 2632-2636	5.9	6
36	Identification and data-driven reduced-order modeling for linear conservative port- and self-adjoint Hamiltonian systems **2013**,		8
35	Canonical realizations by factorization of constant matrices. *Systems and Control Letters*, **2012**, 61, 827-833	2.4	6
34	Lyapunov functions for time-relevant systems, with application to first-orthant stable systems. *Automatica*, **2012**, 48, 1998-2006	5.7	6
33	New frequency domain based stability tests for 2D linear systems **2012**,		1
32	State Maps from Integration by Parts. *SIAM Journal on Control and Optimization*, **2011**, 49, 2415-2439	1.9	24
31	Identification and data-driven model reduction of state-space representations of lossless and dissipative systems from noise-free data. *Automatica*, **2011**, 47, 1721-1728	5.7	24

30	Time-relevant stability of 2D systems. *Automatica*, **2011**, 47, 2373-2382	5.7	25
29	Lyapunov stability analysis of higher-order 2-D systems. *Multidimensional Systems and Signal Processing*, **2011**, 22, 287-302	1.8	14
28	Lyapunov stability of 2D finite-dimensional behaviours. *International Journal of Control*, **2011**, 84, 737-745	1.5	13
27	Time-relevant 2D behaviors **2011**,		1
26	On the stability of switched behavioral systems **2011**,		16
25	Stabilization, Lyapunov functions, and dissipation. *Systems and Control Letters*, **2010**, 59, 806-811	2.4	3
24	A counterexample to "Generalized eigenvalue-based stability tests for 2-D linear systems: Necessary and sufficient conditions" by Fu, P., Chen, J., and S.I. Niculescu. *Automatica*, **2010**, 46, 234-235	5.7	1
23	A behavioral approach to passivity and bounded realness preserving balanced truncation with error bounds **2009**,		1
22	Dissipativity preserving model reduction by retention of trajectories of minimal dissipation. *Mathematics of Control, Signals, and Systems*, **2009**, 21, 171-201	1.3	11
21	Data-driven simulation and control. *International Journal of Control*, **2008**, 81, 1946-1959	1.5	99
20	Higher-order linear lossless systems. *International Journal of Control*, **2008**, 81, 1519-1536	1.5	4
19	On the linear quadratic data-driven control **2007**,		13
18	Canonical forms for polynomial and quadratic differential operators. *Systems and Control Letters*, **2007**, 56, 678-684	2.4	14
17	On the Takagi interpolation problem. *Linear Algebra and Its Applications*, **2007**, 425, 453-470	0.9	8
16	On the state of behaviors. *Linear Algebra and Its Applications*, **2007**, 424, 570-614	0.9	20
15	A characterization of solutions of the discrete-time algebraic Riccati equation based on quadratic difference forms. *Linear Algebra and Its Applications*, **2006**, 416, 1060-1082	0.9	9
14	A note on persistency of excitation. *Systems and Control Letters*, **2005**, 54, 325-329	2.4	164
13	Conserved- and zero-mean quadratic quantities in oscillatory systems. *Mathematics of Control, Signals, and Systems*, **2005**, 17, 173-200	1.3	9

12	A note on persistency of excitation **2004**,		4
11	Recursive exact H□dentification from impulse-response measurements. *Systems and Control Letters*, **2003**, 49, 323-334	2.4	11
10	Balanced State Representations with Polynomial Algebra **2003**, 345-357		4
9	A two-variable approach to solve the polynomial Lyapunov equation. *Systems and Control Letters*, **2001**, 42, 117-126	2.4	22
8	Pick Matrix Conditions for Sign-Definite Solutions of the Algebraic Riccati Equation. *SIAM Journal on Control and Optimization*, **2001**, 40, 969-991	1.9	18
7	New Algorithms for Polynomial J-Spectral Factorization. *Mathematics of Control, Signals, and Systems*, **1999**, 12, 24-61	1.3	30
6	A new algorithm for polynomial J -spectral factorization. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **1999**, 32, 1744-1748		
5	State Maps for Linear Systems. *SIAM Journal on Control and Optimization*, **1997**, 35, 1053-1091	1.9	107
4	The subspace Nevanlinna interpolation problem and the most powerful unfalsified model. *Systems and Control Letters*, **1997**, 32, 291-300	2.4	20
3	Balanced state representations from higher order differential equations		1
2	Vector-exponential time-series modeling for polynomial J-spectral factorization		1
1	A behavioral view of Nevanlinna-Pick interpolation		1