Lorenzo Ntogramatzidis

List of Publications by Year
in descending order

108	1,048	394421 19	477307 29
papers	citations	h-index	g-index

108	108	108	486
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A Behavioral Approach to Estimation in the Presence of Disturbances. IEEE Transactions on Automatic Control, 2021, 66, 2795-2801.	5.7	1
2	Eigenstructure assignment in linear geometric control. Automatica, 2021, 124, 109363.	5.0	9
3	Finite-Horizon Linear-Quadratic Optimal Control with General Boundary Conditions. , 2021, , 808-814.		0
4	State-Space Estimation Using the Behavioral Approach: A Simple Particular Case. Lecture Notes in Electrical Engineering, 2021, , 210-220.	0.4	0
5	Fixed poles in the disturbance decoupling by dynamic output feedback for systems with direct feedthrough matrices. Automatica, 2020, 121, 109159.	5.0	1
6	Minimizing control volatility for nonlinear systems with smooth piecewise-quadratic input signals. Systems and Control Letters, 2020, 145, 104797.	2.3	3
7	Multileg Interleaved Buck Converter for EV Charging: Discrete-Time Model and Direct Control Design. Energies, 2020, 13, 466.	3.1	21
8	Finite-Horizon Linear-Quadratic Optimal Control with General Boundary Conditions. , 2020, , 1-7.		0
9	Dual lattices for non-strictly proper systems. IFAC-PapersOnLine, 2020, 53, 4392-4397.	0.9	0
10	On the well-posedness in the solution of the disturbance decoupling by dynamic output feedback with self bounded and self hidden subspaces. Automatica, 2019, 106, 315-326.	5.0	4
11	MIMO tracking control of LTI systems: A geometric approach. Systems and Control Letters, 2019, 126, 8-20.	2.3	1
12	Direct Digital Design of PIDF Controllers with ComPlex Zeros for DC-DC Buck Converters. Energies, 2019, 12, 36.	3.1	12
13	The geometry of the generalized algebraic Riccati equation and of the singular Hamiltonian system. Linear and Multilinear Algebra, 2019, 67, 158-174.	1.0	3
14	On the solvability of the global monotonic tracking for subsets of output components. , 2019, , .		0
15	New results on the eigenstructure assignment in the computation of reachability output nulling subspaces. , 2019, , .		0
16	On the reduction of the continuous-time generalized algebraic Riccati equation: An effective procedure for solving the singular LQ problem with smooth solutions. Automatica, 2018, 93, 554-558.	5.0	11
17	Explicit reference governor for linear systems. International Journal of Control, 2018, 91, 1415-1430.	1.9	37
18	Nonovershooting state feedback and dynamic output feedback tracking controllers for descriptor systems. International Journal of Control, 2018, 91, 1785-1800.	1.9	6

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19	Tuning and performance assessment of complex fractional-order PI controllers. IFAC-PapersOnLine, 2018, 51, 757-762.	0.9	9
20	On the Construction of Jordan Chains in the Eigenstructure Assignment for Output-Nulling Subspaces. , 2018, , .		0
21	A Structural Approach to State-to-Output Decoupling. SIAM Journal on Control and Optimization, 2018, 56, 3816-3847.	2.1	4
22	Computation of regular friends for output-nulling and reachability subspaces of linear time-invariant descriptor systems. , 2018, , .		0
23	Discrete-time negative imaginary systems. Automatica, 2017, 79, 1-10.	5.0	45
24	A general approach to the eigenstructure assignment for reachability and stabilizability subspaces. Systems and Control Letters, 2017, 106, 58-67.	2.3	7
25	Geometric structure and properties of linear time invariant multivariable systems in the controller canonical form. IET Control Theory and Applications, 2017, 11, 25-37.	2.1	0
26	Solvability conditions for the positive real lemma equations in the discrete time. IET Control Theory and Applications, 2017, 11, 2916-2920.	2.1	3
27	Geometric conditions for the existence of solutions of singular multidimensional systems. , 2017, , .		0
28	On the generalized algebraic Riccati equations * *This work was partially supported by the Australian Research Council (DP160104994).. IFAC-PapersOnLine, 2017, 50, 9555-9560.	0.9	1
29	NOUS 2.0: A MATLABÂ® toolbox for the design of globally monotonie tracking controllers. , 2017, , .		0
30	New results on the global monotonic tracking of MIMO systems. , 2017, , .		1
31	A new method for the row-by-row decoupling problem with pole assignment. , 2016, , .		0
32	A geometric approach to constrained tracking control. , 2016, , .		0
33	On the structure of the solutions of the constrained generalized discrete-time algebraic Riccati equation. , 2016, , .		1
34	A discussion on the discrete-time finite-horizon indefinite LQ problem. , 2016, , .		0
35	New inversion formulae for PIDF controllers with complex zeros for DC-DC buck converter. , 2016, , .		2
36	Continuous-time singular linearâ€“quadratic control: Necessary and sufficient conditions for the existence of regular solutions. Systems and Control Letters, 2016, 93, 30-34.	2.3	17

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37	New nonovershooting step response control for the DC-DC buck converter. , 2016, , .		0
38	New results in the computation of output-nulling subspaces. , 2016, , .		0
39	On the computation of the fundamental subspaces for descriptor systems. International Journal of Control, 2016, 89, 1481-1494.	1.9	4
40	Arbitrary pole placement with the extended Kautskyâ€“Nicholsâ€“van Dooren parametric form. International Journal of Control, 2016, 89, 1359-1366.	1.9	1
41	Foundations of Not Necessarily Rational Negative Imaginary Systems Theory: Relations Between Classes of Negative Imaginary and Positive Real Systems. IEEE Transactions on Automatic Control, 2016, 61, 3052-3057.	5.7	64
42	Globally Monotonic Tracking Control of Multivariable Systems. IEEE Transactions on Automatic Control, 2016, 61, 2559-2564.	5.7	27
43	A tutorial on the globally monotonic tracking control problem with geometric techniques. , 2016, , .		1
44	Self-boundedness and self-hiddenness for implicit two-dimensional systems. , 2015, , .		0
45	On the geometry of the continuous-time generalized algebraic Riccati equation arising in LQ optimal control. , 2015, , .		0
46	A note on finite-horizon LQ problems with indefinite cost. Automatica, 2015, 52, 290-293.	5.0	11
47	Repeated eigenstructure assignment for controlled invariant subspaces. European Journal of Control, 2015, 26, 1-11.	2.6	6
48	Linear matrix inequalities for globally monotonic tracking control. Automatica, 2015, 61, 173-177.	5.0	20
49	The discrete-time generalized algebraic Riccati equation: Order reduction and solutionsâ€™ structure. Systems and Control Letters, 2015, 75, 84-93.	2.3	7
50	Failure identification for 3D linear systems. Multidimensional Systems and Signal Processing, 2015, 26, 481-502.	2.6	10
51	A reduction technique for discrete generalized algebraic and difference Riccati equations. Linear and Multilinear Algebra, 2014, 62, 1460-1474.	1.0	16
52	New results in impulse-free continuous-time cheap LQ optimal control. , 2014, , .		0
53	Robust arbitrary pole placement with the extended Kautsky-Nichols-van Dooren parametric form. , 2014, , .		1
54	Robust Eigenstructure Assignment in Geometric Control Theory. SIAM Journal on Control and Optimization, 2014, 52, 960-986.	2.1	22

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55	The generalized continuous algebraic Riccati equation and impulse-free continuous-time LQ optimal control. Automatica, 2014, 50, 1176-1180.	5.0	31
56	A unified method for optimal arbitrary pole placement. Automatica, 2014, 50, 2150-2154.	5.0	25
57	A Novel Instructional Approach to the Design of Standard Controllers: Using Inversion Formulae. IEEE Transactions on Education, 2014, 57, 54-60.	2.4	2
58	Nonovershooting and nonundershooting exact output regulation. Systems and Control Letters, 2014, 70, 30-37.	2.3	11
59	Special issue on Multidimensional systems theory and control. Multidimensional Systems and Signal Processing, 2013, 24, 599-600.	2.6	0
60	Geometric techniques for implicit two-dimensional systems. Multidimensional Systems and Signal Processing, 2013, 24, 601-620.	2.6	2
61	Some new results in the theory of negative imaginary systems with symmetric transfer matrix function. Automatica, 2013, 49, 2138-2144.	5.0	67
62	The generalised discrete algebraic Riccati equation in linear-quadratic optimal control. Automatica, 2013, 49, 471-478.	5.0	49
63	On the use of inversion formulae for the synthesis of discrete PID controllers. , 2013, , .		1
64	Arbitrary pole placement by state feedback with minimum gain. , 2013, , .		5
65	Direct and exact methods for the synthesis of discreteâ€time proportionalâ€“integralâ€“derivative controllers. IET Control Theory and Applications, 2013, 7, 2164-2171.	2.1	11
66	The Extended Symplectic Pencil and the Finite-Horizon LQ Problem With Two-Sided Boundary Conditions. IEEE Transactions on Automatic Control, 2013, 58, 2102-2107.	5.7	19
67	The role of the generalised continuous algebraic Riccati equation in impulse-free continuous-time singular LQ optimal control. , 2013, , .		4
68	Robust eigenstructure assignment in the computation of friends of output-nulling subspaces. , 2013, , .		1
69	Robust repeated pole placement. , 2013, , .		4
70	On the definition of negative imaginary system for not necessarily rational symmetric transfer functions. , 2013, , .		4
71	The generalised discrete algebraic Riccati equation arising in LQ optimal control problems: Part I. , 2012, , .		0
72	Comments on "Structural Invariant Subspaces of Singular Hamiltonian Systems and Nonrecursive Solutions of Finite-Horizon Optimal Control Problems. IEEE Transactions on Automatic Control, 2012, 57, 270-272.	5.7	5

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73	A reduction technique for generalised Riccati difference equations arising in linear-quadratic optimal control. , 2012, , .		0
74	Structural Invariants of Two-dimensional Systems. SIAM Journal on Control and Optimization, 2012, 50, 334-356.	2.1	11
75	The generalised discrete algebraic Riccati equation arising in LQ optimal control problems: Part II. , 2012, , .		0
76	The design of nonovershooting and nonundershooting multivariable state feedback tracking controllers. Systems and Control Letters, 2012, 61, 714-722.	2.3	34
77	Detectability subspaces and observer synthesis for two-dimensional systems. Multidimensional Systems and Signal Processing, 2012, 23, 79-96.	2.6	20
78	Analytical and graphical design of leadâ€“lag compensators. International Journal of Control, 2011, 84, 1830-1846.	1.9	14
79	Structural invariants of implicit two-dimensional systems. , 2011, , .		4
80	Lead-Lag compensators: Analytical and graphical design on the Nyquist plane. , 2011, , .		3
81	A unified method for the design of nonovershooting linear multivariable state-feedback tracking controllers. Automatica, 2010, 46, 312-321.	5.0	78
82	On the solution of the Riccati differential equation arising from the LQ optimal control problem. Systems and Control Letters, 2010, 59, 114-121.	2.3	25
83	Input decoupling with PD and preview control law for non-strictly proper systems. International Journal of Control, 2010, 83, 1741-1750.	1.9	0
84	Asymptotic quotient observers for 2-D Fornasini Marchesini models. , 2009, , .		0
85	On Kalman filtering for 2-D Fornasini-Marchesini models. , 2009, , .		5
86	On the design of non-overshooting linear tracking controllers for right-invertible systems. , 2009, , .		3
87	LQ optimal control for 2D Roesser models of finite extent. Systems and Control Letters, 2009, 58, 482-490.	2.3	15
88	Achieving a nonovershooting transient response with multivariable dynamic output feedback tracking controllers. , 2009, , .		14
89	On the Realization of 2-D Linear Systems With Recursively Computable Latent Variable Models. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 644-652.	5.4	2
90	Controlled and conditioned invariance with stability for two-dimensional systems. , 2009, , .		0

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91	On solving boundary value problems associated with generalised LQ control of 2-D systems. , 2009, , .		0
92	A geometric theory for 2-D systems including notions of stabilisability. Multidimensional Systems and Signal Processing, 2008, 19, 449-475.	2.6	19
93	A new approach to the cheap LQ regulator exploiting the geometric properties of the Hamiltonian system. Automatica, 2008, 44, 2834-2839.	5.0	20
94	Self-Bounded Subspaces for Nonstrictly Proper Systems and Their Application to the Disturbance Decoupling With Direct Feedthrough Matrices. IEEE Transactions on Automatic Control, 2008, 53, 423-428.	5.7	17
95	Disturbance decoupling by state feedback and pd control law for systems with direct feedthrough matrices. , 2007, , .		0
96	On the realisation of 2-D linear systems with implicit latent variable models. , 2007, , .		0
97	A geometric approach with stability for two-dimensional systems. , 2007, , .		1
98	On the Partial Realization of Noncausal 2-D Linear Systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 1800-1808.	0.1	9
99	Measurable Signal Decoupling with Dynamic Feedforward Compensation and Unknown-Input Observation for Systems with Direct Feedthrough*. European Journal of Control, 2007, 13, 489-500.	2.6	6
100	A Unified Approach to the Finite-Horizon Linear Quadratic Optimal Control Problem*. European Journal of Control, 2007, 13, 473-488.	2.6	17
101	A unified approach to finite-horizon generalized LQ optimal control problems for discrete-time systems. Linear Algebra and Its Applications, 2007, 425, 242-260.	0.9	17
102	Conditioned invariance and unknown-input observation for two-dimensional Fornasini-Marchesini models. , 2007, , .		3
103	On the sufficiency of finite-frame LQR optimality conditions for 2-D Roesser models. , 2007, , .		1
104	A unified approach to the finite-horizon LQ regulator - Part I: the continuous time. , 2006, , .		5
105	A unified approach to the finite-horizon LQ regulator - Part II: the discrete time. , 2006, , .		1
106	A parametrization of the solutions of the finite-horizon LQ problem with general cost and boundary conditions. Automatica, 2005, 41, 1359-1366.	5.0	39
107	Employing the algebraic Riccati equation for a parametrization of the solutions of the finite-horizon LQ problem: the discrete-time case. Systems and Control Letters, 2005, 54, 693-703.	2.3	24
108	A parametrization of the solutions of the Hamiltonian system for stabilizable pairs. International Journal of Control, 2005, 78, 530-533.	1.9	11