Li Xu

List of Publications by Year
in descending order

142 papers	1,315 citations	471371 17 h-index	454834 30 g-index
144 all docs	144 docs citations	144 times ranked	663 citing authors

#	Article	IF	Citations
1	Maximum correntropy criterion based sparse adaptive filtering algorithms for robust channel estimation under non-Gaussian environments. Journal of the Franklin Institute, 2015, 352, 2708-2727.	1.9	188
2	A direct-construction approach to multidimensional realization and LFR uncertainty modeling. Multidimensional Systems and Signal Processing, 2008, 19, 323-359.	1.7	63
3	A Tutorial on GrÃ¶bner Bases With Applications in Signals and Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2008, 55, 445-461.	3.5	46
4	Stability and stabilisation of linear multidimensional discrete systems in the frequency domain. International Journal of Control, 2013, 86, 1969-1989.	1.2	46
5	A New Elementary Operation Approach to Multidimensional Realization and LFR Uncertainty Modeling: The MIMO Case. IEEE Transactions on Circuits and Systems I: Regular Papers, 2012, 59, 638-651.	3.5	45
6	Output feedback stabilizability and stabilization algorithms for 2D systems. Multidimensional Systems and Signal Processing, 1994, 5, 41-60.	1.7	43
7	Robust non-fragile <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0015.gif" overflow="scroll"><mml:msub><mml:mrow><mml:mi>H</mml:mi></mml:mrow><mml:mrow><mml:mo>âˆž</mml:mo></mml:mrow></mml:msub></mml:math> state estimation for discrete-time genetic regulatory networks with Markov jump delays and uncertain transition probabilities. Neurocomputing, 2015, 154, 162-173.	3.5	40
8	A new elementary operation approach to multidimensional realization and LFR uncertainty modeling: the SISO case. Multidimensional Systems and Signal Processing, 2010, 21, 343-372.	1.7	35
9	<i><scp>H</scp>_{âˆž}</i> Static Output Feedback Control of 2â€‹<scp>D</scp> Discrete Systems in <scp>FM</scp> Second Model. Asian Journal of Control, 2012, 14, 1505-1513.	1.9	33
10	Improved adaptive sparse channel estimation using mixed square/fourth error criterion. Journal of the Franklin Institute, 2015, 352, 4579-4594.	1.9	31
11	A New Constructive Procedure for 2-D Coprime Realization in Fornasini–Marchesini Model. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 2061-2069.	0.1	27
12	Analysis of Online Secondary-Path Modeling With Auxiliary Noise Scaled by Residual Noise Signal. IEEE Transactions on Audio Speech and Language Processing, 2010, 18, 1978-1993.	3.8	26
13	Elementary Operation Approach to Order Reduction for Roesser State-Space Model of Multidimensional Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2014, 61, 789-802.	3.5	22
14	Exponential synchronization of switched genetic oscillators with time-varying delays. Journal of the Franklin Institute, 2014, 351, 4395-4414.	1.9	22
15	On minor prime factorizations for n-D polynomial matrices. IEEE Transactions on Circuits and Systems Part 2: Express Briefs, 2005, 52, 568-571.	2.3	20
16	Factorizations for nD polynomial matrices. Circuits, Systems, and Signal Processing, 2001, 20, 601-618.	1.2	19
17	Robust stability analysis for discrete-time genetic regulatory networks with probabilistic time delays. Neurocomputing, 2014, 124, 72-80.	3.5	19
18	Realization of multidimensional systems in Fornasini-Marchesini state-space model. Multidimensional Systems and Signal Processing, 2011, 22, 319-333.	1.7	18

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19	Coefficient-dependent direct-construction approach to realization of multidimensional systems in Roesser model. Multidimensional Systems and Signal Processing, 2011, 22, 97-129.	1.7	18
20	Dimension-Reduced Direction-of-Arrival Estimation Based on $ell_{2,1}$ -Norm Penalty. IEEE Access, 2018, 6, 44433-44444.	2.6	18
21	Multiple-prespecified-dictionary sparse representation for compressive sensing image reconstruction with nonconvex regularization. Journal of the Franklin Institute, 2019, 356, 2353-2371.	1.9	17
22	An algebraic approach to strong stabilizability of linear nD MIMO systems. IEEE Transactions on Automatic Control, 2002, 47, 1510-1514.	3.6	13
23	$${{\mathcal H}_{\infty}}$$ control of linear multidimensional discrete systems. Multidimensional Systems and Signal Processing, 2012, 23, 381-411.	1.7	13
24	Notes on minimal realizations of multidimensional systems. Multidimensional Systems and Signal Processing, 2015, 26, 519-553.	1.7	13
25	Simple state-space formulations of 2-D frequency transformation and double bilinear transformation. Multidimensional Systems and Signal Processing, 2010, 21, 3-23.	1.7	12
26	A Two-Stage Approach to the Establishment of State-Space Formulation of 2-D Frequency Transformation. IEEE Signal Processing Letters, 2007, 14, 960-963.	2.1	11
27	Analysis and design of unknown input observers for a class of 2-D nonlinear systems. Multidimensional Systems and Signal Processing, 2013, 24, 621-635.	1.7	11
28	RZA-NLMF algorithm-based adaptive sparse sensing for realizing compressive sensing. Eurasip Journal on Advances in Signal Processing, 2014, 2014, .	1.0	11
29	On Finite Convergence of Iterative Methods for Variational Inequalities in Hilbert Spaces. Journal of Optimization Theory and Applications, 2014, 161, 701-715.	0.8	11
30	Distributed filtering and control for time delay systems interconnected over an undirected graph. International Journal of Control, 2020, 93, 1839-1858.	1.2	11
31	Statistical Properties of the LMS Fourier Analyzer in the Presence of Frequency Mismatch. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2004, 51, 2504-2515.	0.1	10
32	A constructive approach to minimal realization problem of 2D systems. Journal of Control Theory and Applications, 2009, 7, 335-343.	0.8	10
33	Finite Convergence of the Proximal Point Algorithm for Variational Inequality Problems. Set-Valued and Variational Analysis, 2013, 21, 297-309.	0.5	10
34	Robust adaptive sparse channel estimation in the presence of impulsive noises. , 2015, , .		10
35	Low-complexity large-scale multiple-input multiple-output channel estimation using affine combination of sparse least mean square filters. IET Communications, 2015, 9, 2168-2175.	1.5	10
36	A novel elementary operation approach with Jordan transformation to order reduction for Roesser state-space model. Multidimensional Systems and Signal Processing, 2017, 28, 1417-1442.	1.7	10

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37	Compressive Sensing Signal Reconstruction Using L0-Norm Normalized Least Mean Fourth Algorithms. Circuits, Systems, and Signal Processing, 2018, 37, 1724-1752.	1.2	10
38	Recovery of Block-Structured Sparse Signal Using Block-Sparse Adaptive Algorithms via Dynamic Grouping. IEEE Access, 2018, 6, 56069-56083.	2.6	10
39	A Filtered-X RLS Based Narrowband Active Noise Control System in the Presence of Frequency Mismatch. , 0, , .		9
40	Further Results on Sufficient LMI Conditions for H&infin; Static Output Feedback Control of Discrete-Time Systems. SICE Journal of Control Measurement and System Integration, 2012, 5, 147-152.	0.4	9
41	Eigenvalue trim approach to exact order reduction for roesser state-space model of multidimensional systems. Multidimensional Systems and Signal Processing, 2018, 29, 1905-1934.	1.7	9
42	Distributed finiteâ€time control for Markovian jump systems interconnected over undirected graphs with timeâ€varying delay. IET Control Theory and Applications, 2019, 13, 2969-2982.	1.2	9
43	A novel hybrid optimization algorithm combined with BBO and PSO. , 2016, , .		8
44	Robust stochastic gradient-based adaptive filtering algorithms to realize compressive sensing against impulsive interferences. , 2016, , .		8
45	Design of two-dimensional IIR digital filters by using a novel hybrid optimization algorithm. Multidimensional Systems and Signal Processing, 2017, 28, 1267-1281.	1.7	8
46	On minimal realizations of first-degree 3D systems with separable denominators. Multidimensional Systems and Signal Processing, 2017, 28, 305-314.	1.7	8
47	Some algebraic aspects of the strong stabilizability of time-delay linear systems. IEEE Transactions on Automatic Control, 2001, 46, 454-457.	3.6	7
48	Order reduction for Roesser state-space model based on elementary operations. , 2012, , .		7
49	Finite termination of the proximal point algorithm in Banach spaces. Journal of Mathematical Analysis and Applications, 2012, 387, 765-769.	0.5	7
50	Extra gain: Improved sparse channel estimation using reweighted &#x2113;<inf>1</inf>-norm penalized LMS/F algorithm. , 2014, , .		7
51	Stable sparse channel estimation algorithm under non-Gaussian noise environments. , 2015, , .		7
52	A brief review and insights into matrix inequalities for H_{∞} static-output-feedback control and a local optimal solution. International Journal of Systems Science, 2019, 50, 2292-2305.	3.7	7
53	Common eigenvector approach to exact order reduction for multidimensional Fornasiniâ€"Marchesini state-space models. International Journal of Systems Science, 2019, 50, 60-74.	3.7	7
54	Order evaluation to new elementary operation approach for MIMO multidimensional systems. International Journal of Control, 2019, 92, 2349-2359.	1.2	7

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55	Derivation and reduction of the singular Fornasiniâ€"Marchesini stateâ€space model for a class of multidimensional systems. IET Control Theory and Applications, 2020, 14, 634-645.	1.2	7
56	Revisiting the Absolutely Minimal Realization for Two-dimensional Digital Filters. , 2007, , .		6
57	Sufficient LMI conditions for H<inf>∞</inf> static output feedback control of 2-D systems. , 2010, , .		6
58	Asymptotic unknown input observers for two-dimensional systems. , 2011, , .		6
59	Hybridization of harmony search with Nelder-Mead algorithm for combined heat and power economic dispatch problem. , 2017, , .		6
60	State-space formulation of 2-D frequency transformation in Fornasiniâ€"Marchesini second model. Multidimensional Systems and Signal Processing, 2018, 29, 361-383.	1.7	6
61	Adaptive filtering algorithm for direction-of-arrival (DOA) estimation with small snapshots. , 2019, 94, 84-95.		6
62	An approach to multidimensional Fornasiniâ€"Marchesini state-space model realization w.r.t. columns of transfer matrices. Systems and Control Letters, 2019, 123, 116-123.	1.3	6
63	3-D modelling of rectangular circuits as the particular class of spatially interconnected systems on the plane. Multidimensional Systems and Signal Processing, 2019, 30, 1583-1608.	1.7	6
64	A Â Approach to Robust Stability Analysis of nD Discrete Systems. Multidimensional Systems and Signal Processing, 2004, 15, 277-293.	1.7	5
65	A new elementary operation approach to multidimensional realization and LFR uncertainty modeling. , 2008, , .		5
66	H<inf>∞</inf> static output feedback controller design for two-dimensional discrete systems in Roesser model. , 2010, , .		5
67	2-D zero-phase IIR notch filters design based on state-space representation of 2-D frequency transformation. , 2015, , .		5
68	A novel adaptive wide-angle SAR imaging algorithm based on Boltzmann machine model. Multidimensional Systems and Signal Processing, 2018, 29, 119-135.	1.7	5
69	Sparse Detection Algorithms Based on Two-Dimensional Compressive Sensing for Sub-Nyquist Pulse Doppler Radar Systems. IEEE Access, 2019, 7, 18649-18661.	2.6	5
70	A digraph approach to the state-space model realization of MIMO non-commensurate fractional order systems. Journal of the Franklin Institute, 2022, 359, 5014-5035.	1.9	5
71	A Constructive Procedure for Multidimensional Realization and LFR Uncertainty Modelling. , 0, , .		4
72	A general state-space representation of n-variable bilinear transformation. Signal Processing, 2011, 91, 185-190.	2.1	4

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73	Variable Is Better Than Invariable: Sparse VSS-NLMS Algorithms with Application to Adaptive MIMO Channel Estimation. Scientific World Journal, The, 2014, 2014, 1-10.	0.8	4
74	Compressive Sensing Based Bayesian Sparse Channel Estimation for OFDM Communication Systems: High Performance and Low Complexity. Scientific World Journal, The, 2014, 2014, 1-10.	0.8	4
75	Block Bayesian sparse learning algorithms with application to estimating channels in OFDM systems. , 2014, , .		4
76	Fast NLMF-type algorithms for adaptive sparse system identifications. , 2015, , .		4
77	Correntropy Induced Metric Penalized Sparse RLS Algorithm to Improve Adaptive System Identification. , 2016, , .		4
78	Design of orthogonal filterbanks with rational coefficients using Grobner bases. , 2017, , .		4
79	Optimization of coordinate transformation matrix for $$H_{infty }$$ static-output-feedback control of 2-D discrete systems in FM second model. Multidimensional Systems and Signal Processing, 2018, 29, 1727-1737.	1.7	4
80	Distributed output-feedback controllers design for Markovian jump systems interconnected over an undirected graph with time-varying delay. International Journal of Systems Science, 2019, 50, 563-584.	3.7	4
81	Distributed delayâ€dependent filtering for Markovian jump systems interconnected over an undirected graph with timeâ€delay. Asian Journal of Control, 2020, 22, 1253-1267.	1.9	4
82	Distributed Hˆž fuzzy filtering for nonlinear systems interconnected over graphs. International Journal of Adaptive Control and Signal Processing, 2022, 36, 1172-1195.	2.3	4
83	Symbolic implementation of the new elementary operation approach for multidimensional realization and LFR uncertainty modeling. , 2010, , .		3
84	State-space formulation of 2-D frequency transformation base on Fornasini-Marchesini second model. , 2013, , .		3
85	Affine combination of two adaptive sparse filters for estimating large scale MIMO channels. , 2014, , .		3
86	Normalized least mean squareâ€based adaptive sparse filtering algorithms for estimating multipleâ€input multipleâ€output channels. Wireless Communications and Mobile Computing, 2015, 15, 1079-1088.	0.8	3
87	On the finite termination of the Douglas-Rachford method for the convex feasibility problem. Optimization, 2016, 65, 2037-2047.	1.0	3
88	Common eigenvector approach to exact order reduction for Roesser state-space models of multidimensional systems. Systems and Control Letters, 2019, 134, 104559.	1.3	3
89	DOA Estimation With Small Snapshots Using Weighted Mixed Norm Based on Spatial Filter. IEEE Transactions on Vehicular Technology, 2020, 69, 16183-16187.	3.9	3
90	Pattern Recognition of Movements on Bed Aimed at Prediction of Bed-leaving Behaviors. Transactions of the Society of Instrument and Control Engineers, 2015, 51, 528-534.	0.1	3

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91	Aggregated Reduction Model Based on Partial Block Observability Matrix. , 2009, , .		2
92	Roesser model realization of MIMO n-D systems by elementary operations. , 2011, , .		2
93	Invariance of second-order modes of 2-D digital filters under 2-D frequency transformation. , 2012, , .		2
94	A procedure for n-D Fornasini-Marchesini state-space model realization based on right matrix fraction description. , 2013, , .		2
95	Symbolic implementation of the new elementary operation approach for MIMO multidimensional realization. , 2014, , .		2
96	Optimization of coordinate transformation matrix for discrete-time H<inf>∞</inf> static-output-feedback control problems. , 2014, , .		2
97	Correntropy induced metric penalized NLMF algorithm to improve sparse system identification. , 2015, , .		2
98	Stable adaptive channel estimation method under impulsive noise environments. International Journal of Communication Systems, 2017, 30, e3104.	1.6	2
99	Sparse target detection of pulse Doppler radar based on two dimensional iterative hard thresholding algorithm. , 2017, , .		2
100	A new order reduction approach for multidimensional roesser model based on real eigenvalues. , 2017, , .		2
101	Order reduction for roesser state-space model based on real jordan transformation. , 2017, , .		2
102	Compressive Sensing Based Direction-of-Arrival Estimation in MIMO Radars in Presence of Strong Jamming via Blocking Matrix. , 2018, , .		2
103	A novel constructive procedure to low-order Fornasiniâ€"Marchesini model realization. Journal of the Franklin Institute, 2020, 357, 1764-1789.	1.9	2
104	Distributed finiteâ€time control for systems interconnected over an undirected graph. Asian Journal of Control, 2022, 24, 282-296.	1.9	2
105	Robust adaptive control of a class of 2-D discrete systems in the presence of disturbances. , 0, , .		1
106	On the Synthesis of Stable Stabilizing Compensators for Linear nD SISO Systems. , 0, , .		1
107	New results on minimal realization of 2D filters. , 2005, , .		1
108	A Constructive Procedure for Three-Dimensional Realization. , 2006, , .		1

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109	A parameter optimization approach to robust PI-controller design for systems with interval plants. Journal of Control Theory and Applications, 2008, 6, 435-441.	0.8	1
110	Study on robust H âˆž filtering in networked environments. International Journal of Automation and Computing, 2011, 8, 465-471.	4.5	1
111	An Iterative Procedure for Multidimensional Realization By LFT Techniques. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 723-727.	0.4	1
112	Adaptive MIMO channel estimation using sparse variable step-size NLMS algorithms. , 2014, , .		1
113	Improved adaptive sparse channel estimation using re-weighted L1-norm normalized least mean fourth algorithm. , 2015, , .		1
114	Iteration-promoting variable step size least mean square algorithm for accelerating adaptive channel estimation. , 2015, , .		1
115	A hybrid optimization approach for discrete-time H<inf>∞</inf> static-output-feedback control problem. , 2015, , .		1
116	Accelerated reflection projection algorithm and its application to the LMI problem. Optimization, 2015, 64, 2307-2320.	1.0	1
117	Human Sensing for Sleep Monitoring Using Film-Load Sensors. Journal of Japan Society for Fuzzy Theory and Intelligent Informatics, 2016, 28, 963-973.	0.0	1
118	Order reduction for roesser state-space model based on a certain system of equations. , 2017, , .		1
119	Two-dimensional zero-attraction projection algorithm for single snapshot DOA estimation. , 2017, , .		1
120	Exact order reduction for fornasini-marchesini state-space models based on real eigenvalues. , 2018, , .		1
121	Anti-jamming DOA Estimation Based on Compressive Sensing via Blocking Matrix. , 2018, , .		1
122	Elementary operation approach to Fornasiniâ€"Marchesini state-space model realization of multidimensional systems. Journal of the Franklin Institute, 2020, 357, 8098-8117.	1.9	1
123	Further results on primitive factorizations for nD polynomial matrices. , 0, , .		0
124	Grobner bases and applications in the design of multidimensional iir filter banks. , 0, , .		0
125	Roust PI-Controller Design for Systems With Interval Plants: An Eigenvalue Approach. , 2003, , .		0
126	A &#956; Approach to Roust Staility Analysis of nD Discrete-time Systems. , 2003, , .		0

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127	Design of multidimensional filter banks using Grobner bases: a survey. , 0, , .		0
128	Minimal Realization of a Class of 2D Filters. , 2006, , .		0
129	New results on state-space formulation of 2-D frequency transformation. , 2008, , .		0
130	Synthesis of multidimensional control systems by Gr&#x00F6;bner basis approach. , 2008, , .		0
131	Structural insights in constructive procedures for multidimensional realization and LFR uncertainty modeling. , 2008, , .		0
132	Decentralized adaptive stabilization of nonlinear interconnected stochastic systems by output feedback. , 2009, , .		0
133	State-space formulation of n-variable bilinear transformation for n-D systems. , 2010, , .		0
134	Image registration based on a novel 2-D adaptive filter algorithm. , 2012, , .		0
135	Stabilizability analysis of sphere plants. Journal of Central South University, 2012, 19, 2561-2571.	1.2	0
136	Order evaluation for realization of MIMO multidimensional systems. , 2014, , .		0
137	Suitable is the best: Least absolute deviation algorithm under high-mobility non-Gaussian noise environments. , 2014, , .		0
138	A New Order Reduction Approach for Roesser State-Space Model Based on Multiple Eigenvalues. , 2018, , .		0
139	A new elementary operation approach for the realization of 2-D singular systems. , 2018, , .		0
140	Stochastic stability and performance analysis for Markovian jump systems interconnected over an undirected graph. , 2018, , .		0
141	Exact Order Reduction for the Fornasini-Marchesini State-Space Model Based on Common Invariant Subspace. , 2019, , .		0
142	A Common Invariant Subspace Approach to Exact Order Reduction for Multidimensional Roesser State-Space Models. , 2020, , .		0