Er-wei Bai

List of Publications by Year
in descending order

102 papers	1,857 citations	331670 21 h-index	276875 41 g-index
102 all docs	102 docs citations	102 times ranked	1248 citing authors

#	Article	IF	Citations
1	Identification of Sparse Volterra Systems: An Almost Orthogonal Matching Pursuit Approach. IEEE Transactions on Automatic Control, 2022, 67, 2027-2032.	5.7	4
2	Persistence of excitation for identifying switched linear systems. Automatica, 2022, 137, 110142.	5.0	3
3	Variable Selection According to Goodness of Fit in Nonparametric Nonlinear System Identification. IEEE Transactions on Automatic Control, 2021, 66, 3184-3196.	5.7	2
4	Vocal pattern detection of depression among older adults. International Journal of Mental Health Nursing, 2020, 29, 440-449.	3.8	13
5	Analytical Iterative Multistep Interval Forecasts of Wind Generation Based on TLGP. IEEE Transactions on Sustainable Energy, 2019, 10, 625-636.	8.8	15
6	Variable Selection for a Nonparametric Nonlinear System by Directional Regression. , 2019, , .		0
7	Consistent Variable Selection for a Nonparametric Nonlinear System by Inverse and Contour Regressions. IEEE Transactions on Automatic Control, 2019, 64, 2653-2664.	5.7	4
8	Variable selection of high-dimensional non-parametric nonlinear systems by derivative averaging to avoid the curse of dimensionality. Automatica, 2019, 101, 138-149.	5.0	9
9	Source Localization by a Binary Sensor Network in the Presence of Imperfection, Noise, and Outliers. IEEE Transactions on Automatic Control, 2018, 63, 347-359.	5.7	12
10	Variable Selection and Identification of High-Dimensional Nonparametric Additive Nonlinear Systems. IEEE Transactions on Automatic Control, 2017, 62, 2254-2269.	5.7	8
11	Outliers in system identification. , 2017, , .		1
12	Global and asymptotically efficient identification of nonlinear rational systems via a two-step method. , 2016, , .		0
13	Time series wind power forecasting based on variant Gaussian Process and TLBO. Neurocomputing, 2016, 189, 135-144.	5.9	52
14	Parameter convergence in source localization. , 2016, , .		2
15	Hybrid Probabilistic Wind Power Forecasting Using Temporally Local Gaussian Process. IEEE Transactions on Sustainable Energy, 2016, 7, 87-95.	8.8	121
16	A bayesian approach to multiple target localization. , 2015, , .		1
17	Maximum Likelihood Localization of Radioactive Sources Against a Highly Fluctuating Background. IEEE Transactions on Nuclear Science, 2015, 62, 3274-3282.	2.0	22
18	Special condition wind power forecasting based on Gaussian Process and similar historical data. , 2015, , .		3

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19	A Preliminary Study on Cleaning up Erroneous Data and Filling in Missing Values in A Medical Recordâ—âˆ—This work was supported in part by NSF CNS-1239509.. IFAC-PapersOnLine, 2015, 48, 493-498.	0.9	2
20	Kernel-based local order estimation of nonlinear nonparametric systems. Automatica, 2015, 51, 243-254.	5.0	27
21	Variable selection in identification of a high dimensional nonlinear non-parametric system. Control Theory and Technology, 2015, 13, 1-16.	1.6	2
22	Robust tracking of piecewise linear trajectories with binary sensor networks. Automatica, 2015, 61, 134-145.	5.0	10
23	Minimizing Energy Cost in Electric Arc Furnace Steel Making by Optimal Control Designs. Journal of Energy, 2014, 2014, 1-9.	3.2	14
24	The maximum likelihood estimate for radiation source localization: Initializing an iterative search. , 2014, , .		9
25	A distributed control law for optimum sensor placement for source localization. , 2014, , .		1
26	Generalized Wiener system identification: General backlash nonlinearity and finite impulse response linear part. International Journal of Adaptive Control and Signal Processing, 2014, 28, 1174-1188.	4.1	12
27	Kernel based approaches to local nonlinear non-parametric variable selection. Automatica, 2014, 50, 100-113.	5.0	33
28	A Recursive Local Linear Estimator for Identification of Nonlinear ARX Systems: Asymptotical Convergence and Applications. IEEE Transactions on Automatic Control, 2013, 58, 3054-3069.	5.7	29
29	On the Gradient Descent Localization of Radioactive Sources. IEEE Signal Processing Letters, 2013, 20, 1046-1049.	3.6	19
30	Prediction error adjusted Gaussian Process for short-term wind power forecasting. , 2013, , .		9
31	A novel LOO based two-stage method for automatic model identification of a class of nonlinear dynamic systems. , 2013, , .		3
32	Variable selection via RIVAL (removing irrelevant variables amidst Lasso iterations) and its application to nuclear material detection. Automatica, 2012, 48, 2107-2115.	5.0	21
33	How Nonlinear Parametric Wiener System Identification is Under Gaussian Inputs?. IEEE Transactions on Automatic Control, 2012, 57, 738-742.	5.7	10
34	A new approach for aggregated PageRank computation via distributed randomized algorithms. , 2011, , .		2
35	Adaptive bolus chasing computed tomography angiography by a local linear time and space parameter varying model: modeling, control, identification, and experimental results. Frontiers of Electrical and Electronic Engineering in China: Selected Publications From Chinese Universities, 2010, 5, 119-127.	0.6	0
36	Distributed randomized pagerank algorithms based on web aggregation over unreliable channels. , 2010, , .		3

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37	Adaptive bolus chasing Computed Tomography Angiography: Modeling, identification, control and experimental results. , 2010, , .		0
38	Non-Parametric Nonlinear System Identification: An Asymptotic Minimum Mean Squared Error Estimator. IEEE Transactions on Automatic Control, 2010, 55, 1615-1626.	5.7	55
39	An Interactive Term Approach to Non-Parametric FIR Nonlinear System Identification. IEEE Transactions on Automatic Control, 2010, 55, 1952-1957.	5.7	6
40	Is Wiener/Hammerstein system identification really nonlinear?. , 2010, , .		0
41	Distributed randomized PageRank computation based on web aggregation. , 2009, , .		15
42	Non-parametric nonlinear system identification: An asymptotic minimum mean squared error estimator. , 2009, , .		0
43	Identification of a modified Wiener–Hammerstein system and its application in electrically stimulated paralyzed skeletal muscle modeling. Automatica, 2009, 45, 736-743.	5.0	65
44	Towards identification of Wiener systems with the least amount of a priori information: IIR cases. Automatica, 2009, 45, 956-964.	5.0	43
45	Two-Stage Mixed Discrete–Continuous Identification of Radial Basis Function (RBF) Neural Models for Nonlinear Systems. IEEE Transactions on Circuits and Systems I: Regular Papers, 2009, 56, 630-643.	5.4	32
46	Identification of an additive nonlinear system and its applications in generalized Hammerstein models. Automatica, 2008, 44, 430-436.	5.0	42
47	Application of Wiener-Hammerstein system identification in electrically stimulated paralyzed skeletal muscle modeling. , 2008, , .		1
48	An Adaptive Optimal Control Design for a Bolus Chasing Computed Tomography Angiography. IEEE Transactions on Control Systems Technology, 2008, 16, 60-69.	5.2	11
49	Identification of IIR Nonlinear Systems Without Prior Structural Information. IEEE Transactions on Automatic Control, 2007, 52, 442-453.	5.7	30
50	Identification of wiener systems : the least amount of a priori information. , 2007, , .		0
51	An interactive term approach to non-parametric FIR nonlinear system identification. , 2007, , .		1
52	Recursive Direct Weight Optimization in Nonlinear System Identification: A Minimal Probability Approach. IEEE Transactions on Automatic Control, 2007, 52, 1218-1231.	5.7	54
53	A comparative study on interpolation methods for controlled cardiac CT. International Journal of Imaging Systems and Technology, 2007, 17, 91-98.	4.1	5
54	A two-stage algorithm for identification of nonlinear dynamic systems. Automatica, 2006, 42, 1189-1197.	5.0	169

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55	Controlled Cardiac Computed Tomography. International Journal of Biomedical Imaging, 2006, 2006, 1-11.	3.9	4
56	A Minimal Probability Approach in Nonparametric Nonlinear System Identification. , 2006, , .		0
57	Iterative identification of Hammerstein systems with piecewise-linear nonlinearities. , 2006, , .		6
58	Study of an adaptive bolus chasing CT angiography. Journal of X-Ray Science and Technology, 2006, 14, 27-38.	1.0	4
59	Blind source separation/channel equalization of nonlinear channels with binary inputs. IEEE Transactions on Signal Processing, 2005, 53, 2315-2323.	5.3	9
60	Convergence of the Iterative Hammerstein System Identification Algorithm. IEEE Transactions on Automatic Control, 2004, 49, 1929-1940.	5.7	178
61	Outliers, inliers and the generalized least trimmed squares estimator in system identification. Journal of Control Theory and Applications, 2003, 1, 17-27.	0.8	1
62	Blind source separation of signals with known alphabets using -approximation algorithms. IEEE Transactions on Signal Processing, 2003, 51, 1-10.	5.3	20
63	Frequency domain identification of hammerstein models. IEEE Transactions on Automatic Control, 2003, 48, 530-542.	5.7	109
64	On the Horton-weigel-sprott model of the solar-wind-driven magnetosphere-ionosphere system. URSI Radio Science Bulletin, 2003, 2003, 11-16.	0.1	0
65	A blind approach to Hammerstein model identification. IEEE Transactions on Signal Processing, 2002, 50, 1610-1619.	5.3	137
66	Optimization with few violated constraints for linear bounded error parameter estimation. IEEE Transactions on Automatic Control, 2002, 47, 1067-1077.	5.7	32
67	An Optimization Based Robust Identification Algorithm in the Presence of Outliers. Journal of Global Optimization, 2002, 23, 195-211.	1.8	4
68	Blind decision feedback equalization of time-varying channels with DPSK inputs. IEEE Transactions on Signal Processing, 2001, 49, 1533-1542.	5.3	14
69	Blind channel equalization and Îμ-approximation algorithms. IEEE Transactions on Signal Processing, 2001, 49, 2823-2831.	5.3	8
70	Zero distribution of sampled systems with non-rational transfer functions. , 2001, , .		0
71	Zero-forcing equalizability of FIR and IIR multichannel systems with and without perfect measurements. IEEE Transactions on Communications, 2000, 48, 17-22.	7.8	5
72	Invertibility of sampled data systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2000, 47, 279-289.	0.1	4

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73	Convergence results of the analytic center estimator. IEEE Transactions on Automatic Control, 2000, 45, 569-572.	5.7	4
74	Constrained logarithmic least squares in parameter estimation. IEEE Transactions on Automatic Control, 1999, 44, 182-186.	5.7	4
75	Device physics using the method of moments. IEEE Transactions on Education, 1998, 41, 112-115.	2.4	2
76	Convergence results for an adaptive dead zone inverse. International Journal of Adaptive Control and Signal Processing, 1998, 12, 451-466.	4.1	147
77	Worst-case properties of the uniform distribution and randomized algorithms for robustness analysis. Mathematics of Control, Signals, and Systems, 1998, 11, 183-196.	2.3	60
78	The least squares: output error sensitivity and the constrained logarithmic algorithm. , 1998, , .		1
79	Parametrization and adaptive compensation of friction forces. International Journal of Adaptive Control and Signal Processing, 1997, 11, 21-31.	4.1	17
80	Simulation Of Spring Discharge From A Limestone Aquifer In Iowa, USA. Hydrogeology Journal, 1996, 4, 41-54.	2.1	33
81	Digital identification of a continuous-time system and some related issues. International Journal of Control, 1995, 61, 149-170.	1.9	2
82	Simulation of Linear And Nonlinear Wave Propagation On Transmission Lines. Electromagnetics, 1995, 15, 665-677.	0.7	0
83	Improving delay estimates derived from least-square algorithms and PadÃ© approximations. International Journal of Systems Science, 1993, 24, 745-756.	5.5	14
84	Digital Identification of A Continuous Time System and Some Related Problems. , 1993, , .		0
85	Robust System Identification with Noisy Time/Frequency Response Experimental Data: Projection Operator and Linear Algorithms. , 1993, , .		0
86	Hard and Tight Upper Bounds on The Model Uncertainty in Linear Estimation of Restricted Complexity Models. , 1992, , .		0
87	A Linear Robustly Convergent Interpolatory Algorithm For System Identification. , 1992, , .		7
88	Controller design based on observable vector feedback. International Journal of Systems Science, 1991, 22, 2217-2228.	5.5	1
89	Adaptive Quantification of Model Uncertainties for Possibly Unstable Systems. , 1991, , .		1
90	Uncertainty Bound Estimation and Its Applications. , 1991, , .		0

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91	Robust control design of sampled systems. International Journal of Systems Science, 1990, 21, 985-992.	5.5	2
92	Uncertainties in Sampled Data Systems. , 1989, , .		1
93	A random Least Trimmed Squares identification algorithm. , 0, , .		1
94	Analytic center approach to parameter estimation: convergence analysis. , 0, , .		4
95	A robust stochastic identification algorithm in the presence of outliers. , 0, , .		0
96	On identifiability in blind IIR system identifications. , 0, , .		1
97	Zero-forcing equalizability of FIR and IIR multi-channel systems with and without perfect measurements. , 0, , .		0
98	Inverse of a sampled system. , 0, , .		0
99	Frequency domain identification of Hammerstein models. , 0, , .		6
100	The Size of the Membership Set in the Presence of Disturbance and Parameter Uncertainty. , 0, , .		1
101	Identification of an Additive NFIR System and its applications in generalized Hammerstein models. , 0, , .		1
102	On the Least Squares Solutions of a System of Bilinear Equations. , 0, , .		5