Yi Shen

List of Publications by Year in Descending Order

170 papers	1,757 citations	22 h-index	34 g-index
249 ext. papers	2,399 ext. citations	3.3 avg, IF	5.46 L-index

#	Paper	IF	Citations
170	Efficiency Enhancement of Tilted Bifacial Photovoltaic Modules with Horizontal Single-Axis Tracker⬛he Bifacial Companion Method. *Energies*, **2022**, 15, 1262	3.1	0
169	Fault Symptoms Generation via Reachable Set Estimation. *Lecture Notes in Electrical Engineering*, **2022**, 2811-2821	0.2	
168	An improved reconstruction method based on auto-adjustable step size sparsity adaptive matching pursuit and adaptive modular dictionary update for acoustic emission signals of rails. *Measurement: Journal of the International Measurement Confederation*, **2022**, 189, 110650	4.6	3
167	Outlier-robust set-membership estimation for discrete-time linear systems. *International Journal of Robust and Nonlinear Control*, **2022**, 32, 2313-2329	3.6	0
166	Fast interval estimation for discrete-time linear systems: An L1 optimization method. *Automatica*, **2021**, 137, 110029	5.7	2
165	Ellipsoid-based Interval Estimation for Lipschitz Nonlinear Systems. *IEEE Transactions on Automatic Control*, **2021**, 1-1	5.9	2
164	An adaptive extraction method for rail crack acoustic emission signal under strong wheel-rail rolling noise of high-speed railway. *Mechanical Systems and Signal Processing*, **2021**, 154, 107546	7.8	5
163	Interval Estimation for Uncertain Systems via Polynomial Chaos Expansions. *IEEE Transactions on Automatic Control*, **2021**, 66, 468-475	5.9	5
162	Computer aided diagnosis of thyroid nodules based on the devised small-datasets multi-view ensemble learning. *Medical Image Analysis*, **2021**, 67, 101819	15.4	8
161	Zonotopic reachable set estimation for bilinear systems with time-varying delays. *International Journal of Systems Science*, **2021**, 52, 848-856	2.3	1
160	Unknown Input Observer Design for Linear Parameter-Varying Systems in a Bounded Error Context. *IEEE Transactions on Automatic Control*, **2021**, 66, 4246-4251	5.9	4
159	Interval estimation of sensor fault based on zonotopic Kalman filter. *International Journal of Control*, **2021**, 94, 1641-1650	1.5	2
158	Deep spectral unmixing framework via 3D denoising convolutional autoencoder. *IET Image Processing*, **2021**, 15, 1399-1409	1.7	1
157	Reachable set estimation for uncertain nonlinear systems with time delay. *Optimal Control Applications and Methods*, **2020**, 41, 1644-1656	1.7	2
156	. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2020**, 1-11	7.3	9
155	Interval estimation of state and unknown input for linear discrete-time systems. *Journal of the Franklin Institute*, **2020**, 357, 9045-9062	4	1
154	Reachable Set Estimation for Uncertain Linear Systems with Known Inputs. *International Journal of Control, Automation and Systems*, **2020**, 18, 2445-2455	2.9	2

153	Set-membership estimation for linear time-varying descriptor systems. *Automatica*, **2020**, 115, 108867	5.7	21
152	Blind source extraction of acoustic emission signals for rail cracks based on ensemble empirical mode decomposition and constrained independent component analysis. *Measurement: Journal of the International Measurement Confederation*, **2020**, 157, 107653	4.6	14
151	Ellipsoid bundle and its application to set-membership estimation. *IFAC-PapersOnLine*, **2020**, 53, 13688-13693	3.7	0
150	A two-step approach to interval estimation for continuous-time switched linear systems. *IFAC-PapersOnLine*, **2020**, 53, 4175-4180	0.7	1
149	Fast interval estimation for discrete-time systems based on fixed-time convergence. *IFAC-PapersOnLine*, **2020**, 53, 4571-4575	0.7	
148	Rail crack detection using acoustic emission technique by joint optimization noise clustering and time window feature detection. *Applied Acoustics*, **2020**, 160, 107141	3.1	10
147	Distributed fault estimation for linear systems with actuator faults. *International Journal of Robust and Nonlinear Control*, **2020**, 30, 6853-6878	3.6	3
146	A parameter optimized variational mode decomposition method for rail crack detection based on acoustic emission technique. *Nondestructive Testing and Evaluation*, **2020**, 1-29	2	1
145	Zonotopic reachable set estimation for linear discrete-time systems with time delay. *International Journal of Robust and Nonlinear Control*, **2020**, 30, 5542-5558	3.6	5
144	Aviation Plug Clustering Based Fault Detection Method Using Hyperspectral Image **2020**,		1
143	Fault detection and isolation for discrete-time descriptor systems based on H/L observer and zonotopic residual evaluation. *International Journal of Control*, **2020**, 93, 1867-1878	1.5	25
142	A state augmentation approach to interval fault estimation for descriptor systems. *European Journal of Control*, **2020**, 51, 19-29	2.5	14
141	Gyroscope fault accommodation based on dedicated Kalman filters. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **2020**, 234, 254-266	0.9	5
140	Combined FATEMD-based band selection method for hyperspectral images. *IET Image Processing*, **2019**, 13, 287-298	1.7	
139	Zonotopic fault detection observer for linear parameter-varying descriptor systems. *International Journal of Robust and Nonlinear Control*, **2019**, 29, 3426-3445	3.6	13
138	H/L fault detection observer for linear parameter-varying systems with parametric uncertainty. *International Journal of Robust and Nonlinear Control*, **2019**, 29, 2912-2926	3.6	14
137	Interval Estimation Methods for Discrete-Time Linear Time-Invariant Systems. *IEEE Transactions on Automatic Control*, **2019**, 64, 4717-4724	5.9	57
136	Robust fault estimation in the finite-frequency domain for multi-agent systems. *Transactions of the Institute of Measurement and Control*, **2019**, 41, 3171-3181	1.8	4

135	Interval Observer Design for Discrete-Time Uncertain TakagiSugeno Fuzzy Systems. *IEEE Transactions on Fuzzy Systems*, **2019**, 27, 816-823	8.3	24
134	Hierarchical Human Machine Interaction Learning for a Lower Extremity Augmentation Device. *International Journal of Social Robotics*, **2019**, 11, 123-139	4	8
133	Hypergraph Learning and Reweighted ℓ_1-Norm Minimization for Hyperspectral Unmixing. *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, **2019**, 12, 1898-1904	4.7	8
132	Interval observer design for continuous-time linear parameter-varying systems. *Systems and Control Letters*, **2019**, 134, 104541	2.4	20
131	A Fractal Model of Acoustic Emission Signals in Sliding Friction. *Tribology Letters*, **2019**, 67, 1	2.8	4
130	Aviation Plug On-site Measurement and Fault Detection Method Based on Model Matching **2019**,		2
129	Interval estimation of actuator fault by interval analysis. *IET Control Theory and Applications*, **2019**, 13, 2717-2724	2.5	3
128	Ellipsoid-based interval estimation for Takagi-Sugeno fuzzy systems **2019**,		5
127	Unknown Input Observer Design for Takagi-Sugeno Systems with Fuzzy Output Equation. *International Journal of Control, Automation and Systems*, **2019**, 17, 267-272	2.9	9
126	Locomotion Stability Analysis of Lower Extremity Augmentation Device. *Journal of Bionic Engineering*, **2019**, 16, 99-114	2.7	4
125	Interval estimation for discrete-time linear systems: A two-step method. *Systems and Control Letters*, **2019**, 123, 69-74	2.4	25
124	A Simple Approach to Distributed Observer Design for Linear Systems. *IEEE Transactions on Automatic Control*, **2019**, 64, 329-336	5.9	60
123	A novel rail defect detection method based on undecimated lifting wavelet packet transform and Shannon entropy-improved adaptive line enhancer. *Journal of Sound and Vibration*, **2018**, 425, 208-220	3.9	15
122	Towards a minimal order distributed observer for linear systems. *Systems and Control Letters*, **2018**, 114, 59-65	2.4	15
121	Fault estimation for a quadrotor unmanned aerial vehicle by integrating the parity space approach with recursive least squares. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **2018**, 232, 783-796	0.9	21
120	Detection method based on Kalman filter for high speed rail defect AE signal on wheel-rail rolling rig. *Nondestructive Testing and Evaluation*, **2018**, 33, 75-91	2	6
119	Probabilistic Sensitivity Amplification Control for Lower Extremity Exoskeleton. *Applied Sciences (Switzerland)*, **2018**, 8, 525	2.6	9
118	Intrinsic Sensing and Evolving Internal Model Control of Compact Elastic Module for a Lower Extremity Exoskeleton. *Sensors*, **2018**, 18,	3.8	8

117	Interval observer design for uncertain discrete-time linear systems. *Systems and Control Letters*, **2018**, 116, 41-46	2.4	87
116	A new rail crack detection method using LSTM network for actual application based on AE technology. *Applied Acoustics*, **2018**, 142, 78-86	3.1	16
115	H_/H∞ fault detection observer design for a polytopic LPV system using the relative degree. *International Journal of Applied Mathematics and Computer Science*, **2018**, 28, 83-95	1.7	5
114	Three-Dimensional Empirical Mode Decomposition Based Hyperspectral Band Selection Method **2018**,		1
113	An improved recovery method of rail crack signal based on least-square deconvolution algorithm with sectional regulatory factors **2018**,		2
112	fault detection for linear discrete-time descriptor systems. *IET Control Theory and Applications*, **2018**, 12, 2156-2163	2.5	15
111	Zonotopic fault detection observer design for Takagi-Sugeno fuzzy systems. *International Journal of Systems Science*, **2018**, 49, 3216-3230	2.3	8
110	An investigation on acoustic emission detection of rail crack in actual application by chaos theory with improved feature detection method. *Journal of Sound and Vibration*, **2018**, 436, 165-182	3.9	4
109	High Precision Data-driven Force Control of Compact Elastic Module for a Lower Extremity Augmentation Device. *Journal of Bionic Engineering*, **2018**, 15, 805-819	2.7	3
108	A signal-adapted wavelet design method for acoustic emission signals of rail cracks. *Applied Acoustics*, **2018**, 139, 251-258	3.1	6
107	Memory-based passive control design for complex networked fuzzy delta operator systems. *Advances in Mechanical Engineering*, **2017**, 9, 168781401769914	1.2	0
106	A wearable bone-conducted speech enhancement system for strong background noises **2017**,		7
105	fault detection observer design in finite-frequency domain for Lipschitz non-linear systems. *IET Control Theory and Applications*, **2017**, 11, 2361-2369	2.5	25
104	Rail crack detection based on the adaptive noise cancellation method of EMD at high speed **2017**,		1
103	An improved method of rail health monitoring based on CNN and multiple acoustic emission events **2017**,		5
102	Coupled denoising and unmixing with low rank constraint and hypergraph regularization for hyperspectral image **2017**,		1
101	Geometric structure based intelligent collaborative compressive sensing for image reconstruction by l0 minimization. *Neurocomputing*, **2017**, 260, 221-234	5.4	
100	Intelligent nonconvex compressive sensing using prior information for image reconstruction by sparse representation. *Neurocomputing*, **2017**, 224, 71-81	5.4	12

99   Simultaneous fault estimation and fault-tolerant tracking control for uncertain nonlinear discrete-time systems. *International Journal of Systems Science*, **2017**, 48, 1367-1379   2.3   8

98   H-/L Fault detection observer design for linear parameter-varying systems. *IFAC-PapersOnLine*, **2017**, 50, 15271-15276   0.7   14

97   Mutual information and clone selection algorithm based hyperspectral band selection method **2017**,   2

96   H/L Fault detection observer for discrete-time Takagi-Sugeno fuzzy systems **2017**,   3

95   Robust H Fault diagnosis observer design for multiple satellites attitude synchronization with disturbance **2016**,   1

94   H/H Fault detection filter design for interval time-varying delays switched systems. *Journal of Systems Engineering and Electronics*, **2016**, 27, 878-886   1.3   4

93   Convolutional neural network based classification for hyperspectral data **2016**,   17

92   A self-healing control method for satellite attitude tracking based on simultaneous fault estimation and control design **2016**,   2

91   Manifold learning based supervised hyperspectral data classification method using class encoding **2016**,   2

90   Hyperspectral image classification method based on orthogonal NMF and LPP **2016**,   3

89   A CT-based investigation of the influence of tissue modulus variation, anisotropy and inhomogeneity on ultrasound propagation in trabecular bone. *Journal of the Mechanical Behavior of Biomedical Materials*, **2016**, 60, 416-424   4.1   1

88   Predicted multi-variable intelligent matching pursuit algorithm for image sequences reconstruction based on l0 minimization. *Journal of Visual Communication and Image Representation*, **2016**, 38, 316-327   2.7   3

87   Intelligent greedy pursuit model for sparse reconstruction based on l0 minimization. *Signal Processing*, **2016**, 122, 138-151   4.4   8

86   Total variation-regularized weighted nuclear norm minimization for hyperspectral image mixed denoising. *Journal of Electronic Imaging*, **2016**, 25, 013037   0.7   30

85   Multi-variable intelligent matching pursuit algorithm using prior knowledge for image reconstruction by l0 minimization. *Neurocomputing*, **2016**, 207, 548-559   5.4   4

84   Non-uniform sampling photoacoustic microscope system based on low rank matrix completion **2016**,   1

83   Theoretical results for sparse signal recovery with noises using generalized OMP algorithm. *Signal Processing*, **2015**, 117, 270-278   4.4   8

82   Fault estimation filter design for discrete-time descriptor systems. *IET Control Theory and Applications*, **2015**, 9, 1587-1594   2.5   39

81	Stress Estimation in Different Bone Layers Subject to Therapeutic Ultrasound in an Intelligent Bone System. *IEEE Transactions on Instrumentation and Measurement*, **2015**, 64, 1204-1214	5.2	3
80	Pulsar signal de-noising method based on multivariate empirical mode decomposition **2015**,		1
79	Compressed sensing and mobile agent based sparse data collection in wireless sensor networks **2015**,		2
78	Actuator fault estimation observer design for discrete-time linear parameter-varying descriptor systems. *International Journal of Adaptive Control and Signal Processing*, **2015**, 29, 242-258	2.8	73
77	Regularized multivariable grey model for stable grey coefficients estimation. *Expert Systems With Applications*, **2015**, 42, 1806-1815	7.8	21
76	Sufficient conditions for generalized Orthogonal Matching Pursuit in noisy case. *Signal Processing*, **2015**, 108, 111-123	4.4	31
75	A complete parallel narrowband active noise control system based on residual error separation using variable leaky LMS **2015**,		4
74	An investigation on rail health monitoring using acoustic emission technique by tensile test **2015**,		8
73	Golay improvement of the robustness of mean scatterer spacing measurement with ultrasonic backscattering. *Bio-Medical Materials and Engineering*, **2015**, 26 Suppl 1, S455-65	1	2
72	Acoustic emission detection of rail defect based on wavelet transform and Shannon entropy. *Journal of Sound and Vibration*, **2015**, 339, 419-432	3.9	64
71	Sensor Fault Estimation Filter Design for Discrete-time Linear Time-varying Systems. *Zidonghua Xuebao/Acta Automatica Sinica*, **2014**, 40, 2364-2369		9
70	**2014**,		3
69	Fault diagnosis and fault-tolerant control for sampled-data attitude control systems: an indirect approach. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **2014**, 228, 1047-1057	0.9	3
68	An analysis of the simulated acoustic emission sources with different propagation distances, types and depths for rail defect detection. *Applied Acoustics*, **2014**, 86, 80-88	3.1	19
67	Kernel Sparse Multitask Learning for Hyperspectral Image Classification With Empirical Mode Decomposition and Morphological Wavelet-Based Features. *IEEE Transactions on Geoscience and Remote Sensing*, **2014**, 52, 5150-5163	8.1	34
66	Shrinkage-Based Alternating Projection Algorithm for Efficient Measurement Matrix Construction in Compressive Sensing. *IEEE Transactions on Instrumentation and Measurement*, **2014**, 63, 1073-1084	5.2	20
65	Mode Decomposition Based Cepstrum Measurement of Scatterer Spacing with Ultrasonic Scattering **2014**,		1
64	Analysis of generalised orthogonal matching pursuit using restricted isometry constant. *Electronics Letters*, **2014**, 50, 1020-1022	1.1	31

63	Artificial immune algorithm based signal reconstruction for compressive sensing **2014**,		6
62	Stress granule-defective mutants deregulate stress responsive transcripts. *PLoS Genetics*, **2014**, 10, e1004763		30
61	Fault Diagnosis for Satellite Attitude Control Systems With Four Flywheels. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2014**, 136,	1.6	4
60	Multivariate Gray Model-Based BEMD for Hyperspectral Image Classification. *IEEE Transactions on Instrumentation and Measurement*, **2013**, 62, 889-904	5.2	40
59	Adaptive fault-tolerant robust control for a linear system with adaptive fault identification. *IET Control Theory and Applications*, **2013**, 7, 246-252	2.5	35
58	Rail defect detection based on vibration acceleration signals **2013**,		5
57	Phases measure of image sharpness based on quaternion wavelet. *Pattern Recognition Letters*, **2013**, 34, 1063-1070	4.7	10
56	Discrete multivariate gray model based boundary extension for bi-dimensional empirical mode decomposition. *Signal Processing*, **2013**, 93, 124-138	4.4	13
55	Resonant frequency analysis for spring-mass structure in high-g MEMS accelerometer **2013**,		1
54	Performance analysis of OMP algorithm in recovering magnitude decaying sparse signals in compressive sensing **2013**,		1
53	GA-BFO based signal reconstruction for compressive sensing **2013**,		8
52	Boundary extension for Hilbert-Huang transform inspired by gray prediction model. *Signal Processing*, **2012**, 92, 685-697	4.4	34
51	Observer design for discrete-time descriptor systems: An LMI approach. *Systems and Control Letters*, **2012**, 61, 683-687	2.4	88
50	N-Person Card Game Approach for Solving SET K-COVER Problem in Wireless Sensor Networks. *IEEE Transactions on Instrumentation and Measurement*, **2012**, 61, 1522-1535	5.2	13
49	. *IEEE Transactions on Information Theory*, **2012**, 58, 3654-3656	2.8	86
48	Active fault-tolerant control for satellite system via learning unknown input observer **2012**,		1
47	Stepwise suboptimal iterative hard thresholding algorithm for compressive sensing **2012**,		1
46	Attitude sensor fault diagnosis based on Kalman filter of discrete-time descriptor system. *Journal of Systems Engineering and Electronics*, **2012**, 23, 914-920	1.3	11

45	Flocking based distributed deployment for target monitoring in mobile sensor networks: Algorithm and implementation **2012**,		2
44	A general H∞ fault tolerant control and management for a linear system with actuator faults. *Automatica*, **2012**, 48, 1676-1682	5.7	15
43	RIDGE REGRESSION MODEL-BASED ENSEMBLE EMPIRICAL MODE DECOMPOSITION FOR ULTRASOUND CLUTTER REJECTION. *Advances in Adaptive Data Analysis*, **2012**, 04, 1250013		1
42	BUILT-IN TEST SIGNAL FEATURE EXTRACTION METHOD BASED ON HILBERT–HUANG TRANSFORM. *Advances in Adaptive Data Analysis*, **2012**, 04, 1250005		
41	Dictionaries Construction Using Alternating Projection Method in Compressive Sensing. *IEEE Signal Processing Letters*, **2011**, 18, 663-666	3.2	11
40	Single-frequency matching pursuits based time-of-flight measurement in viscoacoustic medium. *Transactions of Tianjin University*, **2011**, 17, 356-361	2.9	
39	Empirical mode decomposition based reducing false alarm filter for built-in test signal **2011**,		1
38	Flaw detection in high speed train's rail based on EMD and PSD **2011**,		1
37	An accurate extrinsic camera self-calibration method in non-overlapping camera sensor networks **2011**,		2
36	An Analytical Convolution Method Combined With the Conformal Fourier Transform for Solving 1-D Integral Equations. *IEEE Antennas and Wireless Propagation Letters*, **2011**, 10, 1267-1269	3.8	1
35	Accent extraction of emotional speech based on modified ensemble empirical mode decomposition **2010**,		5
34	Dynamic artificial potential field based multi-robot formation control **2010**,		18
33	Non-linear Matching Pursuits and its apllication in bone mineral measurement **2010**,		3
32	Automatic measurement of the artery intima-media thickness with image empirical mode decomposition **2010**,		1
31	A hybrid genetic algorithm for medical image registration with Downhill Simplex method **2009**,		1
30	Real time performance analysis and evaluation of CAN bus with an extended Petri Net model **2009**,		2
29	A region entropy based objective evaluation method for image segmentation **2009**,		8
28	Hyperspectral datum classification using kernel method based on mutual information of neighbor bands. *Optoelectronics Letters*, **2009**, 5, 309-312	0.7	1

27	Generalized Local Priority Based Medical Image Fusion Scheme **2009**,		1
26	Protein Long Disordered Region Prediction Based on Profile-Level Disorder Propensities and Position-Specific Scoring Matrixes **2009**,		1
25	Medical ultrasound signal denoise based on ensemble empirical mode decomposition and nonlinear correlation information entropy **2009**,		3
24	Optimal Mobile Agent Routing for Data Fusion in Distributed Sensor Networks Using Improved Ant Colony Algorithm **2008**,		3
23	High-performance medical image registration using improved particle swarm optimization **2008**,		2
22	Decision Tree Support Vector Machine based on Genetic Algorithm for fault diagnosis **2008**,		2
21	Segmentation for MRA Image: An Improved Level-Set Approach. *IEEE Transactions on Instrumentation and Measurement*, **2007**, 56, 1316-1321	5.2	14
20	Nonlinear Distance Measure Based Discriminant Pursuit Algorithm for Defects Classification in Ultrasonic NDT **2006**,		1
19	Adaptive Rejection of Nonstationary Clutter in Ultrasonic Color Flow Imaging **2006**,		1
18	A Medical Image Compression Scheme Based on Low Order Linear Predictor and Most-likely Magnitude Huffman Code **2006**,		1
17	Noise reduction for Doppler ultrasound signal based on the adapted local cosine transform and the garrote thresholding method. *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control* , **2006**, 53, 735-745	3.2	4
16	An Improved Marching Cubes Method for Surface Reconstruction of Volume Data **2006**,		5
15	Modeling and Simulation of Digital Closed-loop Fiber Optic Gyroscope **2006**,		1
14	Measurement of six degree-of-freedom ground motion by using eight accelerometers. *Earthquake Engineering and Engineering Vibration*, **2005**, 4, 229-232	2	4
13	Fast quantitative correlation analysis and information deviation analysis for evaluating the performances of image fusion techniques. *IEEE Transactions on Instrumentation and Measurement*, **2004**, 53, 1441-1447	5.2	25
12	A quantitative method for evaluating the performances of hyperspectral image fusion. *IEEE Transactions on Instrumentation and Measurement*, **2003**, 52, 1041-1047	5.2	38
11	Automatic Ultrasound Image Segmentation by Active Contour Model Based on Texture		1
10	Performances evaluation of image fusion techniques based on nonlinear correlation measurement		8

9	Edge detection based on early vision model incorporating improved directional median filtering		1
8	The effects of fusion structures on image fusion performances		2
7	A JPEG2000 and Nonlinear Correlation Measurement Based Method to Enhance Hyperspectral Image Compression		2
6	Ultrasound Image Segmentation Based on the Early Vision Model and Watershed Transform		1
5	Comparisons of Several Pixel-Level Image Fusion Schemes for Infrared and Visible Light Images		4
4	A quantitative method to evaluate the performance of hyperspectral data fusion		2
3	Rail Steel Health Analysis Based on a Novel Genetic Density-based Clustering Technique and Manifold Representation of Acoustic Emission Signals. *Applied Artificial Intelligence*,1-25	2.3	0
2	Defect detection in guided wave signals using nonlinear autoregressive exogenous method. *Structural Health Monitoring*,147592172110186	4.4	3
1	Interval Estimation for Discrete-time Descriptor System Based on Zonotopic Kalman Filter. *International Journal of Control, Automation and Systems*,1	2.9	