Asok Ray

List of Publications by Year
in descending order

335 papers	6,025 citations	117625 34 h-index	110387 64 g-index
339 all docs	339 docs citations	339 times ranked	2618 citing authors

#	Article	IF	Citations
1	Integrated Communication and Control Systems: Part Iâ€"Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1988, 110, 367-373.	1.6	465
2	An observer-based compensator for distributed delays. Automatica, 1990, 26, 903-908.	5.0	344
3	Symbolic dynamic analysis of complex systems for anomaly detection. Signal Processing, 2004, 84, 1115-1130.	3.7	335
4	Symbolic time series analysis via wavelet-based partitioning. Signal Processing, 2006, 86, 3309-3320.	3.7	227
5	Integrated Communication and Control Systems: Part IIâ€"Design Considerations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1988, 110, 374-381.	1.6	204
6	Symbolic time series analysis of ultrasonic data for early detection of fatigue damage. Mechanical Systems and Signal Processing, 2007, 21, 866-884.	8.0	136
7	Output feedback control under randomly varying distributed delays. Journal of Guidance, Control, and Dynamics, 1994, 17, 701-711.	2.8	133
8	Target Detection and Classification Using Seismic and PIR Sensors. IEEE Sensors Journal, 2012, 12, 1709-1718.	4.7	127
9	Experimental verification of a delay compensation algorithm for integrated communication and control systems. International Journal of Control, 1994, 59, 1357-1372.	1.9	112
10	A Stochastic Regulator for Integrated Communication and Control Systems: Part Iâ€"Formulation of Control Law. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1991, 113, 604-611.	1.6	100
11	Review and comparative evaluation of symbolic dynamic filtering for detection of anomaly patterns. Signal, Image and Video Processing, 2009, 3, 101-114.	2.7	94
12	State splitting and merging in probabilistic finite state automata for signal representation and analysis. Signal Processing, 2014, 104, 105-119.	3.7	83
13	Space partitioning via Hilbert transform for symbolic time series analysis. Applied Physics Letters, 2008, 92, .	3.3	75
14	Damage-Mitigating Control of Mechanical Systems: Part Iâ€"Conceptual Development and Model Formulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1994, 116, 437-447.	1.6	71
15	Fatigue crack growth under variable-amplitude loading: Part II â€“ Code development and model validation. Applied Mathematical Modelling, 2001, 25, 995-1013.	4.2	65
16	Fatigue crack growth under variable-amplitude loading: Part I â€“ Model formulation in state-space setting. Applied Mathematical Modelling, 2001, 25, 979-994.	4.2	64
17	Symbolic time series analysis for anomaly detection: A comparative evaluation. Signal Processing, 2005, 85, 1859-1868.	3.7	63
18	On the discriminability of keystroke feature vectors used in fixed text keystroke authentication. Pattern Recognition Letters, 2011, 32, 1070-1080.	4.2	59

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19	Symbolic Analysis of Sonar Data for Underwater Target Detection. IEEE Journal of Oceanic Engineering, 2011, 36, 219-230.	3.8	56
20	Performance Evaluation of Medium Access Control Protocols for Distributed Digital Avionics. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1987, 109, 370-377.	1.6	51
21	Robust Optimal Control of Nuclear Reactors and Power Plants. Nuclear Technology, 1992, 98, 137-148.	1.2	51
22	Wavelet-based feature extraction using probabilistic finite state automata for pattern classification. Pattern Recognition, 2011, 44, 1343-1356.	8.1	51
23	Real-time fatigue life estimation in mechanical structures. Measurement Science and Technology, 2007, 18, 1947-1957.	2.6	48
24	Data-Driven Fault Detection in Aircraft Engines With Noisy Sensor Measurements. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	47
25	Dynamic data-driven prediction of instability in a swirl-stabilized combustor. International Journal of Spray and Combustion Dynamics, 2016, 8, 235-253.	1.0	47
26	Robust feedback control of combustion instability with modeling uncertainty. Combustion and Flame, 2000, 120, 91-106.	5.2	46
27	Performance comparison of feature extraction algorithms for target detection and classification. Pattern Recognition Letters, 2013, 34, 2126-2134.	4.2	46
28	A Redundancy Management Procedure for Fault Detection and Isolation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1986, 108, 248-254.	1.6	44
29	A language measure for performance evaluation of discrete-event supervisory control systems. Applied Mathematical Modelling, 2004, 28, 817-833.	4.2	44
30	Life-extending control of fossil fuel power plants. Automatica, 1997, 33, 1101-1118.	5.0	43
31	Information Fusion of Passive Sensors for Detection of Moving Targets in Dynamic Environments. IEEE Transactions on Cybernetics, 2017, 47, 93-104.	9.5	42
32	Lean Blow-Out Prediction in Gas Turbine Combustors Using Symbolic Time Series Analysis. Journal of Propulsion and Power, 2013, 29, 950-960.	2.2	41
33	Dynamic modelling of power plant turbines for controller design. Applied Mathematical Modelling, 1980, 4, 109-112.	4.2	39
34	Investigation of Melt Pool Geometry Control in Additive Manufacturing Using Hybrid Modeling. Metals, 2020, 10, 683.	2.3	39
35	DISTRIBUTED DATA COMMUNICATION NETWORKS FOR REAL-TIME PROCESS CONTROL. Chemical Engineering Communications, 1988, 65, 139-154.	2.6	36
36	A State-Space Model of Fatigue Crack Growth. International Journal of Fracture, 1998, 90, 235-249.	2.2	36

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37	Signed real measure of regular languages for discrete-event automata. International Journal of Control, 2003, 76, 1800-1808.	1.9	36
38	Anomaly Detection in Nuclear Power Plants via Symbolic Dynamic Filtering. IEEE Transactions on Nuclear Science, 2011, 58, 277-288.	2.0	34
39	Detection and estimation of demagnetization faults in permanent magnet synchronous motors. Electric Power Systems Research, 2013, 96, 225-236.	3.6	33
40	Unconstrained optimal control of regular languages. Automatica, 2004, 40, 639-646.	5.0	32
41	Stochastic optimal control under randomly varying distributed delays. International Journal of Control, 1997, 68, 1179-1202.	1.9	31
42	A stochastic model of fatigue crack propagation under variable-amplitude loading. Engineering Fracture Mechanics, 1999, 62, 477-493.	4.3	31
43	Pattern identification in dynamical systems via symbolic time series analysis. Pattern Recognition, 2007, 40, 2897-2907.	8.1	31
44	Damage-mitigating control of a reusable rocket engine. Journal of Propulsion and Power, 1994, 10, 225-234.	2.2	30
45	Fuzzy Damage Mitigating Control of Mechanical Structures. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1998, 120, 249-256.	1.6	30
46	Language-measure-theoretic optimal control of probabilistic finite-state systems. International Journal of Control, 2007, 80, 1271-1290.	1.9	30
47	Structural transformations of probabilistic finite state machines. International Journal of Control, 2008, 81, 820-835.	1.9	30
48	Void fraction measurement in two-phase flow processes via symbolic dynamic filtering of ultrasonic signals. Measurement Science and Technology, 2009, 20, 023001.	2.6	30
49	A Stochastic Regulator for Integrated Communication and Control Systems: Part Iâ€”Numerical Analysis and Simulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1991, 113, 612-619.	1.6	29
50	Modelling of power plant dynamics and uncertainties for robust control synthesis. Applied Mathematical Modelling, 1996, 20, 501-512.	4.2	29
51	State-space supervisory control of reconfigurable discrete event systems. International Journal of Control, 1996, 63, 767-797.	1.9	29
52	A nonlinear stochastic model of fatigue crack dynamics. Probabilistic Engineering Mechanics, 1997, 12, 33-40.	2.7	29
53	Wide-range robust control of combustion instability. Combustion and Flame, 2002, 128, 242-258.	5.2	29
54	Dynamic data-driven and model-based recursive analysis for estimation of battery state-of-charge. Applied Energy, 2016, 184, 266-275.	10.1	29

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55	Anomaly Detection in Aircraft Gas Turbine Engines. Journal of Aerospace Computing, Information, and Communication, 2006, 3, 44-51.	0.8	27
56	Classification of fatigue crack damage in polycrystalline alloy structures using convolutional neural networks. Engineering Failure Analysis, 2021, 119, 104908.	4.0	27
57	Damage-Mitigating Control of Mechanical Systems: Part IIâ€"Formulation of an Optimal Policy and Simulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1994, 116, 448-455.	1.6	26
58	Robust Multivariable Control of Rotorcraft in Forward Flight. Journal of the American Helicopter Society, 1997, 42, 149-160.	0.8	26
59	Optimal supervisory control of finite state automata. International Journal of Control, 2004, 77, 1083-1100.	1.9	26
60	A Dynamically Stabilized Recurrent Neural Network. Neural Processing Letters, 2022, 54, 1195-1209.	3.2	26
61	Fuzzy wide-range control of fossil power plants for life extension and robust performance. Automatica, 2000, 36, 69-82.	5.0	25
62	State-space modeling of fatigue crack growth in ductile alloys. Engineering Fracture Mechanics, 2000, 66, 129-151.	4.3	24
63	Statistical Mechanics of Complex Systems for Pattern Identification. Journal of Statistical Physics, 2009, 134, 337-364.	1.2	24
64	Integrated Robust and Resilient Control of Nuclear Power Plants for Operational Safety and High Performance. IEEE Transactions on Nuclear Science, 2010, 57, 807-817.	2.0	24
65	Statistical-Mechanics-Inspired Optimization of Sensor Field Configuration for Detection of Mobile Targets. IEEE Transactions on Systems, Man, and Cybernetics, 2011, 41, 783-791.	5.0	24
66	Sensor Fusion for Fault Detection and Classification in Distributed Physical Processes. Frontiers in Robotics and AI, 2014, 1, .	3.2	24
67	Hybrid life-extending control of mechanical systems: experimental validation of the concept. Automatica, 2000, 36, 23-36.	5.0	23
68	Estimation of slowly varying parameters in nonlinear systems via symbolic dynamic filtering. Signal Processing, 2008, 88, 339-348.	3.7	23
69	Navigation of autonomous vehicles for oil spill cleaning in dynamic and uncertain environments. International Journal of Control, 2014, 87, 787-801.	1.9	22
70	Real-time estimation of lead-acid battery parameters: A dynamic data-driven approach. Journal of Power Sources, 2014, 268, 758-764.	7.8	22
71	Identification of the battery state-of-health parameter from inputâ€"output pairs of time series data. Journal of Power Sources, 2015, 285, 235-246.	7.8	22
72	Early Detection of Thermoacoustic Instabilities Using Hidden Markov Models. Combustion Science and Technology, 2019, 191, 1309-1336.	2.3	22

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73	Damage-Mitigating Control of a Reusable Rocket Engine: Part Iâ€"Life Prediction of the Main Thrust Chamber Wall. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1996, 118, 401-408.	1.6	21
74	Multi-sensor information fusion for fault detection in aircraft gas turbine engines. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2013, 227, 1988-2001.	1.3	21
75	Early detection of stator voltage imbalance in three-phase induction motors. Electric Power Systems Research, 2009, 79, 239-245.	3.6	20
76	Dynamic Data-Driven Prediction of Lean Blowout in a Swirl-Stabilized Combustor. International Journal of Spray and Combustion Dynamics, 2015, 7, 209-241.	1.0	20
77	Dynamic modelling of once-through subcritical steam generator for solar applications11This work was done while the author was at Carnegie-Mellon University, Pittsburgh, PA, USA. Applied Mathematical Modelling, 1980, 4, 417-423.	4.2	19
78	Analytic Redundancy for On-Line Fault Diagnosis in a Nuclear Reactor. Journal of Energy, 1983, 7, 367-373.	0.2	19
79	Compensatability and optimal compensation under randomly varying distributed delays. International Journal of Control, 1999, 72, 826-832.	1.9	19
80	Generalization of Hilbert transform for symbolic analysis of noisy signals. Signal Processing, 2009, 89, 1245-1251.	3.7	19
81	Dynamic Data Driven Sensor Array Fusion for Target Detection and Classification. Procedia Computer Science, 2013, 18, 2046-2055.	2.0	19
82	Signed Real Measure of Regular Languages. , 2005, , 3-37.		19
83	Technical Note: Robust Multivariable Control of Rotorcraft in Forward Flight: Impact of Bandwidth on Fatigue Life. Journal of the American Helicopter Society, 1998, 43, 195-201.	0.8	18
84	Underwater mine detection using symbolic pattern analysis of sidescan sonar images. , 2009, , .		18
85	Symbolic Dynamic Filtering and Language Measure for Behavior Identification of Mobile Robots. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 647-659.	5.0	18
86	Optimization of symbolic feature extraction for pattern classification. Signal Processing, 2012, 92, 625-635.	3.7	18
87	Symbolic Dynamic Analysis of Transient Time Series for Fault Detection in Gas Turbine Engines. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	1.6	18
88	Adaptive pattern classification for symbolic dynamic systems. Signal Processing, 2013, 93, 252-260.	3.7	18
89	Sequential Testing for Fault Detection in Multiply-Redundant Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1989, 111, 329-332.	1.6	17
90	Digital Control of Power Transients in a Nuclear Reactor. IEEE Transactions on Nuclear Science, 1984, 31, 701-705.	2.0	16

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91	Observability under recurrent loss of data. Journal of Guidance, Control, and Dynamics, 1992, 15, 284-287.	2.8	16
92	Anomaly detection in flight recorder data: A dynamic data-driven approach. , 2013, , .		16
93	Dynamic data-driven identification of battery state-of-charge via symbolic analysis of inputâ€“output pairs. Applied Energy, 2015, 155, 778-790.	10.1	16
94	Dynamic modeling and simulation of a relief valve. Simulation, 1978, 31, 167-172.	1.8	15
95	Stochastic Measure of Fatigue Crack Damage for Health Monitoring of Ductile Alloy Structures. Structural Health Monitoring, 2004, 3, 245-263.	7.5	15
96	Statistical pattern analysis of ultrasonic signals for fatigue damage detection in mechanical structures. NDT and E International, 2008, 41, 491-500.	3.7	15
97	Symbolic analysis-based reduced order Markov modeling of time series data. Signal Processing, 2018, 149, 68-81.	3.7	15
98	Neural Network-Based Learning from Demonstration of an Autonomous Ground Robot. Machines, 2019, 7, 24.	2.2	15
99	Nonlinear dynamic model of a solar steam generator. Solar Energy, 1981, 26, 297-306.	6.1	14
100	Robust Damage-Mitigating Control of Mechanical Systems: Experimental Validation on a Test Apparatus. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1999, 121, 377-385.	1.6	14
101	An inner product space on irreducible and synchronizable probabilistic finite state automata. Mathematics of Control, Signals, and Systems, 2012, 23, 281-310.	2.3	14
102	Detection and classification of lean blow-out and thermoacoustic instability in turbulent combustors. Applied Thermal Engineering, 2020, 180, 115808.	6.0	14
103	Symbolic Time Series Analysis for Anomaly Detection in Measure-Invariant Ergodic Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	14
104	Damage-Mitigating Control of a Reusable Rocket Engine: Part IIâ€”Formulation of an Optimal Policy. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1996, 118, 409-415.	1.6	13
105	Stochastic modeling of fatigue crack propagation. Applied Mathematical Modelling, 1998, 22, 197-204.	4.2	13
106	Unsupervised Symbolization of Signal Time Series for Extraction of the Embedded Information. Entropy, 2017, 19, 148.	2.2	13
107	Information-Theoretic Performance Analysis of Sensor Networks via Markov Modeling of Time Series Data. IEEE Transactions on Cybernetics, 2018, 48, 1898-1909.	9.5	13
108	Stochastic Modeling of Fatigue Crack Damage for Risk Analysis and Remaining Life Prediction. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1999, 121, 386-393.	1.6	12

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109	Symbolic time series analysis of ultrasonic signals for fatigue damage monitoring in polycrystalline alloys. Measurement Science and Technology, 2006, 17, 1963-1973.	2.6	12
110	Pattern identification using lattice spin systems: A thermodynamic formalism. Applied Physics Letters, 2007, 91, 194105.	3.3	12
111	Symbolic dynamic filtering of seismic sensors for target detection and classification. , 2011, , .		12
112	Context-aware Dynamic Data-driven Pattern Classification. Procedia Computer Science, 2014, 29, 1324-1333.	2.0	12
113	Transfer learning of deep neural networks for predicting thermoacoustic instabilities in combustion systems. Energy and AI, 2021, 5, 100085.	10.6	12
114	State splitting and state merging in probabilistic finite state automata. , 2011, , .		11
115	Distributed decision propagation in mobile-agent proximity networks. International Journal of Control, 2013, 86, 1118-1130.	1.9	11
116	Topology optimisation for energy management in underwater sensor networks. International Journal of Control, 2015, 88, 1775-1788.	1.9	11
117	Dynamic Prediction of Vehicle Cluster Distribution in Mixed Traffic: A Statistical Mechanics-Inspired Method. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2424-2434.	8.0	11
118	Dynamic Data-Driven Design of Lean Premixed Combustors for Thermoacoustically Stable Operations. Journal of Mechanical Design, Transactions of the ASME, 2017, 139, .	2.9	11
119	Robust Wide-Range Control of Nuclear Reactors by Using the Feedforward-Feedback Concept. Nuclear Science and Engineering, 1994, 117, 177-185.	1.1	10
120	Nonlinear Control of a Reusable Rocket Engine for Life Extension. Journal of Propulsion and Power, 2001, 17, 998-1004.	2.2	10
121	Î½â˜†: a robot path planning algorithm based on renormalised measure of probabilistic regular languages. International Journal of Control, 2009, 82, 849-867.	1.9	10
122	Analytic signal space partitioning and symbolic dynamic filtering for degradation monitoring of electric motors. Signal, Image and Video Processing, 2010, 4, 399-403.	2.7	10
123	Information fusion for object & situation assessment in sensor networks. , 2011, , .		10
124	Early Prediction of Lean Blowout from Chemiluminescence Time Series Data. Combustion Science and Technology, 2022, 194, 1108-1135.	2.3	10
125	Data-driven Detection and Early Prediction of Thermoacoustic Instability in a Multi-nozzle Combustor. Combustion Science and Technology, 2022, 194, 1481-1512.	2.3	10
126	On-line identification of language measure parameters for discrete-event supervisory control. Applied Mathematical Modelling, 2005, 29, 597-613.	4.2	9

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127	Hierarchical control of aircraft propulsion systems: Discrete event supervisor approach. Control Engineering Practice, 2007, 15, 149-162.	5.5	9
128	Anomaly detection in flexible mechanical couplings via symbolic time series analysis. Journal of Sound and Vibration, 2008, 311, 608-622.	3.9	9
129	Real-time activity recognition from seismic signature via multi-scale symbolic time series analysis (MSTSA). , 2015, , .		9
130	Real-time combustion state identification via image processing: A dynamic data-driven approach. , 2016, , .		9
131	Symbolization of dynamic data-driven systems for signal representation. Signal, Image and Video Processing, 2016, 10, 1535-1542.	2.7	9
132	Path planning in GPS-denied environments via collective intelligence of distributed sensor networks. International Journal of Control, 2016, 89, 984-999.	1.9	9
133	Study of vapor film dynamics and heat transfer through an image processing technique. International Journal of Heat and Mass Transfer, 2018, 125, 1310-1320.	4.8	9
134	Adaptive Sensor Activity Scheduling in Distributed Sensor Networks: A Statistical Mechanics Approach. International Journal of Distributed Sensor Networks, 2009, 5, 242-261.	2.2	8
135	Symbolic dynamic analysis of surface deformation during fatigue crack initiation. Measurement Science and Technology, 2010, 21, 043003.	2.6	8
136	Ground characterization and roof mapping: Online sensor signal-based change detection. International Journal of Mining Science and Technology, 2015, 25, 905-913.	10.3	8
137	Application of Composite Indices for Improving Joint Detection Capabilities of Instrumented Roof Bolt Drills in Underground Mining and Construction. Rock Mechanics and Rock Engineering, 2018, 51, 849-860.	5.4	8
138	A Locally Optimal Algorithm for Estimating a Generating Partition from an Observed Time Series and Its Application to Anomaly Detection. Neural Computation, 2018, 30, 2500-2529.	2.2	8
139	State-Space Representations of Deep Neural Networks. Neural Computation, 2019, 31, 538-554.	2.2	8
140	Statistical Analysis of the CapabilitiesÂof Various Pattern Recognition Algorithms for FractureÂDetection Based on Monitoring Drilling Parameters. Rock Mechanics and Rock Engineering, 2020, 53, 2265-2278.	5.4	8
141	Measure invariance of ergodic symbolic systems for low-delay detection of anomalous events. Mechanical Systems and Signal Processing, 2021, 159, 107746.	8.0	8
142	An adaptive real-time intelligent seam tracking system. Journal of Manufacturing Systems, 1987, 6, 241-245.	13.9	7
143	An information-theoretic measure for anomaly detection in complex dynamical systems. Mechanical Systems and Signal Processing, 2009, 23, 358-371.	8.0	7
144	Online recursive estimation of remaining life using ultrasonic measurements. Structural Health Monitoring, 2012, 11, 413-421.	7.5	7

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145	Statistical Mechanics-Inspired Modeling of Heterogeneous Packet Transmission in Communication Networks. IEEE Transactions on Systems, Man, and Cybernetics, 2012, 42, 1083-1094.	5.0	7
146	Learning context-aware measurement models. , 2015, , .		7
147	Depth estimation in Markov models of time-series data via spectral analysis. , 2015, , .		7
148	Neural Probabilistic Forecasting of Symbolic Sequences With Long Short-Term Memory. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	7
149	A Data-Driven Framework for Early-Stage Fatigue Damage Detection in Aluminum Alloys Using Ultrasonic Sensors. Machines, 2021, 9, 211.	2.2	7
150	Hidden Markov Modeling-Based Decision-Making Using Short-Length Sensor Time Series. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	7
151	Deep Reinforcement Learning Control of a Boiling Water Reactor. IEEE Transactions on Nuclear Science, 2022, 69, 1820-1832.	2.0	7
152	Use of Reactivity Constraints for the Automatic Control of Reactor Power. IEEE Transactions on Nuclear Science, 1985, 32, 1036-1040.	2.0	6
153	Multi-Level Hypotheses Testing for Fault Detection in Continuous Process. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1990, 112, 787-790.	1.6	6
154	Extended discrete-time LTR synthesis of delayed control systems. Automatica, 1993, 29, 431-438.	5.0	6
155	Damage-Mitigating Control With Overload Injection: Experimental Validation of the Concept1. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2000, 122, 336-342.	1.6	6
156	Anomaly Detection in Complex Systems â€. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1119-1124.	0.4	6
157	Optimal control of robot behaviour using language measure. International Journal of Vehicle Autonomous Systems, 2004, 2, 147.	0.2	6
158	Correlation regimes in fluctuations of fatigue crack growth. Physica A: Statistical Mechanics and Its Applications, 2006, 359, 1-23.	2.6	6
159	Identification of statistical patterns in complex systems via symbolic time series analysis. ISA Transactions, 2006, 45, 477-490.	5.7	6
160	Modelling and system identification of an experimental apparatus for anomaly detection in mechanical systems. Applied Mathematical Modelling, 2007, 31, 734-748.	4.2	6
161	Suboptimal partitioning of time-series data for anomaly detection. , 2009, , .		6
162	Symbolic dynamic filtering for image analysis: theory and experimental validation. Signal, Image and Video Processing, 2010, 4, 319-329.	2.7	6

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163	Real-time adaptation of decision thresholds in sensor networks for detection of moving targets. Automatica, 2011, 47, 185-191.	5.0	6
164	Unsupervised inductive learning in symbolic sequences via Recursive Identification of Self-Similar Semantics. , 2011, , .		6
165	Multi-resolution navigation of mobile robots with complete coverage of unknown and complex environments. , 2012, , .		6
166	Classification of Two-Phase Flow Patterns by Ultrasonic Sensing. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2013, 135, .	1.6	6
167	Early detection of lean blow out (LBO) via generalized D-Markov machine construction. , 2014, , .		6
168	Path planning in GPS-denied environments: A collective intelligence approach. , 2015, , .		6
169	Alphabet size selection for symbolization of dynamic data-driven systems: An information-theoretic approach. , 2015, , .		6
170	Sequential hypothesis tests for streaming data via symbolic time-series analysis. Engineering Applications of Artificial Intelligence, 2019, 81, 234-246.	8.1	6
171	Neural Network-Based Automated Assessment of Fatigue Damage in Mechanical Structures. Machines, 2020, 8, 85.	2.2	6
172	Reduced-order modelling of thermoacoustic instabilities in a two-heater Rijke tube. Combustion Theory and Modelling, 2020, 24, 530-548.	1.9	6
173	A dual-imaging framework for multi-scale measurements of fatigue crack evolution in metallic materials. International Journal of Fatigue, 2021, 142, 105922.	5.7	6
174	Early Detection of Fatigue Crack Damage in Ductile Materials: A Projection-Based Probabilistic Finite State Automata Approach. ASME Letters in Dynamic Systems and Control, 2021, 1, .	0.7	6
175	Thresholdless Classification of chaotic dynamics and combustion instability via probabilistic finite state automata. Mechanical Systems and Signal Processing, 2022, 164, 108213.	8.0	6
176	On-Line Fault Diagnosis in a Nuclear Reactor by Sequential Testing. IEEE Transactions on Nuclear Science, 1983, 30, 1850-1855.	2.0	5
177	On Modeling of Integrated Communication and Control Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1990, 112, 790-794.	1.6	5
178	Delay Compensation in Integrated Communication and Control Systems: Part I -- Conceptual Development and Analysis. , 1990, , .		5
179	Calibration and estimation of redundant signals. Automatica, 2000, 36, 1525-1534.	5.0	5
180	Dynamic Information Fusion Driven Design of Urban Sensor Networks. , 2007, , .		5

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181	Understanding phase transition in communication networks to enable robust and resilient control. , 2009, , .		5
182	Asynchronous data-driven classification of weapon systems. Measurement Science and Technology, 2009, 20, 123001.	2.6	5
183	Statistical estimation of multiple parameters via symbolic dynamic filtering. Signal Processing, 2009, 89, 981-988.	3.7	5
184	Distributed network control for mobile multi-modal wireless sensor networks. Journal of Parallel and Distributed Computing, 2011, 71, 460-470.	4.1	5
185	Vector space formulation of probabilistic finite state automata. Journal of Computer and System Sciences, 2012, 78, 1127-1141.	1.2	5
186	Dynamic context-aware sensor selection for sequential hypothesis testing. , 2014, , .		5
187	Performance robustness of feature extraction for target detection & classification. , 2014, , .		5
188	Feature level sensor fusion for target detection in dynamic environments. , 2015, , .		5
189	Robot Path Planning in Uncertain Environments: A Language-Measure-Theoretic Approach. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2015, 137, .	1.6	5
190	Data-driven robot gait modeling via symbolic time series analysis. , 2016, , .		5
191	Prediction of Thermoacoustic Instabilities in a Premixed Combustor based on FFT-based Dynamic Characterization. , 2017, , .		5
192	Modeling of microscope images for early detection of fatigue cracks in structural materials. International Journal of Advanced Manufacturing Technology, 2019, 104, 3899-3913.	3.0	5
193	Improving the capability of detecting joints and fractures in rock mass from roof bolt drilling data by using wavelet analysis. International Journal of Oil, Gas and Coal Technology, 2019, 20, 97.	0.2	5
194	Multivariable Nonadaptive Controller Design. IEEE Transactions on Industrial Electronics, 2021, 68, 6181-6191.	7.9	5
195	HMM conditional-likelihood based change detection with strict delay tolerance. Mechanical Systems and Signal Processing, 2021, 147, 107109.	8.0	5
196	Optimal Window-Symbolic Time Series Analysis for Pattern Classification and Anomaly Detection. IEEE Transactions on Industrial Informatics, 2022, 18, 2614-2621.	11.3	5
197	Online Discovery and Classification of Operational Regimes From an Ensemble of Time Series Data. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2020, 142, .	1.6	5
198	Delay Compensation in Integrated Communication and Control Systems: Part II -- Implementation and Verification. , 1990, , .		4

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199	Observer-embedded L2-gain control. Applied Mathematics Letters, 2001, 14, 563-569.	2.7	4
200	Integrated decision and control of human-engineered complex systems. International Journal of General Systems, 2006, 35, 275-294.	2.5	4
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