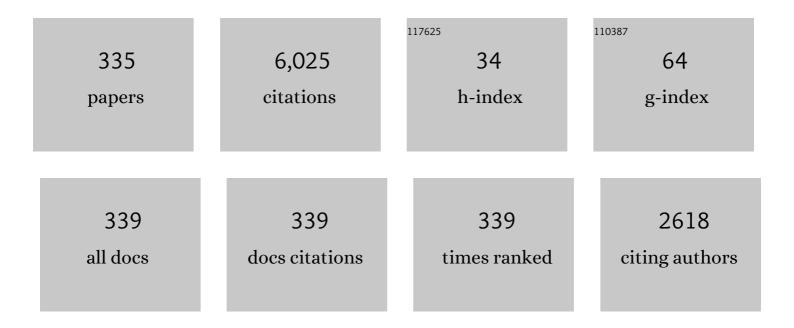
## Asok Ray

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/9155828/publications.pdf Version: 2024-02-01



ASOK RAV

#	Article	IF	CITATIONS
1	Early Prediction of Lean Blowout from Chemiluminescence Time Series Data. Combustion Science and Technology, 2022, 194, 1108-1135.	2.3	10
2	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
3	Optimal Window-Symbolic Time Series Analysis for Pattern Classification and Anomaly Detection. IEEE Transactions on Industrial Informatics, 2022, 18, 2614-2621.	11.3	5
4	On State-Space Modeling and Signal Localization in Dynamical Systems. ASME Letters in Dynamic Systems and Control, 2022, 2, .	0.7	1
5	Thresholdless Classification of chaotic dynamics and combustion instability via probabilistic finite state automata. Mechanical Systems and Signal Processing, 2022, 164, 108213.	8.0	6
6	A Dynamically Stabilized Recurrent Neural Network. Neural Processing Letters, 2022, 54, 1195-1209.	3.2	26
7	Point-kinetics neutron noise modeling and analysis via probabilistic finite state automata. Nuclear Engineering and Design, 2022, 388, 111628.	1.7	0
8	Spectral invariants of ergodic symbolic systems for pattern recognition and anomaly detection. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2022, 380, .	3.4	1
9	Deep Reinforcement Learning Control of a Boiling Water Reactor. IEEE Transactions on Nuclear Science, 2022, 69, 1820-1832.	2.0	7
10	Multivariable Nonadaptive Controller Design. IEEE Transactions on Industrial Electronics, 2021, 68, 6181-6191.	7.9	5
11	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
12	HMM conditional-likelihood based change detection with strict delay tolerance. Mechanical Systems and Signal Processing, 2021, 147, 107109.	8.0	5
13	Classification of fatigue crack damage in polycrystalline alloy structures using convolutional neural networks. Engineering Failure Analysis, 2021, 119, 104908.	4.0	27
14	Forecasting and Detection of Fatigue Cracks in Polycrystalline Alloys With Ultrasonic Testing Via Discrete Wavelet Transform. Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems, 2021, 4, .	0.9	2
15	Identification of Long-Term Behavior of Natural Circulation Loops: A Thresholdless Approach from an Initial Response. Sci, 2021, 3, 14.	3.0	0
16	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
17	Transfer Learning for Detection of Combustion Instability Via Symbolic Time-Series Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2021, 143, .	1.6	3
18	Transfer learning of deep neural networks for predicting thermoacoustic instabilities in combustion systems. Energy and Al, 2021, 5, 100085.	10.6	12

#	Article	IF	CITATIONS
19	A Data-Driven Framework for Early-Stage Fatigue Damage Detection in Aluminum Alloys Using Ultrasonic Sensors. Machines, 2021, 9, 211.	2.2	7
20	Measure invariance of ergodic symbolic systems for low-delay detection of anomalous events. Mechanical Systems and Signal Processing, 2021, 159, 107746.	8.0	8
21	Data-Driven Detection and Classification of Regimes in Chaotic Systems Via Hidden Markov Modeling. ASME Letters in Dynamic Systems and Control, 2021, 1, .	0.7	2
22	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
23	Detection and classification of lean blow-out and thermoacoustic instability in turbulent combustors. Applied Thermal Engineering, 2020, 180, 115808.	6.0	14
24	Neural Network-Based Automated Assessment of Fatigue Damage in Mechanical Structures. Machines, 2020, 8, 85.	2.2	6
25	On Singular Perturbation of Neutron Point Kinetics in the Dynamic Model of a PWR Nuclear Power Plant. Sci, 2020, 2, 36.	3.0	1
26	Investigation of Melt Pool Geometry Control in Additive Manufacturing Using Hybrid Modeling. Metals, 2020, 10, 683.	2.3	39
27	On Singular Perturbation of Neutron Point Kinetics in the Dynamic Model of a PWR Nuclear Power Plant. Sci, 2020, 2, 30.	3.0	3
28	Reduced-order modelling of thermoacoustic instabilities in a two-heater Rijke tube. Combustion Theory and Modelling, 2020, 24, 530-548.	1.9	6
29	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
30	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
31	Real-Time Monitoring and Diagnostics of Anomalous Behavior in Dynamical Systems. Energy, Environment, and Sustainability, 2020, , 301-327.	1.0	1
32	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
33	Neural Network-Based Learning from Demonstration of an Autonomous Ground Robot. Machines, 2019, 7, 24.	2.2	15
34	Sequential hypothesis tests for streaming data via symbolic time-series analysis. Engineering Applications of Artificial Intelligence, 2019, 81, 234-246.	8.1	6
35	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
36	Dynamic Data-Driven Combustor Design for Mitigation of Thermoacoustic Instabilities. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2019, 141, .	1.6	4

#	Article	IF	CITATIONS
37	Early Detection of Thermoacoustic Instabilities Using Hidden Markov Models. Combustion Science and Technology, 2019, 191, 1309-1336.	2.3	22
38	State-Space Representations of Deep Neural Networks. Neural Computation, 2019, 31, 538-554.	2.2	8
39	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
40	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
41	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
42	Symbolic analysis-based reduced order Markov modeling of time series data. Signal Processing, 2018, 149, 68-81.	3.7	15
43	Bayesian Nonparametric Regression Modeling of Panel Data for Sequential Classification. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 4128-4139.	11.3	2
44	Learning From Multiple Imperfect Instructors in Sensor Networks. IEEE Transactions on Neural Networks and Learning Systems, 2018, 29, 5166-5172.	11.3	0
45	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
46	Detection of Thermoacoustic Instabilities Via Nonparametric Bayesian Markov Modeling of Time-Series Data. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	1
47	Markov Modeling of Time Series via Spectral Analysis for Detection of Combustion Instabilities. , 2018, , 123-138.		2
48	Imitation of Demonstrations Using Bayesian Filtering With Nonparametric Data-Driven Models. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	2
49	Analysis of Filtered Thermal-Fluid Video Data From Downward Facing Boiling Experiments. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	2
50	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
51	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
52	Bayesian Nonparametric Modeling of Categorical Data for Information Fusion and Causal Inference. Entropy, 2018, 20, 396.	2.2	2
53	On Compression of Machine-Derived Context Sets for Fusion of Multi-modal Sensor Data. , 2018, , 571-586.		0
54	Information Fusion of Passive Sensors for Detection of Moving Targets in Dynamic Environments. IEEE Transactions on Cybernetics, 2017, 47, 93-104.	9.5	42

#	Article	IF	CITATIONS
55	Lean Blowout (LBO) Prediction Through Symbolic Time Series Analysis. , 2017, , 153-167.		2
56	Sparse Representation for Time-Series Classification. , 2017, , 199-215.		1
57	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
58	Probabilistic forecasting of symbol sequences with deep neural networks. , 2017, , .		2
59	Distributed Modular Supervisory Control of Integrated < br /> Aircraft Propulsion, Power, and Thermal Systems: < br /> An Overview. , 2017, , .		2
60	Prediction of Thermoacoustic Instabilities in a Premixed Combustor based on FFT-based Dynamic Characterization. , 2017, , .		5
61	Bayesian nonparametric modeling of Markov chains for detection of thermoacoustic instabilities. , 2017, , .		2
62	Unsupervised Symbolization of Signal Time Series for Extraction of the Embedded Information. Entropy, 2017, 19, 148.	2.2	13
63	Multimodal spatiotemporal information fusion using neural-symbolic modeling for early detection of combustion instabilities. , 2016, , .		2
64	Sensor selection for passive sensor networks in dynamic environment: A dynamic data-driven approach. , 2016, , .		1
65	Data-driven robot gait modeling via symbolic time series analysis. , 2016, , .		5
66	Information-space partitioning and symbolization of multi-dimensional time-series data using density estimation. , 2016, , .		4
67	Real-time identification of state-of-charge in battery systems: Dynamic data-driven estimation with limited window length. , 2016, , .		Ο
68	Real-time combustion state identification via image processing: A dynamic data-driven approach. , 2016, ,		9
69	Data-driven anytime algorithms for motion planning with safety guarantees. , 2016, , .		4
70	Dynamic data-driven and model-based recursive analysis for estimation of battery state-of-charge. Applied Energy, 2016, 184, 266-275.	10.1	29
71	Symbolization of dynamic data-driven systems for signal representation. Signal, Image and Video Processing, 2016, 10, 1535-1542.	2.7	9
72	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

#	Article	IF	CITATIONS
73	Path planning in GPS-denied environments via collective intelligence of distributed sensor networks. International Journal of Control, 2016, 89, 984-999.	1.9	9
74	Algorithms for Context Learning and Information Representation for Multi-Sensor Teams. Advances in Computer Vision and Pattern Recognition, 2016, , 403-427.	1.3	3
75	Game Theoretic Controller Synthesis for Multi-Robot Motion Planning-Part II: Policy-based Algorithmsâ^—â^—M. Zhu was partially supported by NSF grant CNS-1505664 IFAC-PapersOnLine, 2015, 48, 168-173.	0.9	4
76	Learning context-aware measurement models. , 2015, , .		7
77	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
78	Path planning in GPS-denied environments: A collective intelligence approach. , 2015, , .		6
79	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
80	Feature level sensor fusion for target detection in dynamic environments. , 2015, , .		5
81	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
82	Topology optimisation for energy management in underwater sensor networks. International Journal of Control, 2015, 88, 1775-1788.	1.9	11
83	Identification of the battery state-of-health parameter from input–output pairs of time series data. Journal of Power Sources, 2015, 285, 235-246.	7.8	22
84	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
85	Real-time activity recognition from seismic signature via multi-scale symbolic time series analysis (MSTSA). , 2015, , .		9
86	Identification of battery parameters via symbolic input-output analysis: A dynamic data-driven approach. , 2015, , .		0
87	Alphabet size selection for symbolization of dynamic data-driven systems: An information-theoretic approach. , 2015, , .		6
88	Depth estimation in Markov models of time-series data via spectral analysis. , 2015, , .		7
89	Dynamic data-driven identification of battery state-of-charge via symbolic analysis of input–output pairs. Applied Energy, 2015, 155, 778-790.	10.1	16
90	Sensor Fusion for Fault Detection and Classification in Distributed Physical Processes. Frontiers in Robotics and AI, 2014, 1, .	3.2	24

#	Article	IF	CITATIONS
91	Early detection of lean blow out (LBO) via generalized D-Markov machine construction. , 2014, , .		6
92	Dynamic context-aware sensor selection for sequential hypothesis testing. , 2014, , .		5
93	Stability Monitoring of Rotorcraft Systems: A Dynamic Data-Driven Approach. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2014, 136, .	1.6	2
94	Navigation of autonomous vehicles for oil spill cleaning in dynamic and uncertain environments. International Journal of Control, 2014, 87, 787-801.	1.9	22
95	State splitting and merging in probabilistic finite state automata for signal representation and analysis. Signal Processing, 2014, 104, 105-119.	3.7	83
96	Implementation of fault detection and prediction capabilities in a multilevel current source inverter. , 2014, , .		0
97	Performance robustness of feature extraction for target detection & classification. , 2014, , .		5
98	Target detection and target type & motion classification: Comparison of feature extraction algorithms. , 2014, , .		1
99	Real-time estimation of lead-acid battery parameters: A dynamic data-driven approach. Journal of Power Sources, 2014, 268, 758-764.	7.8	22
100	Context-aware Dynamic Data-driven Pattern Classification. Procedia Computer Science, 2014, 29, 1324-1333.	2.0	12
101	Performance comparison of feature extraction algorithms for target detection and classification. Pattern Recognition Letters, 2013, 34, 2126-2134.	4.2	46
102	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
103	Hilbert space formulation of symbolic systems for signal representation and analysis. Signal Processing, 2013, 93, 2594-2611.	3.7	4
104	An artificial language for data-driven self-adaptation of networked robots in dynamic environments. , 2013, , .		0
105	Dynamic Data Driven Sensor Array Fusion for Target Detection and Classification. Procedia Computer Science, 2013, 18, 2046-2055.	2.0	19
106	A variance-estimation-based stopping rule for symbolic dynamic filtering. Signal, Image and Video Processing, 2013, 7, 189-195.	2.7	0
107	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
108	Detection and estimation of demagnetization faults in permanent magnet synchronous motors. Electric Power Systems Research, 2013, 96, 225-236.	3.6	33

#	Article	IF	CITATIONS
109	Adaptive pattern classification for symbolic dynamic systems. Signal Processing, 2013, 93, 252-260.	3.7	18
110	Anomaly detection in flight recorder data: A dynamic data-driven approach. , 2013, , .		16
111	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
112	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
113	BEHAVIOR PREDICTION FOR DECISION AND CONTROL IN COGNITIVE AUTONOMOUS SYSTEMS. New Mathematics and Natural Computation, 2013, 09, 263-271.	0.7	2
114	Distributed decision propagation in mobile-agent proximity networks. International Journal of Control, 2013, 86, 1118-1130.	1.9	11
115	Language measure-theoretic path planning in the presence of dynamic obstacles. , 2013, , .		4
116	Spatiotemporal information fusion for fault detection in shipboard auxiliary systems. , 2013, , .		2
117	Identification of Instabilities in Rotorcraft Systems. , 2013, , .		0
118	Symbolic transient time-series analysis for fault detection in aircraft gas turbine engines. , 2012, , .		4
119	DESIGNING A FUSION-DRIVEN SENSOR NETWORK TO SELECTIVELY TRACK MOBILE TARGETS. Parallel Processing Letters, 2012, 22, 1250001.	0.6	1
120	Online recursive estimation of remaining life using ultrasonic measurements. Structural Health Monitoring, 2012, 11, 413-421.	7.5	7
121	Multi-resolution navigation of mobile robots with complete coverage of unknown and complex environments. , 2012, , .		6
122	Distributed decision propagation in mobile agent networks. , 2012, , .		0
123	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
124	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
125	A unified framework for supervised learning of semantic models. , 2012, , .		0
126	Adaptation in symbolic dynamic systems for pattern classification. , 2012, , .		0

#	Article	IF	CITATIONS
127	Target Detection and Classification Using Seismic and PIR Sensors. IEEE Sensors Journal, 2012, 12, 1709-1718.	4.7	127
128	Optimization of symbolic feature extraction for pattern classification. Signal Processing, 2012, 92, 625-635.	3.7	18
129	Vector space formulation of probabilistic finite state automata. Journal of Computer and System Sciences, 2012, 78, 1127-1141.	1.2	5
130	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
131	Symbolic encoding of analytic signals for structural monitoring of power systems. , 2011, , .		0
132	Modeling of symbolic systems: Part I - Vector space representation of probabilistic finite state automata. , 2011, , .		1
133	Modeling of symbolic systems: Part II - Hilbert space construction for model identification and order reduction. , 2011, , .		2
134	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
135	Symbolic Analysis of Sonar Data for Underwater Target Detection. IEEE Journal of Oceanic Engineering, 2011, 36, 219-230.	3.8	56
136	Distributed network control for mobile multi-modal wireless sensor networks. Journal of Parallel and Distributed Computing, 2011, 71, 460-470.	4.1	5
137	Wavelet-based feature extraction using probabilistic finite state automata for pattern classification. Pattern Recognition, 2011, 44, 1343-1356.	8.1	51
138	Real-time adaptation of decision thresholds in sensor networks for detection of moving targets. Automatica, 2011, 47, 185-191.	5.0	6
139	On the discriminability of keystroke feature vectors used in fixed text keystroke authentication. Pattern Recognition Letters, 2011, 32, 1070-1080.	4.2	59
140	Anomaly Detection in Nuclear Power Plants via Symbolic Dynamic Filtering. IEEE Transactions on Nuclear Science, 2011, 58, 277-288.	2.0	34
141	Information fusion for object & situation assessment in sensor networks. , 2011, , .		10
142	GODDeS: Globally ∈-Optimal Routing Via Distributed Decision-theoretic Self-organization. , 2011, , .		3
143	Semantic sensor fusion for fault diagnosis in aircraft gas turbine engines. , 2011, , .		4
144	State splitting and state merging in probabilistic finite state automata. , 2011, , .		11

#	Article	IF	CITATIONS
145	Optimal partitioning of ultrasonic data for fatigue damage detection?. , 2011, , .		Ο
146	Unsupervised inductive learning in symbolic sequences via Recursive Identification of Self-Similar Semantics. , 2011, , .		6
147	Symbolic dynamic filtering of seismic sensors for target detection and classification. , 2011, , .		12
148	Data-Driven Fault Detection in Aircraft Engines With Noisy Sensor Measurements. Journal of Engineering for Gas Turbines and Power, 2011, 133, .	1.1	47
149	Self-organization of sensor networks for detection of pervasive faults. Signal, Image and Video Processing, 2010, 4, 99-104.	2.7	1
150	Symbolic dynamic filtering for image analysis: theory and experimental validation. Signal, Image and Video Processing, 2010, 4, 319-329.	2.7	6
151	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
152	A stopping rule for symbolic dynamic filtering. Applied Mathematics Letters, 2010, 23, 1125-1128.	2.7	4
153	Symbolic dynamic analysis of surface deformation during fatigue crack initiation. Measurement Science and Technology, 2010, 21, 043003.	2.6	8
154	Minimum rotation partitioning for data analysis and its application to fault detection. , 2010, , .		0
155	Symbolic dynamics of wavelet images for pattern identification. , 2010, , .		1
156	Distributed decision propagation in mobile agent networks. , 2010, , .		2
157	Symbolic identification of dynamical systems: Theory and experimental validation. , 2010, , .		0
158	Mathematical Foundations of Sensor Network Design Based On Linguistic Informatics. , 2010, , .		1
159	Pattern classification in symbolic streams via semantic annihilation of information. , 2010, , .		1
160	Symbolic identification for anomaly detection in aircraft gas turbine engines. , 2010, , .		2
161	Tracking Mobile Targets Using Wireless Sensor Networks. , 2010, , .		0
162	Statistical mechanics-inspired optimization for sensor field reconfiguration. , 2010, , .		0

10

#	Article	IF	CITATIONS
163	A decision-theoretic model of selection modulated intra-host antigenic variation for multi-strain pathogens. , 2010, , .		0
164	Optimal control of infinite horizon partially observable decision processes modelled as generators of probabilistic regular languages. International Journal of Control, 2010, 83, 457-483.	1.9	2
165	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
166	Symbolic analysis of time series signals using generalized Hilbert transform. , 2009, , .		1
167	Ultrasonic measurement of crack opening load for life-extending control of mechanical structures. , 2009, , .		3
168	Estimation of multiple faults in aircraft gas-turbine engines. , 2009, , .		4
169	Understanding phase transition in communication networks to enable robust and resilient control. , 2009, , .		5
170	Data-driven estimation of multiple fault parameters in permanent magnet synchronous motors. , 2009, , .		1
171	Autonomous robot navigation using optimal control of probabilistic regular languages. International Journal of Control, 2009, 82, 13-26.	1.9	4
172	Supervised self-organization of large homogeneous Swarms using Ergodic Projections of Markov Chains. , 2009, , .		1
173	Suboptimal partitioning of time-series data for anomaly detection. , 2009, , .		6
174	Optimal path-planning under finite memory obstacle dynamics based on probabilistic finite state automata models. , 2009, , .		2
175	Data driven anomaly detection via symbolic identification of complex dynamical systems. , 2009, , .		2
176	Adaptive control of sensor networks for detection of percolating faults. , 2009, , .		0
177	A real time implementable All-Pair Dynamic Planning Algorithm for robot navigation based on the renormalized measure of probabilistic regular languages. , 2009, , .		0
178	Behavior recognition in mobile robots using Symbolic Dynamic Filtering and language measure. , 2009, , .		0
179	Asynchronous data-driven classification of weapon systems. Measurement Science and Technology, 2009, 20, 123001.	2.6	5
180	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

#	Article	IF	CITATIONS
181	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
182	Early detection of stator voltage imbalance in three-phase induction motors. Electric Power Systems Research, 2009, 79, 239-245.	3.6	20
183	Statistical Mechanics of Complex Systems for Pattern Identification. Journal of Statistical Physics, 2009, 134, 337-364.	1.2	24
184	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
185	An information-theoretic measure for anomaly detection in complex dynamical systems. Mechanical Systems and Signal Processing, 2009, 23, 358-371.	8.0	7
186	Statistical estimation of multiple parameters via symbolic dynamic filtering. Signal Processing, 2009, 89, 981-988.	3.7	5
187	Generalization of Hilbert transform for symbolic analysis of noisy signals. Signal Processing, 2009, 89, 1245-1251.	3.7	19
188	Underwater mine detection using symbolic pattern analysis of sidescan sonar images. , 2009, , .		18
189	νaˆ†: a robot path planning algorithm based on renormalised measure of probabilistic regular languages. International Journal of Control, 2009, 82, 849-867.	1.9	10
190	Signal threshold estimation in a sensor field for undersea target tracking. , 2009, , .		0
191	Statistical pattern analysis of ultrasonic signals for fatigue damage detection in mechanical structures. NDT and E International, 2008, 41, 491-500.	3.7	15
192	Anomaly detection in flexible mechanical couplings via symbolic time series analysis. Journal of Sound and Vibration, 2008, 311, 608-622.	3.9	9
193	Estimation of slowly varying parameters in nonlinear systems via symbolic dynamic filtering. Signal Processing, 2008, 88, 339-348.	3.7	23
194	Fault diagnosis and isolation in aircraft gas turbine engines. , 2008, , .		2
195	Structural transformations of probabilistic finite state machines. International Journal of Control, 2008, 81, 820-835.	1.9	30
196	Generalised projections in finite state automata and decidability of state determinacy. International Journal of Control, 2008, 81, 1626-1644.	1.9	2
197	Early detection of fatigue damage using escort distributions of ultrasonic data sequences. , 2008, , .		0
198	Mathematical Methods in Robust Control of Linear Stochastic Systems (Mathematical Concepts and) Tj ETQq0 (	0 0 rgBT /0 5.7	Overlock 10 Tf 0

198

12

on Automatic Control, 2008, 53, 862-864.

#	Article	IF	CITATIONS
199	Estimation of multiple parameters in dynamical systems. , 2008, , .		2
200	Comparative evaluation of Symbolic Dynamic Filtering for detection of anomaly patterns. , 2008, , .		1
201	Trend detection and data mining via wavelet and Hilbert-Huang transforms. , 2008, , .		3
202	Space partitioning via Hilbert transform for symbolic time series analysis. Applied Physics Letters, 2008, 92, .	3.3	75
203	Symbolic identification and anomaly detection in complex dynamical systems. , 2008, , .		3
204	Irreversibility-based Measure of Slowly Evolving Anomalies. Proceedings of the American Control Conference, 2007, , .	0.0	1
205	Pattern identification using lattice spin systems: A thermodynamic formalism. Applied Physics Letters, 2007, 91, 194105.	3.3	12
206	Language-measure-theoretic optimal control of probabilistic finite-state systems. International Journal of Control, 2007, 80, 1271-1290.	1.9	30
207	Generalized Projections in Finite State Automata & Decidability of State Determinacy. Proceedings of the American Control Conference, 2007, , .	0.0	1
208	Estimation of Fatigue Life Using Ultrasonic Sensing: A Symbolic Dynamics Approach. Proceedings of the American Control Conference, 2007, , .	0.0	0
209	Prognosis of Failure Precursor in Complex Electrical Systems Using Symbolic Dynamics. Proceedings of the American Control Conference, 2007, , .	0.0	2
210	Dynamic Information Fusion Driven Design of Urban Sensor Networks. , 2007, , .		5
211	Generalized language measure families of probabilistic finite state systems. International Journal of Control, 2007, 80, 789-799.	1.9	0
212	Real-time fatigue life estimation in mechanical structures. Measurement Science and Technology, 2007, 18, 1947-1957.	2.6	48
213	Modelling and system identification of an experimental apparatus for anomaly detection in mechanical systems. Applied Mathematical Modelling, 2007, 31, 734-748.	4.2	6
214	Hierarchical control of aircraft propulsion systems: Discrete event supervisor approach. Control Engineering Practice, 2007, 15, 149-162.	5.5	9
215	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
216	Pattern identification in dynamical systems via symbolic time series analysis. Pattern Recognition, 2007, 40, 2897-2907.	8.1	31

#	Article	IF	CITATIONS
217	Integrated decision and control of human-engineered complex systems. International Journal of General Systems, 2006, 35, 275-294.	2.5	4
218	A language measure for partially observed discrete event systems. International Journal of Control, 2006, 79, 1074-1086.	1.9	4
219	Pattern Identification in Complex Systems: A Statistical Thermodynamic Approach. , 2006, , 771.		2
220	Correlation regimes in fluctuations of fatigue crack growth. Physica A: Statistical Mechanics and Its Applications, 2006, 359, 1-23.	2.6	6
221	Symbolic time series analysis via wavelet-based partitioning. Signal Processing, 2006, 86, 3309-3320.	3.7	227
222	Identification of statistical patterns in complex systems via symbolic time series analysis. ISA Transactions, 2006, 45, 477-490.	5.7	6
223	Wavelet Space Partitioning for Symbolic Time Series Analysis. Chinese Physics Letters, 2006, 23, 1951-1954.	3.3	2
224	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
225	Autonomous Navigation of Mobile Robots Using Optimal Control of Finite State Automata. , 2006, , .		4
226	Anomaly Detection in Aircraft Gas Turbine Engines. Journal of Aerospace Computing, Information, and Communication, 2006, 3, 44-51.	0.8	27
227	Supervisory Control of Software Systems. , 2005, , 207-238.		0
228	On-line identification of language measure parameters for discrete-event supervisory control. Applied Mathematical Modelling, 2005, 29, 597-613.	4.2	9
229	Symbolic time series analysis for anomaly detection: A comparative evaluation. Signal Processing, 2005, 85, 1859-1868.	3.7	63
230	Robust optimal control of regular languages. Automatica, 2005, 41, 1439-1445.	5.0	2
231	Robust Optimal Control of Regular Languages. , 2005, , 71-93.		3
232	Supervisory Control of Malicious Executables in Software Processes. , 2005, , 239-259.		0
233	A COMPLEX MEASURE FOR LINEAR GRAMMARS. Demonstratio Mathematica, 2005, 38, .	1.5	2
234	Optimal Discrete Event Control of Gas Turbine Engines. , 2005, , 183-205.		0

#	Article	IF	CITATIONS
235	Optimal Supervisory Control of Regular Languages. , 2005, , 39-69.		Ο
236	Intelligent Navigation in Space Under Supervisory Control. , 2005, , .		1
237	Signed Real Measure of Regular Languages. , 2005, , 3-37.		19
238	Advanced Topics in Supervisory Control. , 2005, , 95-130.		0
239	Optimal Control of Robot Behavior Using Language Measure. , 2005, , 157-181.		3
240	Stochastic Measure of Fatigue Crack Damage for Health Monitoring of Ductile Alloy Structures. Structural Health Monitoring, 2004, 3, 245-263.	7.5	15
241	Symbolic dynamic analysis of complex systems for anomaly detection. Signal Processing, 2004, 84, 1115-1130.	3.7	335
242	A language measure for performance evaluation of discrete-event supervisory control systems. Applied Mathematical Modelling, 2004, 28, 817-833.	4.2	44
243	Unconstrained optimal control of regular languages. Automatica, 2004, 40, 639-646.	5.0	32
244	Optimal supervisory control of finite state automata. International Journal of Control, 2004, 77, 1083-1100.	1.9	26
245	Hierarchical Discrete Event Supervisory Control of Aircraft Propulsion Systems. , 2004, , .		1
246	OPTIMAL SUPERVISORY CONTROL OF REGULAR LANGUAGES. Demonstratio Mathematica, 2004, 37, .	1.5	0
247	Optimal control of robot behaviour using language measure. International Journal of Vehicle Autonomous Systems, 2004, 2, 147.	0.2	6
248	Robot behavioral selection using discrete event language measure. , 2004, , .		2
249	Calibration and estimation of redundant signals for real-time monitoring and control. Signal Processing, 2003, 83, 2593-2605.	3.7	3
250	Signed real measure of regular languages for discrete-event automata. International Journal of Control, 2003, 76, 1800-1808.	1.9	36
251	Anomaly Detection in Complex Systems â€. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 1119-1124.	0.4	6
252	Detection and identification of potential faults via multi-level hypotheses testing. Signal Processing, 2002, 82, 853-859.	3.7	3

#	Article	IF	CITATIONS
253	Wide-range robust control of combustion instability. Combustion and Flame, 2002, 128, 242-258.	5.2	29
254	Fatigue crack growth under variable-amplitude loading: Part I – Model formulation in state-space setting. Applied Mathematical Modelling, 2001, 25, 979-994.	4.2	64
255	Fatigue crack growth under variable-amplitude loading: Part II – Code development and model validation. Applied Mathematical Modelling, 2001, 25, 995-1013.	4.2	65
256	Observer-embedded L2-gain control. Applied Mathematics Letters, 2001, 14, 563-569.	2.7	4
257	Nonlinear Control of a Reusable Rocket Engine for Life Extension. Journal of Propulsion and Power, 2001, 17, 998-1004.	2.2	10
258	Robust damage-mitigating control of aircraft structures. , 2000, , .		0
259	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
260	Hybrid life-extending control of mechanical systems: experimental validation of the concept. Automatica, 2000, 36, 23-36.	5.0	23
261	Robust feedback control of combustion instability with modeling uncertainty. Combustion and Flame, 2000, 120, 91-106.	5.2	46
262	State-space modeling of fatigue crack growth in ductile alloys. Engineering Fracture Mechanics, 2000, 66, 129-151.	4.3	24
263	Calibration and estimation of redundant signals. Automatica, 2000, 36, 1525-1534.	5.0	5
264	Fuzzy wide-range control of fossil power plants for life extension and robust performance. Automatica, 2000, 36, 69-82.	5.0	25
265	Nonlinear Life-Extending Control of a Rocket Engine. Journal of Guidance, Control, and Dynamics, 2000, 23, 759-762.	2.8	3
266	Compensatability and optimal compensation under randomly varying distributed delays. International Journal of Control, 1999, 72, 826-832.	1.9	19
267	A stochastic model of fatigue crack propagation under variable-amplitude loading. Engineering Fracture Mechanics, 1999, 62, 477-493.	4.3	31
268	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
269	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
270	A State-Space Model of Fatigue Crack Growth. International Journal of Fracture, 1998, 90, 235-249.	2.2	36

#	Article	lF	CITATIONS
271	Stochastic modeling of fatigue crack propagation. Applied Mathematical Modelling, 1998, 22, 197-204.	4.2	13
272	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
273	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
274	Robust Multivariable Control of Rotorcraft in Forward Flight. Journal of the American Helicopter Society, 1997, 42, 149-160.	0.8	26
275	Stochastic optimal control under randomly varying distributed delays. International Journal of Control, 1997, 68, 1179-1202.	1.9	31
276	A nonlinear stochastic model of fatigue crack dynamics. Probabilistic Engineering Mechanics, 1997, 12, 33-40.	2.7	29
277	Life-extending control of fossil fuel power plants. Automatica, 1997, 33, 1101-1118.	5.0	43
278	Damage-Mitigating Control of a Reusable Rocket Engine: Part l—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
279	Modelling of power plant dynamics and uncertainties for robust control synthesis. Applied Mathematical Modelling, 1996, 20, 501-512.	4.2	29
280	State-space supervisory control of reconfigurable discrete event systems. International Journal of Control, 1996, 63, 767-797.	1.9	29
281	Damage-Mitigating Control of a Reusable Rocket Engine: Part II—Formulation of an Optimal Policy. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1996, 118, 409-415.	1.6	13
282	GRAMMIAN ASSIGNMENT FOR STOCHASTIC PARAMETER SYSTEMS AND THEIR STABILIZATION UNDER RANDOMLY VARYING DELAYS. Optimal Control Applications and Methods, 1995, 16, 263-272.	2.1	3
283	Damage-Mitigating Control of Mechanical Systems: Part l—Conceptual Development and Model Formulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1994, 116, 437-447.	1.6	71
284	Fixed memory filter for real-time estimation of noise-corrupted signals. Journal of Guidance, Control, and Dynamics, 1994, 17, 631-634.	2.8	0
285	Damage-mitigating control of a reusable rocket engine. Journal of Propulsion and Power, 1994, 10, 225-234.	2.2	30
286	Experimental verification of a delay compensation algorithm for integrated communication and control systems. International Journal of Control, 1994, 59, 1357-1372.	1.9	112
287	Output feedback control under randomly varying distributed delays. Journal of Guidance, Control, and Dynamics, 1994, 17, 701-711.	2.8	133
288	Damage-Mitigating Control of Mechanical Systems: Part Il—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

#	Article	IF	CITATIONS
289	Robust Wide-Range Control of Nuclear Reactors by Using the Feedforward-Feedback Concept. Nuclear Science and Engineering, 1994, 117, 177-185.	1.1	10
290	Extended discrete-time LTR synthesis of delayed control systems. Automatica, 1993, 29, 431-438.	5.0	6
291	Modelling and analysis of a data communication protocol for integrated control of advanced aircraft. Computer Communications, 1993, 16, 350-365.	5.1	0
292	Control of Output Feedback Systems under Randomly Varying Distributed Delays. , 1993, , .		1
293	Observability under recurrent loss of data. Journal of Guidance, Control, and Dynamics, 1992, 15, 284-287.	2.8	16
294	Robust Optimal Control of Nuclear Reactors and Power Plants. Nuclear Technology, 1992, 98, 137-148.	1.2	51
295	Extended Linear Quadratic Gaussian Control under Randomly Varying Distributed Delays. , 1992, , .		0
296	Discreteâ€ŧime loop transfer recovery with multistep delays. Optimal Control Applications and Methods, 1992, 13, 255-263.	2.1	1
297	A Stochastic Regulator for Integrated Communication and Control Systems: Part l—Formulation of Control Law. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1991, 113, 604-611.	1.6	100
298	A Stochastic Regulator for Integrated Communication and Control Systems: Part Il—Numerical Analysis and Simulation. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1991, 113, 612-619.	1.6	29
299	A decision support system for real-time monitoring and control of dynamical processes. International Journal of Intelligent Systems, 1991, 6, 739-758.	5.7	2
300	Twin-bus-controller protocol for fibre optic networks. Computer Communications, 1991, 14, 598-607.	5.1	1
301	Performance Management of Multiple-Access Communication Networks for Large-Scale Integrated Systems. , 1991, , .		Ο
302	A Stochastic Approach to Delay Compensation in Integrated Communication and Control Systems. , 1991, , .		0
303	Robust Compensation of Distributed Delays in Integrated Communication and Control Systems. , 1991, ,		0
304	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
305	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
306	An observer-based compensator for distributed delays. Automatica, 1990, 26, 903-908.	5.0	344

#	Article	IF	CITATIONS
307	Analysis and simulation of the priority scheme in token bus protocols. Computer Communications, 1990, 13, 157-164.	5.1	0
308	Delay Compensation in Integrated Communication and Control Systems: Part II Implementation and Verification. , 1990, , .		4
309	Delay Compensation in Integrated Communication and Control Systems: Part I Conceptual Development and Analysis. , 1990, , .		5
310	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
311	Multi-Level Hypotheses Testing for Fault Detection in Continuous Processes. , 1989, , .		2
312	Analysis of the Priority Scheme in Token Bus Protocols. , 1989, , .		0
313	Perturbation Analysis of a Token Bus Protocol for Network Performance Management. , 1989, , .		3
314	Service access procedure (SAP) for a transport layer protocol. Telematics and Informatics, 1988, 5, 65-73.	5.8	1
315	DISTRIBUTED DATA COMMUNICATION NETWORKS FOR REAL-TIME PROCESS CONTROL. Chemical Engineering Communications, 1988, 65, 139-154.	2.6	36
316	Integrated Communication and Control Systems: Part l—Analysis. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1988, 110, 367-373.	1.6	465
317	Integrated Communication and Control Systems: Part II—Design Considerations. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 1988, 110, 374-381.	1.6	204
318	Fault Detection in Multiply-Redundant Measurement Systems via Sequential Testing. , 1988, , .		3
319	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
320	An adaptive real-time intelligent seam tracking system. Journal of Manufacturing Systems, 1987, 6, 241-245.	13.9	7
321	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
322	Implementation of a Fault Detection Procedure. , 1986, , .		1
323	Selection of Media Access Protocol for Distributed Digital Avionics. , 1986, , .		0
324	Use of Reactivity Constraints for the Automatic Control of Reactor Power. IEEE Transactions on Nuclear Science, 1985, 32, 1036-1040.	2.0	6

#	Article	IF	CITATIONS
325	Digital Control of Power Transients in a Nuclear Reactor. IEEE Transactions on Nuclear Science, 1984, 31, 701-705.	2.0	16
326	Computer Control of Power in a Nuclear Reactor. IEEE Transactions on Nuclear Science, 1983, 30, 820-824.	2.0	1
327	On-Line Fault Diagnosis in a Nuclear Reactor by Sequential Testing. IEEE Transactions on Nuclear Science, 1983, 30, 1850-1855.	2.0	5
328	Analytic Redundancy for On-Line Fault Diagnosis in a Nuclear Reactor. Journal of Energy, 1983, 7, 367-373.	0.2	19
329	Nonlinear dynamic model of a solar steam generator. Solar Energy, 1981, 26, 297-306.	6.1	14
330	Dynamic modelling of power plant turbines for controller design. Applied Mathematical Modelling, 1980, 4, 109-112.	4.2	39
331	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
332	Digital Simulaiion of a Commercial Scale High Temperature Gas-Cooled Reactor (HTGR) Steam Power Plant. IEEE Transactions on Nuclear Science, 1978, 25, 1068-1077.	2.0	3
333	Dynamic modeling and simulation of a relief valve. Simulation, 1978, 31, 167-172.	1.8	15
334	Embedded Soft Sensing for Anomaly Detection in Mobile Robotic Networks. , 0, , 609-629.		0
335	Fatigue damage detection and risk assessment via neural network modeling of ultrasonic signals. Fatigue and Fracture of Engineering Materials and Structures, 0, , .	3.4	2