

# Dimitri Lefebvre

## List of Publications by Year in descending order

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88  
papers

917  
citations

567281

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h-index

552781

26  
g-index

89  
all docs

89  
docs citations

89  
times ranked

466  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diagnosis of DES With Petri Net Models. IEEE Transactions on Automation Science and Engineering, 2007, 4, 114-118.	5.2	88
2	Risk analysis of French chemical industry. Safety Science, 2018, 105, 77-85.	4.9	64
3	Fault Diagnosis and Prognosis With Partially Observed Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2014, 44, 1413-1424.	9.3	58
4	Feedback control designs for manufacturing systems modelled by continuous Petri nets. International Journal of Systems Science, 1999, 30, 591-600.	5.5	41
5	On-Line Fault Diagnosis With Partially Observed Petri Nets. IEEE Transactions on Automatic Control, 2014, 59, 1919-1924.	5.7	41
6	Autonomous learning algorithm for fully connected recurrent networks. Neurocomputing, 2005, 63, 25-44.	5.9	34
7	Control Design for Trajectory Tracking With Untimed Petri Nets. IEEE Transactions on Automatic Control, 2015, 60, 1921-1926.	5.7	33
8	Stable adaptive control with recurrent neural networks for square MIMO non-linear systems. Engineering Applications of Artificial Intelligence, 2009, 22, 702-717.	8.1	32
9	Analysis of thermal runaway events in French chemical industry. Journal of Loss Prevention in the Process Industries, 2019, 62, 103938.	3.3	28
10	Approaching Minimal Time Control Sequences for Timed Petri Nets. IEEE Transactions on Automation Science and Engineering, 2016, 13, 1215-1221.	5.2	25
11	Some contributions with Petri nets for the modelling, analysis and control of HDS. Nonlinear Analysis: Hybrid Systems, 2007, 1, 451-465.	3.5	24
12	Detection of freezing of gait for Parkinson's disease patients with multi-sensor device and Gaussian neural networks. International Journal of Machine Learning and Cybernetics, 2017, 8, 941-954.	3.6	22
13	Dynamical Scheduling and Robust Control in Uncertain Environments with Petri Nets for DESs. Processes, 2017, 5, 54.	2.8	20
14	Multimodel and neural emulators for non-linear systems: application to an indirect adaptive neural control. International Journal of Modelling, Identification and Control, 2012, 17, 348.	0.2	17
15	Indirect neural control for plant-wide systems: Application to the Tennessee Eastman Challenge Process. Computers and Chemical Engineering, 2010, 34, 232-243.	3.8	16
16	Piecewise constant timed continuous PNs for the steady state estimation of stochastic PNs. Discrete Event Dynamic Systems: Theory and Applications, 2012, 22, 179-196.	1.5	16
17	Detection of damages in underwater metal plate using acoustic inverse scattering and image processing methods. Applied Acoustics, 2016, 103, 110-121.	3.3	15
18	Control Design for Bounded Partially Controlled TPNs Using Timed Extended Reachability Graphs and MDP. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 2273-2283.	9.3	15

#	ARTICLE	IF	CITATIONS
19	Robust scheduling of flexible manufacturing systems with unreliable operations and resources. International Journal of Production Research, 2020, 58, 6474-6492.	7.5	15
20	Adaptive control design using stability analysis and tracking errors dynamics for nonlinear square MIMO systems. Engineering Applications of Artificial Intelligence, 2012, 25, 1450-1459.	8.1	14
21	Fault diagnosis and prognosis with partially observed stochastic Petri nets. Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability, 2014, 228, 382-396.	0.7	14
22	Soft sensor design and fault detection using Bayesian network and probabilistic principal component analysis. Journal of Advanced Manufacturing and Processing, 2019, 1, .	2.4	13
23	About the stochastic and continuous Petri nets equivalence in the long run. Nonlinear Analysis: Hybrid Systems, 2011, 5, 394-406.	3.5	12
24	Supervisory control design for systems of multiple sources of energy. Control Engineering Practice, 2012, 20, 1310-1324.	5.5	12
25	Near-Optimal Scheduling for Petri Net Models With Forbidden Markings. IEEE Transactions on Automatic Control, 2018, 63, 2550-2557.	5.7	11
26	Robust scheduling in uncertain environment with Petri nets and beam search. IFAC-PapersOnLine, 2018, 51, 1077-1082.	0.9	11
27	Influence assessment of inlet parameters on thermal risk and productivity: Application to the epoxidation of vegetable oils. Journal of Loss Prevention in the Process Industries, 2021, 72, 104551.	3.3	11
28	Diagnosis of Discrete Event Systems with Petri Nets. , 0, , .		10
29	Deadlock-free scheduling for timed Petri net models combined with MPC and backtracking. , 2016, , .		10
30	Evaluating the robustness of scheduling in uncertain environment with Petri nets. , 2017, , .		10
31	An approach based on timed Petri nets and tree encoding to implement search algorithms for a class of scheduling problems. Information Sciences, 2021, 559, 314-335.	6.9	9
32	Approximated timed reachability graphs for the robust control of discrete event systems. Discrete Event Dynamic Systems: Theory and Applications, 2019, 29, 31-56.	1.5	8
33	Early detection and diagnosis of thermal runaway reactions using model-based approaches in batch reactors. Computers and Chemical Engineering, 2020, 140, 106908.	3.8	8
34	Robust control for railway transport networks based on stochastic P-timed Petri net models. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2019, 233, 830-846.	1.0	7
35	Privacy and safety analysis of timed stochastic discrete event systems using Markovian trajectory-observers. Discrete Event Dynamic Systems: Theory and Applications, 2020, 30, 413-440.	1.5	7
36	Diagnosability of fault patterns with labeled stochastic Petri nets. Information Sciences, 2022, 593, 341-363.	6.9	7

#	ARTICLE	IF	CITATIONS
37	PN modeling of discrete event systems with temporal constraints. , 2017, , .		6
38	Model predictive control for discrete and continuous timed Petri nets. International Journal of Automation and Computing, 2018, 15, 25-38.	4.5	6
39	Exposure Time as a Measure of Opacity in Timed Discrete Event Systems. , 2019, , .		6
40	Probabilistic state estimation for labeled continuous time Markov models with applications to attack detection. Discrete Event Dynamic Systems: Theory and Applications, 2022, 32, 65-88.	1.5	6
41	Exposure and Revelation Times as a Measure of Opacity in Timed Stochastic Discrete Event Systems. IEEE Transactions on Automatic Control, 2021, 66, 5802-5815.	5.7	6
42	DIAGNOSIS WITH CAUSALITY RELATIONSHIPS AND DIRECTED PATHS IN PN MODELS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 103-108.	0.4	5
43	Robust stability analysis of adaptive control based on recurrent ANN. International Journal of Modelling, Identification and Control, 2008, 5, 14.	0.2	5
44	Feasibility of piecewise-constant control sequences for timed continuous Petri nets. Automatica, 2013, 49, 3654-3660.	5.0	5
45	Observers for a Class of Timed Automata Based on Elapsed Time Graphs. IEEE Transactions on Automatic Control, 2022, 67, 767-779.	5.7	5
46	A Clustering Approach to Approximate the Timed Reachability Graph for a Class of Time Petri Nets. IEEE Transactions on Automatic Control, 2022, 67, 3693-3698.	5.7	5
47	Gradient-based controllers for timed continuous Petri nets. International Journal of Systems Science, 2015, 46, 1661-1678.	5.5	4
48	A Discussion on Fault detection for a class of Hybrid Petri Nets. IFAC-PapersOnLine, 2017, 50, 6837-6842.	0.9	4
49	Approximated Timed Reachability Graphs for performance evaluation and control of DES. IFAC-PapersOnLine, 2018, 51, 224-229.	0.9	4
50	Trajectory-observers of timed stochastic discrete event systems: Applications to privacy analysis. , 2019, , .		4
51	Robust Deadlock-free Scheduling for FMS with Liveness-enforcing Supervisor Combined with Beam Search Controller. , 2019, , .		4
52	Diagnosis of Structural and Temporal Faults for $k$ -Bounded Non-Markovian Stochastic Petri Nets. IEEE Transactions on Systems, Man, and Cybernetics: Systems, 2020, 50, 3369-3381.	9.3	4
53	Residual analysis for the diagnosis of hybrid electrical energy systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 1366-1371.	0.4	3
54	Neural network control for large scale systems with faults and perturbations. , 2010, , .		3

#	ARTICLE	IF	CITATIONS
55	Multivariable adaptive neural control based on multimodel emulator for nonlinear square MIMO systems. , 2014, , .		3
56	Initial study for observers application to Fault Detection and Isolation with continuous timed Petri nets. IFAC-PapersOnLine, 2015, 48, 97-103.	0.9	3
57	Design of control sequences for timed Petri nets based on tree encoding. IFAC-PapersOnLine, 2018, 51, 218-223.	0.9	3
58	Moving Average control chart for the detection and isolation of temporal faults in stochastic Petri nets. , 2018, , .		3
59	Datation of Faults for Markovian Stochastic DESs. IEEE Transactions on Automatic Control, 2019, 64, 2961-2967.	5.7	3
60	Modeling and Scheduling Methods for Batch Production Systems Based on Petri Nets and Heuristic Search. IEEE Access, 2020, 8, 163458-163471.	4.2	3
61	Outils d'aide à la décision pour le diagnostic des structures immergées. Journal Europeen Des Systemes Automatisés, 2013, 47, 339-360.	0.4	3
62	Configuration of surveillance patrols with Petri nets for safety issues. , 2020, , .		3
63	Model Predictive Control for Timed Petri Nets. IFAC-PapersOnLine, 2015, 48, 91-96.	0.9	2
64	A systematic design of emulators for multivariable non square and nonlinear systems. International Journal of Automation and Computing, 2017, 14, 742-754.	4.5	2
65	Detection of Temporal Anomalies for Partially Observed Timed PNs. Mathematical Problems in Engineering, 2017, 2017, 1-10.	1.1	2
66	Revelation Time for Initial-State Opacity Measurement in Timed Discrete Event Systems. , 2019, , .		2
67	Special Issue on "Thermal Safety of Chemical Processes" Processes, 2021, 9, 1054.	2.8	2
68	Distributed Monitoring Based on P-Time Petri Nets and Chronicle Recognition of the Tunisian Railway Network. Journal of Electrical and Computer Engineering, 2020, 2020, 1-12.	0.9	2
69	Source and Sink Transitions Controllers for Continuous Petri Nets: A Gradient-Based Approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 193-198.	0.4	1
70	IMMEDIATE DIAGNOSIS OF FAULTY BEHAVIOURS WITH PETRI NET MODELS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 61-66.	0.4	1
71	FLOW CONTROL FOR CONTINUOUS PETRI NET MODELS OF HDS : STABILITY ISSUES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 217-222.	0.4	1
72	PARAMETERS ESTIMATION FOR TIMED AND CONTINUOUS PETRI NETS: APPLICATION TO THE IDENTIFICATION AND MONITORING OF HYBRID SYSTEMS. Cybernetics and Systems, 2005, 36, 217-250.	2.5	1

#	ARTICLE	IF	CITATIONS
73	An algorithm based on model predictive control for trajectories tracking with untimed PNs. , 2014, , .		1
74	Tolerance intervals for stochastic processes with timed continuous Petri nets. IFAC-PapersOnLine, 2015, 48, 1018-1023.	0.9	1
75	Improving Fault Isolation in DC/DC Converters Based with Bayesian Belief Networks. IFAC-PapersOnLine, 2016, 49, 303-308.	0.9	1
76	A Comparative Study about the Effectiveness of Observers and Bayesian Belief Networks for the Fault Detection and Isolation in Power Electronics. Research Journal of Applied Sciences, Engineering and Technology, 2017, 14, 10-28.	0.1	1
77	Control design of timed continuous Petri nets via model predictive constant control. International Journal of Control, 2018, 91, 1962-1978.	1.9	1
78	Control design for timed Petri nets based on LMIs and structure expansion. , 2018, , .		1
79	Algorithms of reduced complexity to design control sequences for untimed Petri nets in varying and uncertain environments. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2018, 232, 638-651.	1.0	1
80	Hybrid FMS scheduling using T-TPN and Beam Search in uncertain environments. , 2019, , .		1
81	A region-based approach for state estimation of timed automata under no event observation. , 2020, , .		1
82	Detection and isolation of temporal drifts in manufacturing systems with observers and control charts. SN Applied Sciences, 2020, 2, 1.	2.9	1
83	Probabilistic verification of attack detection using logical observer. IFAC-PapersOnLine, 2020, 53, 95-100.	0.9	1
84	Model - Based Monitoring of Hybrid Dynamical Systems Using Continuous Petri Nets. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 753-758.	0.4	0
85	Faults Detection and Isolation for Non Linear Hybrid Systems. , 2007, , 986-991.		0
86	Sensing and Diagnosis of DES With Petri Net Models. , 2007, , 1145-1150.		0
87	Geometric characterization of invariant regions for timed continuous Petri nets with control actions. , 2011, , .		0
88	Stability analysis of adaptive control using fuzzy adapting rate neural emulator: Experimental validation on a thermal process. Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering, 2021, 235, 1403-1416.	1.0	0