Olivier Sename

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2201063/publications.pdf

Version: 2024-02-01

141 papers	2,340 citations	361413 20 h-index	265206 42 g-index
147 all docs	147 docs citations	147 times ranked	1359 citing authors

#	Article	IF	Citations
1	Sufficient Conditions for Convergent Recursive Extrapolation of qLPV Scheduling Parameters Along a Prediction Horizon. IEEE Transactions on Automatic Control, 2023, 68, 3182-3193.	5.7	3
2	$$H_{infty }$$ Observer forÂRoad Profile Estimation inÂanÂAutomotive Semi-active Suspension System Using Two Accelerometers. Lecture Notes in Mechanical Engineering, 2023, , 121-134.	0.4	2
3	Semi active damping force estimation using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si76.svg"><mml:mrow><mml:mi>L</mml:mi><mml:mi>P</mml:mi><mml:mi>V</mml:mi><mml:mspace width="0.16em" /><mml:mo linebreak="goodbreak">â^’</mml:mo><mml:mspace width="0.16em" /><mml:msub><mml:mi>H</mml:mi><mml:mi>â^ž</mml:mi></mml:msub></mml:mrow></mml:math> estimators with different sensing configurations. Journal of the Franklin Institute, 2022, 359, 928-951.	3.4	2
4	LPV-Based Autonomous Vehicle Lateral Controllers: A Comparative Analysis. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 13570-13581.	8.0	13
5	Evaluation of Dynamic Load Reduction for a Tractor Semi-Trailer Using the Air Suspension System at all Axles of the Semi-Trailer. Actuators, 2022, 11, 12.	2.3	5
6	An LPV-Based Online Reconfigurable Adaptive Semi-Active Suspension Control with MR Damper. Energies, 2022, 15, 3648.	3.1	12
7	LMI Conditions for Stability and State-Feedback Hâ^ž Control of Discrete-Time Multi-Mode Multi-Dimensional Systems. , 2022, , 1-1.		0
8	An inputâ€toâ€state stable model predictive control framework for Lipschitz nonlinear parameter varying systems. International Journal of Robust and Nonlinear Control, 2021, 31, 8239-8272.	3.7	4
9	Design and Experimental Validation of an LPV Pure Pursuit Automatic Steering Controller. IFAC-PapersOnLine, 2021, 54, 63-68.	0.9	8
10	An investigation into the ride comfort of buses using an air suspension system. International Journal of Heavy Vehicle Systems, 2021, 28, 184.	0.2	6
11	Identification and comparison of two nonlinear extended phenomenological models for an automotive ElectroRheological (ER) damper. IFAC-PapersOnLine, 2021, 54, 439-444.	0.9	1
12	Multi-objective Unified qLPV Observer: Application to a Semi-active Suspension System. IFAC-PapersOnLine, 2021, 54, 136-141.	0.9	2
13	A General Modeling Approach for Shock Absorbers: 2 DoF MR Damper Case Study. Frontiers in Materials, 2021, 7, .	2.4	2
14	Design and Validation of Disturbance Rejection Dynamic Inverse Control for a Tailless Aircraft in Wind Tunnel. Applied Sciences (Switzerland), 2021, 11, 1407.	2.5	7
15	Integrated Comfort-Adaptive Cruise and Semi-Active Suspension Control for an Autonomous Vehicle: An LPV Approach. Electronics (Switzerland), 2021, 10, 813.	3.1	6
16	Dynamic Hâ^ž observer for real-time damper force estimation of a semi-active automotive suspension system. , 2021, , .		0
17	Improving roll stability of tractor semi-trailer vehicles by using Hâ^ž active anti-roll bar control system. Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering, 2021, 235, 3509-3520.	1.9	4
18	Fault-tolerant semi-active suspension control for degradation in damper performance. , 2021, , .		2

#	Article	IF	Citations
19	A nonlinear parameter varying observer for realâ€time damper force estimation of an automotive electroâ€rheological suspension system. International Journal of Robust and Nonlinear Control, 2021, 31, 8183-8205.	3.7	9
20	Review on LPV Approaches for Suspension Systems. Electronics (Switzerland), 2021, 10, 2120.	3.1	7
21	Vehicle Semi-active Suspension Control with Cloud-based Road Information. Periodica Polytechnica Transportation Engineering, 2021, 49, 242-249.	1.2	8
22	Road Quality Information Based Adaptive Semi-active Suspension Control. Periodica Polytechnica Transportation Engineering, 2021, 49, 210-217.	1.2	7
23	A fast dissipative robust nonlinear model predictive control procedure via quasiâ€linear parameter varying embedding and parameter extrapolation. International Journal of Robust and Nonlinear Control, 2021, 31, 9619-9651.	3.7	5
24	Adaptive Semi-Active Suspension and Cruise Control through LPV Technique. Applied Sciences (Switzerland), 2021, 11, 290.	2.5	22
25	Robust Energy Management System for Multi-Source DC Energy Systemsâ€”Real-Time Setup and Validation. IEEE Transactions on Control Systems Technology, 2020, 28, 2591-2599.	5.2	4
26	An Innovative Experimental Approach to Lateral-Directional Flying Quality Investigation for Tailless Aircraft. IEEE Access, 2020, 8, 109543-109556.	4.2	3
27	Integrated multi-criteria velocity and semi-active suspension control based on look-ahead road information. , 2020, , .		4
28	Development of a simple ER damper model for fault-tolerant control design. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	1.6	5
29	Model predictive control design for linear parameter varying systems: A survey. Annual Reviews in Control, 2020, 49, 64-80.	7.9	88
30	Subâ€optimal recursively feasible Linear Parameterâ€Varying predictive algorithm for semiâ€active suspension control. IET Control Theory and Applications, 2020, 14, 2764-2775.	2.1	14
31	Gainâ€scheduled steering control for autonomous vehicles. IET Control Theory and Applications, 2020, 14, 3451-3460.	2.1	7
32	Parameter Varying Approach For A Combined (Kinematic + Dynamic) Model Of Autonomous Vehicles. IFAC-PapersOnLine, 2020, 53, 15071-15076.	0.9	6
33	GPU based Stochastic Parameterized NMPC scheme for Control of Semi-Active Suspension System for Half Car Vehicle. IFAC-PapersOnLine, 2020, 53, 14369-14374.	0.9	0
34	GPU-Based Parameterized NMPC Scheme for Control of Half Car Vehicle With Semi-Active Suspension System. , 2019, 3, 631-636.		11
35	Design and Experimental Validation of an Hâˆž Observer for Vehicle Damper Force Estimation. IFAC-PapersOnLine, 2019, 52, 673-678.	0.9	10
36	An Investigation into the Oil Leakage Effect Inside the Electronic Servo-valve for an $$mathcal{H}_infty$$/LPV Active Anti-roll Bar System. International Journal of Control, Automation and Systems, 2019, 17, 2917-2928.	2.7	10

#	Article	IF	Citations
37	Robustness to In-Domain Viscous Damping of a Collocated Boundary Adaptive Feedback Law for an Antidamped Boundary Wave PDE. IEEE Transactions on Automatic Control, 2019, 64, 3284-3299.	5.7	21
38	Unified $mathcal{H}_{infty}$ Observer for a Class of Nonlinear Lipschitz Systems: Application to a Real ER Automotive Suspension. , 2019, 3, 817-822.		20
39	Hâˆž/LPV controller design for an active anti-roll bar system of heavy vehicles using parameter dependent weighting functions. Heliyon, 2019, 5, e01827.	3.2	12
40	Comparative study of three robust observers for automotive damper force estimation. IOP Conference Series: Materials Science and Engineering, 2019, 707, 012014.	0.6	2
41	Real-time Damper Force Estimation of Vehicle Electrorheological Suspension: A NonLinear Parameter Varying Approach. IFAC-PapersOnLine, 2019, 52, 94-99.	0.9	19
42	Novel qLPV MPC Design with Least-Squares Scheduling Prediction. IFAC-PapersOnLine, 2019, 52, 158-163.	0.9	28
43	Design and Analysis of Several State-Feedback Fault-Tolerant Control Strategies for Semi-Active Suspensions. IFAC-PapersOnLine, 2019, 52, 48-53.	0.9	8
44	Structured observer-based controller for delayed systems with two unstable poles and minimum phase zeros.. IFAC-PapersOnLine, 2019, 52, 162-167.	0.9	0
45	The Design of an Hâˆž/LPV Active Braking Control to Improve Vehicle Roll Stability. IFAC-PapersOnLine, 2019, 52, 54-59.	0.9	10
46	LPV Force Observer Design and Experimental Validation from a Dynamical Semi-Active ER Damper Model. IFAC-PapersOnLine, 2019, 52, 60-65.	0.9	6
47	Improving Vehicle Roll Stability by LQR Active Anti-roll Bar Control. Lecture Notes in Networks and Systems, 2019, , 350-356.	0.7	0
48	Fault estimation for automotive Electro-Rheological dampers: LPV-based observer approach. Control Engineering Practice, 2019, 85, 11-22.	5.5	30
49	Design of a fast real-time LPV model predictive control system for semi-active suspension control of a full vehicle. Journal of the Franklin Institute, 2019, 356, 1196-1224.	3.4	55
50	Full Vehicle Combinatory Efficient Damping Controller: Experimental Implementation. IEEE/ASME Transactions on Mechatronics, 2018, 23, 377-388.	5.8	6
51	The cross-coupling of lateral-longitudinal vehicle dynamics: Towards decentralized Fault-Tolerant Control Schemes. Mechatronics, 2018, 50, 377-393.	3.3	8
52	Exhaust pressure LPV observer for turbocharged diesel engine on-board diagnosis. IFAC-PapersOnLine, 2018, 51, 389-394.	0.9	1
53	A Parameterized NMPC Scheme for Embedded Control of Semi-active Suspension System. IFAC-PapersOnLine, 2018, 51, 301-306.	0.9	10
54	LPV-MPC Fault Tolerant Control of Automotive Suspension Dampers. IFAC-PapersOnLine, 2018, 51, 31-36.	0.9	30

#	Article	IF	Citations
55	Parameter-Dependent Hâˆž Filter for LPV Semi-Active Suspension Systems. IFAC-PapersOnLine, 2018, 51, 19-24.	0.9	12
56	Backstepping Control of a Wave PDE With Unstable Source Terms and Dynamic Boundary. , 2018, 2, 459-464.		15
57	Real-time control systems: feedback, scheduling and robustness. International Journal of Systems Science, 2017, 48, 2368-2378.	5.5	16
58	Enhancing roll stability of heavy vehicle by LQR active anti-roll bar control using electronic servo-valve hydraulic actuators. Vehicle System Dynamics, 2017, 55, 1405-1429.	3.7	62
59	Reduced-order Robust Control of a Fuel Cell Air Supply System * *This work was possible thanks to the financial support of the Grenoble Institute of Technology. Dr. Hernandez-Torres formerly with G2ELab in Grenoble, is now with the University of Toulouse.. IFAC-PapersOnLine, 2017, 50, 96-101.	0.9	12
60	Multi objective Hâˆž active anti-roll bar control for heavy vehicles. IFAC-PapersOnLine, 2017, 50, 13802-13807.	0.9	7
61	Observer-based fault diagnosis for trucks belt tensioner. IFAC-PapersOnLine, 2017, 50, 13848-13853.	0.9	1
62	Backstepping observer based-control for an anti-damped boundary wave PDE in presence of in-domain viscous damping. , 2016, , .		12
63	Robustness of an adaptive output feedback for an anti-damped boundary wave PDE in presence of in-domain viscous damping. , 2016, , .		6
64	The impact of suspension control on the controllability of the lateral vehicle dynamics. , 2016, , .		0
65	Hâˆž active anti-roll bar control to prevent rollover of heavy vehicles: a robustness analysis. IFAC-PapersOnLine, 2016, 49, 99-104.	0.9	17
66	Active anti-roll bar control using electronic servo valve hydraulic damper on single unit heavy vehicle. IFAC-PapersOnLine, 2016, 49, 418-425.	0.9	18
67	Chassis Control based on Fuzzy Logic. , 2016, , .		2
68	Power sources coordination through multivariable linear parameterâ€varying/ control with application to multiâ€source electric vehicles. IET Control Theory and Applications, 2016, 10, 2049-2059.	2.1	24
69	Stabilization and Control of Delayed Recycling High Order Systems with one Unstable Pole at the Direct Path. Asian Journal of Control, 2016, 18, 789-801.	3.0	1
70	Control-Oriented Modeling of Fluid Networks: A Time-Delay Approach. Advances in Delays and Dynamics, 2016, , 275-289.	0.4	1
71	An Integrated Vehicle Dynamic Controller. IEEE Transactions on Vehicular Technology, 2016, 65, 1880-1889.	6.3	27
72	Driver torque estimation in Electric Power Steering system using an H<inf>âˆž</inf>/H<inf>2</inf> Proportional Integral observer. , 2015, , .		4

#	Article	IF	Citations
73	Fault estimation methods for semi-active suspension systems. , 2015, , .		5
74	Force Control System for an Automotive Semi-active Suspension**Authors thank CONACyT and CRNS for their partial support in the bilateral M_exico-France PCP projects 03/10 and 06/13.. IFAC-PapersOnLine, 2015, 48, 55-60.	0.9	4
75	Fault detection for LPV systems: Loop shaping H_ approach. IFAC-PapersOnLine, 2015, 48, 188-193.	0.9	7
76	Adaptive Road Profile Estimation in Semiactive Car Suspensions. IEEE Transactions on Control Systems Technology, 2015, 23, 2293-2305.	5.2	66
77	Optimal frequency separation of power sources by multivariable LPV/H<inf>∞</inf> control: Application to on-board energy management systems of electric vehicles. , 2014, , .		9
78	Observerâ€based scheme for the control of high order systems with two unstable poles plus time delay. Asia-Pacific Journal of Chemical Engineering, 2014, 9, 167-180.	1.5	7
79	Online road profile estimation in automotive vehicles. , 2014, , .		5
80	A time-delay approach for modeling and control of mist in a poiseuille flow. , 2014, , .		1
81	The INOVE ANR 2010 Blan 0308 project: Integrated approach for observation and control of vehicle dynamics. , 2014, , .		2
82	LPV methods for fault-tolerant vehicle dynamic control. , 2013, , .		13
83	A LPV EMS regulator for the parallel HEV with battery life prolongation. , 2013, , .		0
84	Fault tolerant strategy for semi-active suspensions with LPV accommodation?. , 2013, , .		13
85	Integrated vehicle dynamics control via coordination of active front steering and rear braking. European Journal of Control, 2013, 19, 121-143.	2.6	187
86	LPV Approaches for Varying Sampling Control Design: Application to Autonomous Underwater Vehicles. Lecture Notes in Control and Information Sciences, 2013, , 375-395.	1.0	1
87	Advantages of rear steer in LTI and LPV vehicle stability control. , 2013, , .		8
88	Comparison between a Model-free and Model-based Controller of an Automotive Semi-active Suspension System * *Authors thank to TecnolÃ³gico de Monterrey (Autotronics research chair) and CONACyT (PCP 03/2010) for their partial support.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 869-874.	0.4	6
89	Road Adaptive Semi-Active Suspension in an Automotive Vehicle using an LPV Controller. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 231-236.	0.4	13
90	Adaptive Semi-Active Suspension Design Using Gain-Scheduling* *Authors thank the Autotronics research chair at TecnolÃ³gico de Monterrey and CONACyT for the PCP 06/2007.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 845-850.	0.4	2

#	Article	IF	Citations
91	LPV Control Approaches in View of Comfort Improvement of Automotive Suspensions Equipped with MR Dampers. Lecture Notes in Control and Information Sciences, 2013, , 183-212.	1.0	3
92	Global Chassis Control Using Coordinated Control of Braking/Steering Actuators. Lecture Notes in Control and Information Sciences, 2013, , 237-265.	1.0	4
93	Control of delayed recycling systems with an unstable pole at forward path. , 2012, , .		3
94	Some LPV approaches for semi-active suspension control. , 2012, , .		8
95	Fault Tolerant Control in a Semi-active Suspension*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 1173-1178.	0.4	2
96	A Parameter Varying Observer for the Enclosed Mass in a Spark Ignited Engine. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 318-325.	0.4	0
97	Fault-tolerant control design for trajectory tracking in driver assistance systems*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 186-191.	0.4	6
98	Discussion on: â€œTime-Delay Model-Based Control of the Glucoseâ€“Insulin System, by Means of a State Observerâ€• European Journal of Control, 2012, 18, 607-609.	2.6	0
99	On real-time feedback control systems: Requirements, achievements and perspectives. , 2012, , .		5
100	An LFR approach to varying sampling control of LPV systems: Application to AUVs. , 2012, , .		1
101	On the stabilization of high order systems with two unstable poles plus time delay. , 2012, , .		0
102	Magnetorheological damperâ€”an experimental study. Journal of Intelligent Material Systems and Structures, 2012, 23, 1213-1232.	2.5	42
103	Survey and performance evaluation on some automotive semi-active suspension control methods: A comparative study on a single-corner model. Annual Reviews in Control, 2012, 36, 148-160.	7.9	129
104	LPV Modeling and Control of Semi-active Dampers in Automotive Systems. , 2012, , 381-411.		18
105	Vehicle dynamic stability improvements through gain-scheduled steering and braking control. Vehicle System Dynamics, 2011, 49, 1597-1621.	3.7	92
106	Validation and Application of a New 0D Flame/Wall Interaction Sub Model for SI Engines. SAE International Journal of Engines, 2011, 5, 718-733.	0.4	11
107	A new mathematical model for car drivers with spatial preview. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1139-1144.	0.4	4
108	Control Strategies for an Automotive Suspension with a MR Damper. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1820-1825.	0.4	16

#	Article	IF	Citations
109	Attitude and handling improvements through gain-scheduled suspensions and brakes control. Control Engineering Practice, 2011, 19, 252-263.	5.5	65
110	LPV-based MR damper modelling. , 2011, , .		0
111	Fuzzy-based electric current dependency on an MR damper model. , 2011, , .		0
112	On the Robust Control of DC-DC Converters: Application to a Hybrid Power Generation System. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 123-130.	0.4	7
113	A LPV Quarter of Car with Semi-active Suspension Model including Dynamic Input Saturation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 68-75.	0.4	5
114	A Semi-active Control-oriented Damper Model for an Automotive Suspension. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 336-341.	0.4	2
115	An LPV control approach for semi-active suspension control with actuator constraints. , 2010, , .		23
116	Design and experimental validation of a robust control method for a hybrid Fuel Cell power generation system. , 2010, , .		5
117	Discussion on: â€œExperimental Identification of Engine-to-Slip Dynamics for Traction Control Applications in a Sport Motorbikeâ€• European Journal of Control, 2010, 16, 109-112.	2.6	1
118	An LPV control approach for comfort and suspension travel improvements of semi-active suspension systems. , 2010, , .		10
119	Robust optimal control strategies for a hybrid fuel cell power management system. , 2010, , .		11
120	An $H_{infty} $ LPV Design for Sampling Varying Controllers: Experimentation With a T-Inverted Pendulum. IEEE Transactions on Control Systems Technology, 2010, 18, 741-749.	5.2	48
121	Modeling and robust control of Blu-ray disc servo-mechanisms. Mechatronics, 2009, 19, 715-725.	3.3	8
122	${cal H}_infty$ Delay-Scheduled Control of Linear Systems With Time-Varying Delays. IEEE Transactions on Automatic Control, 2009, 54, 2255-2260.	5.7	17
123	A feedback-feedforward suspension control strategy for global chassis control through anti-roll distribution. International Journal of Vehicle Autonomous Systems, 2009, 7, 201.	0.2	3
124	A new semi-active suspension control strategy through LPV technique. Control Engineering Practice, 2008, 16, 1519-1534.	5.5	206
125	A convex optimization approach to feedback scheduling. , 2008, , .		0
126	Robust Control of Time-Delay Systems (Zhong, Q.-C.; 2006) [Book Reviews]. IEEE Transactions on Automatic Control, 2008, 53, 636-637.	5.7	4

#	Article	IF	Citations
127	A LPV approach to control and real-time scheduling codesign: Application to a robot-arm control. , 2008, , .		8
128	Robust LPVâ€“_{âˆž}control for active suspensions with performance adaptation in view of global chassis control. Vehicle System Dynamics, 2008, 46, 889-912.	3.7	57
129	The design of a chassis system based on multi-objective qLPV control. Periodica Polytechnica Transportation Engineering, 2008, 36, 93.	1.2	4
130	Robust H âˆž Control of Bilateral Teleoperation Systems Under Communication Time-Delay. Lecture Notes in Control and Information Sciences, 2007, , 99-116.	1.0	11
131	A New Predictive Approach for Bilateral Teleoperation With Applications to Drive-by-Wire Systems. , 2006, 22, 1146-1162.		81
132	H_α control of a Teleoperation Drive-by-Wire System with Communication Time-Delay. , 2006, , .		1
133	A sampled spur free fractional frequency synthesizer and its noise analysis. Solid-State Circuits Conference, 2008 ESSCIRC 2008 34th European, 2006, , .	0.0	0
134	MODELLING AND CONTROL IN OPTICAL DISK DRIVES: REDUCING THE OPTO-MECHANICAL COUPLING EFFECT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 397-402.	0.4	2
135	Stability of time-delay systems, Keqin Gu, Vladimir L. Kharitonov, Jie Chen, BirkhÃuser, Boston, 2003, ISBN 0-8176-4212-9.. Automatica, 2005, 41, 2181-2183.	5.0	3
136	Discussion on: â€œA State Observer for a Class of Nonlinear Systems with Multiple Discrete and Distributed Time Delaysâ€• European Journal of Control, 2005, 11, 206-208.	2.6	3
137	Skyhook and H8 Control of Semi-active Suspensions: Some Practical Aspects. Vehicle System Dynamics, 2003, 39, 279-308.	3.7	166
138	Robust H<inf>âˆž</inf> control of a DVD drive under parametric uncertainties. , 2003, , .		3
139	Robust H<inf>âˆž</inf> control of quarter-car semi-active suspensions. , 2003, , .		3
140	Observer-based fault detection and isolation for structured systems. IEEE Transactions on Automatic Control, 2002, 47, 2074-2079.	5.7	83
141	Energy Wall Losses Estimation of a Gasoline Engine Using a Sliding Mode Observer. , 0, , .		1