Philippe Martin

List of Publications by Year
in descending order

75 papers	5,249 citations	430874 18 h-index	330143 37 g-index
75 all docs	75 docs citations	75 times ranked	1903 citing authors

#	Article	IF	Citations
1	Towards an industrially implementable PWM-injection scheme. , 2021, , .		0
2	Adding virtual measurements by PWM-induced signal injection. , 2020, , .		8
3	Sensorless rotor position estimation by PWM-induced signal injection. , 2020, , .		3
4	Exact Controllability of a Linear Korteweg--de Vries Equation by the Flatness Approach. SIAM Journal on Control and Optimization, 2019, 57, 2467-2486.	2.1	6
5	Third-order virtual measurements with signal injection. , 2019, , .		2
6	A new demodulation procedure for a class of multiplexed signals. , 2019, , .		2
7	Delay-Robust Control Design for Two Heterodirectional Linear Coupled Hyperbolic PDEs. IEEE Transactions on Automatic Control, 2018, 63, 3551-3557.	5.7	50
8	Controllability of the 1D SchrÃ¶dinger equation using flatness. Automatica, 2018, 91, 208-216.	5.0	9
9	Nonlinear attitude estimation from biased vector and gyro measurements. , 2018, , .		0
10	Partial Attitude Estimation from a Single Measurement Vector. , 2018, , .		4
11	Modeling and identification of synchronous reluctance motors. , 2017, , .		5
12	A global observer for attitude and gyro biases from vector measurements. IFAC-PapersOnLine, 2017, 50, 15409-15415.	0.9	8
13	Obtaining the current-flux relations of the saturated PMSM by signal injection. , 2017, , .		3
14	Global Exponential Attitude and Gyro Bias Estimation from Vector Measurements. Lecture Notes in Computer Science, 2017, , 345-351.	1.3	0
15	Adding virtual measurements by signal injection. , 2016, , .		14
16	An analysis of the benefits of signal injection for low-speed sensorless control of induction motors. , 2016, , .		2
17	Flatness and null controllability of 1â€Ð parabolic equations. Proceedings in Applied Mathematics and Mechanics, 2016, 16, 47-50.	0.2	0
18	An online compensation algorithm for improving the performance of gas Ring Laser Gyroscopes. , 2016, , .		1

#	Article	IF	Citations
19	On the Reachable States for the Boundary Control of the Heat Equation. Applied Mathematics Research EXpress, 2016, 2016, 181-216.	1.0	18
20	Null Controllability of One-dimensional Parabolic Equations by the Flatness Approach. SIAM Journal on Control and Optimization, 2016, 54, 198-220.	2.1	25
21	Stability analysis of velocity-aided attitude observers for accelerated vehicles. Automatica, 2016, 63, 11-15.	5.0	28
22	Sensorless position estimation and control of permanent-magnet synchronous motors using a saturation model. International Journal of Control, 2016, 89, 535-549.	1.9	18
23	A semi-global model-based state observer for the quadrotor using only inertial measurements. , 2016, , .		5
24	Null controllability using flatness: A case study of a 1-D heat equation with discontinuous coefficients. , 2015, , .		3
25	Homogeneity applied to the controllability of a system of parabolic equations. , 2015, , .		2
26	Null controllability of the heat equation using flatness. Automatica, 2014, 50, 3067-3076.	5.0	34
27	Velocity-aided attitude estimation for accelerated rigid bodies. , 2014, , .		7
28	Towards a solid-state ring laser gyroscope. Comptes Rendus Physique, 2014, 15, 841-850.	0.9	3
29	Controllability of the 1D SchrÃ¶dinger equation by the flatness approach. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 646-651.	0.4	3
30	Energy-based modeling of electric motors. , 2014, , .		6
31	Null Controllability of the Structurally Damped Wave Equation with Moving Control. SIAM Journal on Control and Optimization, 2013, 51, 660-684.	2.1	45
32	Symmetrieerhaltende Datenfusion fÃ¼r optisch-inertiales Tracking / Symmetry-Preserving Data Fusion for Optical-Inertial Tracking. Automatisierungstechnik, 2013, 61, 596-608.	0.8	3
33	Error growth due to noise during occlusions in inertially-aided tracking systems. , 2013, , .		1
34	Null controllability of the 2D heat equation using flatness. , 2013, , .		4
35	Null controllability of the 1D heat equation using flatness. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 7-12.	0.4	4
36	Optical-Inertial Tracking System with High Bandwidth and Low Latency. Studies in Computational Intelligence, 2013, , 171-181.	0.9	1

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37	Sensorless position estimation of Permanent-Magnet Synchronous Motors using a nonlinear magnetic saturation model. , 2012, , .		2
38	Signal injection and averaging for position estimation of Permanent-Magnet Synchronous Motors. , 2012, , .		4
39	High-bandwidth low-latency tracking using optical and inertial sensors. , 2011, , .		10
40	A Separation Principle on Lie Groups. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8004-8009.	0.4	3
41	Tracking and control for handheld surgery tools. , 2011, , .		3
42	Estimation of saturation of Permanent-Magnet Synchronous Motors through an energy-based model. , 2011, , .		7
43	Design and implementation of a low-cost observer-based attitude and heading reference system. Control Engineering Practice, 2010, 18, 712-722.	5.5	144
44	Generalized Multiplicative Extended Kalman Filter for Aided Attitude and Heading Reference System. , 2010, , .		41
45	The true role of accelerometer feedback in quadrotor control. , 2010, , .		164
46	Invariant Extended Kalman Filter: theory and application to a velocity-aided attitude estimation problem. , 2009, , .		107
47	An Embedded Attitude and Heading Reference System Based on a Nonlinear Filter. Lecture Notes in Electrical Engineering, 2009, , 267-281.	0.4	1
48	Non-Linear Symmetry-Preserving Observers on Lie Groups. IEEE Transactions on Automatic Control, 2009, 54, 1709-1713.	5.7	144
49	Design and Implementation of a Low-Cost Aided Attitude and Heading Reference System. , 2008, , .		5
50	Symmetry-Preserving Observers. IEEE Transactions on Automatic Control, 2008, 53, 2514-2526.	5.7	185
51	A general symmetry-preserving observer for aided attitude heading reference systems. , 2008, , .		10
52	Non-linear observer on Lie Groups for left-invariant dynamics with right-left equivariant output. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8594-8598.	0.4	9
53	An Invariant Observer for Earth-Velocity-Aided Attitude Heading Reference Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 9857-9864.	0.4	32
54	Invariant observers for attitude and heading estimation from low-cost inertial and magnetic sensors. , 2007, , .		50

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55	A Cadaveric Study to Assess the Accuracy of Computer-Assisted Surgery in Locating the Hip Center During Total Knee Arthroplasty. Journal of Arthroplasty, 2007, 22, 590-595.	3.1	14
56	Invariant tracking. ESAIM - Control, Optimisation and Calculus of Variations, 2004, 10, 1-13.	1.3	28
57	Motion Planning for a nonlinear Stefan Problem. ESAIM - Control, Optimisation and Calculus of Variations, 2003, 9, 275-296.	1.3	55
58	MOTION PLANNING FOR A LINEARIZED KORTEWEG-DE VRIES EQUATION WITH BOUNDARY CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 225-230.	0.4	3
59	Industrial sensorless control of induction motors. , 2001, , 535-543.		13
60	Flat systems, equivalence and feedback. , 2001, , 5-32.		15
61	Flat systems: open problems, infinite dimensional extension, symmetries and catalog. , 2001, , 33-57.		7
62	Dynamic feedback transformations of controllable linear time-varying systems. , 2001, , 55-62.		4
63	Motion planning for the heat equation. International Journal of Robust and Nonlinear Control, 2000, 10, 629-643.	3.7	170
64	Some open questions related to flat nonlinear systems. Communications and Control Engineering, 1999, , 99-103.	1.6	10
65	A Lie-Backlund approach to equivalence and flatness of nonlinear systems. IEEE Transactions on Automatic Control, 1999, 44, 922-937.	5.7	605
66	On a new differential geometric setting in nonlinear control. Journal of Mathematical Sciences, 1997, 83, 524-530.	0.4	0
67	A remark on nonlinear accessibility conditions and infinite prolongations. Systems and Control Letters, 1997, 31, 77-83.	2.3	15
68	A lie-bÃcklund approach to dynamic feedback equivalence and flatness. , 1996, , 245-268.		9
69	Flatness and Sampling Control of Induction Motors. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1996, 29, 2786-2791.	0.4	27
70	A different look at output tracking: control of a vtol aircraft. Automatica, 1996, 32, 101-107.	5.0	293
71	Index and Decomposition of Nonlinear Implicit Differential Equations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 37-42.	0.4	12
72	Any (controllable) driftless system with 3 inputs and 5 states is flat. Systems and Control Letters, 1995, 25, 167-173.	2.3	21

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73	Flatness and defect of non-linear systems: introductory theory and examples. International Journal of Control, 1995, 61, 1327-1361.	1.9	2,614
74	Feedback linearization and driftless systems. Mathematics of Control, Signals, and Systems, 1994, 7, 235-254.	2.3	70
75	An intrinsic sufficient condition for regular decoupling. Systems and Control Letters, 1993, 20, 383-391.	2.3	16