Abdelhamid Tayebi

List of Publications by Year
in descending order

110 papers	4,990 citations	136950 32 h-index	128289 60 g-index
115 all docs	115 docs citations	115 times ranked	2506 citing authors

#	Article	IF	Citations
1	Attitude stabilization of a VTOL quadrotor aircraft. IEEE Transactions on Control Systems Technology, 2006, 14, 562-571.	5.2	790
2	Adaptive iterative learning control for robot manipulators. Automatica, 2004, 40, 1195-1203.	5.0	394
3	Formation control of VTOL Unmanned Aerial Vehicles with communication delays. Automatica, 2011, 47, 2383-2394.	5.0	304
4	Unit Quaternion-Based Output Feedback for the Attitude Tracking Problem. IEEE Transactions on Automatic Control, 2008, 53, 1516-1520.	5.7	274
5	Attitude Synchronization of a Group of Spacecraft Without Velocity Measurements. IEEE Transactions on Automatic Control, 2009, 54, 2642-2648.	5.7	266
6	On consensus algorithms for double-integrator dynamics without velocity measurements and with input constraints. Systems and Control Letters, 2010, 59, 812-821.	2.3	241
7	Global trajectory tracking control of VTOL-UAVs without linear velocity measurements. Automatica, 2010, 46, 1053-1059.	5.0	191
8	Adaptive Position Tracking of VTOL UAVs. IEEE Transactions on Robotics, 2011, 27, 129-142.	10.3	169
9	On consensus algorithms design for double integrator dynamics. Automatica, 2013, 49, 253-260.	5.0	163
10	A Unified Adaptive Iterative Learning Control Framework for Uncertain Nonlinear Systems. IEEE Transactions on Automatic Control, 2007, 52, 1907-1913.	5.7	146
11	Attitude Synchronization of Multiple Rigid Bodies With Communication Delays. IEEE Transactions on Automatic Control, 2012, 57, 2405-2411.	5.7	118
12	Synchronization of Lagrangian Systems With Irregular Communication Delays. IEEE Transactions on Automatic Control, 2014, 59, 187-193.	5.7	103
13	Robust Iterative Learning Control Design: Application to a Robot Manipulator. IEEE/ASME Transactions on Mechatronics, 2008, 13, 608-613.	5.8	96
14	Further results on adaptive iterative learning control of robot manipulators. Automatica, 2008, 44, 830-837.	5.0	89
15	Robust iterative learning control design is straightforward for uncertain LTI systems satisfying the robust performance condition. IEEE Transactions on Automatic Control, 2003, 48, 101-106.	5.7	87
16	Motion Coordination for VTOL Unmanned Aerial Vehicles. Advances in Industrial Control, 2013, , .	0.5	79
17	Adaptive iterative learning control for robot manipulators: Experimental results. Control Engineering Practice, 2006, 14, 843-851.	5.5	78
18	Control schemes for stable teleoperation with communication delay based on IOS small gain theorem. Automatica, 2006, 42, 905-915.	5.0	72

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19	Leader-Follower Synchronization of Euler-Lagrange Systems With Time-Varying Leader Trajectory and Constrained Discrete-Time Communication. IEEE Transactions on Automatic Control, 2017, 62, 2539-2545.	5.7	67
20	A Multichannel IOS Small Gain Theorem for Systems With Multiple Time-Varying Communication Delays. IEEE Transactions on Automatic Control, 2009, 54, 404-409.	5.7	57
21	Attitude estimation and stabilization of a rigid body using low-cost sensors. , 2007, , .		55
22	Distributed Consensus Algorithms for a Class of High-Order Multi-Agent Systems on Directed Graphs. IEEE Transactions on Automatic Control, 2018, 63, 3464-3470.	5.7	54
23	Analysis of two particular iterative learning control schemes in frequency and time domains. Automatica, 2007, 43, 1565-1572.	5.0	52
24	Construction of Synergistic Potential Functions on SO(3) With Application to Velocity-Free Hybrid Attitude Stabilization. IEEE Transactions on Automatic Control, 2017, 62, 495-501.	5.7	50
25	All-pass filtering in iterative learning control. Automatica, 2009, 45, 257-264.	5.0	47
26	Hybrid global exponential stabilization on $SO(3)$. Automatica, 2017, 81, 279-285.	5.0	47
27	Distributed output regulation of heterogeneous linear multi-agent systems with communication constraints. Automatica, 2018, 91, 152-158.	5.0	47
28	Observer-based iterative learning control for a class of time-varying nonlinear systems. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2003, 50, 452-455.	0.1	45
29	Inertial Vector Measurements Based Velocity-Free Attitude Stabilization. IEEE Transactions on Automatic Control, 2013, 58, 2893-2898.	5.7	45
30	Synchronization of nonlinear systems with communication delays and intermittent information exchange. Automatica, 2015, 59, 1-8.	5.0	44
31	Hybrid Attitude and Gyro-Bias Observer Design on $SO(3)$. IEEE Transactions on Automatic Control, 2017, 62, 6044-6050.	5.7	36
32	Distributed Coordination of Dynamical Multi-Agent Systems Under Directed Graphs and Constrained Information Exchange. IEEE Transactions on Automatic Control, 2017, 62, 1668-1683.	5.7	33
33	On the attitude estimation of accelerating rigid-bodies using GPS and IMU measurements. , 2011, , .		32
34	Motion coordination of thrust-propelled underactuated vehicles with intermittent and delayed communications. Systems and Control Letters, 2015, 79, 15-22.	2.3	32
35	Hybrid Output Feedback for Attitude Tracking on $\mathbb{SO}(3)$. IEEE Transactions on Automatic Control, 2018, 63, 3956-3963.	5.7	32
36	Title is missing!. Nonlinear Dynamics, 2001, 24, 167-181.	5.2	29

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37	Formation control of VTOL-UAVs. , 2009, , .		28
38	A new position regulation strategy for VTOL UAVs using IMU and GPS measurements. Automatica, 2013, 49, 434-440.	5.0	26
39	Hybrid Pose and Velocity-Bias Estimation on $SE(3)$ Using Inertial and Landmark Measurements. IEEE Transactions on Automatic Control, 2019, 64, 3399-3406.	5.7	22
40	Step by step robust nonlinear PI for attitude stabilisation of a four-rotor mini-aircraft. , 2008, , .		20
41	Unit quaternion observer based attitude stabilization of a rigid spacecraft without velocity measurement. , 2006, , .		19
42	Model reference adaptive iterative learning control for linear systems. International Journal of Adaptive Control and Signal Processing, 2006, 20, 475-489.	4.1	19
43	On the Design of Attitude Complementary Filters on $ext{SO}(3)$. IEEE Transactions on Automatic Control, 2018, 63, 880-887.	5.7	19
44	Adaptive controller for non-holonomic mobile robots with matched uncertainties. Advanced Robotics, 2000, 14, 105-118.	1.8	18
45	Hybrid Nonlinear Observers for Inertial Navigation Using Landmark Measurements. IEEE Transactions on Automatic Control, 2020, 65, 5173-5188.	5.7	17
46	Attitude synchronization of a spacecraft formation without velocity measurement. , 2008, , .		16
47	Iterative learning control for non-linear systems described by a blended multiple model representation. International Journal of Control, 2002, 75, 1376-1384.	1.9	14
48	Adaptive Attitude Tracking Control of Rigid Body Systems With Unknown Inertia and Gyro-Bias. IEEE Transactions on Automatic Control, 2018, 63, 3986-3993.	5.7	14
49	Attitude estimation with intermittent measurements. Automatica, 2019, 105, 415-421.	5.0	13
50	Velocityâ€free attitude stabilization with inertial vector measurements. International Journal of Robust and Nonlinear Control, 2016, 26, 2478-2493.	3.7	12
51	Attitude and gyro bias estimation using GPS and IMU measurements. , 2017, , .		12
52	Nonlinear state estimation for inertial navigation systems with intermittent measurements. Automatica, 2020, 122, 109244.	5.0	12
53	A unified approach to the velocity-free consensus algorithms design for double integrator dynamics with input saturations. , 2011, , .		10
54	Hybrid Feedback for Global Tracking on Matrix Lie Groups $SO(3)$ and $SE(3)$. IEEE Transactions on Automatic Control, 2022, 67, 2930-2945.	5.7	10

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55	Globally asymptotically stable hybrid observers design on SE (3). , 2017, , .		9
56	Geometric Nonlinear Observer Design for SLAM on a Matrix Lie Group. , 2018, , .		9
57	A nonlinear navigation observer using IMU and generic position information. Automatica, 2021, 127, 109513.	5.0	9
58	On the coordinated attitude alignment of a group of spacecraft without velocity measurements. , 2009, , .		8
59	On the leader-follower synchronization of Euler-Lagrange systems. , 2015, , .		8
60	Global exponential angular velocity observer for rigid body systems. , 2016, , .		8
61	Adaptive trajectory tracking control for VTOLâ€UAVs with unknown inertia, gyroâ€bias, and actuator LOE. International Journal of Robust and Nonlinear Control, 2018, 28, 5247-5261.	3.7	8
62	STABILIZATION SCHEME FOR FORCE REFLECTING TELEOPERATION WITH TIME-VARYING COMMUNICATION DELAY BASED ON IOS SMALL GAIN THEOREM. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 394-399.	0.4	7
63	Adaptive position tracking of VTOL UAVs. , 2009, , .		7
64	Synchronization of multiple Euler-Lagrange systems with communication delays. , 2012, , .		7
65	Position, Velocity, Attitude and Gyro-Bias Estimation from IMU and Position Information. , 2019, , .		7
66	A multichannel IOS small gain theorem for systems with multiple time-varying communication delays. , 2007, , .		6
67	A velocity-free attitude tracking controller for rigid spacecraft. , 2007, , .		6
68	Velocity-free consensus algorithms for double-integrator dynamics with input saturations constraints. , 2010, , .		6
69	Some Optimization Aspects on the Lie Group SO(3)Ã•. IFAC-PapersOnLine, 2015, 48, 1117-1121.	0.9	6
70	On the design of synergistic potential functions on SO(3). , 2015, , .		6
71	A globally exponentially stable hybrid attitude and gyro-bias observer. , 2016, , .		6
72	Global hybrid attitude estimation on the Special Orthogonal group SO(3). , 2016, , .		6

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73	An Adaptive Iterative Learning Control Framework for a Class of Uncertain Nonlinear Systems. , 2006, , .		5
74	Adaptive synchronization of networked Lagrangian systems with irregular communication delays. , 2012, , .		5
75	A Globally Exponentially Stable Nonlinear Hybrid Observer for 3D Inertial Navigation. , 2018, , .		5
76	Formation stabilization of VTOL UAVs subject to communication delays. , 2010, , .		4
77	Position control of VTOL UAVs using IMU and GPS measurements. , 2011, , .		4
78	On deterministic attitude observers on the Special Orthogonal group SO(3). , 2016, , .		4
79	Should We Delay the Second COVID-19 Vaccine Dose in Order to Optimize Rollout? A Mathematical Perspective. International Journal of Public Health, 2021, 66, 1604312.	2.3	4
80	Vision based trajectory tracking controller for a B21R mobile robot. , 2006, , .		3
81	Consensus algorithms design for constrained heterogeneous multi-agent systems. , 2012, , .		3
82	Rigid body attitude synchronization with communication delays. , 2012, , .		3
83	Formation Control of VTOL UAVs. Advances in Industrial Control, 2013, , 105-127.	0.5	3
84	Attitude stabilization without angular velocity measurements. , 2014, , .		3
85	Containment control for networked Lagrangian systems under a directed graph and communication constraints. , 2014, , .		3
86	Hybrid Constrained Estimation for Linear Time-Varying Systems. , 2018, , .		3
87	Nonlinear Observers Design for Vision-Aided Inertial Navigation Systems. IEEE Transactions on Automatic Control, 2022, 67, 1853-1868.	5.7	3
88	Authors' Reply to â€œComments on `Robust iterative learning control design is straightforward for uncertain LTI systems satisfying the robust performance condition'â€. IEEE Transactions on Automatic Control, 2004, 49, 2303-2303.	5.7	2
89	A Unit-Gain D-type Iterative Learning Control Scheme: Application to a 6-DOF Robot Manipulator. , 2007, , .		2
90	A One-Parameter Structure for Adaptive Iterative Learning Control of Robot Manipulators. , 2007, , .		2

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91	Rapid-prototyping of iterative learning control using MATLAB/Simlink hybrid-programming. , 2015, , .		2
92	Cooperative output regulation of linear multi-agent systems with communication constraints. , 2016, , .		2
93	Nonlinear Attitude Estimation Using Intermittent Linear Velocity and Vector Measurements. , 2021, , .		2
94	An iterative learning control scheme for robot manipulators without velocity measurement. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 675-679.	0.4	1
95	ANTICIPATIVE ITERATIVE LEARNING CONTROL OF ROBOT MANIPULATORS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 499-504.	0.4	1
96	Direct time injection in the loop: A new adaptive control point of view. , 2009, , .		1
97	Synchronization of Heterogeneous Euler-Lagrange Systems with Time Delays and Intermittent Information Exchange. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 1971-1976.	0.4	1
98	Distributed coordination of linear second-order multi-agent systems with communication constraints. , 2015, , .		1
99	Velocity-free hybrid attitude stabilization using inertial vector measurements. , 2016, , .		1
100	Consensus of heterogeneous multiple integrator agents on directed graphs. , 2017, , .		1
101	A New Hybrid Control Strategy for the Global Attitude Tracking Problem. , 2019, , .		1
102	Nonlinear Observers for Stereo-Vision-Aided Inertial Navigation. , 2019, , .		1
103	Rigid-Body Attitude Synchronization with Communication Delays. Advances in Industrial Control, 2013, , 63-84.	0.5	1
104	Position Tracking for VTOL UAVs. Advances in Industrial Control, 2013, , 85-104.	0.5	1
105	State synchronization of double-integrator dynamics with delayed sampled-data information exchange. , 2016, , .		0
106	Attitude observer using synchronous intermittent vector measurements. , 2017, , .		0
107	Background and Preliminaries. Advances in Industrial Control, 2013, , 11-26.	0.5	0
108	Formation Control with Communication Delays. Advances in Industrial Control, 2013, , 129-152.	0.5	0

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109	Rigid-Body Attitude Synchronization. Advances in Industrial Control, 2013, , 27-61.	0.5	0
110	Nonlinear Estimation for Position-Aided Inertial Navigation Systems. , 2021, , .		0