AntÃ"nio M Pascoal

List of Publications by Year
in descending order

279 papers	6,190 citations	76326 40 h-index	118850 62 g-index
283 all docs	283 docs citations	283 times ranked	3423 citing authors

#	Article	IF	Citations
1	Consensus/synchronisation of networked nonlinear multiple agent systems with event-triggered communications. International Journal of Control, 2022, 95, 1305-1314.	1.9	3
2	Trajectory Generation for Drones in Confined Spaces Using an Ellipsoid Model of the Body. , 2022, 6, 1022-1027.		2
3	Cooperative Distributed Estimation and Control of Multiple Autonomous Vehicles for Range-Based Underwater Target Localization and Pursuit. IEEE Transactions on Control Systems Technology, 2022, 30, 1433-1447.	5.2	13
4	A unified ship manoeuvring model with a nonlinear model predictive controller for path following in regular waves. Ocean Engineering, 2022, 243, 110165.	4.3	21
5	Observability analysis for a cooperative range-based navigation system that uses a rotating single beacon. Ocean Engineering, 2022, 248, 110697.	4.3	2
6	Bernstein Polynomial-Based Method for Solving Optimal Trajectory Generation Problems. Sensors, 2022, 22, 1869.	3.8	10
7	A Distributed Algorithm for Real-Time Multi-Drone Collision-Free Trajectory Replanning. Sensors, 2022, 22, 1855.	3.8	7
8	Chemical Spill Encircling Using a Quadrotor and Autonomous Surface Vehicles: A Distributed Cooperative Approach. Sensors, 2022, 22, 2178.	3.8	1
9	A Path-Following Controller for Marine Vehicles Using a Two-Scale Inner-Outer Loop Approach. Sensors, 2022, 22, 4293.	3.8	4
10	Optimal Multivehicle Motion Planning Using Bernstein Approximants. IEEE Transactions on Automatic Control, 2021, 66, 1453-1467.	5.7	14
11	A Distributed Luenberger Observer for Linear State Feedback Systems With Quantized and Rate-Limited Communications. IEEE Transactions on Automatic Control, 2021, 66, 3922-3937.	5.7	14
12	WiMUST: A cooperative marine robotic system for autonomous geotechnical surveys. Journal of Field Robotics, 2021, 38, 268-288.	6.0	25
13	Online Range-Based SLAM Using B-Spline Surfaces. IEEE Robotics and Automation Letters, 2021, 6, 1958-1965.	5.1	6
14	The Use of BÃ©zier Curves for Optimal Motion Planning of Autonomous Vehicles. , 2021, , .		0
15	A spatio-temporal noise robust filtering method for separation of 2D incident and reflected irregular waves. Ocean Engineering, 2021, 237, 109544.	4.3	0
16	Efficient Bathymetric SLAM With Invalid Loop Closure Identification. IEEE/ASME Transactions on Mechatronics, 2021, 26, 2570-2580.	5.8	8
17	Cooperative Motion Control Using Hybrid Acoustic-Optical Communication Networks. IFAC-PapersOnLine, 2021, 54, 232-237.	0.9	4
18	Cooperative single-beacon multiple AUV navigation under stringent communication bandwidth constraints. IFAC-PapersOnLine, 2021, 54, 216-223.	0.9	2

#	Article	IF	Citations
19	Control of Autonomous Underwater Vehicles. , 2021, , 1-6.		0
20	Hybrid acoustic-optical underwater communication networks for next-generation cooperative systems: the EUMR experience. , 2021, , .		2
21	Underwater Geophysical Navigation using a Particle Filter Approach to Multi-Sensor Fusion. , 2021, , .		2
22	Range-based target localization and pursuit with autonomous vehicles: An approach using posterior CRLB and model predictive control. Robotics and Autonomous Systems, 2020, 132, 103608.	5.1	14
23	A Comparison of Nonlinear Filters for Underwater Geomagnetic Navigation. , 2020, , .		8
24	Cooperative Multiple Formation Control of Autonomous Marine Vehicles. , 2020, , .		2
25	Guest Editorial: Marine Robotics and Control Systems. International Journal of Control, Automation and Systems, 2020, 18, 521-522.	2.7	0
26	Cooperative path following of constrained autonomous vehicles with model predictive control and eventâ€‘triggered communications. International Journal of Robust and Nonlinear Control, 2020, 30, 2644-2670.	3.7	25
27	NetMarSyS - A Tool for the Simulation and Visualization of Distributed Autonomous Marine Robotic Systems. , 2020, , .		1
28	IMPACT: a strategic partnership for sustainable development in marine systems and robotics. , 2020, , .		4
29	Range-based Navigation and Target Localization: Observability Analysis and Guidelines for Motion Planning. IFAC-PapersOnLine, 2020, 53, 14620-14627.	0.9	3
30	Real-time Trajectory Generation for Multiple Drones using BÃ©zier Curves. IFAC-PapersOnLine, 2020, 53, 9276-9281.	0.9	9
31	Enhanced cooperative single-range underwater navigation based on optimal trajectories. IFAC-PapersOnLine, 2020, 53, 14668-14673.	0.9	0
32	A Navigation Algorithm for Under-the-Ice Robotic Operations. , 2020, , .		0
33	The Marine Robotics Research Infrastructure Network (EUMarine Robots): An Overview. , 2020, , .		4
34	B-spline Surfaces for Range-Based Environment Mapping. , 2020, , .		3
35	Optimized design of an autonomous underwater vehicle, for exploration in the Caribbean Sea. Ocean Engineering, 2019, 187, 106184.	4.3	21
36	Optimal Trajectory Planning for Autonomous Drone Cinematography. , 2019, , .		12

#	Article	IF	Citations
37	Event-Triggered Communications for the Synchronization of Nonlinear Multi Agent Systems on Weight-Balanced Digraphs. , 2019, , .		4
38	Distributed state estimation for discrete-time linear time invariant systems: A survey. Annual Reviews in Control, 2019, 48, 36-56.	7.9	36
39	Circular formation control for cooperative target tracking with limited information. Journal of the Franklin Institute, 2019, 356, 1771-1788.	3.4	46
40	Consistent approximation of optimal control problems using Bernstein polynomials. , 2019, , .		9
41	Heuristics-based Adaptive Biased Random Walk Algorithm for Chemical Source Localization using AUVs. , 2019, , .		0
42	Underwater Acoustic Modems with Synchronous Chip-Scale Atomic Clocks for Scalable Tasks of AUV Underwater Positioning. Gyroscopy and Navigation, 2019, 10, 313-321.	1.3	9
43	Cooperative range-based navigation using a beacon with circular motion installed on board the support platform. IFAC-PapersOnLine, 2019, 52, 390-395.	0.9	2
44	Hydro-acoustic communications and networking in contemporary underwater robotics: instruments and case studies. , 2019, , 263-300.		2
45	Detection of mooring line failures using Dynamic Hypothesis Testing. Ocean Engineering, 2018, 159, 496-503.	4.3	11
46	Formation Control of Surface Marine Vehicles for Underwater Target Tracking Using Range Information. , 2018, , .		3
47	Decoupled Sampling-Based Motion Planning for Multiple Autonomous Marine Vehicles. , 2018, , .		3
48	A coverage planner for AUVs using B-splines. , 2018, , .		4
49	Input-Constrained Path Following for Autonomous Marine Vehicles with a Global Region of Attraction. IFAC-PapersOnLine, 2018, 51, 348-353.	0.9	8
50	An Integrated System for Geophysical Navigation of Autonomous Underwater Vehicles.. IFAC-PapersOnLine, 2018, 51, 293-298.	0.9	6
51	Cooperative Path Following of Autonomous Vehicles with Model Predictive Control and Event Triggered Communications. IFAC-PapersOnLine, 2018, 51, 562-567.	0.9	11
52	Cooperative Motion Planning with Time, Energy and Active Navigation Constraints. , 2018, , .		3
53	A B-Spline Mapping Framework for Long-Term Autonomous Operations. , 2018, , .		4
54	Data-driven control in marine systems. Annual Reviews in Control, 2018, 46, 343-349.	7.9	7

#	Article	IF	Citations
55	A Study of Modulation Formats for the Blue Ray Underwater Optical Modem. , 2018, , .		4
56	Challenges and future trends in marine robotics. Annual Reviews in Control, 2018, 46, 350-368.	7.9	130
57	Multiple autonomous surface vehicle motion planning for cooperative range-based underwater target localization. Annual Reviews in Control, 2018, 46, 326-342.	7.9	26
58	Range-based underwater target localization using an autonomous surface vehicle: Observability analysis. , 2018, , .		6
59	Advances on a null-space-based approach to range-only underwater steering and positioning. , 2018, , .		0
60	Multiple underwater target positioning with optimally placed acoustic surface sensor networks. International Journal of Distributed Sensor Networks, 2018, 14, 155014771877323.	2.2	9
61	AUV geophysical navigation using magnetic data â€" The MEDUSA GN system. , 2018, , .		9
62	Robust particle filter formulations with application to terrainâ€aided navigation. International Journal of Adaptive Control and Signal Processing, 2017, 31, 608-651.	4.1	47
63	Synchronization of Multiagent Systems Using Event-Triggered and Self-Triggered Broadcasts. IEEE Transactions on Automatic Control, 2017, 62, 4741-4746.	5.7	91
64	Environmental monitoring using autonomous vehicles: a survey of recent searching techniques. Current Opinion in Biotechnology, 2017, 45, 76-84.	6.6	119
65	Robust Dynamic Positioning of offshore vessels using mixed-Î¼ synthesis modeling, design, and practice. Ocean Engineering, 2017, 129, 389-400.	4.3	46
66	Eventâ€triggered output synchronization of heterogeneous multiâ€agent systems. International Journal of Robust and Nonlinear Control, 2017, 27, 1302-1338.	3.7	15
67	Range-based cooperative underwater target localization. * *The work of the second and fourth authors was supported by Ministerio de Economia y Competitividadâ€•under project DPI2013-46665-C2-2-R.D. Moreno-Salinas is grateful to the â€œMinisterio de EducaciÃ³n, Cultura y De-porteâ€• for support under â€œPrograma Estatal de PromociÃ³n del Talento y su Empleabilidad en I+D+i, Subprograma Estatal de Movilidad, del Plan Estatal de InvestigaciÃ³n Cientfica y TÃ©cnica y de InnovaciÃ³n 2013-2016â€•for the â€œJose Castillejo 2015â€• IFAC-PapersOnLine, 2017, 50, 12366-12373.	0.9	0
68	Application of Data Driven Control to Dynamic Positioning. IFAC-PapersOnLine, 2017, 50, 12392-12397.	0.9	4
69	Target Tracking via a Circular Formation of Unicycles * *This work was supported by FUI CAP2018 and H2020-ICT-2014-1/GA 645141 WIMUST projects and ROBOTEX (ANR-10-EQPX-44-01). IFAC-PapersOnLine, 2017, 50, 5782-5787.	0.9	11
70	Robust methods of magnetic navigation of marine robotic vehicles * *Funding: This research was supported in part by the European project WiMUST (GA No. 645141) and the Portuguese FCT program [PEst-OE/EEI/LA0009/2011]. The authors gratefully acknowledge the sponsorhip of the South Korean Agency for Defense Development under a collaborative research agreement between KAIST and IST.. IFAC-PapersOnLine, 2017, 50, 3470-3475.	0.9	1
71	CADDY project, year 3: The final validation trials. , 2017, , .		12
72	A design method for distributed luenberger observers. , 2017, , .		8

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73	Widely Scalable Mobile Underwater Sonar Technology: An Overview of the H2020 WiMUST Project. Marine Technology Society Journal, 2016, 50, 42-53.	0.4	25
74	Magnetic signal processing methods with application to geophysical navigation of marine robotic vehicles. , 2016, , .		7
75	An algorithm for formation-based chemical plume tracing using robotic marine vehicles. , 2016, , .		1
76	Towards 3-D distributed odor source localization: An extended graph-based formation control algorithm for plume tracking. , 2016, , .		16
77	Experimental validation of magnetic navigation of marine robotic vehicles**Funding: This research was supported in part by the European project WiMUST (GA No. 645141) and the Portuguese FCT funding program [PEst-OE/EEI/LA0009/2011]. The authors gratefully acknowledge the sponsorhip of the South Korean Agency for Defense Development under a collaborative research agreement between KAIST and IST.. IFAC-PapersOnLine, 2016, 49, 273-278.	0.9	5
78	AUV terrain-aided navigation using a Doppler velocity logger. Annual Reviews in Control, 2016, 42, 166-176.	7.9	15
79	The European Project MORPH: Distributed UUV Systems for Multimodal, 3D Underwater Surveys. Marine Technology Society Journal, 2016, 50, 26-41.	0.4	18
80	Integrated Motion Planning, Control, and Estimation for Range-Based Marine Vehicle Positioning and Target Localization. IFAC-PapersOnLine, 2016, 49, 34-40.	0.9	17
81	Optimal Motion Planning for Range-Based Marine Vehicle Positioning in the Presence of Unknown Currents. IFAC-PapersOnLine, 2016, 49, 41-47.	0.9	5
82	Cooperative Surface/Underwater Navigation for AUV Path following missions. IFAC-PapersOnLine, 2016, 49, 355-360.	0.9	3
83	CADDY Project, Year 2: The First Validation Trials**This work is supported by the European Commission under the FP7-ICT project "CADDY - Cognitive Autonomous Diving Buddy" Grant Agreement No. 611373.. IFAC-PapersOnLine, 2016, 49, 420-425.	0.9	2
84	Overview and first year progress of the Widely scalable Mobile Underwater Sonar Technology H2020 project**This work has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 645141 (WiMUST project, http://www.wimust.eu).. IFAC-PapersOnLine, 2016, 49, 430-433.	0.9	4
85	Marine Vehicles with Streamers for Geotechnical Surveys: Modeling, Positioning, and Control**This research was supported by the EC WiMUST project (Grant no. 645141) and the Portuguese FCT funding program [PEst-OE/EEI/LA0009/2011]. The second author was supported by the Brasilian Navy during his sabbatical leave at the ISR/IST, Lisbon, Portugal.. IFAC-PapersOnLine, 2016, 49, 458-464.	0.9	9
86	Design of a distributed quantized luenberger filter for bounded noise. , 2016, , .		5
87	Human-robot interaction underwater: Communication and safety requirements. , 2016, , .		3
88	Development and validation of blue ray, an optical modem for the MEDUSA class AUVs. , 2016, , .		11
89	The MEDUSA class of autonomous marine vehicles and their role in EU projects. , 2016, , .		31
90	Safe Coordinated Maneuvering of Teams of Multirotor Unmanned Aerial Vehicles: A Cooperative Control Framework for Multivehicle, Time-Critical Missions. IEEE Control Systems, 2016, 36, 59-82.	0.8	32

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91	The Widely scalable Mobile Underwater Sonar Technology (WiMUST) H2020 project: First year status. , 2016, , .		3
92	A Graph-Based Formation Algorithm for Odor Plume Tracing. Springer Tracts in Advanced Robotics, 2016, , 255-269.	0.4	8
93	Optimal Sensor Placement for Acoustic Underwater Target Positioning With Range-Only Measurements. IEEE Journal of Oceanic Engineering, 2016, 41, 620-643.	3.8	75
94	Energy-Optimal Motion Planning for Multiple Robotic Vehicles With Collision Avoidance. IEEE Transactions on Control Systems Technology, 2016, 24, 867-883.	5.2	63
95	Range-Based Underwater Vehicle Localization in the Presence of Unknown Ocean Currents: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2016, 24, 122-139.	5.2	84
96	CADDYâ€"Cognitive Autonomous Diving Buddy: Two Years of Underwater Human-Robot Interaction. Marine Technology Society Journal, 2016, 50, 54-66.	0.4	21
97	Formation Control in the scope of the MORPH project. Part II: Implementation and Resultsâ˜…. IFAC-PapersOnLine, 2015, 48, 250-255.	0.9	15
98	Underwater Single-Beacon Localization: Optimal Trajectory Planning and Minimum-Energy Estimation. IFAC-PapersOnLine, 2015, 48, 155-160.	0.9	16
99	Cooperative navigation and control: The EU MORPH project. , 2015, , .		2
100	CADDY Project, Year 1: Overview of Technological Developments and Cooperative Behavioursâ˜…. IFAC-PapersOnLine, 2015, 48, 125-130.	0.9	5
101	Formation Control in the scope of the MORPH project. Part I: Theoretical Foundations. IFAC-PapersOnLine, 2015, 48, 244-249.	0.9	20
102	A Null-Space-Based Behavioral Approach to Single Range Underwater Positioningâˆ—âˆ—This work was partially supported by the European Union' Horizon 2020 research and innovation programme under the project WiMUST: Widely scalable Mobile Underwater Sonar Technology, grant agreement NÂ°645141 (call H2020 ICT-23-2014 Robotics).. IFAC-PapersOnLine, 2015, 48, 55-60.	0.9	5
103	AUV Terrain-Aided Navigation using a Doppler Velocity Loggerâ˜…. IFAC-PapersOnLine, 2015, 48, 137-142.	0.9	8
104	Cooperative control and navigation in the scope of the EC CADDY project. , 2015, , .		2
105	Selfâ€triggered stateâ€feedback control of linear plants under bounded disturbances. International Journal of Robust and Nonlinear Control, 2015, 25, 1230-1246.	3.7	14
106	Cooperative Path Following of Multiple Multirotors Over Time-Varying Networks. IEEE Transactions on Automation Science and Engineering, 2015, 12, 945-957.	5.2	54
107	Overview of the FP7 project &#x201C;CADDY &#x2014; Cognitive Autonomous Diving Buddy&#x201D;. , 2015, , .		13
108	Navigation, Guidance and Control of Underwater Vehicles within the Widely scalable Mobile Underwater Sonar Technology Project: an overviewâ˜…. IFAC-PapersOnLine, 2015, 48, 189-193.	0.9	14

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109	The widely scalable Mobile Underwater Sonar Technology (WiMUST) project: An overview. , 2015, , .		19
110	State estimation of nonlinear systems using the Unscented Kalman Filter. , 2015, , .		3
111	The MORPH project: Actual results. , 2015, , .		3
112	Cooperative formation control in the scope of the EC MORPH project: Theory and experiments. , 2015, , .		18
113	A Decentralized Strategy for Multirobot Sampling/Patrolling: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2015, 23, 313-322.	5.2	19
114	Time-Critical Cooperative Path Following of Multiple UAVs: Case Studies. , 2015, , 209-233.		6
115	Observability analysis of 3D AUV trimming trajectories in the presence of ocean currents using range and depth measurements. Annual Reviews in Control, 2015, 40, 142-156.	7.9	19
116	EU project MORPH: Current Status After 3 Years of Cooperation Under and Above Water. IFAC-PapersOnLine, 2015, 48, 119-124.	0.9	7
117	A distributed formation-based odor source localization algorithm - design, implementation, and wind tunnel evaluation. , 2015, , .		25
118	Optimal design of observable multi-agent networks: A structural system approach. , 2014, , .		10
119	Adaptive leader-follower formation control of autonomous marine vehicles. , 2014, , .		3
120	Output synchronization of heterogeneous LTI plants with event-triggered communication. , 2014, , .		8
121	Self-Triggered Output Feedback Control of Linear Plants in the Presence of Unknown Disturbances. IEEE Transactions on Automatic Control, 2014, 59, 3040-3045.	5.7	44
122	Trajectory Tracking Nonlinear Model Predictive Control for Autonomous Surface Craft. IEEE Transactions on Control Systems Technology, 2014, 22, 2160-2175.	5.2	75
123	Determination of Inner and Outer Bounds of Reachable Sets Through Subpavings. Mathematics in Computer Science, 2014, 8, 425-442.	0.4	0
124	Observability Analysis of 3D AUV Trimming Trajectories in the Presence of Ocean Currents using Single Beacon Navigation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4222-4227.	0.4	8
125	Optimal Sensor Trajectories for Mobile Underwater Target Positioning with Noisy Range Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5139-5144.	0.4	6
126	Flexible triangular formation keeping of marine robotic vehicles using range measurements 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5145-5150.	0.4	9

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127	Design and Implementation of a Range-Based Formation Controller for Marine Robots. Advances in Intelligent Systems and Computing, 2014, , 55-67.	0.6	4
128	Time-Critical Cooperative Path Following of Multiple Unmanned Aerial Vehicles over Time-Varying Networks. Journal of Guidance, Control, and Dynamics, 2013, 36, 499-516.	2.8	80
129	The MORPH concept and its application in marine research. , 2013, , .		13
130	Joint ASV/AUV range-based formation control: Theory and experimental results. , 2013, , .		33
131	An Observability Metric for Underwater Vehicle Localization Using Range Measurements. Sensors, 2013, 13, 16191-16215.	3.8	42
132	Optimal Sensor Placement for Multiple Target Positioning with Range-Only Measurements in Two-Dimensional Scenarios. Sensors, 2013, 13, 10674-10710.	3.8	73
133	Sensor Networks for Optimal Target Localization with Bearings-Only Measurements in Constrained Three-Dimensional Scenarios. Sensors, 2013, 13, 10386-10417.	3.8	69
134	Cooperative AUV motion planning using terrain information. , 2013, , .		9
135	A novel methodology for robust dynamic positioning of marine vessels: Theory and experiments. , 2013, , .		21
136	A novel methodology for adaptive Wave Filtering of marine vessels: Theory and experiments?. , 2013, , .		16
137	A Packet Loss Compliant Logic-Based Communication Algorithm for Cooperative Path-Following Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 262-267.	0.4	4
138	Optimal Sensor Placement for Acoustic Range-Based Underwater Robot Positioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 215-220.	0.4	3
139	Four-Quadrant Propeller Modeling: A Low-Order Harmonic Approximation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 161-166.	0.4	0
140	Adaptive Wave Filtering for Dynamic Positioning of Marine Vessels using Maximum Likelihood Identification: Theory and Experiments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 203-208.	0.4	11
141	Magnetic Navigation and Tracking of Underwater Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 239-244.	0.4	12
142	Observability analysis of 2D single beacon navigation in the presence of constant currents for two classes of maneuvers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 227-232.	0.4	8
143	Underwater Target Positioning with a Single Acoustic Sensor. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 233-238.	0.4	11
144	Trajectory tracking nonlinear model predictive control for autonomous surface craft. , 2013, , .		6

#	Article	IF	Citations
145	Multiple Model Adaptive Estimation for open loop unstable plants. , 2013, , .		4
146	A comprehensive evaluation of three robust adaptive control methodologies. , 2012, , .		0
147	Observer based self-triggered control of linear plants with unknown disturbances. , 2012, , .		11
148	Multiple model adaptive wave filtering for dynamic positioning of marine vessels. , 2012, , .		36
149	A Lyapunov-based approach for Time-Coordinated 3D Path-Following of multiple quadrotors. , 2012, , .		20
150	Constrained motion planning for multiple vehicles on SE(3). , 2012, , .		8
151	Observer based self-triggered control of an acyclic interconnection of linear plants. , 2012, , .		1
152	Surface sensor networks for Underwater Vehicle positioning with bearings-only measurements. , 2012, , .		5
153	A new approach to multi-robot harbour patrolling: Theory and experiments. , 2012, , .		13
154	Complementary Terrain/Single Beacon-Based AUV Navigation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 76-83.	0.4	3
155	A Novel Particle Filter Formulation with Application to Terrain-Aided Navigation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 132-139.	0.4	27
156	Evaluation of Three Dynamic Ship Positioning Controllers: from Calm to Extreme Conditions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 158-163.	0.4	5
157	Cooperative Cognitive Control for Autonomous Underwater Vehicles (CO3AUVs): overview and progresses in the 3rd project year. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 361-366.	0.4	6
158	An Underwater Acoustic Localisation System for Assisted Human Diving Operations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 206-211.	0.4	8
159	The European R&D-Project MORPH: Marine robotic systems of self-organizing, logically linked physical nodes. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 226-231.	0.4	5
160	Triangular formation control using range measurements: An application to marine robotic vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 112-117.	0.4	20
161	Robust Dynamic Positioning of Offshore Vessels using Mixed-μ Synthesis Part I: A Control System Design Methodology. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 177-182.	0.4	12
162	AUV Terrain-Aided Doppler Navigation using Complementary Filtering. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 313-318.	0.4	8

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163	Cooperative Motion Planning for Multiple Autonomous Marine Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 244-249.	0.4	12
164	Multiple Model Adaptive Dynamic Positioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 55-60.	0.4	5
165	Time-Critical Cooperative Control of Multiple Autonomous Vehicles: Robust Distributed Strategies for Path-Following Control and Time-Coordination over Dynamic Communications Networks. IEEE Control Systems, 2012, 32, 49-73.	0.8	62
166	Cooperative control of multiple surface vessels with discreteâ€time periodic communications. International Journal of Robust and Nonlinear Control, 2012, 22, 398-419.	3.7	65
167	Continuous-time consensus with discrete-time communications. Systems and Control Letters, 2012, 61, 788-796.	2.3	18
168	Robust Dynamic Positioning of Offshore Vessels using Mixed-μ Synthesis Part II: Simulation and Experimental Results. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 183-188.	0.4	9
169	The CO<sup>3</sup>AUVs (Cooperative Cognitive Control for Autonomous Underwater) Tj ETQq1 1 0.784314 rgBT /Over		20
170	Geometric 3D Path-Following Control for a Fixed-Wing UAV on SO(3). , 2011, , .		36
171	Observability metric for the relative localization of AUVs based on range and depth measurements: Theory and experiments. , 2011, , .		1
172	Optimal Sensor Placement for Multiple Underwater Target Localization with Acoustic Range Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 12825-12832.	0.4	9
173	Stability Analysis of Robust Multiple Model Adaptive Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 350-355.	0.4	23
174	Self-triggered observer based control of linear plants*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 10074-10079.	0.4	8
175	Observability metric for the relative localization of AUVs based on range and depth measurements: Theory and experiments. , 2011, , .		27
176	Optimal sensor placement for underwater positioning with uncertainty in the target location. , 2011, , .		22
177	Self-triggered output feedback control of linear plants. , 2011, , .		18
178	Portugal, science and resources in the last frontier. , 2011, , .		0
179	Multiple Marine Vehicle Deconflicted Path Planning with Currents and Communication Constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 491-496.	0.4	5
180	Optimal Sensor Placement for Underwater Target Positioning with Noisy Range Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 85-90.	0.4	5

#	Article	IF	Citations
181	A Multiple Model Adaptive Wave Filter for Dynamic Ship Positioning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 120-125.	0.4	6
182	Nonlinear adaptive control of an underwater towed vehicle. Ocean Engineering, 2010, 37, 1193-1220.	4.3	31
183	Cooperative control of multiple surface vessels in the presence of ocean currents and parametric model uncertainty. International Journal of Robust and Nonlinear Control, 2010, 20, 1549-1565.	3.7	109
184	Self-triggered state feedback control of linear plants under bounded disturbances. , 2010, , .		14
185	Applying the RMMAC methodology to an unstable plant. , 2010, , .		1
186	Path Following for Small Unmanned Aerial Vehicles Using L1 Adaptive Augmentation of Commercial Autopilots. Journal of Guidance, Control, and Dynamics, 2010, 33, 550-564.	2.8	137
187	On Coordinated Road Search using Time-Coordinated Path Following of Multiple UAVs. , 2010, , .		4
188	A performance based model-set design strategy for Multiple Model Adaptive Estimation. , 2009, , .		9
189	Continuous-time consensus with discrete-time communication. , 2009, , .		0
190	Further results on plant parameter identification using continuous-time multiple-model adaptive estimators. , 2009, , .		11
191	Path planning for multiple marine vehicles. , 2009, , .		8
192	A general framework for multiple vehicle time-coordinated path following control. , 2009, , .		21
193	Multiple Model Adaptive Estimation and model identification usign a Minimum Energy criterion. , 2009, , .		29
194	Underwater vehicle technology in the European Research Project VENUS. Underwater Technology, 2009, 28, 175-185.	0.3	7
195	An application of the RMMAC methodology to an unstable plant. , 2009, , .		4
196	A Bottom-Following Preview Controller for Autonomous Underwater Vehicles. IEEE Transactions on Control Systems Technology, 2009, 17, 257-266.	5.2	54
197	Estimation of Spatially Distributed Processes Using Mobile Spatially Distributed Sensor Network. SIAM Journal on Control and Optimization, 2009, 48, 266-291.	2.1	88
198	Cooperative Autonomous Marine Vehicle motion control in the scope of the EU GREX Project: Theory and Practice. , 2009, , .		34

#	Article	IF	Citations
199	Marine Vehicle Path Following Using Inner-Outer Loop Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 38-43.	0.4	21
200	The Detection of Annual Hypoxia in a Low Latitude Freshwater Reservoir in Kerala, India, Using the Small AUV <i>Maya</i>. Marine Technology Society Journal, 2009, 43, 60-70.	0.4	4
201	Cooperative Control of Multiple Marine Vehicles Theoretical Challenges and Practical Issues. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 412-417.	0.4	25
202	Temporally and Spatially Deconflicted Path Planning for Multiple Autonomous Marine Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 376-381.	0.4	9
203	Nonlinear adaptive depth tracking and attitude control of an underwater towed vehicle. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 211-216.	0.4	6
204	Investigation of a method for predicting AUV derivatives. Ocean Engineering, 2008, 35, 1627-1636.	4.3	44
205	Time-Coordinated Path Following of Multiple UAVs over Time-Varying Networks using L1 Adaptation. , 2008, , .		13
206	Investigation of Normal Force and Moment Coefficients for an AUV at Nonlinear Angle of Attack and Sideslip Range. IEEE Journal of Oceanic Engineering, 2008, 33, 538-549.	3.8	61
207	Joint positioning and navigation aiding system for underwater robots. , 2008, , .		4
208	A dynamic estimator on SE(3) using range-only measurements. , 2008, , .		4
209	Identification and Convergence Analysis of a Class of Continuous-Time Multiple-Model Adaptive Estimators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 8605-8610.	0.4	9
210	Geophysical Navigation of Autonomous Underwater Vehicles Using Geomagnetic Information*. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 178-183.	0.4	30
211	Compliant coordination and control of multiple vehicles with discrete-time periodic communications. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 15996-16001.	0.4	2
212	Cooperative Path-Following of Underactuated Autonomous Marine Vehicles with Logic-based Communication. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 107-112.	0.4	27
213	Coordinated Path Following of Multiple UAVs for Time-Critical Missions in the Presence of Time-Varying Communication Topologies. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 16015-16020.	0.4	9
214	Synchronization in multi-agent systems with switching topologies and non-homogeneous communication delays. , 2007, , .		32
215	Dynamic positioning and way-point tracking of underactuated AUVs in the presence of ocean currents. International Journal of Control, 2007, 80, 1092-1108.	1.9	167
216	Coordinated control of multiple vehicles with discrete-time periodic communications. , 2007, , .		11

#	Article	IF	Citations
217	Coordinated path-following control for nonlinear systems with logic-based communication. , 2007, , .		40
218	NONLINEAR MOTION CONTROL OF MULTIPLE AUTONOMOUS UNDERWATER VEHICLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 75-80.	0.4	9
219	COOPERATIVE PATH-FOLLOWING OF MULTIPLE SURFACE VESSELS WITH PARAMETRIC MODEL UNCERTAINTY AND IN THE PRESENCE OF OCEAN CURRENTS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 84-89.	0.4	0
220	GEOPHYSICAL NAVIGATION OF AUTONOMOUS UNDERWATER VEHICLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 117-122.	0.4	13
221	A Small Autonomous Surface Vehicle for Ocean Color Remote Sensing. IEEE Journal of Oceanic Engineering, 2007, 32, 353-364.	3.8	23
222	Coordinated Path Following for Time-Critical Missions of Multiple UAVs via L1 Adaptive Output Feedback Controllers. , 2007, , .		61
223	Convergence properties of a Continuous-Time Multiple-Model Adaptive Estimator. , 2007, , .		5
224	Time-critical coordinated path following for multiple UAVs via L_1 adaptive output feedback controllers. , 2007, , .		4
225	Non-linear co-ordinated path following control of multiple wheeled robots with bidirectional communication constraints. International Journal of Adaptive Control and Signal Processing, 2007, 21, 133-157.	4.1	67
226	Robust multiple model adaptive control (RMMAC): a case study. International Journal of Adaptive Control and Signal Processing, 2007, 21, 1-30.	4.1	82
227	Study and implementation of an EKF GIB-based underwater positioning system. Control Engineering Practice, 2007, 15, 689-701.	5.5	111
228	Depth control of the INFANTE AUV using gain-scheduled reduced order output feedback. Control Engineering Practice, 2007, 15, 883-895.	5.5	65
229	Switched seesaw control for the stabilization of underactuated vehicles. Automatica, 2007, 43, 1997-2008.	5.0	43
230	Estimation of Attitude and Position from Range-Only Measurements using Geometric Descent Optimization on the Special Euclidean Group. , 2006, , .		10
231	Vehicle and Mission Control of the DELFIM Autonomous Surface Craft. , 2006, , .		69
232	Coordinated path following control of multiple wheeled robots using linearization techniques. International Journal of Systems Science, 2006, 37, 399-414.	5.5	43
233	Nonsingular path following control of a unicycle in the presence of parametric modelling uncertainties. International Journal of Robust and Nonlinear Control, 2006, 16, 485-503.	3.7	70
234	Issues, progress and new results in robust adaptive control. International Journal of Adaptive Control and Signal Processing, 2006, 20, 519-579.	4.1	211

#	Article	IF	Citations
235	A Bottom-Following Preview Controller for Autonomous Underwater Vehicles. , 2006, , .		5
236	Coordinated path-following control of multiple underactuated autonomous vehicles in the presence of communication failures. , 2006, , .		72
237	Vehicle and mission control of single and multiple autonomous marine robots. , 2006, , 353-386.		33
238	Shallow water hydrothermal vent field fluids and communities of the D. JoÃ£o de Castro Seamount (Azores). Chemical Geology, 2005, 224, 153-168.	3.3	75
239	Coordinated Payload Delivery using High Glide Parafoil Systems. , 2005, , .		6
240	Cooperative control of small UAVs for naval applications. , 2004, , .		17
241	Control of the INFANTE AUV using gain scheduled static output feedback. Control Engineering Practice, 2004, 12, 1501-1509.	5.5	45
242	Linear parametrically varying systems with brief instabilities: an application to vision/inertial navigation. IEEE Transactions on Aerospace and Electronic Systems, 2004, 40, 889-902.	4.7	49
243	Coordinated path following control of multiple wheeled robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 382-387.	0.4	6
244	Control of the Infante AUV Using Gain Scheduled Static Output Feedback 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 127-132.	0.4	11
245	The use of â€œCARAVELA 2000Â®â€•vehicles in operational oceanography. Elsevier Oceanography Series, 2002, 66, 281-288.	0.1	3
246	DYNAMIC POSITIONING OF AN UNDERACTUATED AUV IN THE PRESENCE OF A CONSTANT UNKNOWN OCEAN CURRENT DISTURBANCE. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 283-288.	0.4	9
247	On the design of gain-scheduled trajectory tracking controllers. International Journal of Robust and Nonlinear Control, 2002, 12, 797-839.	3.7	72
248	Estimation and Identification of Mass-Spring-Dashpot Systems Using Multiple-Model Adaptive Algorithms. , 2002, , .		1
249	Application of nonlinear filtering to navigation system design using passive sensors. IEEE Transactions on Aerospace and Electronic Systems, 2001, 37, 158-172.	4.7	33
250	LPV systems with brief instabilities: Application to integrated vision/IMU navigation. , 2001, , .		8
251	Stabilization of the Extended Nonholonomic Double Integrator Via Logic-Based Hybrid Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 351-356.	0.4	15
252	Navigation system design using time-varying complementary filters. IEEE Transactions on Aerospace and Electronic Systems, 2000, 36, 1099-1114.	4.7	54

#	Article	IF	Citations
253	Underwater vehicle design using integrated plant-controller optimization methods. International Journal of Systems Science, 1999, 30, 1057-1072.	5.5	3
254	Development of a flight test system for unmanned air vehicles. IEEE Control Systems, 1999, 19, 55-65.	0.8	22
255	Mission control of the MARIUS autonomous underwater vehicle: system design, implementation and sea trials. International Journal of Systems Science, 1998, 29, 1065-1080.	5.5	31
256	Trajectory Tracking for Autonomous Vehicles: An Integrated Approach to Guidance and Control. Journal of Guidance, Control, and Dynamics, 1998, 21, 29-38.	2.8	279
257	Development of the rapid flight test prototyping system for unmanned air vehicles. , 1998, , .		3
258	Plant/controller optimization with applications to integrated surface sizing and feedback controller design for autonomous underwater vehicles (AUVs). , 1998, , .		4
259	Control of an AUV in the vertical and horizontal planes: system design and tests at sea. Transactions of the Institute of Measurement and Control, 1997, 19, 126-138.	1.7	25
260	MARIUS: an autonomous underwater vehicle for coastal oceanography. IEEE Robotics and Automation Magazine, 1997, 4, 46-59.	2.0	31
261	Navigation, guidance and control of AUVs: An application to the MARIUS vehicle. Control Engineering Practice, 1996, 4, 401-409.	5.5	42
262	A velocity algorithm for the implementation of gain-scheduled controllers. Automatica, 1995, 31, 1185-1191.	5.0	175
263	The graph topology for linear plants with applications to nonlinear robust stabilization. IEEE Transactions on Automatic Control, 1993, 38, 298-302.	5.7	5
264	Normalized coprime factorizations for linear time-varying systems. Systems and Control Letters, 1992, 18, 455-465.	2.3	36
265	Normalized coprime factorizations and the graph metric for linear time-varying systems. , 1990, , .		6
266	Strong, simultaneous, and reliable stabilization of finite-dimensional linear time-varying plants. IEEE Transactions on Automatic Control, 1988, 33, 1158-1161.	5.7	26
267	Pointwise stabilizability of families of linear time-invariant plants. IEEE Transactions on Automatic Control, 1988, 33, 1161-1165.	5.7	10
268	Minimum-Time Control Of Large Space Structures. Proceedings of SPIE, 1988, , .	0.8	0
269	Robust stabilizability of linear time-invariant plants. , 1987, , .		0
270	On the robust stabilizability of uncertain linear time-invariant plants using nonlinear time-varying controllers. Automatica, 1987, 23, 617-624.	5.0	22

#	Article	IF	Citations
271	Robust stabilization of families of linear time-varying plants with applications to singularly perturbed systems. , 0, , .		3
272	Regulation of a nonholonomic dynamic wheeled mobile robot with parametric modeling uncertainty using Lyapunov functions. , 0, , .		21
273	Regulation of a nonholonomic autonomous underwater vehicle with parametric modeling uncertainty using Lyapunov functions. , 0, , .		26
274	Global stabilization of an underactuated autonomous underwater vehicle via logic-based switching. , 0, , .		14
275	Dynamic positioning and way-point tracking of underactuated AUVs in the presence of ocean currents. , 0, , .		50
276	Nonlinear coordinated path following control of multiple wheeled robots with communication constraints. , 0, , .		7
277	Coordinated Path Following Control of Multiple Wheeled Robots with Directed Communication Links. , 0, , .		19
278	Stability of switched seesaw systems with application to the stabilization of underactuated vehicles. , 0, , .		2
279	Coordinated Control of Multiple UAVs for Time-Critical Applications. , 0, , .		4