

Tor Arne Johansen

List of Publications by Year in descending order

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307
papers

8,341
citations

66343

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h-index

74163

75
g-index

310
all docs

310
docs citations

310
times ranked

5114
citing authors

#	ARTICLE	IF	CITATIONS
1	Control allocation – A survey. Automatica, 2013, 49, 1087-1103.	5.0	880
2	An algorithm for multi-parametric quadratic programming and explicit MPC solutions. Automatica, 2003, 39, 489-497.	5.0	479
3	Approximate explicit receding horizon control of constrained nonlinear systems. Automatica, 2004, 40, 293-300.	5.0	212
4	Ship Collision Avoidance and COLREGS Compliance Using Simulation-Based Control Behavior Selection With Predictive Hazard Assessment. IEEE Transactions on Intelligent Transportation Systems, 2016, 17, 3407-3422.	8.0	208
5	Stabilization of Automotive Vehicles Using Active Steering and Adaptive Brake Control Allocation. IEEE Transactions on Control Systems Technology, 2010, 18, 545-558.	5.2	205
6	Adaptive control allocation. Automatica, 2008, 44, 2754-2765.	5.0	169
7	Fault tolerant control allocation using unknown input observers. Automatica, 2014, 50, 1891-1897.	5.0	147
8	Dynamic Positioning With Model Predictive Control. IEEE Transactions on Control Systems Technology, 2016, 24, 1340-1353.	5.2	139
9	A Survey of Control Allocation Methods for Ships and Underwater Vehicles. , 2006, , .		131
10	Optimization of Wireless Sensor Network and UAV Data Acquisition. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 78, 159-179.	3.4	110
11	Computation of Lyapunov functions for smooth nonlinear systems using convex optimization. Automatica, 2000, 36, 1617-1626.	5.0	108
12	Optimal constrained control allocation in marine surface vessels with rudders. Control Engineering Practice, 2008, 16, 457-464.	5.5	100
13	On Tikhonov regularization, bias and variance in nonlinear system identification. Automatica, 1997, 33, 441-446.	5.0	98
14	Efficient Optimal Constrained Control Allocation via Multiparametric Programming. Journal of Guidance, Control, and Dynamics, 2005, 28, 506-515.	2.8	94
15	Hardware Synthesis of Explicit Model Predictive Controllers. IEEE Transactions on Control Systems Technology, 2007, 15, 191-197.	5.2	93
16	Globally exponentially stable attitude and gyro bias estimation with application to GNSS/INS integration. Automatica, 2015, 51, 158-166.	5.0	92
17	Path Planning for UAVs Under Communication Constraints Using SPLAT! and MILP. Journal of Intelligent and Robotic Systems: Theory and Applications, 2012, 65, 265-282.	3.4	88
18	Identification of non-linear systems using empirical data and prior knowledge – an optimization approach. Automatica, 1996, 32, 337-356.	5.0	87

#	ARTICLE	IF	CITATIONS
19	On estimation of wind velocity, angle-of-attack and sideslip angle of small UAVs using standard sensors. , 2015, , .		85
20	Automatic detection, classification and tracking of objects in the ocean surface from UAVs using a thermal camera. , 2015, , .		78
21	Survey on Communication and Networks for Autonomous Marine Systems. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 789-813.	3.4	78
22	Using hash tables to manage the time-storage complexity in a point location problem: Application to explicit model predictive control. Automatica, 2011, 47, 571-577.	5.0	76
23	Explicit sub-optimal linear quadratic regulation with state and input constraints. Automatica, 2002, 38, 1099-1111.	5.0	75
24	On the facet-to-facet property of solutions to convex parametric quadratic programs. Automatica, 2006, 42, 2209-2214.	5.0	75
25	Explicit Nonlinear Model Predictive Control. Lecture Notes in Control and Information Sciences, 2012, , .	1.0	75
26	Do it yourself hyperspectral imager for handheld to airborne operations. Optics Express, 2018, 26, 6021.	3.4	73
27	Explicit stochastic predictive control of combustion plants based on Gaussian process models. Automatica, 2008, 44, 1621-1631.	5.0	72
28	Neural network augmented identification of underwater vehicle models. Control Engineering Practice, 2007, 15, 715-725.	5.5	67
29	Cooperative Control for Multirotors Transporting an Unknown Suspended Load Under Environmental Disturbances. IEEE Transactions on Control Systems Technology, 2020, 28, 653-660.	5.2	64
30	Energy-based control of a distributed solar collector field. Automatica, 2002, 38, 1191-1199.	5.0	63
31	Nonlinear Control with Swing Damping of a Multirotor UAV with Suspended Load. Journal of Intelligent and Robotic Systems: Theory and Applications, 2017, 88, 379-394.	3.4	63
32	Toward Dependable Embedded Model Predictive Control. IEEE Systems Journal, 2017, 11, 1208-1219.	4.6	56
33	COMPLEXITY REDUCTION IN EXPLICIT LINEAR MODEL PREDICTIVE CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 189-194.	0.4	55
34	Marine Vessel and Power Plant System Simulator. IEEE Access, 2015, 3, 2065-2079.	4.2	51
35	Observers for interconnected nonlinear and linear systems. Automatica, 2012, 48, 1339-1346.	5.0	50
36	Autonomous visual navigation of Unmanned Aerial Vehicle for wind turbine inspection. , 2015, , .		49

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37	The eXogenous Kalman Filter (XKF). International Journal of Control, 2017, 90, 161-167.	1.9	49
38	Model predictive control for a multi-body slung-load system. Robotics and Autonomous Systems, 2017, 92, 1-11.	5.1	49
39	Flexible Piecewise Function Evaluation Methods Based on Truncated Binary Search Trees and Lattice Representation in Explicit MPC. IEEE Transactions on Control Systems Technology, 2012, 20, 632-640.	5.2	47
40	Nonlinear observer for GNSS-aided inertial navigation with quaternion-based attitude estimation. , 2013, , .		46
41	UAVs Trajectory Planning by Distributed MPC under Radio Communication Path Loss Constraints. Journal of Intelligent and Robotic Systems: Theory and Applications, 2015, 79, 115-134.	3.4	46
42	Battery Power Smoothing Control in a Marine Electric Power Plant Using Nonlinear Model Predictive Control. IEEE Transactions on Control Systems Technology, 2017, 25, 1449-1456.	5.2	46
43	Unmanned aerial vehicle as communication relay for autonomous underwater vehicle " Field tests. , 2014, , .		45
44	Autonomous Unmanned Aerial Vehicles in Search and Rescue Missions Using Real-Time Cooperative Model Predictive Control. Sensors, 2019, 19, 4067.	3.8	45
45	Gain-scheduled control of a solar power plant. Control Engineering Practice, 2000, 8, 1011-1022.	5.5	44
46	A Four-Quadrant Thrust Estimation Scheme for Marine Propellers: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2009, 17, 215-226.	5.2	44
47	Computation, approximation and stability of explicit feedback min-max nonlinear model predictive control. Automatica, 2009, 45, 1134-1143.	5.0	44
48	Nonlinear Observers for Integrated INS/GNSS Navigation: Implementation Aspects. IEEE Control Systems, 2017, 37, 59-86.	0.8	44
49	Linear Moving Horizon Estimation With Pre-Estimating Observer. IEEE Transactions on Automatic Control, 2010, 55, 2363-2368.	5.7	43
50	Collaborative collision avoidance for Maritime Autonomous Surface Ships: A review. Ocean Engineering, 2022, 250, 110920.	4.3	43
51	Integrated Multimodel Control of Nonlinear Systems Based on Gap Metric and Stability Margin. Industrial & Engineering Chemistry Research, 2014, 53, 10206-10215.	3.7	42
52	Nonlinear control of a multicopter UAV with suspended load. , 2015, , .		42
53	An improved algorithm for combinatorial multi-parametric quadratic programming. Automatica, 2013, 49, 1370-1376.	5.0	40
54	Lyapunov-Based Integrator Resetting With Application to Marine Thruster Control. IEEE Transactions on Control Systems Technology, 2008, 16, 908-917.	5.2	39

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55	Design and Comparison of Explicit Model Predictive Controllers for an Electropneumatic Clutch Actuator Using On/Off Valves. IEEE/ASME Transactions on Mechatronics, 2011, 16, 665-673.	5.8	39
56	Dynamic Positioning System as Dynamic Energy Storage on Diesel-Electric Ships. IEEE Transactions on Power Systems, 2014, 29, 3086-3091.	6.5	39
57	Linear MPC with optimal prioritized infeasibility handling: application, computational issues and stability. Automatica, 2001, 37, 1835-1843.	5.0	38
58	Computational Aspects of Approximate Explicit Nonlinear Model Predictive Control. , 2007, , 181-192.		37
59	An Efficient Real-Time FPGA Implementation of the CCSDS-123 Compression Standard for Hyperspectral Images. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2018, 11, 3841-3852.	4.9	37
60	Fuzzy domain and meta-heuristic algorithm-based collision avoidance control for ships: Experimental validation in virtual and real environment. Ocean Engineering, 2021, 220, 108502.	4.3	36
61	Coordinating UAVs and AUVs for oceanographic field experiments: Challenges and lessons learned. , 2014, , .		35
62	Experimental Heat Loads for Electrothermal Anti-Icing and De-Icing on UAVs. Aerospace, 2021, 8, 83.	2.2	35
63	Aerodynamic modeling of the Skywalker X8 Fixed-Wing Unmanned Aerial Vehicle. , 2018, , .		33
64	Model-Based Actuator Fault Diagnosis in Multirotor UAVs. , 2018, , .		33
65	Attitude estimation by multiplicative exogenous Kalman filter. Automatica, 2018, 95, 347-355.	5.0	32
66	Multi-Agent Formation Tracking for Autonomous Surface Vehicles. IEEE Transactions on Control Systems Technology, 2021, 29, 2287-2298.	5.2	32
67	A Parallel FPGA Implementation of the CCSDS-123 Compression Algorithm. Remote Sensing, 2019, 11, 673.	4.0	31
68	Object detection, recognition, and tracking from UAVs using a thermal camera. Journal of Field Robotics, 2021, 38, 242-267.	6.0	31
69	System-Wide Harmonic Mitigation in a Diesel-Electric Ship by Model Predictive Control. IEEE Transactions on Industrial Electronics, 2016, 63, 4008-4019.	7.9	30
70	Optimizing adaptive control allocation with actuator dynamics. , 2007, , .		29
71	Integrated Multilinear Model Predictive Control of Nonlinear Systems Based on Gap Metric. Industrial & Engineering Chemistry Research, 2015, 54, 6002-6011.	3.7	29
72	Optimal constrained control allocation in marine surface vessels with rudders. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 181-186.	0.4	27

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73	Linear constrained moving horizon estimator with pre-estimating observer. Systems and Control Letters, 2014, 67, 40-45.	2.3	27
74	Performance evaluation of cooperative relay and Particle Swarm Optimization path planning for UAV and wireless sensor network. , 2013, , .		25
75	Ocean Color Hyperspectral Remote Sensing With High Resolution and Low Latency—The HYPSON-1 CubeSat Mission. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-19.	6.3	25
76	Dual-Mode Switched Control of an Electropneumatic Clutch Actuator. IEEE/ASME Transactions on Mechatronics, 2010, , .	5.8	24
77	Explicit model predictive control of gas-liquid separation plant via orthogonal search tree partitioning. Computers and Chemical Engineering, 2004, 28, 2481-2491.	3.8	23
78	Identification of underwater vehicle hydrodynamic coefficients using free decay tests. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 363-368.	0.4	23
79	A METHOD FOR OBTAINING CONTINUOUS SOLUTIONS TO MULTIPARAMETRIC LINEAR PROGRAMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 253-258.	0.4	23
80	Cooperative path-following for multirotor UAVs with a suspended payload. , 2015, , .		23
81	Combining model-free and model-based angle of attack estimation for small fixed-wing UAVs using a standard sensor suite. , 2016, , .		23
82	Combinatorial Approach Toward Multiparametric Quadratic Programming Based on Characterizing Adjacent Critical Regions. IEEE Transactions on Automatic Control, 2018, 63, 3221-3231.	5.7	23
83	On the Usage of Low-Cost MEMS Sensors, Strapdown Inertial Navigation, and Nonlinear Estimation Techniques in Dynamic Positioning. IEEE Journal of Oceanic Engineering, 2021, 46, 24-39.	3.8	23
84	Explicit output-feedback nonlinear predictive control based on black-box models. Engineering Applications of Artificial Intelligence, 2011, 24, 388-397.	8.1	22
85	Cluster-based communication topology selection and UAV path planning in wireless sensor networks. , 2013, , .		22
86	Icing detection and identification for unmanned aerial vehicles: Multiple model adaptive estimation. , 2015, , .		22
87	Estimation of Flow Rate and Viscosity in a Well with an Electric Submersible Pump using Moving Horizon Estimation—This work is funded by the Research Council of Norway and Statoil through the PETROMAKS project No. 215684: Enabling High-Performance Safety-Critical Offshore and Subsea Automatic Control Systems Using Embedded Optimization (emOpt). IFAC-PapersOnLine, 2015, 48, 140-146.	0.9	22
88	Integrated Monitoring of Mola mola Behaviour in Space and Time. PLoS ONE, 2016, 11, e0160404.	2.5	22
89	Nonlinear observer design for GNSS-aided inertial navigation systems with time-delayed GNSS measurements. Control Engineering Practice, 2017, 60, 39-50.	5.5	22
90	Unmanned Aerial Vehicles as Data Mules: An Experimental Assessment. IEEE Access, 2017, 5, 24716-24726.	4.2	22

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91	Redundant MEMS-Based Inertial Navigation Using Nonlinear Observers. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	22
92	Autonomous recovery of a fixed-wing UAV using a net suspended by two multirotor UAVs. Journal of Field Robotics, 2018, 35, 717-731.	6.0	22
93	Real-time georeferencing of thermal images using small fixed-wing UAVs in maritime environments. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 154, 84-97.	11.1	22
94	Asymptotic Stability of Perturbation-Based Extremum-Seeking Control for Nonlinear Plants. IEEE Transactions on Automatic Control, 2017, 62, 2302-2317.	5.7	21
95	Robust fault and icing diagnosis in unmanned aerial vehicles using LPV interval observers. International Journal of Robust and Nonlinear Control, 2019, 29, 5456-5480.	3.7	21
96	Moving Horizon Estimation of Air Data Parameters for UAVs. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2101-2121.	4.7	21
97	Wheel slip control using gain-scheduled LQ " LPV/LMI analysis and experimental results. , 2003, , .		20
98	Non-linear model predictive control for guidance of a fixed-wing UAV in precision deep stall landing. , 2015, , .		20
99	Nonlinear filtering with exogenous Kalman filter and double Kalman filter. , 2016, , .		20
100	Unmanned aerial surveillance system for hazard collision avoidance in autonomous shipping. , 2016, , .		20
101	Nonlinear Observer for Tightly Integrated Inertial Navigation Aided by Pseudo-Range Measurements. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2017, 139, .	1.6	20
102	User-Configurable Timing and Navigation for UAVs. Sensors, 2018, 18, 2468.	3.8	20
103	Estimation of states and parameters for linear systems with nonlinearly parameterized perturbations. Systems and Control Letters, 2011, 60, 771-777.	2.3	19
104	A ligh-weight thermal camera payload with georeferencing capabilities for small fixed-wing UAVs. , 2015, , .		19
105	Diagnosis of Icing and Actuator Faults in UAVs Using LPV Unknown Input Observers. Journal of Intelligent and Robotic Systems: Theory and Applications, 2018, 91, 651-665.	3.4	19
106	Nonlinear Observers for GNSS- and Camera-Aided Inertial Navigation of a Fixed-Wing UAV. IEEE Transactions on Control Systems Technology, 2018, 26, 1884-1891.	5.2	19
107	Advancing multi-vehicle deployments in oceanographic field experiments. Autonomous Robots, 2019, 43, 1555-1574.	4.8	19
108	Reducing Power Load Fluctuations on Ships Using Power Redistribution Control. Marine Technology, 2008, 45, 162-174.	0.2	19

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109	Moving horizon observer with regularisation for detectable systems without persistence of excitation. International Journal of Control, 2011, 84, 1041-1054.	1.9	18
110	Unmanned aerial system architecture for maritime missions. design & hardware description. , 2015, , .		18
111	A Nonlinear Model-Based Wind Velocity Observer for Unmanned Aerial Vehicles. IFAC-PapersOnLine, 2016, 49, 276-283.	0.9	18
112	Precision Deep-Stall Landing of Fixed-Wing UAVs Using Nonlinear Model Predictive Control. Journal of Intelligent and Robotic Systems: Theory and Applications, 2021, 101, 1.	3.4	18
113	Nonlinear observer with time-varying gains for inertial navigation aided by satellite reference systems in dynamic positioning. , 2014, , .		17
114	Three-stage filter for position estimation using pseudorange measurements. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1631-1643.	4.7	17
115	Nonlinear Observer for Tightly Coupled Integration of Pseudorange and Inertial Measurements. IEEE Transactions on Control Systems Technology, 2016, 24, 2199-2206.	5.2	17
116	Fault tolerant control of uncertain dynamical systems using interval virtual actuators. International Journal of Robust and Nonlinear Control, 2018, 28, 611-624.	3.7	17
117	Improved predictions from measured disturbances in linear model predictive control. Journal of Process Control, 2019, 75, 86-106.	3.3	17
118	A Machine Learning Approach for Estimating Air Data Parameters of Small Fixed-Wing UAVs Using Distributed Pressure Sensors. IEEE Transactions on Aerospace and Electronic Systems, 2020, 56, 2157-2173.	4.7	17
119	Wave motion compensation in dynamic positioning of small autonomous vessels. Journal of Marine Science and Technology, 2021, 26, 693-712.	2.9	17
120	Design of a hyperspectral imager using COTS optics for small satellite applications. , 2021, , .		17
121	Estimation of road inclination and bank angle in automotive vehicles. , 2009, , .		16
122	Thrust allocation with power management functionality on dynamically positioned vessels. , 2012, , .		16
123	Path- and data transmission planning for cooperating UAVs in delay tolerant network. , 2012, , .		16
124	A communication bridge between underwater sensors and unmanned vehicles using a surface wireless sensor network - design and validation. , 2016, , .		16
125	Estimation of wind velocities and aerodynamic coefficients for UAVs using standard autopilot sensors and a Moving Horizon Estimator. , 2017, , .		16
126	Long-Endurance Green Energy Autonomous Surface Vehicle Control Architecture. , 2019, , .		16

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127	Electronic Navigational Charts for Visualization, Simulation, and Autonomous Ship Control. IEEE Access, 2022, 10, 3716-3737.	4.2	16
128	Neural network augmented identification of underwater vehicle models. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 263-268.	0.4	15
129	Explicit stochastic Nonlinear Predictive Control based on Gaussian process models. , 2007, , .		15
130	Task assignment for cooperating UAVs under radio propagation path loss constraints. , 2012, , .		15
131	Observer and IMU-based detection and isolation of faults in position reference systems and gyrocompasses with dual redundancy in dynamic positioning. , 2014, , .		15
132	Attitude and Heave Estimation for Ships using MEMS-based Inertial Measurements. IFAC-PapersOnLine, 2016, 49, 568-575.	0.9	15
133	Long-Range Path Planning Using an Aircraft Performance Model for Battery-Powered sUAS Equipped With Icing Protection System. IEEE Journal on Miniaturization for Air and Space Systems, 2020, 1, 76-89.	2.7	15
134	A Satellite-USV System for Persistent Observation of Mesoscale Oceanographic Phenomena. Remote Sensing, 2021, 13, 3229.	4.0	15
135	Experiences with coastal and maritime UAS BLOS operation with phased-array antenna digital payload data link. , 2014, , .		14
136	Autonomous search and tracking of objects using model predictive control of unmanned aerial vehicle and gimbal: Hardware-in-the-loop simulation of payload and avionics. , 2015, , .		14
137	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
138	Reinforcement Learning of the Prediction Horizon in Model Predictive Control. IFAC-PapersOnLine, 2021, 54, 314-320.	0.9	14
139	Risk-Based Model Predictive Control for Autonomous Ship Emergency Management. IFAC-PapersOnLine, 2020, 53, 14524-14531.	0.9	14
140	Transient power control in dynamic positioning - governor feedforward and dynamic thrust allocation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 158-163.	0.4	13
141	Constrained MPC design for heave disturbance attenuation in offshore drilling systems. , 2013, , .		13
142	A uniformly semiglobally exponentially stable nonlinear observer for GNSS- and camera-aided inertial navigation. , 2014, , .		13
143	MEMS-based Inertial Navigation on Dynamically Positioned Ships: Dead Reckoning. IFAC-PapersOnLine, 2016, 49, 139-146.	0.9	13
144	Design of inertial navigation systems for marine craft with adaptive wave filtering aided by triple-redundant sensor packages. International Journal of Adaptive Control and Signal Processing, 2017, 31, 522-544.	4.1	13

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145	Analysis and design of quadratic parameter varying (QPV) control systems with polytopic attractive region. <i>Journal of the Franklin Institute</i> , 2018, 355, 3488-3507.	3.4	13
146	Adaptive Sampling of Ocean Processes Using an AUV with a Gaussian Proxy Model. <i>IFAC-PapersOnLine</i> , 2018, 51, 238-243.	0.9	13
147	Nonlinear Observer for Tightly Coupled Integrated Inertial Navigation Aided by RTK-GNSS Measurements. <i>IEEE Transactions on Control Systems Technology</i> , 2019, 27, 1084-1099.	5.2	13
148	Kalman Filters for Air Data System Bias Correction for a Fixed-Wing UAV. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 2164-2176.	5.2	13
149	Multi-agent informed path planning using the probability hypothesis density. <i>Autonomous Robots</i> , 2020, 44, 913-925.	4.8	13
150	Autonomous ballistic airdrop of objects from a small fixed-wing unmanned aerial vehicle. <i>Autonomous Robots</i> , 2020, 44, 859-875.	4.8	13
151	Fault tolerant control allocation for a thruster-controlled floating platform using parametric programming. , 2009, , .		12
152	Icing detection in unmanned aerial vehicles with longitudinal motion using an LPV unknown input observer. , 2015, , .		12
153	A UAV ice tracking framework for autonomous sea ice management. , 2017, , .		12
154	Icing detection and identification for unmanned aerial vehicles using adaptive nested multiple models. <i>International Journal of Adaptive Control and Signal Processing</i> , 2017, 31, 1584-1607.	4.1	12
155	A virtual vertical reference concept for aided inertial navigation at the sea surface. <i>Control Engineering Practice</i> , 2018, 70, 1-14.	5.5	12
156	Tracking of Ocean Surface Objects from Unmanned Aerial Vehicles with a Pan/Tilt Unit using a Thermal Camera. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2018, 91, 775-793.	3.4	12
157	Exogenous Kalman Filter for State-of-Charge Estimation in Lithium-Ion Batteries. , 2018, , .		12
158	A Survey of Practical Design Considerations of Optical Imaging Stabilization Systems for Small Unmanned Aerial Systems. <i>Sensors</i> , 2019, 19, 4800.	3.8	12
159	Explicit Model Predictive Control of an electropneumatic clutch actuator using on/off valves and pulse-width modulation. , 2009, , .		11
160	Multi-Resolution Explicit Model Predictive Control: Delta-Model Formulation and Approximation. <i>IEEE Transactions on Automatic Control</i> , 2013, 58, 2979-2984.	5.7	11
161	A Virtual Vertical Reference Concept for GNSS/INS Applications at the Sea Surface. <i>IFAC-PapersOnLine</i> , 2015, 48, 127-133.	0.9	11
162	Nonlinear observer for inertial navigation aided by pseudo-range and range-rate measurements. , 2015, , .		11

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163	Experimental validation of a uniformly semi-globally exponentially stable non-linear observer for GNSS- and camera-aided inertial navigation for fixed-wing UAVs. , 2015, , .		11
164	SyncBoard - A high accuracy sensor timing board for UAV payloads. , 2017, , .		11
165	Coordinated maritime missions of unmanned vehicles " Network architecture and performance analysis. , 2017, , .		11
166	On Collision Risk Assessment for Autonomous Ships Using Scenario-Based MPC. IFAC-PapersOnLine, 2020, 53, 14509-14516.	0.9	11
167	Improved Transient Performance by Lyapunov-based Integrator Reset of PI Thruster Control in Extreme Seas. , 2006, , .		10
168	Modeling of Air-Fuel Ratio Dynamics of Gasoline Combustion Engine With ARX Network. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2008, 130, .	1.6	10
169	Regularized Nonlinear Moving-Horizon Observer With Robustness to Delayed and Lost Data. IEEE Transactions on Control Systems Technology, 2013, 21, 2114-2128.	5.2	10
170	Suspended load motion control using multicopters. , 2014, , .		10
171	Design and comparison of adaptive estimators for Under-balanced Drilling. , 2014, , .		10
172	Moving Horizon Estimation for Integrated Navigation Filtering**This work is supported by the ANR project entitled Hamiltonian Methods for the Control of Multidomain Distributed Parameter Systems, HAMECMOPSYS financed by the French National Research Agency. Further information is available at http://www.hamecmopsys.ens2m.fr/ . IFAC-PapersOnLine, 2015, 48, 519-526.	0.9	10
173	An unknown input observer approach to icing detection for unmanned aerial vehicles with linearized longitudinal motion. , 2015, , .		10
174	Redesign and analysis of globally asymptotically stable bearing only SLAM. , 2017, , .		10
175	Guaranteed feasible control allocation using model predictive control. Control Theory and Technology, 2019, 17, 252-264.	1.6	10
176	Ship Collision Avoidance Utilizing the Cross-Entropy Method for Collision Risk Assessment. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 11148-11161.	8.0	10
177	Explicit Approximate Approach to Feedback Min-Max Model Predictive Control of Constrained Nonlinear Systems. , 2006, , .		9
178	Moving horizon estimation for tire-road friction during braking. , 2010, , .		9
179	Distributed MPC-Based Path Planning for UAVs under Radio Communication Path Loss Constraints. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 254-259.	0.4	9
180	Nonlinear observer for INS aided by time-delayed GNSS measurements: Implementation and UAV experiments. , 2015, , .		9

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181	Net recovery of UAV with single-frequency RTK GPS. , 2015, , .		9
182	Optimized current reference generation for system-level harmonic mitigation in a diesel-electric ship using non-linear model predictive control. , 2015, , .		9
183	Enhanced Hydroacoustic Range Robustness of Three-Stage Position Filter based on Long Baseline Measurements with Unknown Wave Speed**This work is supported by the Center of Autonomous Marine Operations and Systems (AMOS), grant no. 223254.. IFAC-PapersOnLine, 2016, 49, 61-67.	0.9	9
184	Coordinated control concept for recovery of a fixed-wing UAV on a ship using a net carried by multirotor UAVs. , 2016, , .		9
185	Fault-tolerant Control Allocation for Overactuated Nonlinear Systems. Asian Journal of Control, 2018, 20, 621-634.	3.0	9
186	Phased array radio system aided inertial navigation for unmanned aerial vehicles. , 2018, , .		9
187	Autonomous Recovery of a Fixed-Wing UAV Using a Line Suspended Between Two Multirotor UAVs. IEEE Transactions on Aerospace and Electronic Systems, 2021, 57, 90-104.	4.7	9
188	Control of Fixed-Wing UAV Attitude and Speed based on Embedded Nonlinear Model Predictive Control. IFAC-PapersOnLine, 2021, 54, 91-98.	0.9	9
189	Energy optimal attitude control for a solar-powered spacecraft. European Journal of Control, 2021, 62, 192-197.	2.6	9
190	Nonlinear hierarchical control allocation for vehicle yaw stabilization and rollover prevention. , 2009, , .		8
191	Fault-tolerant control allocation with actuator dynamics: Finite-time control reconfiguration. , 2014, , .		8
192	Efficient implementation of step response models for embedded Model Predictive Control. Computers and Chemical Engineering, 2016, 90, 121-135.	3.8	8
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