

Thor Inge Fossen

List of Publications by Year in descending order

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275
papers

15,073
citations

34105

52
h-index

33894

99
g-index

280
all docs

280
docs citations

280
times ranked

5252
citing authors

#	ARTICLE	IF	CITATIONS
1	Control allocation – A survey. <i>Automatica</i> , 2013, 49, 1087-1103.	5.0	880
2	Adaptive maneuvering, with experiments, for a model ship in a marine control laboratory. <i>Automatica</i> , 2005, 41, 289-298.	5.0	549
3	Passive nonlinear observer design for ships using lyapunov methods: full-scale experiments with a supply vessel. <i>Automatica</i> , 1999, 35, 3-16.	5.0	454
4	Line-of-Sight Path Following for Dubins Paths With Adaptive Sideslip Compensation of Drift Forces. <i>IEEE Transactions on Control Systems Technology</i> , 2015, 23, 820-827.	5.2	383
5	Nonlinear output feedback control of dynamically positioned ships using vectorial observer backstepping. <i>IEEE Transactions on Control Systems Technology</i> , 1998, 6, 121-128.	5.2	315
6	Constrained Nonlinear Control Allocation With Singularity Avoidance Using Sequential Quadratic Programming. <i>IEEE Transactions on Control Systems Technology</i> , 2004, 12, 211-216.	5.2	308
7	Integral LOS Path Following for Curved Paths Based on a Monotone Cubic Hermite Spline Parametrization. <i>IEEE Transactions on Control Systems Technology</i> , 2014, 22, 2287-2301.	5.2	283
8	Robust output maneuvering for a class of nonlinear systems. <i>Automatica</i> , 2004, 40, 373-383.	5.0	271
9	Line-of-sight path following of underactuated marine craft. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2003, 36, 211-216.	0.4	266
10	Passivity-based designs for synchronized path-following. <i>Automatica</i> , 2007, 43, 1508-1518.	5.0	215
11	Kalman filtering for positioning and heading control of ships and offshore rigs. <i>IEEE Control Systems</i> , 2009, 29, 32-46.	0.8	210
12	On uniform semiglobal exponential stability (USGES) of proportional line-of-sight guidance laws. <i>Automatica</i> , 2014, 50, 2912-2917.	5.0	201
13	Design of a dynamic positioning system using model-based control. <i>Control Engineering Practice</i> , 1996, 4, 359-368.	5.5	187
14	Vehicle velocity estimation using nonlinear observers. <i>Automatica</i> , 2006, 42, 2091-2103.	5.0	182
15	Path following control system for a tanker ship model. <i>Ocean Engineering</i> , 2007, 34, 2074-2085.	4.3	174
16	Direct and indirect adaptive integral line-of-sight path-following controllers for marine craft exposed to ocean currents. <i>International Journal of Adaptive Control and Signal Processing</i> , 2017, 31, 445-463.	4.1	172
17	A separation principle for dynamic positioning of ships: theoretical and experimental results. <i>IEEE Transactions on Control Systems Technology</i> , 2000, 8, 332-343.	5.2	171
18	Attitude Estimation Using Biased Gyro and Vector Measurements With Time-Varying Reference Vectors. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 1332-1338.	5.7	160

#	ARTICLE	IF	CITATIONS
19	Straight-Line Target Tracking for Unmanned Surface Vehicles. Modeling, Identification and Control, 2008, 29, 131-149.	1.1	154
20	A Nonlinear Ship Manoeuvring Model: Identification and adaptive control with experiments for a model ship. Modeling, Identification and Control, 2004, 25, 3-27.	1.1	152
21	Position and attitude tracking of AUV's: a quaternion feedback approach. IEEE Journal of Oceanic Engineering, 1994, 19, 512-518.	3.8	147
22	A Matlab Toolbox for Parametric Identification of Radiation-Force Models of Ships and Offshore Structures. Modeling, Identification and Control, 2009, 30, 1-15.	1.1	134
23	A NONLINEAR UNIFIED STATE-SPACE MODEL FOR SHIP MANEUVERING AND CONTROL IN A SEAWAY. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2005, 15, 2717-2746.	1.7	131
24	A Survey of Control Allocation Methods for Ships and Underwater Vehicles. , 2006, , .		131
25	Principles of Guidance-Based Path Following in 2D and 3D. , 0, , .		125
26	Non-linear and adaptive backstepping designs for tracking control of ships. International Journal of Adaptive Control and Signal Processing, 1998, 12, 649-670.	4.1	120
27	Underactuated dynamic positioning of a ship-experimental results. IEEE Transactions on Control Systems Technology, 2000, 8, 856-863.	5.2	113
28	Time- vs. Frequency-domain Identification of Parametric Radiation Force Models for Marine Structures at Zero Speed. Modeling, Identification and Control, 2008, 29, 1-19.	1.1	113
29	Adaptive control of nonlinear systems: A case study of underwater robotic systems. Journal of Field Robotics, 1991, 8, 393-412.	0.7	111
30	Nonlinear vehicle side-slip estimation with friction adaptation. Automatica, 2008, 44, 611-622.	5.0	109
31	Modeling, identification, and adaptive maneuvering of CyberShip II: A complete design with experiments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 203-208.	0.4	106
32	Formation Control of Marine Surface Craft: A Lagrangian Approach. IEEE Journal of Oceanic Engineering, 2006, 31, 922-934.	3.8	105
33	Path planning and collision avoidance for autonomous surface vehicles I: a review. Journal of Marine Science and Technology, 2021, 26, 1292-1306.	2.9	103
34	Nonlinear output feedback control of underwater vehicle propellers using feedback form estimated axial flow velocity. IEEE Journal of Oceanic Engineering, 2000, 25, 241-255.	3.8	101
35	Identification of dynamically positioned ships. Control Engineering Practice, 1996, 4, 369-376.	5.5	100
36	Optimal constrained control allocation in marine surface vessels with rudders. Control Engineering Practice, 2008, 16, 457-464.	5.5	100

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37	Nonlinear passive weather optimal positioning control (WOPC) system for ships and rigs: experimental results. <i>Automatica</i> , 2001, 37, 701-715.	5.0	94
38	Efficient Optimal Constrained Control Allocation via Multiparametric Programming. <i>Journal of Guidance, Control, and Dynamics</i> , 2005, 28, 506-515.	2.8	94
39	Globally exponentially stable attitude and gyro bias estimation with application to GNSS/INS integration. <i>Automatica</i> , 2015, 51, 158-166.	5.0	92
40	Ship steering control system optimisation using genetic algorithms. <i>Control Engineering Practice</i> , 2000, 8, 429-443.	5.5	90
41	Fuel-efficient rudder and propeller control allocation for marine craft: experiments with a model ship. <i>IEEE Transactions on Control Systems Technology</i> , 2003, 11, 850-862.	5.2	90
42	On estimation of wind velocity, angle-of-attack and sideslip angle of small UAVs using standard sensors. , 2015, , .		85
43	Practical aspects of frequency-domain identification of dynamic models of marine structures from hydrodynamic data. <i>Ocean Engineering</i> , 2011, 38, 426-435.	4.3	82
44	Nonlinear modelling of marine vehicles in 6 degrees of freedom. <i>Mathematical Modelling of Systems</i> , 1995, 1, 17-27.	0.7	79
45	Automatic detection, classification and tracking of objects in the ocean surface from UAVs using a thermal camera. , 2015, , .		78
46	Tutorial on nonlinear backstepping: Applications to ship control. <i>Modeling, Identification and Control</i> , 1999, 20, 83-135.	1.1	75
47	A Time-Varying Lookahead Distance Guidance Law for Path Following. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012, 45, 398-403.	0.4	71
48	Formation Control of Underactuated Surface Vessels using the Null-Space-Based Behavioral Control. , 2006, , .		67
49	Path following of straight lines and circles for marine surface vessels. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2004, 37, 65-70.	0.4	65
50	Ship Formation Control: A Guided Leader-Follower Approach. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2008, 41, 16008-16014.	0.4	65
51	H Almost output synchronization for heterogeneous networks of introspective agents under external disturbances. <i>Automatica</i> , 2014, 50, 1026-1036.	1.04	64
52	Cooperative Control for Multirotors Transporting an Unknown Suspended Load Under Environmental Disturbances. <i>IEEE Transactions on Control Systems Technology</i> , 2020, 28, 653-660.	5.2	64
53	Nonlinear Control with Swing Damping of a Multirotor UAV with Suspended Load. <i>Journal of Intelligent and Robotic Systems: Theory and Applications</i> , 2017, 88, 379-394.	3.4	63
54	Wave synchronizing crane control during water entry in offshore moonpool operations-experimental results. <i>IEEE Journal of Oceanic Engineering</i> , 2003, 28, 720-728.	3.8	60

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55	On non-linear unknown input observers applied to lateral vehicle velocity estimation on banked roads. <i>International Journal of Control</i> , 2007, 80, 1741-1750.	1.9	60
56	An Overview of the Marine Systems Simulator (MSS): A Simulink Toolbox for Marine Control Systems. <i>Modeling, Identification and Control</i> , 2006, 27, 259-275.	1.1	58
57	A survey on Nonlinear Ship Control: from Theory to Practice. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2000, 33, 1-16.	0.4	55
58	Guidance laws for planar motion control. , 2008, , .		54
59	A nonlinear PDE formulation for offshore vessel pipeline installation. <i>Ocean Engineering</i> , 2010, 37, 365-377.	4.3	54
60	Nonlinear Time-Domain Strip Theory Formulation for Low-Speed Manoeuvring and Station-Keeping. <i>Modeling, Identification and Control</i> , 2004, 25, 201-221.	1.1	52
61	Finite element modelling of mooring lines. <i>Mathematics and Computers in Simulation</i> , 2000, 53, 415-422.	4.4	51
62	Underwater Robotics. , 2008, , 987-1008.		51
63	Tutorial on Incremental Stability Analysis using Contraction Theory. <i>Modeling, Identification and Control</i> , 2010, 31, 93-106.	1.1	50
64	Path following of underwater robots using Lagrange multipliers. <i>Robotics and Autonomous Systems</i> , 2015, 67, 44-52.	5.1	49
65	The eXogenous Kalman Filter (XKF). <i>International Journal of Control</i> , 2017, 90, 161-167.	1.9	49
66	Kinematic Models for Manoeuvring and Seakeeping of Marine Vessels. <i>Modeling, Identification and Control</i> , 2007, 28, 19-30.	1.1	47
67	Nonlinear observer for GNSS-aided inertial navigation with quaternion-based attitude estimation. , 2013, , .		46
68	A Hybrid Approach to Motion Prediction for Ship Docking Integration of a Neural Network Model Into the Ship Dynamic Model. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-11.	4.7	46
69	Global output tracking control of a class of Euler-Lagrange systems with monotonic non-linearities in the velocities. <i>International Journal of Control</i> , 2001, 74, 649-658.	1.9	45
70	Genetic algorithms optimisation of decoupled Sliding Mode controllers: simulated and real results. <i>Control Engineering Practice</i> , 2005, 13, 739-748.	5.5	44
71	Nonlinear Observers for Integrated INS/GNSS Navigation: Implementation Aspects. <i>IEEE Control Systems</i> , 2017, 37, 59-86.	0.8	44
72	Robust Control Allocation of Overactuated Ships; Experiments with a Model Ship. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1997, 30, 193-198.	0.4	43

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73	Guidance-Based Path Following for Autonomous Underwater Vehicles. , 0, , .		43
74	Finite Element Modelling of Moored Vessels. Mathematical and Computer Modelling of Dynamical Systems, 2001, 7, 47-75.	2.2	42
75	Nonlinear control of a multirotor UAV with suspended load. , 2015, , .		42
76	Nonlinear Container Ship Model for the Study of Parametric Roll Resonance. Modeling, Identification and Control, 2007, 28, 87-103.	1.1	42
77	Design of automatic thruster assisted mooring systems for ships. Modeling, Identification and Control, 1998, 19, 61-75.	1.1	41
78	Comments on "The attitude control problem". IEEE Transactions on Automatic Control, 1994, 39, 699-700.	5.7	40
79	Nonlinear passive observer design for ships with adaptive wave filtering. , 1999, , 113-134.		40
80	Continuous-Curvature Path Generation Using Fermat's Spiral. Modeling, Identification and Control, 2013, 34, 183-198.	1.1	39
81	Comments on "Hamiltonian adaptive control of spacecraft" by J.J.E. Slotine and M.D. Di Benedetto. IEEE Transactions on Automatic Control, 1993, 38, 671-672.	5.7	37
82	A theorem for UGAS and ULES of (passive) nonautonomous systems: robust control of mechanical systems and ships. International Journal of Robust and Nonlinear Control, 2001, 11, 95-108.	3.7	36
83	Dead Reckoning of Dynamically Positioned Ships: Using an Efficient Recurrent Neural Network. IEEE Robotics and Automation Magazine, 2019, 26, 39-51.	2.0	35
84	Path planning and collision avoidance for autonomous surface vehicles II: a comparative study of algorithms. Journal of Marine Science and Technology, 2021, 26, 1307-1323.	2.9	35
85	Aerodynamic modeling of the Skywalker X8 Fixed-Wing Unmanned Aerial Vehicle. , 2018, , .		33
86	Attitude estimation by multiplicative exogenous Kalman filter. Automatica, 2018, 95, 347-355.	5.0	32
87	Rudder Roll Stabilization of Ships Subject to Input Rate Saturation Using a Gain Scheduled Control Law. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 111-116.	0.4	31
88	Object detection, recognition, and tracking from UAVs using a thermal camera. Journal of Field Robotics, 2021, 38, 242-267.	6.0	31
89	Nonlinear Vectorial Observer Backstepping with Integral Action and Wave Filtering for Ships. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 77-82.	0.4	30
90	On-board sensor-based adaptive control of small UUVs in very shallow water. International Journal of Adaptive Control and Signal Processing, 2000, 14, 441-452.	4.1	30

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91	Nonlinear Observer for Vehicle Velocity with Friction and Road Bank Angle Adaptation - Validation and Comparison with an Extended Kalman Filter. , 0, , .		30
92	HOW TO INCORPORATE WIND, WAVES AND OCEAN CURRENTS IN THE MARINE CRAFT EQUATIONS OF MOTION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 126-131.	0.4	29
93	Experimental verification of a global exponential stable nonlinear wave encounter frequency estimator. Ocean Engineering, 2015, 97, 48-56.	4.3	29
94	Line-of-sight curved path following for underactuated USVs and AUVs in the horizontal plane under the influence of ocean currents. , 2016, , .		29
95	Passivity-based Formation Control for UAVs with a Suspended Load. IFAC-PapersOnLine, 2017, 50, 13150-13155.	0.9	29
96	Identification of Dynamically Positioned Ships. Modeling, Identification and Control, 1996, 17, 153-165.	1.1	28
97	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
98	Optimal search mission with Unmanned Aerial Vehicles using Mixed Integer Linear Programming. , 2013, , .		27
99	Trajectory tracking and ocean current estimation for marine underactuated vehicles. , 2014, , .		27
100	Formation control by synchronizing multiple Maneuvering systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 241-246.	0.4	26
101	Minimization of cross-track and along-track errors for path tracking of marine underactuated vehicles. , 2014, , .		26
102	Uniformly semiglobally exponential stability of vector field guidance law and autopilot for path-following. European Journal of Control, 2020, 53, 88-97.	2.6	26
103	Mathematical Modelling of Diesel-Electric Propulsion Systems for Marine Vessels. Mathematical and Computer Modelling of Dynamical Systems, 2001, 7, 323-355.	2.2	25
104	Formation Control of Marine Surface Craft using Lagrange Multipliers. , 0, , .		25
105	Nonlinear Passive Control and Observer Design for Ships. Modeling, Identification and Control, 2000, 21, 129-184.	1.1	25
106	The optimization of a tanker autopilot control system using genetic algorithms. Transactions of the Institute of Measurement and Control, 2000, 22, 141-178.	1.7	24
107	OUTPUT MANEUVERING FOR A CLASS OF NONLINEAR SYSTEMS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 501-506.	0.4	24
108	Nonlinear dynamic positioning of ships with gain-scheduled wave filtering. , 2004, , .		24

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109	Nonlinear Thrust Controller for Marine Propellers in Four-Quadrant Operations. Proceedings of the American Control Conference, 2007, , .	0.0	24
110	Autonomous net recovery of fixed-wing UAV with single-frequency carrier-phase differential GNSS. IEEE Aerospace and Electronic Systems Magazine, 2015, 30, 18-27.	1.3	24
111	Feedback Linearization Control for Systems with Mismatched Uncertainties via Disturbance Observers. Asian Journal of Control, 2019, 21, 1064-1076.	3.0	24
112	APPLYING MISSILE GUIDANCE CONCEPTS TO MOTION CONTROL OF MARINE CRAFT. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 349-354.	0.4	23
113	Genetic Programming for the Automatic Design of Controllers for a Surface Ship. IEEE Transactions on Intelligent Transportation Systems, 2008, 9, 311-321.	8.0	23
114	Cooperative path-following for multirotor UAVs with a suspended payload. , 2015, , .		23
115	Non-linear Model Predictive Control for Longitudinal and Lateral Guidance of a Small Fixed-Wing UAV in Precision Deep Stall Landing. , 2016, , .		23
116	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
117	Nonlinear observer design for GNSS-aided inertial navigation systems with time-delayed GNSS measurements. Control Engineering Practice, 2017, 60, 39-50.	5.5	22
118	Redundant MEMS-Based Inertial Navigation Using Nonlinear Observers. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2018, 140, .	1.6	22
119	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
120	Continuous Curvature Path Planning using Voronoi diagrams and Fermat's spirals. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 132-137.	0.4	21
121	Joint Identification of Infinite-Frequency Added Mass and Fluid-Memory Models of Marine Structures. Modeling, Identification and Control, 2008, 29, 93-102.	1.1	21
122	Robust Adaptive Control of Underwater Vehicles: A Comparative Study. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 66-74.	0.4	20
123	Robust adaptive ship autopilot with wave filter and integral action. International Journal of Adaptive Control and Signal Processing, 1998, 12, 605-622.	4.1	20
124	A nonlinear 7-DOF model for U-tanks of arbitrary shape. Ocean Engineering, 2012, 45, 22-37.	4.3	20
125	Non-linear model predictive control for guidance of a fixed-wing UAV in precision deep stall landing. , 2015, , .		20
126	Nonlinear filtering with exogenous Kalman filter and double Kalman filter. , 2016, , .		20

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127	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
128	Nonlinear control of ships minimizing the position tracking errors. Modeling, Identification and Control, 1999, 20, 177-187.	1.1	20
129	A Lagrangian approach to nonlinear modeling of anti-roll tanks. Ocean Engineering, 2011, 38, 341-359.	4.3	19
130	A lighth-weight thermal camera payload with georeferencing capabilities for small fixed-wing UAVs. , 2015, , .		19
131	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
132	Vision-based positioning system for auto-docking of unmanned surface vehicles (USVs). International Journal of Intelligent Robotics and Applications, 2022, 6, 86-103.	2.8	19
133	Semiglobal exponential output feedback control of ships. IEEE Transactions on Control Systems Technology, 1997, 5, 360-370.	5.2	18
134	A Nonlinear Model-Based Wind Velocity Observer for Unmanned Aerial Vehicles. IFAC-PapersOnLine, 2016, 49, 276-283.	0.9	18
135	A New Method of Thruster Control in Positioning of Ships Based on Power Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1997, 30, 199-206.	0.4	17
136	Output feedback control for maneuvering systems using observer backstepping. , 0, , .		17
137	Passivity-Based Designs for Synchronized Path Following. , 2006, , .		17
138	On the Boundedness and Skew-Symmetric Properties of the Inertia and Coriolis Matrices for Vehicle-Manipulator Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 193-198.	0.4	17
139	Nonlinear observer with time-varying gains for inertial navigation aided by satellite reference systems in dynamic positioning. , 2014, , .		17
140	Modeling and Control of Underwater Robots. Springer Handbooks, 2016, , 1285-1306.	0.6	17
141	Three-stage filter for position estimation using pseudorange measurements. IEEE Transactions on Aerospace and Electronic Systems, 2016, 52, 1631-1643.	4.7	17
142	Nonlinear Observer for Tightly Coupled Integration of Pseudorange and Inertial Measurements. IEEE Transactions on Control Systems Technology, 2016, 24, 2199-2206.	5.2	17
143	A Neural Network Approach to Control Allocation of Ships for Dynamic Positioning. IFAC-PapersOnLine, 2018, 51, 128-133.	0.9	17
144	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

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145	Wave motion compensation in dynamic positioning of small autonomous vessels. Journal of Marine Science and Technology, 2021, 26, 693-712.	2.9	17
146	Global output tracking control of a class of Euler-Lagrange systems. , 0, , .		16
147	Robust Navigation of UAV using Inertial Sensors Aided by UWB and RTK GPS. , 2017, , .		16
148	Adaptive control of ROVs with actuator dynamics and saturation. Modeling, Identification and Control, 1992, 13, 175-188.	1.1	16
149	Nonlinear Control of Underactuated Ships with Forward Speed Compensation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 119-124.	0.4	15
150	Nonlinear Vehicle Velocity Observer with Road-Tire Friction Adaptation. , 2006, , .		15
151	Stabilization of parametric roll resonance with active u-tanks via Lyapunov control design. , 2009, , .		15
152	Observer and IMU-based detection and isolation of faults in position reference systems and gyrocompasses with dual redundancy in dynamic positioning. , 2014, , .		15
153	Attitude and Heave Estimation for Ships using MEMS-based Inertial Measurements. IFAC-PapersOnLine, 2016, 49, 568-575.	0.9	15
154	Nonlinear observer design for integration of DGPS and INS. , 1999, , 135-159.		14
155	Guided Formation Control for Wheeled Mobile Robots. , 2006, , .		14
156	Vision-Aided Nonlinear Observer for Fixed-Wing Unmanned Aerial Vehicle Navigation. Journal of Guidance, Control, and Dynamics, 2016, 39, 1777-1789.	2.8	14
157	Nonlinear Control of Ships: A Locally Optimal Design. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 705-710.	0.4	13
158	Vehicle Velocity Estimation using Modular Nonlinear Observers. , 0, , .		13
159	MODELING AND CONTROL OF UNDERWAY REPLENISHMENT OPERATIONS IN CALM WATER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 78-85.	0.4	13
160	Marine Vessel Path Planning & Guidance Using Potential Flow. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 188-193.	0.4	13
161	A uniformly semiglobally exponentially stable nonlinear observer for GNSS- and camera-aided inertial navigation. , 2014, , .		13
162	MEMS-based Inertial Navigation on Dynamically Positioned Ships: Dead Reckoning. IFAC-PapersOnLine, 2016, 49, 139-146.	0.9	13

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163	Design of inertial navigation systems for marine craft with adaptive wave filtering aided by triple-redundant sensor packages. <i>International Journal of Adaptive Control and Signal Processing</i> , 2017, 31, 522-544.	4.1	13
164	Extended Kalman Filter Design and Motion Prediction of Ships Using Live Automatic Identification System (AIS) Data. , 2018, , .		13
165	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
166	Underwater Position and Attitude Estimation Using Acoustic, Inertial, and Depth Measurements. <i>IEEE Journal of Oceanic Engineering</i> , 2020, 45, 1450-1465.	3.8	13
167	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
168	Adaptive control of nonlinear underwater robotic systems. <i>Modeling, Identification and Control</i> , 1991, 12, 95-105.	1.1	13
169	Sliding control of MIMO nonlinear systems. <i>Modeling, Identification and Control</i> , 1991, 12, 129-138.	1.1	13
170	Robust adaptive control of underwater vehicles: A comparative study. <i>Modeling, Identification and Control</i> , 1996, 17, 47-61.	1.1	13
171	A Nonlinear Observer for Integration of GPS and Inertial Navigation Systems. <i>Modeling, Identification and Control</i> , 2000, 21, 192-208.	1.1	13
172	Stabilisation of parametric roll resonance by combined speed and fin stabiliser control. , 2009, , .		12
173	A Globally K-Exponentially Stable Nonlinear Observer for the Wave Encounter Frequency. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2013, 46, 209-214.	0.4	12
174	A UAV ice tracking framework for autonomous sea ice management. , 2017, , .		12
175	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
176	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
177	Adaptive feedback linearization applied to steering of ships. <i>Modeling, Identification and Control</i> , 1993, 14, 229-237.	1.1	12
178	Design of a dynamic positioning system using model-based control. <i>Modeling, Identification and Control</i> , 1996, 17, 135-151.	1.1	12
179	Nonlinear Output Feedback and Locally Optimal Control of Dynamically Positioned Ships: Experimental Results. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 1998, 31, 83-88.	0.4	11
180	Nonlinear Observer for Vehicle Velocity Estimation. , 0, , .		11

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181	Attitude Estimation Based on Time-Varying Reference Vectors with Biased Gyro and Vector Measurements. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 8497-8502.	0.4	11
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