Kristin Ytterstad Pettersen

List of Publications by Year in descending order

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299 papers

7,840 citations

39 h-index 85541 71

g-index

311 all docs

311 docs citations

times ranked

311

2773 citing authors

#	Article	IF	Citations
1	Line-of-Sight Path Following for Dubins Paths With Adaptive Sideslip Compensation of Drift Forces. IEEE Transactions on Control Systems Technology, 2015, 23, 820-827.	5.2	383
2	Tracking control of an underactuated ship. IEEE Transactions on Control Systems Technology, 2003, 11, 52-61.	5.2	321
3	Integral Line-of-Sight Guidance and Control of Underactuated Marine Vehicles: Theory, Simulations, and Experiments. IEEE Transactions on Control Systems Technology, 2016, 24, 1623-1642.	5.2	226
4	Underactuated ship tracking control: Theory and experiments. International Journal of Control, 2001, 74, 1435-1446.	1.9	224
5	A review on modelling, implementation, and control of snake robots. Robotics and Autonomous Systems, 2012, 60, 29-40.	5.1	213
6	On uniform semiglobal exponential stability (USGES) of proportional line-of-sight guidance laws. Automatica, 2014, 50, 2912-2917.	5.0	201
7	Snake Robot Obstacle-Aided Locomotion: Modeling, Simulations, and Experiments. IEEE Transactions on Robotics, 2008, 24, 88-104.	10.3	195
8	A survey on snake robot modeling and locomotion. Robotica, 2009, 27, 999-1015.	1.9	168
9	Integral LOS control for path following of underactuated marine surface vessels in the presence of constant ocean currents. , 2008, , .		164
10	Global uniform asymptotic stabilization of an underactuated surface vessel. IEEE Transactions on Automatic Control, 2002, 47, 1759-1762.	5.7	161
11	Straight Line Path Following for Formations of Underactuated Marine Surface Vessels. IEEE Transactions on Control Systems Technology, 2011, 19, 493-506.	5.2	159
12	Globalκ-exponential way-point maneuvering of ships: Theory and experiments. Automatica, 2006, 42, 677-687.	5.0	153
13	Time-varying exponential stabilization of the position and attitude of an underactuated autonomous underwater vehicle. IEEE Transactions on Automatic Control, 1999, 44, 112-115.	5.7	151
14	Exponential stabilization of an underactuated surface vessel. , 0, , .		124
15	Model-Based Output Feedback Control of Slender-Body Underactuated AUVs: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2008, 16, 930-946.	5.2	117
16	Snake Robots. Advances in Industrial Control, 2013, , .	0.5	115
17	Underactuated dynamic positioning of a ship-experimental results. IEEE Transactions on Control Systems Technology, 2000, 8, 856-863.	5.2	113
18	Way-point tracking control of ships. , 0, , .		110

#	Article	IF	Citations
19	Integral Line-of-Sight Guidance for Path Following Control of Underwater Snake Robots: Theory and Experiments. IEEE Transactions on Robotics, 2017, 33, 610-628.	10.3	107
20	Trajectory Tracking and Path Following for Underactuated Marine Vehicles. IEEE Transactions on Control Systems Technology, 2019, 27, 1423-1437.	5.2	105
21	Innovation in Underwater Robots: Biologically Inspired Swimming Snake Robots. IEEE Robotics and Automation Magazine, 2016, 23, 44-62.	2.0	94
22	Output Feedback Tracking of Ships. IEEE Transactions on Control Systems Technology, 2011, 19, 442-448.	5.2	91
23	Controllability and Stability Analysis of Planar Snake Robot Locomotion. IEEE Transactions on Automatic Control, 2011, 56, 1365-1380.	5.7	84
24	Maneuvering Control of Planar Snake Robots Using Virtual Holonomic Constraints. IEEE Transactions on Control Systems Technology, 2016, 24, 884-899.	5.2	80
25	3-D Snake Robot Motion: Nonsmooth Modeling, Simulations, and Experiments. IEEE Transactions on Robotics, 2008, 24, 361-376.	10.3	79
26	Mamba - A waterproof snake robot with tactile sensing. , 2014, , .		77
27	Set-Based Tasks within the Singularity-Robust Multiple Task-Priority Inverse Kinematics Framework: General Formulation, Stability Analysis, and Experimental Results. Frontiers in Robotics and AI, 2016, 3,	3.2	76
28	Stabilization of a nonlinear underactuated hovercraft. International Journal of Robust and Nonlinear Control, 2000, 10, 645-654.	3.7	69
29	Tracking control of an underactuated surface vessel. , 0, , .		66
30	Global Uniform Asymptotic Stabilization of an Underactuated Surface Vessel: Experimental Results. IEEE Transactions on Control Systems Technology, 2004, 12, 891-903.	5.2	66
31	Damping and Tracking Control Schemes for Nanopositioning. IEEE/ASME Transactions on Mechatronics, 2014, 19, 432-444.	5.8	65
32	Observer based path following for underactuated marine vessels in the presence of ocean currents: A global approach. Automatica, 2019, 100, 123-134.	5.0	64
33	Hybrid Modelling and Control of Obstacle-Aided Snake Robot Locomotion. IEEE Transactions on Robotics, 2010, 26, 781-799.	10.3	63
34	Snake Robot Locomotion in Environments With Obstacles. IEEE/ASME Transactions on Mechatronics, 2012, 17, 1158-1169.	5.8	59
35	Output feedback motion control system for observation class ROVs based on a high-gain state observer: Theoretical and experimental results. Control Engineering Practice, 2015, 39, 90-102.	5.5	59
36	Experimental Investigation of Obstacle-Aided Locomotion With a Snake Robot. IEEE Transactions on Robotics, 2011, 27, 792-800.	10.3	58

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37	Modeling of underwater snake robots. , 2014, , .		58
38	Path Following Control of Planar Snake Robots Using a Cascaded Approach. IEEE Transactions on Control Systems Technology, 2011, , .	5.2	55
39	Output synchronization control of ship replenishment operations: Theory and experiments. Control Engineering Practice, 2007, 15, 741-755.	5.5	53
40	Snake robots. Annual Reviews in Control, 2017, 44, 19-44.	7.9	52
41	Global Practical Stabilization and Tracking for an Underactuated Ship - A Combined Averaging and Backstepping Approach. Modeling, Identification and Control, 1999, 20, 189-200.	1.1	51
42	Control properties of underactuated vehicles. , 0, , .		49
43	Singularity-free dynamic equations of vehicle–manipulator systems. Simulation Modelling Practice and Theory, 2010, 18, 712-731.	3.8	48
44	Path following of underactuated autonomous underwater vehicles in the presence of ocean currents. , 2012 , , .		44
45	Cross-track control for underactuated autonomous vehicles. , 0, , .		43
46	Controlling Kuka Industrial Robots: Flexible Communication Interface JOpenShowVar. IEEE Robotics and Automation Magazine, 2015, 22, 96-109.	2.0	43
47	Vehicle-Manipulator Systems. Advances in Industrial Control, 2014, , .	0.5	42
48	A sensor fusion wearable health-monitoring system with haptic feedback. , 2015, , .		41
49	The Underwater Swimming Manipulator—A Bioinspired Solution for Subsea Operations. IEEE Journal of Oceanic Engineering, 2018, 43, 402-417.	3.8	41
50	Leader/Follower synchronization of satellite attitude without angular velocity measurements. , 0, , .		40
51	A simplified model of planar snake robot locomotion. , 2010, , .		40
52	Relative Velocity Control and Integral LOS for Path Following of Underactuated Surface Vessels. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 380-385.	0.4	37
53	Adaptive feed-forward hysteresis compensation for piezoelectric actuators. Review of Scientific Instruments, 2012, 83, 085001.	1.3	35
54	Robust control of an underactuated surface vessel with thruster dynamics., 1997,,.		34

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55	Planar Path Following of Underwater Snake Robots in the Presence of Ocean Currents. IEEE Robotics and Automation Letters, 2016, 1, 383-390.	5.1	34
56	Cross-track formation control of underactuated surface vessels. , 2006, , .		33
57	Integral LOS guidance for horizontal path following of underactuated autonomous underwater vehicles in the presence of vertical ocean currents., 2012,,.		33
58	Comparison of two second-order sliding mode control algorithms for an articulated intervention AUV: Theory and experimental results. Ocean Engineering, 2021, 222, 108480.	4.3	33
59	Planar maneuvering control of underwater snake robots using virtual holonomic constraints. Bioinspiration and Biomimetics, 2016, 11, 065005.	2.9	32
60	Collision Avoidance for Underactuated Marine Vehicles Using the Constant Avoidance Angle Algorithm. IEEE Transactions on Control Systems Technology, 2020, 28, 951-966.	5. 2	32
61	Straight line path following for formations of underactuated surface vessels under influence of constant ocean currents., 2009,,.		31
62	Experimental investigation of efficient locomotion of underwater snake robots for lateral undulation and eel-like motion patterns. Robotics and Biomimetics, 2015, 2, 8.	1.7	31
63	A modified dynamic window algorithm for horizontal collision avoidance for AUVs. , 2016, , .		31
64	A snake robot with a contact force measurement system for obstacle-aided locomotion. , 2010, , .		30
65	Path following of underactuated marine surface vessels in the presence of unknown ocean currents. , 2014, , .		30
66	Locomotion Efficiency Optimization of Biologically Inspired Snake Robots. Applied Sciences (Switzerland), 2018, 8, 80.	2.5	30
67	Position and attitude control of an underactuated autonomous underwater vehicle. , 0, , .		29
68	Line-of-sight curved path following for underactuated USVs and AUVs in the horizontal plane under the influence of ocean currents. , 2016, , .		29
69	Modelling and control of obstacle-aided snake robot locomotion based on jam resolution. , 2009, , .		28
70	Set-based Line-of-Sight (LOS) path following with collision avoidance for underactuated unmanned surface vessel., 2016,,.		28
71	Tracking Control of an Articulated Intervention Autonomous Underwater Vehicle in 6DOF Using Generalized Super-twisting: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2021, 29, 353-369.	5.2	27
72	Path Planning for UGVs Based on Traversability Hybrid A*. IEEE Robotics and Automation Letters, 2021, 6, 1216-1223.	5.1	27

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73	Modular Pneumatic Snake Robot: 3D Modelling, Implementation And Control. Modeling, Identification and Control, 2008, 29, 21-28.	1.1	27
74	Straight line path following for formations of underactuated underwater vehicles. , 2007, , .		25
75	Integral line-of-sight for path following of underwater snake robots. , 2014, , .		25
76	Trajectory Tracking for Underwater Swimming Manipulators using a Super Twisting Algorithm. Asian Journal of Control, 2019, 21, 208-223.	3.0	25
77	Path following control of planar snake robots using virtual holonomic constraints: theory and experiments. Robotics and Biomimetics, 2014, 1, 3.	1.7	24
78	Trajectory tracking for an articulated intervention AUV using a super-twisting algorithm in 6 DOF. IFAC-PapersOnLine, 2018, 51, 311-316.	0.9	24
79	Ship replenishment using synchronization control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 247-252.	0.4	23
80	Tracking control for snake robot joints. , 2007, , .		23
81	Lyapunov sufficient conditions for uniform semiglobal exponential stability. Automatica, 2017, 78, 97-102.	5.0	22
82	Way-point tracking control of ships. , 0, , .		22
83	Stabilization of a nonlinear underactuated hovercraft., 0,,.		21
84	Developments in Snake Robot Modeling and Locomotion. , 2006, , .		21
85	A virtual vehicle approach to output synchronization control., 2006,,.		21
86	Output feedback control of slender body underwater vehicles with current estimation. International Journal of Control, 2007, 80, 1136-1150.	1.9	20
87	A Comparison Between the ILOS Guidance and the Vector Field Guidance. IFAC-PapersOnLine, 2015, 48, 89-94.	0.9	20
88	Set-Based Control for Autonomous Spray Painting. IEEE Transactions on Automation Science and Engineering, 2018, 15, 1785-1796.	5.2	20
89	A waypoint guidance strategy for underwater snake robots., 2014,,.		19
90	ILOS Guidance - Experiments and Tuning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 4209-4214.	0.4	19

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91	Stability analysis for set-based control within the singularity-robust multiple task-priority inverse kinematics framework. , 2015, , .		19
92	Exponential Stabilization of an Underactuated Surface Vessel. Modeling, Identification and Control, 1997, 18, 239-248.	1.1	19
93	Semi-global practical stabilization and disturbance adaptation for an underactuated ship. , 0, , .		18
94	JOpenShowVar: An open-source cross-platform communication interface to Kuka robots. , 2014, , .		17
95	The underwater swimming manipulator - a bio-inspired AUV. , 2016, , .		17
96	Integrated Flexible Maritime Crane Architecture for the Offshore Simulation Centre AS (OSC): A Flexible Framework for Alternative Maritime Crane Control Algorithms. IEEE Journal of Oceanic Engineering, 2016, 41, 450-461.	3.8	17
97	Adaptive way-point tracking control for underactuated autonomous vehicles. , 0, , .		16
98	Path following for formations of underactuated marine vessels under influence of constant ocean currents. , $2014, , .$		16
99	Path Following, Obstacle Detection and Obstacle Avoidance for Thrusted Underwater Snake Robots. Frontiers in Robotics and Al, 2019, 6, 57.	3.2	16
100	Waypoint guidance control of snake robots. , 2011, , .		15
101	Differential geometric modelling and robust path following control of snake robots using sliding mode techniques. , 2014, , .		15
102	Relative velocity control and integral line of sight for path following of autonomous surface vessels: Merging intuition with theory. Proceedings of the Institution of Mechanical Engineers Part M: Journal of Engineering for the Maritime Environment, 2014, 228, 180-191.	0.5	15
103	A 3D motion planning framework for snake robots. , 2014, , .		15
104	Energy efficiency of underwater robots. IFAC-PapersOnLine, 2015, 48, 152-159.	0.9	15
105	Energy efficiency of underwater snake robot locomotion. , 2015, , .		15
106	Set-Based line-of-sight (LOS) path following with collision avoidance for underactuated unmanned surface vessels under the influence of ocean currents. , 2017 , , .		15
107	Combined kinematic and dynamic control of vehicle-manipulator systems. Mechatronics, 2020, 69, 102380.	3.3	15
108	Autonomous ROV Inspections of Aquaculture Net Pens Using DVL. IEEE Journal of Oceanic Engineering, 2021, , 1-19.	3.8	15

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109	A universal control architecture for maritime cranes and robots using genetic algorithms as a possible mapping approach. , $2013, \ldots$		14
110	Virtual holonomic constraint based direction following control of planar snake robots described by a simplified model. , 2014, , .		14
111	Compliant control of the body shape of snake robots. , 2014, , .		14
112	Stability Analysis of a Hierarchical Architecture for Discrete-Time Sensor-Based Control of Robotic Systems. IEEE Transactions on Robotics, 2014, 30, 745-753.	10.3	14
113	Locomotion efficiency of underwater snake robots with thrusters. , 2016, , .		14
114	Modeling of Articulated Underwater Robots for Simulation and Control. , 2018, , .		14
115	Cross-Track Formation Control of Underactuated Autonomous Underwater Vehicles. , 2006, , 35-54.		13
116	A snake robot joint mechanism with a contact force measurement system. , 2009, , .		13
117	A modular and waterproof snake robot joint mechanism with a novel force/torque sensor. , 2012, , .		13
118	Maneuvering control of planar snake robots based on a simplified model. , 2014, , .		13
119	A wave simulator and active heave compensation framework for demanding offshore crane operations. , 2015, , .		13
120	A control framework for biologically inspired underwater swimming manipulators equipped with thrusters**This research was partly funded by the Research Council of Norway through the Centres of Excellence funding scheme, project No. 223254 NTNU AMOS, and partly funded by VISTA, a basic research program in collaboration between the Norwegian Academy of Science and Letters, and	0.9	13
121	Statoil. IFAC-PapersOnLine, 2016, 49, 89-96. Multi-objective optimization for efficient motion of underwater snake robots. Artificial Life and Robotics, 2016, 21, 411-422.	1.2	13
122	Global /spl kappa/-exponential way-point manoeuvering of ships. , 2004, , .		12
123	Experimental results on synchronization control of ship rendezvous operations. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 453-458.	0.4	12
124	MODULAR PNEUMATIC SNAKE ROBOT 3D MODELLING, IMPLEMENTATION AND CONTROL. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2005, 38, 19-24.	0.4	12
125	Optimal statistical operators for 3-dimensional rotational data: geometric interpretations and application to prosthesis kinematics. Robotica, 2005, 23, 283-292.	1.9	12
126	Non-smooth 3D Modeling of a Snake Robot with Frictional Unilateral Constraints. , 2006, , .		12

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127	Snake robot obstacle aided locomotion: An experimental validation of a non-smooth modeling approach. , 2007, , .		12
128	A 6 DOF nonlinear observer for auvs with experimental results. , 2007, , .		12
129	Controllability analysis of planar snake robots influenced by viscous ground friction. , 2009, , .		12
130	Singularity-free dynamic equations of spacecraft-manipulator systems. Acta Astronautica, 2011, 69, 1057-1065.	3.2	12
131	Active camera control with obstacle avoidance for remote operations with industrial manipulators: Implementation and experimental results., 2011,,.		12
132	Fast dual-arm manipulation using variable admittance control: Implementation and experimental results. , $2014, \ldots$		12
133	Modeling and propulsion methods of underwater snake robots. , 2017, , .		12
134	Experimental investigation of locomotion efficiency and path-following for underwater snake robots with and without a caudal fin. Annual Reviews in Control, 2018, 46, 281-294.	7.9	12
135	Formation path following control of underactuated USVs. European Journal of Control, 2021, 62, 171-184.	2.6	12
136	Global output feedback PID control for n-DOF Euler-Lagrange systems. , 2006, , .		11
137	Path following control of planar snake robots using a cascaded approach. , 2010, , .		11
138	Path following control of planar snake robots using virtual holonomic constraints. , 2013, , .		11
139	A control-oriented model of underwater snake robots. , 2014, , .		11
140	Path planning and guidance for underactuated vehicles with limited field-of-view. Ocean Engineering, 2019, 174, 84-95.	4.3	11
141	Economic model predictive control for snake robot locomotion. , 2019, , .		11
142	A 3D reactive collision avoidance algorithm for underactuated underwater vehicles. Journal of Field Robotics, 2020, 37, 1094-1122.	6.0	11
143	A Virtual Vehicle Approach to Underway Replenishment. , 2006, , 171-189.		10
144	An optimal guidance scheme for cross-track control of underactuated underwater vehicles. , 2006, , .		10

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145	Conditional Integrators for Path Following and Formation Control of Marine Vessels under Constant Disturbances. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 179-184.	0.4	10
146	Fundamental properties of snake robot locomotion. , 2010, , .		10
147	Stability analysis of snake robot locomotion based on averaging theory. , 2010, , .		10
148	Topics on Current Compensation for Path Following Applications of Underactuated Underwater Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 184-191.	0.4	10
149	A new Coriolis matrix factorization. , 2012, , .		10
150	Modeling of underwater swimming manipulators**This research was partly funded by the Research Council of Norway through the Centres of Excellence funding scheme, project No. 223254 NTNU AMOS, and partly funded by VISTA, a basic research program in collaboration between The Norwegian Academy of Science and Letters, and Statoil IFAC-PapersOnLine, 2016, 49, 81-88.	0.9	10
151	A hybrid approach to underwater docking of AUVs with cross-current. , 2016, , .		10
152	Kinematic singularity avoidance for robot manipulators using set-based manipulability tasks., 2017,,.		10
153	A reactive collision avoidance algorithm for nonholonomic vehicles. , 2017, , .		10
154	A Benchmarking Framework for Control Methods of Maritime Cranes Based on the Functional Mockup Interface. IEEE Journal of Oceanic Engineering, 2018, 43, 468-483.	3.8	10
155	Output feedback control of an AUV with experimental results. , 2007, , .		9
156	STRAIGHT LINE PATH FOLLOWING FOR FORMATIONS OF UNDERACTUATED SURFACE VESSELS. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 521-526.	0.4	9
157	A control framework for snake robot locomotion based on shape control points interconnected by Bézier curves. , 2012, , .		9
158	Stability analysis of underwater snake robot locomotion based on averaging theory. , 2014, , .		9
159	A mapping approach for controlling different maritime cranes and robots using ANN. , 2014, , .		9
160	Uniform Semiglobal Exponential Stability of Integral Line-of-Sight Guidance Lawsâ—â^—This work was partly supported by the Research Council of Norway through the Centres of Excellence funding scheme, project no. 223254 - AMOS. IFAC-PapersOnLine, 2015, 48, 61-68.	0.9	9
161	Navigation and Probability Assessment for Successful AUV Docking Using USBLâ^—â^—This work was partly supported by the Research Council of Norway through the Centres of Excellence funding scheme, project No. 223254 { AMOS, and project No. 205622 IFAC-PapersOnLine, 2015, 48, 204-209.	0.9	9
162	Incorporating set-based control within the singularity-robust multiple task-priority inverse kinematics. , 2015, , .		9

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163	A control-oriented model of underwater snake robots exposed to currents., 2015,,.		9
164	Learning an AUV docking maneuver with a convolutional neural network. IFAC Journal of Systems and Control, 2019, 8, 100049.	1.7	9
165	Set-based collision avoidance applications to robotic systems. Mechatronics, 2020, 69, 102399.	3.3	9
166	Free-floating robotic systems. , 1998, , 119-134.		8
167	Non-smooth 3D Modeling of a Snake Robot with External Obstacles. , 2006, , .		8
168	Formation Control of 6-DOF Euler-Lagrange Systems with Restricted Inter-Vehicle Communication. , 2006, , .		8
169	Leader-Follower output reference state feedback synchronization control of Euler-Lagrange systems. , 2007, , .		8
170	Experimental investigation of a path following controller for planar snake robots. , 2010, , .		8
171	PI2-Controller Applied to a Piezoelectric Nanopositioner Using Conditional Integrators and Optimal Tuning. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 887-892.	0.4	8
172	Lateral undulation of snake robots: a simplified model and fundamental properties. Robotica, 2013, 31, 1005-1036.	1.9	8
173	Direction following control of planar snake robots using virtual holonomic constraints., 2014,,.		8
174	Modeling of underwater snake robots moving in a vertical plane in 3D., 2014,,.		8
175	Body shape and orientation control for locomotion of biologically-inspired snake robots. , 2014, , .		8
176	Adaptive Source Seeking with Leader-Follower Formation Controlâ^—â^—This work was supported by the Research Council of Norway through the Centres of Excellence funding scheme, Project numbe 223254 - AMOS IFAC-PapersOnLine, 2015, 48, 285-290.	0.9	8
177	A coupling library for the force dimension haptic devices and the 20-sim modelling and simulation environment. , $2015, , .$		8
178	Topography and force imaging in atomic force microscopy by state and parameter estimation., 2015,,.		8
179	Underactuated leader-follower synchronisation for multi-agent systems with rejection of unknown disturbances., 2015,,.		8
180	Geometric path following with ocean current estimation for ASVs and AUVs. , 2016, , .		8

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181	Task-Priority Control of Redundant Robotic Systems using Control Lyapunov and Control Barrier Function based Quadratic Programs. IFAC-PapersOnLine, 2020, 53, 9037-9044.	0.9	8
182	Underactuated Ship Stabilization Using Integral Control: Experimental Results with Cybership I. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 125-130.	0.4	7
183	Output synchronization control of Euler-Lagrange systems with nonlinear damping terms. , 0, , .		7
184	Design of output-feedback control system for high speed maneuvering of an underwater vehicle., 0,,.		7
185	Output Tracking Control of PWA Systems. , 2006, , .		7
186	Stable inversion of non-minimum phase nonlinear systems: A convergent systems approach. , 2007, , .		7
187	Curved trajectory tracking for surface vessel formations. , 2010, , .		7
188	Path following of marine surface vessels with saturated transverse actuators. , 2013, , .		7
189	Path Following of Underactuated Surface Vessels in Presence of Unknown Constant Environmental Forces: Preliminary Results. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 85-90.	0.4	7
190	Analysis of underwater snake robot locomotion based on a control-oriented model. , 2015, , .		7
191	The new architecture of ModGrasp for mind-controlled low-cost sensorised modular hands. , 2015, , .		7
192	Trajectory tracking of under-actuated marine vehicles. , 2016, , .		7
193	Tracking control of an articulated intervention AUV in 6DOF using the generalized super-twisting algorithm. , 2019, , .		7
194	Semi-Global Practical Stabilization and Disturbance Adaptation for an Underactuated Ship. Modeling, Identification and Control, 2001, 22, 89-101.	1.1	7
195	Master-Slave synchronization of robot manipulators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2004, 37, 447-452.	0.4	6
196	A UGAS observer for n-DOF Euler-Lagrange systems. , 2006, , .		6
197	Control of slender body underactuated AUVs with current estimation. , 2006, , .		6
198	A MODEL-BASED OCEAN CURRENT OBSERVER FOR 6DOF UNDERWATER VEHICLES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 169-174.	0.4	6

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199	Counter-Current and Co-Current Guidance of Underactuated Unmanned Marine Vehicles. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 60-66.	0.4	6
200	Null-space-based behavior guidance of planar dual-arm UVMS. , 2014, , .		6
201	Experimental results for set-based control within the singularity-robust multiple task-priority inverse kinematics framework. , 2015, , .		6
202	Path Following for Underactuated Marine Vessels. IFAC-PapersOnLine, 2016, 49, 588-593.	0.9	6
203	Leader-follower synchronization with disturbance rejection. , 2016, , .		6
204	A reactive collision avoidance algorithm for vehicles with underactuated dynamics. , 2017, , .		6
205	Model-Based Identification of Nanomechanical Properties in Atomic Force Microscopy: Theory and Experiments. IEEE Transactions on Control Systems Technology, 2019, 27, 2045-2057.	5.2	6
206	Robust observer design for underwater vehicles. , 2006, , .		5
207	Operational space synchronization of two robot manipulators through a virtual velocity estimate. , 2007, , .		5
208	Singularity-Free Dynamic Equations of AUV-Manipulator Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2010, 43, 31-36.	0.4	5
209	A hybrid model of obstacle-aided snake robot locomotion. , 2010, , .		5
210	Experimental investigation of fundamental properties of snake robot locomotion. , 2010, , .		5
211	Path following control of snake robots in unstructured environments. , 2011, , .		5
212	On the Boundedness Property of the Inertia Matrix and Skew-Symmetric Property of the Coriolis Matrix for Vehicle-Manipulator Systems. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2012, 134, .	1.6	5
213	Design of a nonlinear damping control scheme for nanopositioning. , 2013, , .		5
214	OpenMRH: A modular robotic hand generator plugin for OpenRAVE. , 2015, , .		5
215	Integral Line-of-Sight Guidance of Underwater Vehicles Without Neutral Buoyancy**This work was partly supported by the Research Council of Norway through the Centres of Excellence funding scheme, project no. 223254 - NTNU AMOS. IFAC-PapersOnLine, 2016, 49, 590-597.	0.9	5
216	Formation control of underactuated bio-inspired snake robots. Artificial Life and Robotics, 2016, 21, 282-294.	1.2	5

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218	Spiral path planning for docking of underactuated vehicles with limited FOV., 2017,,.		5
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