Olav Egeland

List of Publications by Year
in descending order

121 papers	3,120 citations	279798 23 h-index	175258 52 g-index
137 all docs	137 docs citations	137 times ranked	1802 citing authors

#	Article	IF	Citations
1	Exponential stabilization of nonholonomic chained systems. IEEE Transactions on Automatic Control, 1995, 40, 35-49.	5.7	495
2	Dissipative Systems Analysis and Control. Communications and Control Engineering, 2000, , .	1.6	313
3	Review of the damped least-squares inverse kinematics with experiments on an industrial robot manipulator. IEEE Transactions on Control Systems Technology, 1994, 2, 123-134.	5.2	243
4	Passivity-based adaptive attitude control of a rigid spacecraft. IEEE Transactions on Automatic Control, 1994, 39, 842-846.	5.7	235
5	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
6	Centrifugal compressor surge and speed control. IEEE Transactions on Control Systems Technology, 1999, 7, 567-579.	5.2	121
7	State-space representation of radiation forces in time-domain vessel models. Ocean Engineering, 2005, 32, 2195-2216.	4.3	113
8	Compressor Surge and Rotating Stall. Advances in Industrial Control, 1999, , .	0.5	104
9	Drive torque actuation in active surge control of centrifugal compressors. Automatica, 2002, 38, 1881-1893.	5.0	91
10	A Lyapunov approach to exponential stabilization of nonholonomic systems in power form. IEEE Transactions on Automatic Control, 1997, 42, 1028-1032.	5.7	88
11	VSS-version of energy-based control for swinging up a pendulum. Systems and Control Letters, 2001, 44, 45-56.	2.3	58
12	Free-piston diesel engine timing and control - toward electronic cam- and crankshaft. IEEE Transactions on Control Systems Technology, 2002, 10, 177-190.	5.2	53
13	Parallel Force/Position Crane Control in Marine Operations. IEEE Journal of Oceanic Engineering, 2006, 31, 599-613.	3.8	52
14	Feedback Control of a Nonholonomic Underwater Vehicle With a Constant Desired Configuration. International Journal of Robotics Research, 1996, 15, 24-35.	8.5	51
15	Trajectory planning and collision avoidance for underwater vehicles using optimal control. IEEE Journal of Oceanic Engineering, 1994, 19, 502-511.	3.8	48
16	Modeling of Surge in Free-Spool Centrifugal Compressors: Experimental Validation. Journal of Propulsion and Power, 2004, 20, 849-857.	2.2	48
17	Design of ride control system for surface effect ships using dissipative control. Automatica, 1995, 31, 183-199.	5.0	47
18	Swinging up the spherical pendulum via stabilization of its first integrals. Automatica, 2004, 40, 73-85.	5.0	47

#	ARTICLE	IF	CITATIONS
19	Frequency-Dependent Added Mass in Models for Controller Design for Wave Motion Damping. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 67-72.	0.4	42
20	Crane feedback control in offshore moonpool operations. Control Engineering Practice, 2008, 16, 356-364.	5.5	34
21	Coordination of Motion in a Spacecraft/ Manipulator System. International Journal of Robotics Research, 1993, 12, 366-379.	8.5	29
22	Dynamics and Control of a Free-Piston Diesel Engine. Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME, 2003, 125, 468-474.	1.6	29
23	Dynamic modelling and force analysis of a knuckle boom crane using screw theory. Mechanism and Machine Theory, 2019, 133, 179-194.	4.5	27
24	Inverse Kinematics for Industrial Robots using Conformal Geometric Algebra. Modeling, Identification and Control, 2016, 37, 63-75.	1.1	23
25	Infinite dimensional observer for a flexible robot arm with a tip load. Asian Journal of Control, 2008, 10, 456-461.	3.0	21
26	Dynamics of luffing motion of a flexible knuckle boom crane actuated by hydraulic cylinders. Mechanism and Machine Theory, 2020, 143, 103616.	4.5	21
27	Hardware-in-the-loop testing of marine control system. Modeling, Identification and Control, 2006, 27, 239-258.	1.1	20
28	Control of the three state Moore-Greitzer compressor model using a close-coupled valve. , 1997, , .		19
29	Exponential Stabilization of an Underactuated Surface Vessel. Modeling, Identification and Control, 1997, 18, 239-248.	1.1	19
30	A note on Lyapunov stability for an adaptive robot controller. IEEE Transactions on Automatic Control, 1994, 39, 1671-1673.	5.7	17
31	A solution to the blow-up problem in adaptive controllers. Modeling, Identification and Control, 1985, 6, 39-56.	1.1	16
32	Mechanical Design Optimization of a 6DOF Serial Manipulator Using Genetic Algorithm. IEEE Access, 2018, 6, 59087-59095.	4.2	15
33	Coarse Alignment for Model Fitting of Point Clouds Using a Curvature-Based Descriptor. IEEE Transactions on Automation Science and Engineering, 2019, 16, 811-824.	5.2	14
34	Object Detection in Point Clouds Using Conformal Geometric Algebra. Advances in Applied Clifford Algebras, 2017, 27, 1961-1976.	1.0	13
35	Vision System for Quality Assessment of Robotic Cleaning of Fish Processing Plants Using CNN. IEEE Access, 2019, 7, 71675-71685.	4.2	13
36	Dual Quaternion Particle Filtering for Pose Estimation. IEEE Transactions on Control Systems Technology, 2021, 29, 2012-2025.	5.2	13

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37	Speed and surge control for a lower order centrifugal compressor model. Modeling, Identification and Control, 1998, 19, 13-29.	1.1	13
38	Dynamic Interaction of a Heavy Crane and a Ship in Wave Motion. Modeling, Identification and Control, 2018, 39, 45-60.	1.1	13
39	Robotic Assembly of Aircraft Engine Components Using a Closed-loop Alignment Process. Procedia CIRP, 2014, 23, 110-115.	1.9	11
40	A Curvature-Based Descriptor for Point Cloud Alignment Using Conformal Geometric Algebra. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	11
41	Weighted damped least-squares in kinematic control of robotic manipulators. Advanced Robotics, 1992, 7, 201-218.	1.8	10
42	Automatic Touch-Up of Welding Paths Using 3D Vision. IFAC-PapersOnLine, 2016, 49, 73-78.	0.9	10
43	Automatic Multivector Differentiation and Optimization. Advances in Applied Clifford Algebras, 2017, 27, 707-731.	1.0	10
44	Feedback Linearizing Control of a Gas-Liquid Cylindrical Cyclone. IFAC-PapersOnLine, 2017, 50, 13121-13128.	0.9	10
45	Applied Runge–Kutta–Munthe-Kaas Integration for the Quaternion Kinematics. Journal of Guidance, Control, and Dynamics, 2019, 42, 2747-2754.	2.8	10
46	Kinematics and Dynamics of Flexible Robotic Manipulators Using Dual Screws. IEEE Transactions on Robotics, 2021, 37, 206-224.	10.3	10
47	An EKF for Lie Groups with Application to Crane Load Dynamics. Modeling, Identification and Control, 2019, 40, 109-124.	1.1	10
48	Redundancy resolution for the human-arm-like manipulator. Robotics and Autonomous Systems, 1991, 8, 239-250.	5.1	9
49	Lyapunov-based damping controller with nonlinear MPC control of payload position for a knuckle boom crane. Automatica, 2022, 140, 110219.	5.0	9
50	Free-floating robotic systems. , 1998, , 119-134.		8
51	Control-oriented modelling of gas-liquid cylindrical cyclones. , 2017, , .		8
52	Laser Scanning and Parametrization of Weld Grooves with Reflective Surfaces. Sensors, 2021, 21, 4791.	3.8	8
53	Motion Control of underwater vehicle-manipulator systems using feedback linearization. Modeling, Identification and Control, 1996, 17, 17-26.	1.1	8
54	Kinematic Analysis and Singularity Avoidance for a Seven-Joint Manipulator. , 1990, , .		7

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55	Nonlinear Oscillations in Coriolis-Based Gyroscopes. Nonlinear Dynamics, 1999, 19, 193-235.	5.2	7
56	A Novel Scheme for Positive Real Balanced Truncation. Proceedings of the American Control Conference, 2007, , .	0.0	7
57	Robotic Autoscanning of Highly Skewed Ship Propeller Blades. IFAC-PapersOnLine, 2018, 51, 435-440.	0.9	7
58	Determination of Reaction Forces of a Deck Crane in Wave Motion Using Screw Theory. Journal of Offshore Mechanics and Arctic Engineering, 2019, 141, .	1.2	7
59	Crane load position control using Lyapunov-based pendulum damping and nonlinear MPC position control. , 2019, , .		7
60	A Comparative Study of Actuator Configurations for Satellite Attitude Control. Modeling, Identification and Control, 2005, 26, 201-220.	1.1	7
61	Lie Algebraic Unscented Kalman Filter for Pose Estimation. IEEE Transactions on Automatic Control, 2022, 67, 4300-4307.	5.7	7
62	A passive output feedback controller with wave filter for marine vehicles. , 1998, 8, 1239-1253.		6
63	Vision-based control of a knuckle boom crane with online cable length estimation. IEEE/ASME Transactions on Mechatronics, 2020, , 1-1.	5.8	6
64	Optimal continuous-path control for manipulators with redundant degrees of freedom. Modeling, Identification and Control, 1989, 10, 77-89.	1.1	6
65	Manipulator control in singular configurationsâ€"Motion in degenerate directions. , 1991, , 296-306.		5
66	Estimation of crane load parameters during tracking using expectation-maximization. , 2017, , .		5
67	Motor Estimation using Heterogeneous Sets of Objects in Conformal Geometric Algebra. Advances in Applied Clifford Algebras, 2017, 27, 2035-2049.	1.0	5
68	Modeling and Control of a Bifilar Crane Payload. , 2018, , .		5
69	State-space representation of radiation forces in time-domain vessel models. Modeling, Identification and Control, 2006, 27, 23-41.	1.1	5
70	New Schemes for Positive Real Truncation. Modeling, Identification and Control, 2007, 28, 53-65.	1.1	5
71	Identification of the geometric design parameters of propeller blades from 3D scanning. Journal of Marine Science and Technology, 2022, 27, 887-906.	2.9	5
72	Second-order Observer for a Class of Second-Order Distributed Parameter Systems. , 2006, , .		4

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73	Passivity-based Control. Communications and Control Engineering, 2007, , 373-434.	1.6	4
74	Motor Parameterization. Advances in Applied Clifford Algebras, 2018, 28, 1.	1.0	4
75	Pose Estimation using Dual Quaternions and Moving Horizon Estimation. IFAC-PapersOnLine, 2018, 51, 186-191.	0.9	4
76	Robotic weld groove scanning for large tubular T-joints using a line laser sensor. International Journal of Advanced Manufacturing Technology, 2022, 120, 4525-4538.	3.0	4
77	Bounds on the largest singular value of the manipulator Jacobian. IEEE Transactions on Automation Science and Engineering, 1993, 9, 93-96.	2.3	3
78	Experimental results on controlling a 6-DOF robot manipulator in the neighborhood of kinematic singularities. , 1994, , 1-13.		3
79	MIMO AND SISO IDENTIFICATION OF RADIATION FORCE TERMS FOR MODELS OF MARINE STRUCTURES IN WAVES. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2007, 40, 235-242.	0.4	3
80	Parameter estimation for visual tracking of a spherical pendulum with particle filter. , 2015, , .		3
81	Collision detection for visual tracking of crane loads using a particle filter. , 2016, , .		3
82	Automated Assembly Using 3D and 2D Cameras. Robotics, 2017, 6, 14.	3.5	3
83	Pose Estimation with Dual Quaternions and Iterative Closest Point. , 2018, , .		3
84	Positive Real Systems. Communications and Control Engineering, 2020, , 9-79.	1.6	3
85	Cartesian Trajectory Tracking for Manipulators Using Optimal Control Theory. Modeling, Identification and Control, 1987, 8, 137-147.	1.1	3
86	Dynamic Control of Kinematically Redundant Robotic Manipulators. Modeling, Identification and Control, 1987, 8, 159-174.	1.1	3
87	Robot control in singular configurations â€" Analysis and experimental results. , 1993, , 25-34.		2
88	Motion Control of Underwater Vehicle-Manipulator Systems Using Feedback Linearization. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1995, 28, 54-59.	0.4	2
89	Maximum power absorption with active struts. Journal of Guidance, Control, and Dynamics, 1995, 18, 907-908.	2.8	2
90	Kalman-Yakubovich-Popov Lemma. Communications and Control Engineering, 2007, , 69-176.	1.6	2

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91	Kinematic Feedback Control Using Dual Quaternions. , 2018, , .		2
92	Determination of constraint forces for an offshore crane on a moving base. , 2018, , .		2
93	Stabilization of Stable Manifold of Upright Position of the Spherical Pendulum. Modeling, Identification and Control, 2001, 22, 3-14.	1.1	2
94	On the Robustness of the Computed Torque Technique in Manipulator Control. Modeling, Identification and Control, 1987, 8, 149-158.	1.1	2
95	Numerical study on buckling of aluminum extruded panels considering welding effects. Marine Structures, 2022, 84, 103230.	3.8	2
96	Output Feedback Stabilization of Towed Marine Cable. , 2006, , .		1
97	Output Feedback Stabilization of a Class of Second-Order Distributed Parameter Systems. , 2006, , .		1
98	Dissipative Physical Systems. Communications and Control Engineering, 2007, , 315-371.	1.6	1
99	Online state estimation of flexible beams based on particle filtering and camera images. , 2014, , .		1
100	Loading of hanging trolleys on overhead conveyor with industrial robots. , 2015, , .		1
101	Initial alignment of point clouds using motors. , 2017, , .		1
102	Development and validation of robotic cleaning system for fish processing plants. , 2017, , .		1
103	Detection and Inspection Planning for Ship Propeller Blades via Spectral Shape Analysis. IFAC-PapersOnLine, 2019, 52, 154-159.	0.9	1
104	Dissipative Systems. Communications and Control Engineering, 2020, , 263-355.	1.6	1
105	Dissipative Physical Systems. Communications and Control Engineering, 2020, , 429-490.	1.6	1
106	Passivity-Based Control. Communications and Control Engineering, 2020, , 491-573.	1.6	1
107	Boundary control design for towed cables via backstepping. , 2003, , .		1
108	Robust performance in dynamic positioning systems. Modeling, Identification and Control, 1996, 17, 75-86.	1.1	1

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109	Task Space Tracking for Manipulators. Modeling, Identification and Control, 1985, 6, 91-101.	1.1	1
110	MODELING AND CONTROL OF A TOWED SEISMIC STREAMER. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2002, 35, 385-390.	0.4	0
111	Adaptive wave synchronization for lowering of crane load. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 163-168.	0.4	0
112	Output Feedback Stabilization of a Flexible Beam with Hydraulic Drive. , 2006, , .		0
113	Positive Real Systems. Communications and Control Engineering, 2007, , 9-68.	1.6	0
114	Stability of Dissipative Systems. Communications and Control Engineering, 2007, , 257-313.	1.6	0
115	Adaptive Control. Communications and Control Engineering, 2007, , 435-465.	1.6	0
116	Experimental Results. Communications and Control Engineering, 2007, , 467-506.	1.6	0
117	Particle filter based tracking of free-swinging objects for visual servoing. , 2014, , .		0
118	Planning of Robotic Inspection from Visual Tracking of Manual Surface Finishing Tool. , 2019, , .		0
119	Kalmanâ€"Yakubovichâ€"Popov Lemma. Communications and Control Engineering, 2020, , 81-261.	1.6	0
120	Stability of Dissipative Systems. Communications and Control Engineering, 2020, , 357-427.	1.6	0
121	Experimental Results. Communications and Control Engineering, 2020, , 605-647.	1.6	0