

# Anders Robertsson

## List of Publications by Year in descending order

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123  
papers

1,657  
citations

471509

17  
h-index

434195

31  
g-index

124  
all docs

124  
docs citations

124  
times ranked

1321  
citing authors

#	ARTICLE	IF	CITATIONS
1	LuGre-Model-Based Friction Compensation. IEEE Transactions on Control Systems Technology, 2010, 18, 194-200.	5.2	179
2	Cost-efficient drilling using industrial robots with high-bandwidth force feedback. Robotics and Computer-Integrated Manufacturing, 2010, 26, 24-38.	9.9	116
3	Virtual-Holonomic-Constraints-Based Design of Stable Oscillations of Furuta Pendulum: Theory and Experiments. IEEE Transactions on Robotics, 2007, 23, 827-832.	10.3	85
4	Force controlled robotic assembly without a force sensor. , 2012, , .		71
5	Sensor Fusion for Compliant Robot Motion Control. , 2008, 24, 430-441.		57
6	Observer-based strict positive real (SPR) feedback control system design. Automatica, 2002, 38, 1557-1564.	5.0	56
7	Integrated approach to robotic machining with macro/micro-actuation. Robotics and Computer-Integrated Manufacturing, 2014, 30, 636-647.	9.9	45
8	State-space system identification of robot manipulator dynamics. Mechatronics, 2000, 10, 403-418.	3.3	42
9	Robotic force estimation using motor torques and modeling of low velocity friction disturbances. , 2013, , .		37
10	Sensor integration in task-level programming and industrial robotic task execution control. Industrial Robot, 2004, 31, 284-296.	2.1	34
11	On the integration of skilled robot motions for productivity in manufacturing. , 2011, , .		32
12	Conclusions of the ARTIST2 roadmap on control of computing systems. ACM SIGBED Review, 2006, 3, 11-20.	1.8	30
13	Sensor Fusion for Robotic Workspace State Estimation. IEEE/ASME Transactions on Mechatronics, 2016, 21, 2236-2248.	5.8	30
14	On Distributed Knowledge Bases for Robotized Small-Batch Assembly. IEEE Transactions on Automation Science and Engineering, 2015, 12, 519-528.	5.2	29
15	Reactive Task Adaptation Based on Hierarchical Constraints Classification for Safe Industrial Robots. IEEE/ASME Transactions on Mechatronics, 2015, 20, 2935-2949.	5.8	28
16	Increasing Time-Efficiency and Accuracy of Robotic Machining Processes Using Model-Based Adaptive Force Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 543-548.	0.4	26
17	Force controlled assembly of emergency stop button. , 2011, , .		25
18	Real-time trajectory generation using model predictive control. , 2015, , .		24

#	ARTICLE	IF	CITATIONS
19	Detection of contact force transients in robotic assembly. , 2015, , .		24
20	Robot Joint Modeling and Parameter Identification Using the Clamping Method. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 813-818.	0.4	23
21	Rao's Blackwellized Particle Filters With Out-of-Sequence Measurement Processing. IEEE Transactions on Signal Processing, 2014, 62, 6454-6467.	5.3	23
22	Friction compensation based on LuGre model. , 2006, , .		22
23	Resource allocation and disturbance rejection in web servers using SLAs and virtualized servers. IEEE Transactions on Network and Service Management, 2009, 6, 226-239.	4.9	22
24	Shaping stable periodic motions of inertia wheel pendulum: theory and experiment. Asian Journal of Control, 2009, 11, 548-556.	3.0	21
25	On Orbital Stabilization for Industrial Manipulators: Case Study in Evaluating Performances of Modified PD+ and Inverse Dynamics Controllers. IEEE Transactions on Control Systems Technology, 2017, 25, 101-117.	5.2	21
26	Increasing the milling accuracy for industrial robots using a piezo-actuated high-dynamic micro manipulator. , 2012, , .		20
27	Precise robot motions using dual motor control. , 2010, , .		18
28	Modeling and control of a piezo-actuated high-dynamic compensation mechanism for industrial robots. , 2011, , .		18
29	Model Predictive Control for Real-Time Point-to-Point Trajectory Generation. IEEE Transactions on Automation Science and Engineering, 2019, 16, 972-983.	5.2	18
30	Robotic force estimation using dithering to decrease the low velocity friction uncertainties. , 2015, , .		17
31	Flexible Force Control for Accurate Low-Cost Robot Drilling. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	16
32	On force control for assembly and deburring of castings. Production Engineering, 2013, 7, 351-360.	2.3	16
33	Linear controllers for tracking chained-form systems. Lecture Notes in Control and Information Sciences, 1999, , 183-199.	1.0	15
34	Exploiting task redundancy in industrial manipulators during drilling operations. , 2011, , .		14
35	Estimation-based ILC applied to a parallel kinematic robot. Control Engineering Practice, 2014, 33, 1-9.	5.5	13
36	Sensorless friction-compensated passive lead-through programming for industrial robots. , 2015, , .		13

#	ARTICLE	IF	CITATIONS
37	The Yakubovich-Kalman-Popov lemma and stability analysis of dynamic output feedback systems. International Journal of Robust and Nonlinear Control, 2006, 16, 45-69.	3.7	12
38	Temperature aware power allocation: An optimization framework and case studies. Sustainable Computing: Informatics and Systems, 2012, 2, 117-127.	2.2	12
39	Modeling and identification of position and temperature dependent friction phenomena without temperature sensing. , 2015, , .		12
40	Residual models and stochastic realization in state-space identification. International Journal of Control, 2001, 74, 988-995.	1.9	11
41	Initialization of the Kalman filter without assumptions on the initial state. , 2011, , .		11
42	Six DOF eye-to-hand calibration from 2D measurements using planar constraints. , 2015, , .		11
43	Convergence of Dynamical Movement Primitives with Temporal Coupling. , 2018, , .		11
44	Modeling and design of admission control mechanisms for web servers using nonlinear control theory. , 2003, , .		10
45	Friction Compensation for Passive Systems Based on the LuGre Model 1. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2003, 36, 159-164.	0.4	9
46	Object tracking with measurements from single or multiple cameras. , 2010, , .		9
47	Adaptation of Force Control Parameters in Robotic Assembly. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 561-566.	0.4	9
48	Performance modelling and control of server systems using non-linear control theory. Teletraffic Science and Engineering, 2003, , 1151-1160.	0.4	8
49	Accuracy of Kinematic and Dynamic Models of a Gantry-Tau Parallel Kinematic Robot. , 2007, , .		8
50	A constraint-based strategy for task-consistent safe human-robot interaction. , 2013, , .		8
51	Trajectory Generation for Assembly Tasks via Bilateral Teleoperation. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10230-10235.	0.4	8
52	Iterative Learning Control for Machining with Industrial Robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 9327-9333.	0.4	8
53	Configuration Support and Kinematics for a Reconfigurable Gantry-Tau Manipulator. , 2007, , .		7
54	Estimaci3n de la fuerza de contacto para el control de robots manipuladores con movimientos restringidos. RIAI - Revista Iberoamericana De Automatica E Informatica Industrial, 2007, 4, 70-82.	1.0	7

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55	NARX-based multi-step ahead response time prediction for database servers. , 2011, , .		7
56	Augmenting L1 adaptive control of piecewise constant type to a fighter aircraft. Performance and robustness evaluation for rapid maneuvering.. , 2012, , .		7
57	Integrated time-optimal trajectory planning and control design for industrial robot manipulator. , 2013, , .		7
58	Adaptive internal model control for mid-ranging of closed-loop systems with internal saturation. , 2013, , .		7
59	On a Feedback Control-Based Mechanism of Bidding for Cloud Spot Service. , 2015, , .		7
60	Improving contact force estimation accuracy by optimal redundancy resolution. , 2016, , .		7
61	Learning Approach to Cycle-Time-Minimization of Wood Milling Using Adaptive Force Control. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2016, 138, .	2.2	7
62	Virtual-Constraints-Based Design of Stable Oscillations of Furuta Pendulum: Theory and Experiments. , 2006, , .		6
63	Criteria for global stability of coupled systems with application to robust output feedback design for active surge control. , 2009, , .		6
64	Subspace-based identification of compliance dynamics of parallel kinematic manipulator. , 2009, , .		6
65	A kinematic error model for a parallel Gantry-Tau manipulator. , 2010, , .		6
66	Mobile manipulation with a kinematically redundant manipulator for a pick-and-place scenario. , 2012, , .		6
67	Robotic assembly of emergency stop buttons. , 2013, , .		6
68	Stabilization of Rotational Modes for the Furuta Pendulum. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 813-818.	0.4	5
69	Response-time control of a single server queue. , 2007, , .		5
70	Stable periodic motions of inertia wheel pendulum via virtual holonomic constraints. , 2007, , .		5
71	Observer-based ILC Applied to the Gantry-Tau Parallel Kinematic Robot. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 992-998.	0.4	5
72	Force controlled assembly of flexible aircraft structure. , 2011, , .		5

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73	Robotic Assembly Using a Singularity-Free Orientation Representation Based on Quaternions. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 549-554.	0.4	5
74	Target Localization and Circumnavigation With Integral Action in $\mathbb{R}^2$ . , 2022, 6, 1250-1255.		5
75	Automatic kinematic calibration of a modular Gantry-Tau parallel robot from a kinematics point of view. , 2008, , .		4
76	Force Feedback for Assembly of Aircraft Structures. , 0, , .		4
77	Multi-step ahead response time prediction for single server queuing systems. , 2011, , .		4
78	Analysis of linear L1 adaptive control architectures for aerospace applications. , 2012, , .		4
79	Increasing the Accuracy for a Piezo-Actuated Micro Manipulator for Industrial Robots using Model-Based Nonlinear Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 277-282.	0.4	4
80	Optimization of a Pendulum System using Optimica and Modelica. , 2009, , .		4
81	Control Theoretic Modelling and Design of Admission Control Mechanisms for Server Systems. Lecture Notes in Computer Science, 2004, , 1366-1371.	1.3	3
82	Response-Time Control of a Processor-Sharing System using Virtualized Server Environments. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2008, 41, 3612-3618.	0.4	3
83	Stability of haptic obstacle avoidance and force interaction. , 2009, , .		3
84	Reconfigurable Parallel Kinematic Manipulator for Flexible Manufacturing. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 145-150.	0.4	3
85	Cascaded Control of Power Input and Welding Temperature During Sealing of Spent Nuclear Fuel Canisters. , 2010, , .		3
86	Attitude Control on $SU(2)$ : Stability, Robustness, and Similarities. , 2022, 6, 73-78.		3
87	Optimal Robot Control Using Modelica and Optimica. , 2009, , .		3
88	A velocity observer based on friction adaptation. , 2008, , .		2
89	Force Controlled Assembly of a Compliant Rib. , 0, , .		2
90	Optimal Tracking and Identification of Paths for Industrial Robots. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 1126-1132.	0.4	2

#	ARTICLE	IF	CITATIONS
91	Design of an intermediate layer to enhance operator awareness and safety in telesurgical systems. , 2012, , .		2
92	Enhancement of human operator's perceptual sensitivity for telesurgical systems via polytopic system approach. , 2012, , .		2
93	Force controlled knife-grinding with industrial robot. , 2012, , .		2
94	Hybrid stiff/compliant workspace control for robotized minimally invasive surgery. , 2014, , .		2
95	Static Stability Analysis of a Planar Object Grasped by Multifingers with Three Joints. Robotics, 2015, 4, 464-491.	3.5	2
96	Joint Stiction Avoidance with Null-Space Motion in Real-Time Model Predictive Control for Redundant Collaborative Robots. , 2021, , .		2
97	Force/Vision Based Active Damping Control of Contact Transition in Dynamic Environments. , 2006, , 299-313.		2
98	Force Control. , 2015, , 1933-1965.		2
99	Nonlinear Observers and Output Feedback Control with Application to Dynamically Positioned Ships. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1998, 31, 793-798.	0.4	1
100	The Yakubovich-Kalman-Popov lemma and stability analysis of dynamic output feedback systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 1999, 32, 3055-3060.	0.4	1
101	Observer-Based Impedance Control in Robotics. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2001, 34, 369-374.	0.4	1
102	On behavioral model identification. Signal Processing, 2004, 84, 1089-1100.	3.7	1
103	High-speed visual robot control using an optimal linearizing intensity-based filtering approach. , 2006, , .		1
104	Integrating an anti-collision system based on laser Time-Of-Flight sensor in an industrial robot controller. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2012, 45, 664-669.	0.4	1
105	Observer-based strictly positive real (SPR) variable structure output feedback control. , 2012, , .		1
106	Analytic parameterization of stabilizing controllers for the surge subsystem of the Moore-Greitzer compressor model. , 2013, , .		1
107	Continuous-time gray-box identification of mechanical systems using subspace-based identification methods. , 2014, , .		1
108	Robustness of the Moore-Greitzer Compressor Model's Surge Subsystem with New Dynamic Output Feedback Controllers. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 3690-3695.	0.4	1

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109	On the Manipulability of Velocity-constrained Serial Robotic Manipulators. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 10934-10939.	0.4	1
110	Observer-based strictly positive real (SPR) variable structure output feedback control. Journal of the Franklin Institute, 2016, 353, 4213-4232.	3.4	1
111	Tuning and Analysis of Geometric Tracking Controllers on SO(3). , 2021, , .		1
112	Modeling and Control of a Parallel Robot Using Modelica. , 2009, , .		1
113	Performance Modeling and Analysis of a Database Server with Write-Heavy Workload. Lecture Notes in Computer Science, 2012, , 184-191.	1.3	1
114	A Robot Playing Scrabble Using Visual Feedback. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2000, 33, 551-556.	0.4	0
115	Active control of thermoacoustic oscillation. , 2006, , .		0
116	Observer Backstepping for Nonlinear Drive Control. , 2006, , .		0
117	Stability of Robotic Obstacle Avoidance and Force Interaction* *The work was partly supported by the Swedish Research Council under the grants: 2005-4182, 2006-5243.. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2009, 42, 561-566.	0.4	0
118	Analysis of buffer delay in web-server control. , 2010, , .		0
119	Nonlinear Feedforward and Reference Systems for Adaptive Flight Control. , 2013, , .		0
120	Path tracking with obstacle avoidance for pseudo-omnidirectional mobile robots using convex optimization. , 2014, , .		0
121	An analytic solution to fixed-time point-to-point trajectory planning. , 2015, , .		0
122	Master-Slave Coordination Using Virtual Constraints for a Redundant Dual-Arm Haptic Interface. , 2018, , .		0
123	Force Control. , 2014, , 1-29.		0