

# HÅkan Hjalmarsson

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6877957/publications.pdf>

Version: 2024-02-01

58

papers

1,287

citations

516710

16

h-index

454955

30

g-index

58

all docs

58

docs citations

58

times ranked

646

citing authors

#	ARTICLE	IF	CITATIONS
1	From experiment design to closed-loop control. Automatica, 2005, 41, 393-438.	5.0	410
2	System Identification of Complex and Structured Systems. European Journal of Control, 2009, 15, 275-310.	2.6	132
3	Identification of ARX systems with non-stationary inputs – asymptotic analysis with application to adaptive input design. Automatica, 2009, 45, 623-633.	5.0	52
4	Closed loop experiment design for linear time invariant dynamical systems via LMIs. Automatica, 2008, 44, 623-636.	5.0	44
5	A Note on the SPICE Method. IEEE Transactions on Signal Processing, 2013, 61, 4545-4551.	5.3	41
6	Optimal Input Design for Identification of Non-linear Systems: Learning From the Linear Case. Proceedings of the American Control Conference, 2007, , .	0.0	39
7	Application-Oriented Input Design in System Identification: Optimal Input Design for Control [Applications of Control]. IEEE Control Systems, 2017, 37, 31-56.	0.8	39
8	Robust EM kernel-based methods for linear system identification. Automatica, 2016, 67, 114-126.	5.0	37
9	A new kernel-based approach to system identification with quantized output data. Automatica, 2017, 85, 145-152.	5.0	36
10	Experimental evaluation of model predictive control with excitation (MPC-X) on an industrial depropanizer. Journal of Process Control, 2015, 31, 1-16.	3.3	35
11	Analyzing iterations in identification with application to nonparametric identification and control? Joint input design and state feedback with ellipsoidal parametric uncertainty via LMIs. Automatica, 2008, 44, 543-551.	5.0	29
12	Control of IgG glycosylation in CHO cell perfusion cultures by GReBA mathematical model supported by a novel targeted feed, TAFE. Metabolic Engineering, 2021, 65, 135-145.	7.0	27
13	A Geometric Approach to Variance Analysis in System Identification. IEEE Transactions on Automatic Control, 2011, 56, 983-997.	5.7	24
14	On optimal input design for nonlinear FIR-type systems. , 2010, , .	2.6	22
15	On optimal input design in system identification for control. , 2010, , .	2.6	20
16	An application-oriented approach to dual control with excitation for closed-loop identification. European Journal of Control, 2016, 29, 1-16.	2.6	19
17	Learning Robust LQ-Controllers Using Application Oriented Exploration. , 2020, 4, 19-24.	19	

#	ARTICLE	IF	CITATIONS
19	The Box-Jenkins Steiglitz-McBride algorithm. <i>Automatica</i> , 2016, 65, 170-182.	5.0	18
20	How to Make Bias and Variance Errors Insensitive to System and Model Complexity in Identification. <i>IEEE Transactions on Automatic Control</i> , 2011, 56, 100-112.	5.7	15
21	Glycan Residues Balance Analysis - GReBA: A novel model for the N-linked glycosylation of IgG produced by CHO cells. <i>Metabolic Engineering</i> , 2020, 57, 118-128.	7.0	15
22	Conditions when minimum variance control is the optimal experiment for identifying a minimum variance controller. <i>Automatica</i> , 2011, 47, 578-583.	5.0	13
23	Open-loop asymptotically efficient model reduction with the Steiglitz-McBride method. <i>Automatica</i> , 2018, 89, 221-234.	5.0	13
24	A geometric approach to variance analysis in system identification: Theory and nonlinear systems. , 2007, , .		12
25	On optimal input design in system identification for model predictive control. , 2011, , .		12
26	On the Performance of Optimal Input Signals for Frequency Response Estimation. <i>IEEE Transactions on Automatic Control</i> , 2012, 57, 766-771.	5.7	12
27	A geometric approach to variance analysis in system identification: Linear Time-Invariant Systems. , 2007, , .		11
28	Linear prediction error methods for stochastic nonlinear models. <i>Automatica</i> , 2019, 105, 49-63.	5.0	11
29	A least squares approach to direct frequency response estimation. , 2011, , .		10
30	Parametric Identification Using Weighted Null-Space Fitting. <i>IEEE Transactions on Automatic Control</i> , 2019, 64, 2798-2813.	5.7	10
31	ACK-clock Dynamics in Network Congestion Control - An Inner Feedback Loop with Implications on Inelastic Flow Impact. , 2006, , .		9
32	Identification of Linear Models From Quantized Data: A Midpoint-Projection Approach. <i>IEEE Transactions on Automatic Control</i> , 2020, 65, 2801-2813.	5.7	9
33	On optimal input signal design for frequency response estimation. , 2010, , .		6
34	Consistent identification of dynamic networks subject to white noise using Weighted Null-Space Fitting. <i>IFAC-PapersOnLine</i> , 2020, 53, 46-51.	0.9	6
35	Identification of nonlinear systems using misspecified predictors. , 2010, , .		5
36	Probabilistic model by Bayesian network for the prediction of antibody glycosylation in perfusion and fed-batch cell cultures. <i>Biotechnology and Bioengineering</i> , 2021, 118, 3447-3459.	3.3	5

#	ARTICLE	IF	CITATIONS
37	System identification of complex and structured systems. , 2009, , .	5	
38	Variance analysis for identification of cascade systems. , 2008, , .	4	
39	On estimation of the gain of a dynamical system. , 2011, , .	4	
40	Adaptive Input Design for LTI Systems. IEEE Transactions on Automatic Control, 2017, 62, 2390-2405.	5.7	3
41	Toward Tractable Global Solutions to Maximum-Likelihood Estimation Problems via Sparse Sum-of-Squares Relaxations. , 2019, , .	3	
42	On Reducing the Coherence in Sparse System Identification. , 2020, , .	3	
43	Optimal Input Design Through Infinity Norm Minimization Using Proximal Mapping. , 2021, , .	3	
44	On the variance of identified SIMO systems with spatially correlated output noise. , 2014, , .	2	
45	Kernel-based system identification from noisy and incomplete input-output data. , 2016, , .	2	
46	Generation of signals with specified second-order properties for constrained systems. International Journal of Adaptive Control and Signal Processing, 2016, 30, 456-472.	4.1	2
47	Approximate Maximum-likelihood Identification of Linear Systems from Quantized Measurements. IFAC-PapersOnLine, 2018, 51, 724-729.	0.9	2
48	Outlier-Robust Estimation of Uncertain-Input Systems With Applications to Nonparametric FIR and Hammerstein Models. , 2018, 2, 647-652.	2	
49	Estimating models with high-order noise dynamics using semi-parametric weighted null-space fitting. Automatica, 2019, 102, 45-57.	5.0	2
50	Regret Minimization for Linear Quadratic Adaptive Controllers Using Fisher Feedback Exploration. , 2022, 6, 2870-2875.	2	
51	MIMO experiment design based on asymptotic model order theory. , 2009, , .	1	
52	On consistent estimation of farthest NMP zeros of stable LTI systems. , 2011, , .	1	
53	Adaptive experiment design for ARMAX systems? , 2012, , .	1	
54	Efficient OOK/DS-CDMA detection threshold selection. , 2013, , .	1	

#	ARTICLE	IF	CITATIONS
55	Willemssâ€™ fundamental lemma based on second-order moments. , 2021, , .	1	
56	Recursive Weighted Null-Space Fitting Method for Identification of Multivariate Systems. IFAC-PapersOnLine, 2021, 54, 345-350.	0.9	0
57	Estimation of Heteroscedastic Multilinear Systems. , 2020, , .		0
58	Unscented Bayes Methods for Hierarchical Gaussian Processes. , 2020, , .		0