Dr Hendra I Nurdin

List of Publications by Year
in descending order

93 papers	1,883 citations	394421 19 h-index	265206 42 g-index
95 all docs	95 docs citations	95 times ranked	623 citing authors

#	Article	IF	Citations
1	Nonlinear Autoregression With Convergent Dynamics on Novel Computational Platforms. IEEE Transactions on Control Systems Technology, 2022, 30, 2228-2234.	5.2	2
2	Development of an Undergraduate Quantum Engineering Degree. IEEE Transactions on Quantum Engineering, 2022, 3, 1-10.	4.9	8
3	Parameter estimation and system identification for continuously-observed quantum systems. Annual Reviews in Control, 2022, 54, 295-304.	7.9	8
4	Dispatchable Virtual Oscillator Control for Single-Phase Islanded Inverters: Analysis and Experiments. IEEE Transactions on Industrial Electronics, 2021, 68, 4812-4826.	7.9	29
5	Quantum Stochastic Processes and the Modelling of Quantum Noise. , 2021, , 1808-1815.		0
6	Direct approach to realizing quantum filters for high-precision measurements. Physical Review A, 2021, 103, .	2.5	6
7	Online Algorithms for Polynomial Regression on Physical Reservoir Computers with Noisy Measurements. , 2021, , .		0
8	From the Heisenberg to the Schrödinger Picture: Quantum Stochastic Processes and Process Tensors. , 2021, , .		2
9	Temporal Information Processing on Noisy Quantum Computers. Physical Review Applied, 2020, 14, .	3.8	49
10	Transient response comparison of virtual oscillator controlled and droop controlled three‐phase inverters under load changes. IET Generation, Transmission and Distribution, 2020, 14, 1138-1147.	2.5	3
11	Regulation of active and reactive power of a virtual oscillator controlled inverter. IET Generation, Transmission and Distribution, 2020, 14, 62-69.	2.5	6
12	Quantum Stochastic Processes and the Modelling of Quantum Noise. , 2020, , 1-8.		3
13	Data-Driven System Identification of Linear Quantum Systems Coupled to Time-Varying Coherent Inputs. , 2020, , .		4
14	Comparison of Virtual Oscillator and Droop Controlled Islanded Three-Phase Microgrids. IEEE Transactions on Energy Conversion, 2019, 34, 1769-1780.	5.2	39
15	Modelling virtual oscillator‐controlled microgrids. IET Generation, Transmission and Distribution, 2019, 13, 2173-2181.	2.5	1
16	Mathematical models of Markovian dephasing. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 385301.	2.1	8
17	Learning nonlinear input–output maps with dissipative quantum systems. Quantum Information Processing, 2019, 18, 1.	2.2	26
18	Stability Analysis of the Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2019, , .		1

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19	Towards Single-Input Single-Output Nonlinear System Identification and Signal Processing on Near-Term Quantum Computers. , 2019, , .		3
20	Generalized Simulated Annealing with Sequentially Modified Cost Function for Combinatorial optimization Problems. , 2019, , .		0
21	Power spectrum identification for quantum linear systems. Automatica, 2018, 90, 255-262.	5.0	7
22	A novel controller for harmonics reduction of grid-tied converters in unbalanced networks. Electric Power Systems Research, 2018, 155, 296-306.	3.6	7
23	Existence of Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2018, , .		1
24	Simultaneous Regulation of Active and Reactive Output Power of Parallel-Connected Virtual Oscillator Controlled Inverters. , 2018, , .		5
25	Output Power Regulation of a Virtual Oscillator Controlled Inverter. , 2018, , .		11
26	Similarities Between Virtual Oscillator Controlled and Droop Controlled Three-Phase Inverters. , 2018, , .		7
27	Representation and network synthesis for a class of mixed quantum–classical linear stochastic systems. Automatica, 2018, 96, 84-97.	5.0	5
28	Tangential Interpolatory Projection for Model Reduction of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2017, 62, 5-17.	5.7	5
29	Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , .	1.6	42
30	Quantum feedback networks with uniform time delays. , 2017, , .		1
31	Can quantum Markov evolutions ever be dynamically decoupled?. , 2017, , .		6
32	Feedback Control of Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 153-202.	1.6	1
33	Linear Systems and Control Theory for Quantum Information. Communications and Control Engineering, 2017, , 203-257.	1.6	0
34	Realization Theory for Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 73-122.	1.6	0
35	Quantum Filtering for Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 123-151.	1.6	1
36	Mathematical Modeling of Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 35-71.	1.6	0

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37	On transfer function realizations for Linear Quantum Stochastic Systems. , 2016, , .		2
38	Perfect single device absorber of arbitrary traveling single photon fields with a tunable coupling parameter: A QSDE approach. , 2016, , .		2
39	Quantum state transfer for multi-input linear quantum systems. , 2016, , .		5
40	Model reduction of cavity nonlinear optics for photonic logic: a quasi-principal components approach. Journal Physics D: Applied Physics, 2016, 49, 465501.	2.8	3
41	Formulae for entanglement in a linear coherent feedback network of multiple nondegenerate optical parametric amplifiers: The infinite bandwidth case. , 2016, , .		2
42	The transfer function of generic linear quantum stochastic systems has a pure cascade realization. Automatica, 2016, 69, 324-333.	5.0	15
43	Optimization of distributed EPR entanglement generated between two Gaussian fields by the modified steepest descent method. , 2015, , .		3
44	A Comparison of PI vs LPV Controllers for a Doubly-Fed Induction Generator in a Microgrid. Wind Engineering, 2015, 39, 479-493.	1.9	1
45	Local optimality of a coherent feedback scheme for distributed entanglement generation: The idealized infinite bandwidth limit. , 2015, , .		2
46	Error bounds on finite-dimensional approximations of input-output open quantum systems. , 2015, , .		2
47	Tangential interpolatory projection for model reduction of completely passive linear quantum stochastic systems. , 2015, , .		0
48	A tutorial introduction to quantum feedback control. , 2015, , .		1
49	On the quasi-balanceable class of linear quantum stochastic systems. Systems and Control Letters, 2015, 78, 25-31.	2.3	12
50	Coherent feedback enabled distributed generation ofÂentanglement between propagating Gaussian fields. Quantum Information Processing, 2015, 14, 337-359.	2.2	10
51	Comparing resolved-sideband cooling and measurement-based feedback cooling on an equal footing: Analytical results in the regime of ground-state cooling. Physical Review A, 2015, 91, .	2.5	17
52	LPV controllers for a DFIG in a microgrid under unbalanced conditions. , 2015, , .		0
53	Quantum trajectories for a class of continuous matrix product input states. New Journal of Physics, 2014, 16, 075008.	2.9	22
54	New complete parameterizations for two related classes of linear quantum stochastic systems. , 2014, , .		0

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55	End-to-end entanglement in a coherent feedback interconnection of three nondegenerate optical parametric amplifiers. , 2014, , .		0
56	Quantum filtering for multiple input multiple output systems driven by arbitrary zero-mean jointly Gaussian input fields. Russian Journal of Mathematical Physics, 2014, 21, 386-398.	1.5	17
57	An error bound on balanced truncation of quasi-balanceable linear quantum stochastic systems. , 2014, , .		0
58	Structures and Transformations for Model Reduction of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2014, 59, 2413-2425.	5.7	24
59	Effect of phase shifts on EPR entanglement generated on two propagating Gaussian fields via coherent feedback. , 2014, , .		2
60	Quantum filtering for systems driven by fields in single photon states and superposition of coherent states using non-Markovian embeddings. Quantum Information Processing, 2013, 12, 1469-1499.	2.2	36
61	Quantum optical realization of classical linear stochastic systems. Automatica, 2013, 49, 3090-3096.	5.0	19
62	Distributed generation of entanglement between spatially separated propagating Gaussian fields via coherent feedback. , 2013, , .		2
63	On balanced realization of linear quantum stochastic systems and model reduction by quasi-balanced truncation. , 2013, , .		2
64	Quantum filtering for systems driven by fields in single-photon states or superposition of coherent states. Physical Review A, 2012, 86, .	2.5	90
65	LQG measurement-feedback control of distributed entanglement generation between continuous-mode Gaussian fields. , 2012, , .		0
66	Synthesis and structure of mixed quantum-classical linear systems. , 2012, , .		13
67	On structure-preserving transformations of the ItÅ•generator matrix for model reduction of quantum feedback networks. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5422-5436.	3.4	8
68	Single photon quantum filtering using non-Markovian embeddings. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5408-5421.	3.4	18
69	Distributed entanglement generation between continuous-mode Gaussian fields with measurement-feedback enhancement. Physical Review A, 2012, 86, .	2.5	16
70	On the Infeasibility of Entanglement Generation in Gaussian Quantum Systems via Classical Control. IEEE Transactions on Automatic Control, 2012, 57, 198-203.	5.7	9
71	A System Theory Proof of the Infeasibility of Entanglement Generation in Gaussian Quantum Systems via Classical Control. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2011, 44, 144-149.	0.4	1
72	Quantum master equation and filter for systems driven by fields in a single photon state. , 2011, , .		11

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73	Quantum filtering for systems driven by fermion fields. Communications in Information and Systems, 2011, 11, 237-268.	0.5	3
74	Synthesis of Linear Quantum Stochastic Systems via Quantum Feedback Networks. IEEE Transactions on Automatic Control, 2010, 55, 1008-1013.	5.7	32
75	Squeezing components in linear quantum feedback networks. Physical Review A, 2010, 81, .	2.5	134
76	Commutativity of the adiabatic elimination limit of fast oscillatory components and the instantaneous feedback limit in quantum feedback networks. Journal of Mathematical Physics, 2010, 51, .	1.1	22
77	On Synthesis of Linear Quantum Stochastic Systems by Pure Cascading. IEEE Transactions on Automatic Control, 2010, 55, 2439-2444.	5.7	44
78	Designing Quantum Memories with Embedded Control: Photonic Circuits for Autonomous Quantum Error Correction. Physical Review Letters, 2010, 105, 040502.	7.8	115
79	On synthesis of linear quantum stochastic systems by pure cascading. , 2010, , .		1
80	A network synthesis theorem for linear dynamical quantum stochastic systems. , 2009, , .		0
81	Synthesis of linear quantum stochastic systems via quantum feedback networks. , 2009, , .		1
82	Reduced-Dimension Linear Transform Coding of Distributed Correlated Signals With Incomplete Observations. IEEE Transactions on Information Theory, 2009, 55, 2848-2858.	2.4	8
83	Coherent quantum LQG control. Automatica, 2009, 45, 1837-1846.	5.0	248
84	Network Synthesis of Linear Dynamical Quantum Stochastic Systems. SIAM Journal on Control and Optimization, 2009, 48, 2686-2718.	2.1	124
85	H^{infty} Control of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2008, 53, 1787-1803.	5.7	394
86	Feedback control of entanglement in a linear quantum network: A case study. , 2008, , .		0
87	Avoiding entanglement sudden death via measurement feedback control in a quantum network. Physical Review A, 2008, 78, .	2.5	67
88	On the Solutions of the Rational Covariance Extension Problem Corresponding to Pseudopolynomials Having Boundary Zeros. IEEE Transactions on Automatic Control, 2006, 51, 350-355.	5.7	4
89	Spectral Factorization of a Class of Matrix–Valued Spectral Densities. SIAM Journal on Control and Optimization, 2006, 45, 1801-1821.	2.1	2
90	New results on the rational covariance extension problem with degree constraint. Systems and Control Letters, 2006, 55, 530-537.	2.3	10

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91	Computation of Degree Constrained Rational Interpolants with Non-Strictly Positive Parametrizing Functions via Homotopy Continuation. , 2006, , .		1
92	On the solutions of the rational covariance extension problem corresponding to pseudopolynomials having boundary zeros. , 2004, , .		4
93	A New Approach to Spectral Factorization of a Class of Matrix-Valued Spectral Densities. , 0, , .		3