Dr Hendra I Nurdin

List of Publications by Year
in descending order

93 papers	1,883 citations	393982 19 h-index	264894 42 g-index
95 all docs	95 docs citations	95 times ranked	623 citing authors

#	Article	IF	Citations
1	H^{∞} Control of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2008, 53, 1787-1803.	3.6	394
2	Coherent quantum LQG control. Automatica, 2009, 45, 1837-1846.	3.0	248
3	Squeezing components in linear quantum feedback networks. Physical Review A, 2010, 81, .	1.0	134
4	Network Synthesis of Linear Dynamical Quantum Stochastic Systems. SIAM Journal on Control and Optimization, 2009, 48, 2686-2718.	1.1	124
5	Designing Quantum Memories with Embedded Control: Photonic Circuits for Autonomous Quantum Error Correction. Physical Review Letters, 2010, 105, 040502.	2.9	115
6	Quantum filtering for systems driven by fields in single-photon states or superposition of coherent states. Physical Review A, 2012, 86, .	1.0	90
7	Avoiding entanglement sudden death via measurement feedback control in a quantum network. Physical Review A, 2008, 78, .	1.0	67
8	Temporal Information Processing on Noisy Quantum Computers. Physical Review Applied, 2020, 14, .	1.5	49
9	On Synthesis of Linear Quantum Stochastic Systems by Pure Cascading. IEEE Transactions on Automatic Control, 2010, 55, 2439-2444.	3.6	44
10	Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , .	1.0	42
11	Comparison of Virtual Oscillator and Droop Controlled Islanded Three-Phase Microgrids. IEEE Transactions on Energy Conversion, 2019, 34, 1769-1780.	3.7	39
12	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.	1.0	36
13	Synthesis of Linear Quantum Stochastic Systems via Quantum Feedback Networks. IEEE Transactions on Automatic Control, 2010, 55, 1008-1013.	3.6	32
14	Dispatchable Virtual Oscillator Control for Single-Phase Islanded Inverters: Analysis and Experiments. IEEE Transactions on Industrial Electronics, 2021, 68, 4812-4826.	5.2	29
15	Learning nonlinear input–output maps with dissipative quantum systems. Quantum Information Processing, 2019, 18, 1.	1.0	26
16	Structures and Transformations for Model Reduction of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2014, 59, 2413-2425.	3.6	24
17	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, .	0.5	22
18	Quantum trajectories for a class of continuous matrix product input states. New Journal of Physics, 2014, 16, 075008.	1.2	22

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19	Quantum optical realization of classical linear stochastic systems. Automatica, 2013, 49, 3090-3096.	3.0	19
20	Single photon quantum filtering using non-Markovian embeddings. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2012, 370, 5408-5421.	1.6	18
21	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.	0.4	17
22	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, .	1.0	17
23	Distributed entanglement generation between continuous-mode Gaussian fields with measurement-feedback enhancement. Physical Review A, 2012, 86, .	1.0	16
24	The transfer function of generic linear quantum stochastic systems has a pure cascade realization. Automatica, 2016, 69, 324-333.	3.0	15
25	Synthesis and structure of mixed quantum-classical linear systems. , 2012, , .		13
26	On the quasi-balanceable class of linear quantum stochastic systems. Systems and Control Letters, 2015, 78, 25-31.	1.3	12
27	Quantum master equation and filter for systems driven by fields in a single photon state. , 2011, , .		11
28	Output Power Regulation of a Virtual Oscillator Controlled Inverter. , 2018, , .		11
29	New results on the rational covariance extension problem with degree constraint. Systems and Control Letters, 2006, 55, 530-537.	1.3	10
30	Coherent feedback enabled distributed generation ofÂentanglement between propagating Gaussian fields. Quantum Information Processing, 2015, 14, 337-359.	1.0	10
31	On the Infeasibility of Entanglement Generation in Gaussian Quantum Systems via Classical Control. IEEE Transactions on Automatic Control, 2012, 57, 198-203.	3.6	9
32	Reduced-Dimension Linear Transform Coding of Distributed Correlated Signals With Incomplete Observations. IEEE Transactions on Information Theory, 2009, 55, 2848-2858.	1.5	8
33	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.	1.6	8
34	Mathematical models of Markovian dephasing. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 385301.	0.7	8
35	Development of an Undergraduate Quantum Engineering Degree. IEEE Transactions on Quantum Engineering, 2022, 3, 1-10.	2.9	8
36	Parameter estimation and system identification for continuously-observed quantum systems. Annual Reviews in Control, 2022, 54, 295-304.	4.4	8

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37	Power spectrum identification for quantum linear systems. Automatica, 2018, 90, 255-262.	3.0	7
38	A novel controller for harmonics reduction of grid-tied converters in unbalanced networks. Electric Power Systems Research, 2018, 155, 296-306.	2.1	7
39	Similarities Between Virtual Oscillator Controlled and Droop Controlled Three-Phase Inverters. , 2018, , .		7
40	Can quantum Markov evolutions ever be dynamically decoupled?. , 2017, , .		6
41	Regulation of active and reactive power of a virtual oscillator controlled inverter. IET Generation, Transmission and Distribution, 2020, 14, 62-69.	1.4	6
42	Direct approach to realizing quantum filters for high-precision measurements. Physical Review A, 2021, 103, .	1.0	6
43	Quantum state transfer for multi-input linear quantum systems. , 2016, , .		5
44	Tangential Interpolatory Projection for Model Reduction of Linear Quantum Stochastic Systems. IEEE Transactions on Automatic Control, 2017, 62, 5-17.	3.6	5
45	Simultaneous Regulation of Active and Reactive Output Power of Parallel-Connected Virtual Oscillator Controlled Inverters. , 2018, , .		5
46	Representation and network synthesis for a class of mixed quantumâ€"classical linear stochastic systems. Automatica, 2018, 96, 84-97.	3.0	5
47	On the solutions of the rational covariance extension problem corresponding to pseudopolynomials having boundary zeros. , 2004, , .		4
48	On the Solutions of the Rational Covariance Extension Problem Corresponding to Pseudopolynomials Having Boundary Zeros. IEEE Transactions on Automatic Control, 2006, 51, 350-355.	3.6	4
49	Data-Driven System Identification of Linear Quantum Systems Coupled to Time-Varying Coherent Inputs. , 2020, , .		4
50	A New Approach to Spectral Factorization of a Class of Matrix-Valued Spectral Densities. , 0, , .		3
51	Optimization of distributed EPR entanglement generated between two Gaussian fields by the modified steepest descent method. , 2015, , .		3
52	Model reduction of cavity nonlinear optics for photonic logic: a quasi-principal components approach. Journal Physics D: Applied Physics, 2016, 49, 465501.	1.3	3
53	Towards Single-Input Single-Output Nonlinear System Identification and Signal Processing on Near-Term Quantum Computers. , 2019, , .		3
54	Transient response comparison of virtual oscillator controlled and droop controlled threeâ€phase inverters under load changes. IET Generation, Transmission and Distribution, 2020, 14, 1138-1147.	1.4	3

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55	Quantum filtering for systems driven by fermion fields. Communications in Information and Systems, 2011, 11, 237-268.	0.3	3
56	Quantum Stochastic Processes and the Modelling of Quantum Noise. , 2020, , 1-8.		3
57	Spectral Factorization of a Class of Matrix–Valued Spectral Densities. SIAM Journal on Control and Optimization, 2006, 45, 1801-1821.	1.1	2
58	Distributed generation of entanglement between spatially separated propagating Gaussian fields via coherent feedback. , 2013, , .		2
59	On balanced realization of linear quantum stochastic systems and model reduction by quasi-balanced truncation. , 2013, , .		2
60	Effect of phase shifts on EPR entanglement generated on two propagating Gaussian fields via coherent feedback. , 2014, , .		2
61	Local optimality of a coherent feedback scheme for distributed entanglement generation: The idealized infinite bandwidth limit. , 2015, , .		2
62	Error bounds on finite-dimensional approximations of input-output open quantum systems. , 2015, , .		2
63	On transfer function realizations for Linear Quantum Stochastic Systems. , 2016, , .		2
64	Perfect single device absorber of arbitrary traveling single photon fields with a tunable coupling parameter: A QSDE approach. , 2016, , .		2
65	Formulae for entanglement in a linear coherent feedback network of multiple nondegenerate optical parametric amplifiers: The infinite bandwidth case. , 2016, , .		2
66	Nonlinear Autoregression With Convergent Dynamics on Novel Computational Platforms. IEEE Transactions on Control Systems Technology, 2022, 30, 2228-2234.	3.2	2
67	From the Heisenberg to the Schrödinger Picture: Quantum Stochastic Processes and Process Tensors. , 2021, , .		2
68	Computation of Degree Constrained Rational Interpolants with Non-Strictly Positive Parametrizing Functions via Homotopy Continuation. , 2006, , .		1
69	Synthesis of linear quantum stochastic systems via quantum feedback networks. , 2009, , .		1
70	On synthesis of linear quantum stochastic systems by pure cascading. , 2010, , .		1
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	A Comparison of PI vs LPV Controllers for a Doubly-Fed Induction Generator in a Microgrid. Wind Engineering, 2015, 39, 479-493.	1.1	1

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73	A tutorial introduction to quantum feedback control. , 2015, , .		1
74	Quantum feedback networks with uniform time delays. , 2017, , .		1
75	Existence of Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2018, , .		1
76	Modelling virtual oscillatorâ€controlled microgrids. IET Generation, Transmission and Distribution, 2019, 13, 2173-2181.	1.4	1
77	Stability Analysis of the Sinusoidal Orbits of a Nonlinear Proportional and Resonant Current Regulator for Islanded Microgrids. , 2019, , .		1
78	Feedback Control of Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 153-202.	1.0	1
79	Quantum Filtering for Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 123-151.	1.0	1
80	Feedback control of entanglement in a linear quantum network: A case study. , 2008, , .		0
81	A network synthesis theorem for linear dynamical quantum stochastic systems. , 2009, , .		0
82	LQG measurement-feedback control of distributed entanglement generation between continuous-mode Gaussian fields. , 2012, , .		0
83	New complete parameterizations for two related classes of linear quantum stochastic systems. , 2014, , .		0
84	End-to-end entanglement in a coherent feedback interconnection of three nondegenerate optical parametric amplifiers. , 2014, , .		0
85	An error bound on balanced truncation of quasi-balanceable linear quantum stochastic systems. , 2014, , .		0
86	Tangential interpolatory projection for model reduction of completely passive linear quantum stochastic systems. , 2015, , .		0
87	LPV controllers for a DFIG in a microgrid under unbalanced conditions. , 2015, , .		0
88	Generalized Simulated Annealing with Sequentially Modified Cost Function for Combinatorial optimization Problems. , 2019, , .		0
89	Quantum Stochastic Processes and the Modelling of Quantum Noise. , 2021, , 1808-1815.		0
90	Linear Systems and Control Theory for Quantum Information. Communications and Control Engineering, 2017, , 203-257.	1.0	0

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91	Realization Theory for Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 73-122.	1.0	0
92	Mathematical Modeling of Linear Dynamical Quantum Systems. Communications and Control Engineering, 2017, , 35-71.	1.0	0
93	Online Algorithms for Polynomial Regression on Physical Reservoir Computers with Noisy Measurements. , 2021, , .		0