Eric Jeckelmann

List of Publications by Citations

67 papers	1,874 citations	24 h-index	42 g-index
76 ext. papers	2,105 ext. citations	3.2 avg, IF	4.94 L-index

#	Paper	IF	Citations
67	Dynamical density-matrix renormalization-group method. *Physical Review B*, **2002**, 66,	3.3	241
66	Density-matrix renormalization-group study of the polaron problem in the Holstein model. *Physical Review B*, **1998**, 57, 6376-6385	3.3	173
65	Spectral function of the one-dimensional Hubbard model away from half filling. *Physical Review Letters*, **2004**, 92, 256401	7.4	107
64	Ground-state phase diagram of a half-filled one-dimensional extended hubbard model. *Physical Review Letters*, **2002**, 89, 236401	7.4	99
63	Density Matrix Approach to Local Hilbert Space Reduction. *Physical Review Letters*, **1998**, 80, 2661-2664	7.4	84
62	Optical conductivity of the half-filled hubbard chain. *Physical Review Letters*, **2000**, 85, 3910-3	7.4	81
61	Metal-insulator transition in the one-dimensional Holstein model at half filling. *Physical Review B*, **1999**, 60, 7950-7955	3.3	79
60	Excitons in one-dimensional Mott insulators. *Physical Review B*, **2001**, 64,	3.3	69
59	Resonant inelastic X-ray scattering of the holon-antiholon continuum in SrCuO2. *Physical Review Letters*, **2004**, 92, 137402	7.4	65
58	Metallicity in the half-filled Holstein-Hubbard model. *Europhysics Letters*, **2008**, 84, 57001	1.6	61
57	Stripe formation in doped Hubbard ladders. *Physical Review B*, **2005**, 71,	3.3	54
56	Dynamical density-matrix renormalization group for the Mott–Hubbard insulator in high dimensions. *Journal of Physics Condensed Matter*, **2004**, 16, 7063-7081	1.8	49
55	Optical excitations in a one-dimensional Mott insulator. *Physical Review B*, **2003**, 67,	3.3	46
54	Comparison of different ladder models. *Physical Review B*, **1998**, 58, 9492-9497	3.3	43
53	Dynamical properties of the one-dimensional Holstein model. *Physical Review B*, **1999**, 60, 14092-14104	3.3	43
52	Real-time decay of a highly excited charge carrier in the one-dimensional Holstein model. *Physical Review B*, **2015**, 91,	3.3	40
51	Density-matrix renormalization group approach to quantum impurity problems. *Journal of Physics Condensed Matter*, **2004**, 16, 613-625	1.8	40

50	The metal-insulator transition in polyacetylene: variational study of the Peierls-Hubbard model. *Synthetic Metals*, **1994**, 65, 211-224	3.6	35
49	Fourth-order perturbation theory for the half-filled Hubbard model in infinite dimensions. *European Physical Journal B*, **2003**, 36, 491-509	1.2	34
48	Parallelization strategies for density matrix renormalization group algorithms on shared-memory systems. *Journal of Computational Physics*, **2004**, 194, 795-808	4.1	32
47	Electronic structure of the spin-12 quantum magnet TiOCl. *Physical Review B*, **2005**, 72,	3.3	31
46	Application of the density matrix renormalization group in momentum space. *Physical Review B*, **2002**, 65,	3.3	29
45	Spin and charge dynamics of the one-dimensional extended Hubbard model. *Physical Review B*, **2007**, 75,	3.3	27
44	Mott-Peierls transition in the extended Peierls-Hubbard model. *Physical Review B*, **1998**, 57, 11838-11841	3.3	25
43	Stripes in a three-chain Hubbard ladder: A comparison of density-matrix renormalization group and constrained-path Monte Carlo results. *Physical Review B*, **2000**, 61, 3251-3254	3.3	24
42	Matrix-product-state method with a dynamical local basis optimization for bosonic systems out of equilibrium. *Physical Review B*, **2015**, 92,	3.3	23
41	Differences between hole and electron doping of a two-leg CuO ladder. *Physical Review B*, **2002**, 66,	3.3	22
40	Numerical method for nonlinear steady-state transport in one-dimensional correlated conductors. *Physical Review B*, **2012**, 85,	3.3	20
39	Grand canonical Peierls transition in In/Si(111). *Physical Review B*, **2016**, 93,	3.3	18
38	Density-Matrix Renormalization Group Methods for Momentum- and Frequency-Resolved Dynamical Correlation Functions. *Progress of Theoretical Physics Supplement*, **2008**, 176, 143-164		18
37	Current-current correlations in the three-band model for two-leg CuO ladders: Density-matrix renormalization group study. *Physical Review B*, **2009**, 79,	3.3	17
36	Finite wave vector pairing in doped two-leg ladders. *Physical Review B*, **2012**, 85,	3.3	14
35	Jeckelmann Replies:. *Physical Review Letters*, **2003**, 91,	7.4	14
34	Charge and spin Drude weight of the one-dimensional extended Hubbard model at quarter filling. *Physical Review B*, **2009**, 79,	3.3	12
33	Local density of states of the one-dimensional spinless fermion model. *Journal of Physics Condensed Matter*, **2013**, 25, 014002	1.8	9

32	Dynamical mean-field theory calculation with the dynamical density-matrix renormalization group. *Physica B: Condensed Matter*, **2006**, 378-380, 283-285	2.8	9
31	On the Correlation Effect in Peierls-Hubbard Chains. *Journal of the Physical Society of Japan*, **2003**, 72, 2277-2281	1.5	7
30	Anisotropic 2D metallicity: plasmons in Ge(1 0 0)-Au. *Journal of Physics Condensed Matter*, **2019**, 31, 175001	0.8	7
29	Optical conductivity of the one-dimensional dimerized Hubbard model at quarter filling. *European Physical Journal B*, **2005**, 44, 287-297	1.2	6
28	Scattering of an electronic wave packet by a one-dimensional electron-phonon-coupled structure. *Physical Review B*, **2017**, 95,	3.3	5
27	Optical excitations of Peierls-Mott insulators with bond disorder. *Journal of Physics Condensed Matter*, **2005**, 17, 4093-4110	1.8	5
26	Comment on Accurate ground-state phase diagram of the one-dimensional extended Hubbard model at half filling *Physical Review B*, **2005**, 71,	3.3	5
25	Solitons in the one-dimensional Peierls-Hubbard model. *Synthetic Metals*, **1995**, 69, 651-653	3.6	5
24	The Hubbard Model and Its Application to Conjugated Electron Systems. *NATO ASI Series Series B: Physics*, **1995**, 393-400		5
23	Blind deconvolution of density-matrix renormalization-group spectra. *Physical Review B*, **2014**, 89,	3.3	4
22	Density-matrix renormalization group method for the conductance of one-dimensional correlated systems using the Kubo formula. *Physical Review B*, **2017**, 96,	3.3	4
21	Ground-state and spectral properties of an asymmetric Hubbard ladder. *Physical Review B*, **2015**, 91,	3.3	4
20	The spin-Peierls chain revisited. *Journal of Magnetism and Magnetic Materials*, **2007**, 310, 1380-1382	2.8	4
19	Correlated atomic wires on substrates. II. Application to Hubbard wires. *Physical Review B*, **2017**, 96,	3.3	3
18	Correlated atomic wires on substrates. I. Mapping to quasi-one-dimensional models. *Physical Review B*, **2017**, 96,	3.3	3
17	Matrix-product approach to conjugated polymers. *Physical Review B*, **2000**, 61, 1841-1846	3.3	3
16	Bond Alternation in Conjugated Materials. *Materials Science Forum*, **1995**, 191, 71-80	0.4	3
15	Variational treatment of the one-dimensional Peierls-Hubbard model: Lattice dimerization and solitons. *Synthetic Metals*, **1993**, 57, 4249-4254	3.6	3

14	Comparative study of state-of-the-art matrix-product-state methods for lattice models with large local Hilbert spaces without U(1) symmetry. *Computer Physics Communications*, **2021**, 269, 108106	4.2	3
13	Hole-doped Hubbard ladders. *Physica B: Condensed Matter*, **2006**, 378-380, 319-320	2.8	2
12	Density-Matrix Renormalization Group Algorithms **2008**, 597-619		2
11	Density-matrix renormalization group study of the linear conductance in quantum wires coupled to interacting leads or phonons. *Physical Review B*, **2019**, 100,	3.3	1
10	Circulating-current phase in the three-band model for two-leg CuO ladders. *Physica C: Superconductivity and Its Applications*, **2010**, 470, S53-S54	1.3	1
9	DENSITY-MATRIX RENORMALISATION GROUP FOR DYNAMIC CORRELATION FUNCTIONS. *International Journal of Modern Physics B*, **2003**, 17, 5453-5457	1.1	1
8	Variational study of the metal-insulator transition in polyacetylene **1994**,		1
7	Correlations and confinement of excitations in an asymmetric Hubbard ladder. *European Physical Journal B*, **2018**, 91, 1	1.2	0
6	Exact Numerical Treatment of Finite Quantum Systems Using Leading-Edge Supercomputers **2005**, 165-177		
5	Methods for electron-phonon systems **1999**, 337-344		
4	Dynamical Density-Matrix Renormalization Group **2008**, 621-635		
3	Recurrent Variational Approach Applied to the Electronic Structure of Conjugated Polymers. *Progress in Theoretical Chemistry and Physics*, **2000**, 169-187	0.6	
2	DMRG Investigation of Stripe Formation in Doped Hubbard Ladders **2005**, 339-347		
1	On the Semiconductor-Metal Transition in Conducting Polymers. *Springer Series in Solid-state Sciences*, **1992**, 16-20	0.4	