

Jan von Delft

List of Publications by Year in descending order

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154
papers

7,171
citations

41344

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156
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156
docs citations

156
times ranked

3832
citing authors

#	ARTICLE	IF	CITATIONS
1	Fulfillment of sum rules and Ward identities in the multiloop functional renormalization group solution of the Anderson impurity model. <i>Physical Review Research</i> , 2022, 4, .	3.6	12
2	Benchmark calculations of multiloop pseudofermion fRG. <i>European Physical Journal B</i> , 2022, 95, .	1.5	9
3	New signatures of the spin gap in quantum point contacts. <i>Nature Communications</i> , 2021, 12, 5.	12.8	6
4	Quantum many-body simulations of the two-dimensional Fermi-Hubbard model in ultracold optical lattices. <i>Physical Review B</i> , 2021, 103, .	3.2	19
5	Study of spin symmetry in the doped t - J model using infinite projected entangled pair states. <i>Physical Review B</i> , 2021, 103, .	3.2	6
6	Reply to: "Extracting Kondo temperature of strongly-correlated systems from the inverse local magnetic susceptibility". <i>Nature Communications</i> , 2021, 12, 1445.	12.8	4
7	Differentiating Hund from Mott physics in a three-band Hubbard-Hund model: Temperature dependence of spectral, transport, and thermodynamic properties. <i>Physical Review B</i> , 2021, 104, .	3.2	5
8	Multipoint Correlation Functions: Spectral Representation and Numerical Evaluation. <i>Physical Review X</i> , 2021, 11, .	8.9	14
9	Computing Local Multipoint Correlators Using the Numerical Renormalization Group. <i>Physical Review X</i> , 2021, 11, .	8.9	10
10	Abelian $SU(2)$ chiral spin liquids on the square lattice. <i>Physical Review B</i> , 2021, 104, .	3.2	13
11	Strongly Correlated Materials from a Numerical Renormalization Group Perspective: How the Fermi-Liquid State of Sr_2RuO_4 Emerges. <i>Physical Review Letters</i> , 2020, 124, 195701.	7.8	41
12	Uncovering Non-Fermi-Liquid Behavior in Hund Metals: Conformal Field Theory Analysis of an $SU(2)$ t - J Model. <i>Physical Review Letters</i> , 2020, 124, 195701.	7.8	41
13	Non-Fermi-liquid Kondo screening under Rabi driving. <i>Physical Review B</i> , 2020, 101, .	3.2	1
14	Global Phase Diagram of a Spin-Orbital Kondo Impurity Model and the Suppression of Fermi-Liquid Scale. <i>Physical Review Letters</i> , 2020, 124, 136406.	7.8	11
15	Renormalized Lindblad driving: A numerically exact nonequilibrium quantum impurity solver. <i>Physical Review Research</i> , 2020, 2, .	3.6	21
16	Thermal tensor renormalization group simulations of square-lattice quantum spin models. <i>Physical Review B</i> , 2019, 100, .	3.2	24
17	Orbital differentiation in Hund metals. <i>Physical Review B</i> , 2019, 100, .	3.2	25
18	Signatures of Mottness and Hundness in archetypal correlated metals. <i>Nature Communications</i> , 2019, 10, 2721.	12.8	41

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19	Two-temperature scales in the triangular-lattice Heisenberg antiferromagnet. Physical Review B, 2019, 99, .	3.2	44
20	Hundness versus Mottness in a three-band Hubbardâ€“Hund model: On the origin of strong correlations in Hund metals. Annals of Physics, 2019, 405, 365-409.	2.8	52
21	Emergent spin-1 trimerized valence bond crystal in the spin- $\frac{1}{2}$ Heisenberg model on the star lattice. Physical Review B, 2018, 97, .	3.2	18
22	Multiloop functional renormalization group for general models. Physical Review B, 2018, 97, .	3.2	53
23	Multiloop Functional Renormalization Group That Sums Up All Parquet Diagrams. Physical Review Letters, 2018, 120, 057403.	7.8	55
24	Nonequilibrium Kondo effect in a magnetic field: auxiliary master equation approach. New Journal of Physics, 2018, 20, 013030.	2.9	22
25	Two-color Fermi-liquid theory for transport through a multilevel Kondo impurity. Physical Review B, 2018, 97, .	3.2	16
26	Fermi-edge singularity and the functional renormalization group. Journal of Physics Condensed Matter, 2018, 30, 195501.	1.8	7
27	Filling-driven Mott transition in $SU(N)$ Hubbard models. Physical Review B, 2018, 97, .	3.2	10
28	Derivation of exact flow equations from the self-consistent parquet relations. New Journal of Physics, 2018, 20, 123029.	2.9	29
29	Nonequilibrium Steady-State Transport in Quantum Impurity Models: A Thermofield and Quantum Quench Approach Using Matrix Product States. Physical Review Letters, 2018, 121, 137702.	7.8	56
30	Functional renormalization group treatment of the 0.7 analog in quantum point contacts. Physical Review B, 2018, 98, .	3.2	2
31	Flavor fluctuations in three-level quantum dots: Generic $SU(3)$ Kondo fixed point in equilibrium and non-Kondo fixed points in nonequilibrium. Physical Review B, 2018, 97, .	3.2	6
32	At which magnetic field, exactly, does the Kondo resonance begin to split? A Fermi liquid description of the low-energy properties of the Anderson model. Physical Review B, 2018, 98, .	3.2	28
33	Open Wilson chains for quantum impurity models: Keeping track of all bath modes. Physical Review B, 2017, 95, .	3.2	8
34	Derivation of Oguri's linear conductance formula for interacting fermions within the Keldysh formalism. Physical Review B, 2017, 96, .	3.2	1
35	Functional renormalization group approach for inhomogeneous one-dimensional Fermi systems with finite-ranged interactions. Physical Review B, 2017, 95, .	3.2	14
36	At which magnetic field, exactly, does the Kondo resonance begin to split? A Fermi liquid description of the low-energy properties of the Anderson model. Physical Review B, 2017, 95, .	3.2	13

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37	Anatomy of quantum critical wave functions in dissipative impurity problems. Physical Review B, 2017, 95, .	3.2	26
38	Fermi-edge exciton-polaritons in doped semiconductor microcavities with finite hole mass. Physical Review B, 2017, 96, .	3.2	14
39	Spin Fluctuations in the 0.7 Anomaly in Quantum Point Contacts. Physical Review Letters, 2017, 119, 196401.	7.8	14
40	Doublon-Holon Origin of the Subpeaks at the Hubbard Band Edges. Physical Review Letters, 2017, 119, 236402.	7.8	25
41	Generalized Schrieffer-Wolff transformation of multiband Hubbard models. Physical Review B, 2017, 96, .	3.2	10
42	Dynamic structure factor of the spin-1 XXZ chain in a transverse field. Physical Review B, 2016, 94, .	3.2	10
43	Interleaved numerical renormalization group as an efficient multiband impurity solver. Physical Review B, 2016, 93, .	3.2	34
44	Lindblad-driven discretized leads for nonequilibrium steady-state transport in quantum impurity models: Recovering the continuum limit. Physical Review B, 2016, 94, .	3.2	40
45	Low-temperature behavior of transmission phase shift across a Kondo correlated quantum dot. Physical Review B, 2016, 94, .	3.2	9
46	Relation between the 0.7 anomaly and the Kondo effect: Geometric crossover between a quantum point contact and a Kondo quantum dot. Physical Review B, 2015, 92, .	3.2	20
47	Dynamical Mean-Field Theory Plus Numerical Renormalization-Group Study of Spin-Orbital Separation in a Three-Band Hund Metal. Physical Review Letters, 2015, 115, 136401.	7.8	97
48	Symmetric minimally entangled typical thermal states. Physical Review B, 2015, 92, .	3.2	12
49	Simplex valence-bond crystal in the spin-1 kagome Heisenberg antiferromagnet. Physical Review B, 2015, 91, .	3.2	41
50	Fermi-liquid theory for the single-impurity Anderson model. Physical Review B, 2015, 92, .	3.2	43
51	Thermalization and dynamics in the single-impurity Anderson model. Physical Review B, 2015, 92, .	3.2	9
52	Hexagon-singlet solid ansatz for the spin-1 kagome antiferromagnet. Physical Review B, 2015, 91, .	3.2	14
53	Two-bath spin-boson model: Phase diagram and critical properties. Physical Review B, 2014, 90, .	3.2	28
54	Toward combined transport and optical studies of the 0.7 anomaly in a quantum point contact. Physica Status Solidi (B): Basic Research, 2014, 251, 1931-1937.	1.5	1

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55	Transmission Phase in the Kondo Regime Revealed in a Two-Path Interferometer. Physical Review Letters, 2014, 113, 126601.	7.8	38
56	Effect of Spin-Orbit Interactions on the 0.7 Anomaly in Quantum Point Contacts. Physical Review Letters, 2014, 113, 266402.	7.8	14
57	Functional renormalization group approach for inhomogeneous interacting Fermi systems. Physical Review B, 2014, 89, .	3.2	24
58	Equilibrium Fermi-liquid coefficients for the fully screened N -channel Kondo model. Physical Review B, 2014, 89, .	3.2	14
59	Microscopic origin of the ~ 0.7 -anomaly TM in quantum point contacts. Nature, 2013, 501, 73-78.	27.8	89
60	Nonequilibrium dynamics in an optical transition from a neutral quantum dot to a correlated many-body state. Physical Review B, 2013, 88, .	3.2	10
61	Observing the Nonequilibrium Dynamics of the Quantum Transverse-Field Ising Chain in Circuit QED. Physical Review Letters, 2013, 110, 030601.	7.8	52
62	Proposed Rabi-Kondo Correlated State in a Laser-Driven Semiconductor Quantum Dot. Physical Review Letters, 2013, 111, 157402.	7.8	13
63	The quantum transverse-field Ising chain in circuit quantum electrodynamics: effects of disorder on the nonequilibrium dynamics. New Journal of Physics, 2013, 15, 035013.	2.9	10
64	Iron impurities in gold and silver: Comparison of transport measurements to numerical renormalization group calculations exploiting non-Abelian symmetries. Physical Review B, 2013, 88, .	3.2	21
65	Quantum corrections to the polarizability and dephasing in isolated disordered metals. Physical Review B, 2013, 88, .	3.2	0
66	SU(3) Anderson impurity model: A numerical renormalization group approach exploiting non-Abelian symmetries. Physical Review B, 2012, 86, .	3.2	19
67	Anderson orthogonality in the dynamics after a local quantum quench. Physical Review B, 2012, 85, .	3.2	27
68	Efficient simulation of infinite tree tensor network states on the Bethe lattice. Physical Review B, 2012, 86, .	3.2	55
69	Stroboscopic observation of quantum many-body dynamics. Physical Review A, 2012, 85, .	2.5	11
70	Critical and Strong-Coupling Phases in One- and Two-Bath Spin-Boson Models. Physical Review Letters, 2012, 108, 160401.	7.8	96
71	Transport and dephasing in a quantum dot: Multiply connected graph model. Annalen Der Physik, 2012, 524, 188-198.	2.4	2
72	Quantum quench of Kondo correlations in optical absorption. Nature, 2011, 474, 627-630.	27.8	92

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73	A numerical algorithm for the explicit calculation of $SU(N)$ and $SL(N, \mathbb{H})$. <i>ETQq1</i> 1 0.784314 ₁₉ / Overlock 10		62
74	Many-Body Dynamics of Exciton Creation in a Quantum Dot by Optical Absorption: A Quantum Quench towards Kondo Correlations. <i>Physical Review Letters</i> , 2011, 106, 107402.	7.8	58
75	Thermal noise and dephasing due to electron interactions in nontrivial geometries. <i>Physical Review B</i> , 2011, 84, .	3.2	10
76	Spin-Kondo effect in an InAs nanowire quantum dot: Unitary limit, conductance scaling, and Zeeman splitting. <i>Physical Review B</i> , 2011, 84, .	3.2	106
77	Universality of the Kondo Effect in Quantum Dots with Ferromagnetic Leads. <i>Physical Review Letters</i> , 2011, 107, 176808.	7.8	82
78	Superradiant Phase Transitions and the Standard Description of Circuit QED. <i>Physical Review Letters</i> , 2011, 107, 113602.	7.8	148
79	Anderson orthogonality and the numerical renormalization group. <i>Physical Review B</i> , 2011, 84, .	3.2	14
80	Chebyshev matrix product state approach for spectral functions. <i>Physical Review B</i> , 2011, 83, .	3.2	96
81	Matrix product state approach for a two-lead multilevel Anderson impurity model. <i>Physical Review B</i> , 2010, 81, .	3.2	16
82	Correlation density matrices for one-dimensional quantum chains based on the density matrix renormalization group. <i>New Journal of Physics</i> , 2010, 12, 075027.	2.9	6
83	Simplified derivation of the Bethe-ansatz equations for the Dicke model. <i>Physical Review B</i> , 2010, 82, .	3.2	15
84	Microscopic model of critical current noise in Josephson-junction qubits: Subgap resonances and Andreev bound states. <i>Physical Review B</i> , 2009, 80, .	3.2	23
85	Interplay of mesoscopic and Kondo effects for transmission amplitude of few-level quantum dots. <i>Physical Review B</i> , 2009, 80, .	3.2	13
86	Dimensional crossover of the dephasing time in disordered mesoscopic rings. <i>Physical Review B</i> , 2009, 80, .	3.2	10
87	Variational matrix-product-state approach to quantum impurity models. <i>Physical Review B</i> , 2009, 80, .	3.2	101
88	Dephasing rate formula in the many-body context. <i>Physical Review B</i> , 2009, 80, .	3.2	3
89	Density matrix renormalization group study of a quantum impurity model with Landau-Zener time-dependent Hamiltonian. <i>Physical Review B</i> , 2009, 79, .	3.2	16
90	Kondo Decoherence: Finding the Right Spin Model for Iron Impurities in Gold and Silver. <i>Physical Review Letters</i> , 2009, 102, 056802.	7.8	77

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91	Cavity grid for scalable quantum computation with superconducting circuits. Europhysics Letters, 2009, 85, 50007.	2.0	75
92	Constrained optimization of sequentially generated entangled multiqubit states. Physical Review A, 2009, 80, .	2.5	11
93	Kondo screening cloud in the single-impurity Anderson model: A density matrix renormalization group study. Physical Review B, 2009, 80, .	3.2	58
94	Matrix-product-state comparison of the numerical renormalization group and the variational formulation of the density-matrix renormalization group. Physical Review B, 2008, 78, .	3.2	41
95	INFLUENCE FUNCTIONAL FOR DECOHERENCE OF INTERACTING ELECTRONS IN DISORDERED CONDUCTORS. International Journal of Modern Physics B, 2008, 22, 727-833.	2.0	10
96	Numerical renormalization group calculation of near-gap peaks in spectral functions of the Anderson model with superconducting leads. Journal of Physics Condensed Matter, 2008, 20, 275213.	1.8	52
97	Mesoscopic spin-boson models of trapped ions. Physical Review A, 2008, 78, .	2.5	99
98	Measuring the size of a quantum superposition of many-body states. Physical Review A, 2008, 78, .	2.5	71
99	Phase lapses in transmission through interacting two-level quantum dots. New Journal of Physics, 2007, 9, 123-123.	2.9	38
100	Mesoscopic to Universal Crossover of the Transmission Phase of Multilevel Quantum Dots. Physical Review Letters, 2007, 98, 186802.	7.8	65
101	Dynamical conductance in the two-channel Kondo regime of a double dot system. Physical Review B, 2007, 76, .	3.2	23
102	Sum-Rule Conserving Spectral Functions from the Numerical Renormalization Group. Physical Review Letters, 2007, 99, 076402.	7.8	310
103	Kondo quantum dot coupled to ferromagnetic leads: Numerical renormalization group study. Physical Review B, 2007, 76, .	3.2	65
104	Kondo effect in single-molecule spintronic devices. Journal of Magnetism and Magnetic Materials, 2007, 310, e343-e345.	2.3	5
105	Decoherence in weak localization. II. Bethe-Salpeter calculation of the cooperon. Physical Review B, 2007, 76, .	3.2	20
106	Decoherence in weak localization. I. Pauli principle in influence functional. Physical Review B, 2007, 76, .	3.2	23
107	Finite-Frequency Transport Through A Quantum Dot In The Kondo Regime. AIP Conference Proceedings, 2006, , .	0.4	0
108	Energy-resolved inelastic electron scattering off a magnetic impurity. Physical Review B, 2005, 72, .	3.2	42

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109	Gate-controlled spin splitting in quantum dots with ferromagnetic leads in the Kondo regime. Physical Review B, 2005, 72, .	3.2	93
110	Frequency-Dependent Transport through a Quantum Dot in the Kondo Regime. Physical Review Letters, 2005, 94, 196602.	7.8	26
111	One-dimensional density waves of ultracold bosons in an optical lattice. Physical Review A, 2005, 71, .	2.5	53
112	Charge oscillations in quantum dots: Renormalization group and Hartree method calculations. Physical Review B, 2005, 72, .	3.2	52
113	Ohmic and Step Noise from a Single Trapping Center Hybridized with a Fermi Sea. Physical Review Letters, 2005, 95, 247006.	7.8	26
114	Absorption and emission in quantum dots: Fermi surface effects of Anderson excitons. Physical Review B, 2005, 72, .	3.2	25
115	Well-Defined Quasiparticles in Interacting Metallic Grains. Physical Review Letters, 2004, 93, 186402.	7.8	3
116	Comment on "Quantum measurement and decoherence". Physical Review A, 2004, 70, .	2.5	6
117	Theory of Inelastic Scattering from Magnetic Impurities. Physical Review Letters, 2004, 93, 107204.	7.8	69
118	Spatial correlations of trapped one-dimensional bosons in an optical lattice. Physical Review A, 2004, 69, .	2.5	108
119	Josephson effect between superconducting nanograins with discrete energy levels. European Physical Journal B, 2004, 38, 501-513.	1.5	14
120	The spin-boson model with a structured environment: a comparison of approaches. Chemical Physics, 2004, 296, 345-353.	1.9	48
121	Quantum phase transition in a two-channel-Kondo quantum dot device. Physical Review B, 2004, 69, .	3.2	81
122	Variational ansatz for the superfluid Mott-insulator transition in optical lattices. Optics Express, 2004, 12, 42.	3.4	21
123	Flow equation renormalization of a spin-boson model with a structured bath. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 18, 343-345.	2.7	5
124	Kondo Effect in the Presence of Itinerant-Electron Ferromagnetism Studied with the Numerical Renormalization Group Method. Physical Review Letters, 2003, 91, 247202.	7.8	186
125	SU(4) Fermi Liquid State and Spin Filtering in a Double Quantum Dot System. Physical Review Letters, 2003, 90, 026602.	7.8	188
126	Two pairing parameters in superconducting grains. Physical Review B, 2003, 67, .	3.2	9

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127	Algebraic Bethe ansatz for a discrete-state BCS pairing model. <i>Physical Review B</i> , 2002, 66, .	3.2	50
128	Nonequilibrium excitations in ferromagnetic nanoparticles. <i>Physical Review B</i> , 2002, 65, .	3.2	18
129	Superconductivity in ultrasmall metallic grains. <i>Annalen Der Physik</i> , 2001, 10, 219-276.	2.4	52
130	Spectroscopy of discrete energy levels in ultrasmall metallic grains. <i>Physics Reports</i> , 2001, 345, 61-173.	25.6	399
131	Magnetic Anisotropy Variations and Nonequilibrium Tunneling in a Cobalt Nanoparticle. <i>Physical Review Letters</i> , 2001, 87, 226801.	7.8	57
132	Thermodynamic properties of a small superconducting grain. <i>Physical Review B</i> , 2001, 63, .	3.2	53
133	Model for ferromagnetic nanograins with discrete electronic states. <i>Physical Review B</i> , 2001, 64, .	3.2	37
134	Asymmetric tunable tunneling magnetoresistance in single-electron transistors. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 219, 104-108.	2.3	9
135	Exact study of the effect of level statistics in ultrasmall superconducting grains. <i>Physical Review B</i> , 2000, 61, R11890-R11893.	3.2	83
136	Analytical calculation of the finite-size crossover spectrum of the anisotropic two-channel Kondo model. <i>Physical Review B</i> , 2000, 61, 6918-6933.	3.2	49
137	Transmission Phase Shift of a Quantum Dot with Kondo Correlations. <i>Physical Review Letters</i> , 2000, 84, 3710-3713.	7.8	131
138	Superconductivity in ultrasmall metallic grains. <i>Physical Review B</i> , 1999, 59, 9527-9544.	3.2	85
139	Dephasing in Metals by Two-Level Systems in the 2-Channel Kondo Regime. <i>Physical Review Letters</i> , 1999, 83, 2632-2635.	7.8	103
140	Kondo Box: A Magnetic Impurity in an Ultrasmall Metallic Grain. <i>Physical Review Letters</i> , 1999, 82, 2143-2146.	7.8	158
141	The 2-Channel Kondo Model. <i>Annals of Physics</i> , 1999, 273, 175-241.	2.8	17
142	Fixed-N superconductivity: The crossover from the bulk to the few-electron limit. <i>Advances in Solid State Physics</i> , 1999, , 341-350.	0.8	12
143	Bosonization for beginners - refermionization for experts. <i>Annalen Der Physik</i> , 1998, 7, 225-305.	2.4	337
144	Finite-Size Bosonization of 2-Channel Kondo Model: A Bridge between Numerical Renormalization Group and Conformal Field Theory. <i>Physical Review Letters</i> , 1998, 81, 196-199.	7.8	38

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145	Fixed-N Superconductivity: The Crossover from the Bulk to the Few-Electron Limit. Physical Review Letters, 1998, 81, 4712-4715.	7.8	110
146	Comment on "Point-Contact Study of Fast and Slow Two-Level Fluctuators in Metallic Glasses". Physical Review Letters, 1998, 80, 1353-1353.	7.8	12
147	The 2-Channel Kondo Model*11. Review of Experimental Evidence for Its Realization in Metal Nanoconstrictions. Annals of Physics, 1998, 263, 1-55.	2.8	2
148	Paramagnetic Breakdown of Superconductivity in Ultrasmall Metallic Grains. Physical Review Letters, 1997, 79, 921-924.	7.8	100
149	Parity-Affected Superconductivity in Ultrasmall Metallic Grains. Physical Review Letters, 1996, 77, 3189-3192.	7.8	188
150	Superconductivity and parity effect in ultrasmall metallic particles. European Physical Journal D, 1996, 46, 2391-2392.	0.4	0
151	Ralph et al. Reply. Physical Review Letters, 1995, 75, 770-770.	7.8	19
152	2-channel Kondo scaling in conductance signals from 2 level tunneling systems. Physical Review Letters, 1994, 72, 1064-1067.	7.8	150
153	Spin tunneling in the Kagomé antiferromagnet. Physical Review B, 1993, 48, 965-984.	3.2	45
154	Destructive quantum interference in spin tunneling problems. Physical Review Letters, 1992, 69, 3236-3239.	7.8	238