

# Walter Metzner

## List of Publications by Year in descending order

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40  
papers

4,813  
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257450  
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docs citations

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times ranked

1942  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin stiffness, spectral weight, and Landau damping of magnons in metallic spiral magnets. <i>Physical Review B</i> , 2022, 105, .	3.2	5
2	The nonperturbative functional renormalization group and its applications. <i>Physics Reports</i> , 2021, 910, 1-114.	25.6	265
3	Fluctuation effects at the onset of $\langle \text{mml:math} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle k \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle F_1 \langle / \text{mml:mi} \rangle$ density wave order with two pairs of hot spots in two-dimensional metals. <i>Physical Review B</i> , 2021, 104, .	3.2	3
4	Non-Hermitian band topology from momentum-dependent relaxation in two-dimensional metals with spiral magnetism. <i>Physical Review B</i> , 2021, 104, .	3.2	7
5	Dynamical functional renormalization group computation of order parameters and critical temperatures in the two-dimensional Hubbard model. <i>Physical Review B</i> , 2020, 102, .	3.2	19
6	Charge carrier drop at the onset of pseudogap behavior in the two-dimensional Hubbard model. <i>Physical Review B</i> , 2020, 101, .	3.2	13
7	Phase stiffness in an antiferromagnetic superconductor. <i>Physical Review B</i> , 2019, 100, .	3.2	5
8	Antiferromagnetic and $\langle \text{mml:math} \rangle \langle \text{mml:mi} \rangle d \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -wave pairing correlations in the strongly interacting two-dimensional Hubbard model from the functional renormalization group. <i>Physical Review B</i> , 2019, 99, .	3.2	49
9	Fluctuation effects at the onset of the $\langle \text{mml:math} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle / \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle k_2 \langle / \text{mml:mi} \rangle \langle / \text{mml:msub} \rangle$ density wave order with one pair of hot spots in two-dimensional metals. <i>Physical Review B</i> , 2018, 97, .	3.2	1
10	Longitudinal conductivity and Hall coefficient in two-dimensional metals with spiral magnetic order. <i>Physical Review B</i> , 2018, 98, .	3.2	15
11	Dynamically enhanced magnetic incommensurability: Effects of local dynamics on nonlocal spin correlations in a strongly correlated metal. <i>Physical Review B</i> , 2018, 97, .	3.2	11
12	Longitudinal fluctuations in the Berezinskii-Kosterlitz-Thouless phase. <i>Physical Review B</i> , 2017, 95, .	3.2	16
13	Nonseparable frequency dependence of the two-particle vertex in interacting fermion systems. <i>Physical Review B</i> , 2017, 96, .	3.2	32
14	Coexistence of Incommensurate Magnetism and Superconductivity in the Two-Dimensional Hubbard Model. <i>Physical Review Letters</i> , 2016, 116, 096402.	7.8	44
15	Fermi Surface Reconstruction and Drop in the Hall Number due to Spiral Antiferromagnetism in High- $\langle \text{mml:math} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle T \langle / \text{mml:mi} \rangle \langle \text{mml:mi} \rangle c \langle / \text{mml:mi} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:math} \rangle$ Cuprates. <i>Physical Review Letters</i> , 2016, 117, 187001.	7.8	45
16	Non-Fermi-liquid behavior at the onset of incommensurate $2k_F$ charge- or spin-density wave order in two dimensions. <i>Physical Review B</i> , 2014, 90, .	3.2	11
17	Superconductivity in the two-dimensional $\langle \text{mml:math} \rangle \langle \text{mml:mi} \rangle t \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle \langle \text{mml:math} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mi} \rangle t \langle / \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{\epsilon}^2 \langle / \text{mml:mo} \rangle^3 \langle / \text{mml:msup} \rangle \langle / \text{mml:math} \rangle$ model. <i>Physical Review B</i> , 2014, 89, .	3.2	55
18	From Infinite to Two Dimensions through the Functional Renormalization Group. <i>Physical Review Letters</i> , 2014, 112, 196402.	7.8	112

#	ARTICLE	IF	CITATIONS
19	Competing order in correlated electron systems made simple: Consistent fusion of functional renormalization and mean-field theory. <i>Physical Review B</i> , 2014, 89, .	3.2	31
20	Low-energy singularities in the ground state of fermionic superfluids. <i>Physical Review B</i> , 2013, 88, .	3.2	14
21	Effective interactions and fluctuation effects in spin-singlet superfluids. <i>Physical Review B</i> , 2013, 87, .	3.2	24
22	Incommensurate nematic fluctuations in two-dimensional metals. <i>Physical Review B</i> , 2012, 85, .	3.2	47
23	Functional renormalization group approach to correlated fermion systems. <i>Reviews of Modern Physics</i> , 2012, 84, 299-352.	45.6	531
24	Anomalous criticality near semimetalâ€toâ€superfluid quantum phase transition in a twoâ€dimensional Dirac cone model. <i>Annalen Der Physik</i> , 2011, 523, 621-628.	2.4	4
25	Singular order parameter interaction at the nematic quantum critical point in two-dimensional electron systems. <i>Physical Review B</i> , 2011, 84, .	3.2	16
26	Parametrization of Nambu Vertex in a Singlet Superconductor. <i>Progress of Theoretical Physics</i> , 2010, 124, 471-491.	2.0	17
27	Superconductivity in the attractive Hubbard model: functional renormalization group analysis. <i>New Journal of Physics</i> , 2008, 10, 045003.	2.9	33
28	Renormalized mean-field analysis of antiferromagnetism andd-wave superconductivity in the two-dimensional Hubbard model. <i>Physical Review B</i> , 2007, 75, .	3.2	66
29	Fermionic renormalization group flow into phases with broken discrete symmetry: charge-density wave mean-field model. <i>European Physical Journal B</i> , 2005, 48, 349-358.	1.5	31
30	Correlation effects on resonant tunneling in one-dimensional quantum wires. <i>Physical Review B</i> , 2005, 71, .	3.2	28
31	Impurity and correlation effects on transport in one-dimensional quantum wires. <i>Physical Review B</i> , 2005, 71, .	3.2	89
32	Pseudogap at hot spots in the two-dimensional Hubbard model at weak coupling. <i>Physical Review B</i> , 2005, 71, .	3.2	49
33	Renormalization Group Flows into Phases with Broken Symmetry. <i>Progress of Theoretical Physics</i> , 2004, 112, 943-970.	2.0	87
34	Scaling behavior of impurities in mesoscopic Luttinger liquids. <i>Physical Review B</i> , 2002, 65, .	3.2	41
35	d-Wave Superconductivity and Pomeranchuk Instability in the Two-Dimensional Hubbard Model. <i>Physical Review Letters</i> , 2000, 85, 5162-5165.	7.8	407
36	Renormalization-group analysis of the two-dimensional Hubbard model. <i>Physical Review B</i> , 2000, 61, 7364-7377.	3.2	278

#	ARTICLE	IF	CITATIONS
37	Fermi systems with strong forward scattering. <i>Advances in Physics</i> , 1998, 47, 317-445.	14.4	142
38	Correlated Lattice Fermions in $d=2$ Dimensions. <i>Physical Review Letters</i> , 1989, 62, 1066-1066.	7.8	15
39	Variational theory for correlated lattice fermions in high dimensions. <i>European Physical Journal B</i> , 1989, 77, 253-266.	1.5	83
40	Correlated Lattice Fermions in $d=2$ Dimensions. <i>Physical Review Letters</i> , 1989, 62, 324-327.	7.8	2,068