

Steven A Kivelson

List of Publications by Year in descending order

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142
papers

17,369
citations

28274

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12946

131
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143
all docs

143
docs citations

143
times ranked

8158
citing authors

#	ARTICLE	IF	CITATIONS
1	The Hubbard Model. Annual Review of Condensed Matter Physics, 2022, 13, 239-274.	14.5	136
2	Pair-density-wave in the strong coupling limit of the Holstein-Hubbard model. Npj Quantum Materials, 2022, 7, .	5.2	16
3	Pair density wave and reentrant superconducting tendencies originating from valley polarization. Physical Review B, 2022, 105, .	3.2	3
4	Mean Field Theories of Quantum Hall Liquids Justified: Variations on the Greiterâ€“Wilczek Theme. , 2022, , 103-123.		0
5	Generic character of charge and spin density waves in superconducting cuprates. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, e2119429119.	7.1	13
6	Stripe order enhanced superconductivity in the Hubbard model. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	23
7	Correlated Hofstadter spectrum and flavour phase diagram in magic-angle twisted bilayer graphene. Nature Physics, 2022, 18, 825-831.	16.7	26
8	Discovery of an insulating ferromagnetic phase of electrons in two dimensions. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	4
9	Npj Quantum Materials as a symbol of international scientific cooperation. Npj Quantum Materials, 2021, 6, .	5.2	0
10	The quantum Hall effect in the absence of disorder. Npj Quantum Materials, 2021, 6, .	5.2	7
11	Superconductor-to-metal transition in overdoped cuprates. Npj Quantum Materials, 2021, 6, .	5.2	29
12	Nematic quantum criticality in an Fe-based superconductor revealed by strain-tuning. Science, 2021, 372, 973-977.	12.6	22
13	Superconductivity, charge density waves, and bipolarons in the Holstein model. Physical Review B, 2021, 103, .	3.2	17
14	Nematic antiferromagnetism and deconfined criticality from the interplay between electron-phonon and electron-electron interactions. Physical Review B, 2021, 104, .	3.2	2
15	High Temperature Superconductivity in a Lightly Doped Quantum Spin Liquid. Physical Review Letters, 2021, 127, 097002.	7.8	35
16	Strain-induced time reversal breaking and half quantum vortices near a putative superconducting tetracritical point in Sr_2RuO_4 . Physical Review B, 2021, 104, .	3.2	13
17	Elastocaloric signature of nematic fluctuations. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2105911118.	7.1	12
18	Anomalous thermal transport and strong violation of Wiedemann-Franz law in the critical regime of a charge density wave transition. Physical Review B, 2021, 104, .	3.2	2

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19	Physics of Superconducting Transition Temperatures. Journal of Superconductivity and Novel Magnetism, 2020, 33, 5-10.	1.8	3
20	Strong Coupling Limit of the Holstein-Hubbard Model. Physical Review Letters, 2020, 125, 167001.	7.8	29
21	Hubbard ladders at small U revisited. Physical Review B, 2020, 102, .	3.2	28
22	Floating topological phases. Physical Review B, 2020, 102, .	3.2	2
23	Phases of frustrated quantum antiferromagnets on the square and triangular lattices. Physical Review B, 2020, 101, .	3.2	3
24	Measuring the imaginary-time dynamics of quantum materials. Philosophical Magazine, 2020, 100, 2477-2490.	1.6	2
25	The Physics of Pair-Density Waves: Cuprate Superconductors and Beyond. Annual Review of Condensed Matter Physics, 2020, 11, 231-270.	14.5	209
26	Eliashberg theory of phonon-mediated superconductivity – When it is valid and how it breaks down. Annals of Physics, 2020, 417, 168190.	2.8	50
27	Quantum spin liquids. Science, 2020, 367, .	12.6	513
28	Enhanced Thermal Hall Effect in Nearly Ferroelectric Insulators. Physical Review Letters, 2020, 124, 167601.	7.8	47
29	Robust superconductivity intertwined with charge density wave and disorder in Pd-intercalated ErTe_3 . Physical Review Research, 2020, 2, .	3.6	10
30	Linking the pseudogap in the cuprates with local symmetry breaking: A commentary. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 14395-14397.	7.1	21
31	Observation of two types of charge-density-wave orders in superconducting $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$. Nature Communications, 2019, 10, 3269.	12.8	58
32	Fermi surface reconstruction by a charge density wave with finite correlation length. Physical Review B, 2019, 100, .	3.2	14
33	Pseudogap crossover in the electron-phonon system. Physical Review B, 2019, 99, .	3.2	28
34	Disorder-induced suppression of charge density wave order: STM study of Pd-intercalated ErTe_3 . Physical Review B, 2019, 100, .	3.2	28
35	Understanding complexity. Nature Physics, 2018, 14, 426-427.	16.7	5
36	Breakdown of the Migdal-Eliashberg theory: A determinant quantum Monte Carlo study. Physical Review B, 2018, 97, .	3.2	68

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37	A bound on the superconducting transition temperature. Npj Quantum Materials, 2018, 3, .	5.2	32
38	Superconductivity in the doped t \hat{t} model: Results for four-leg cylinders. Physical Review B, 2018, 98, .	3.2	55
39	Pair density waves in superconducting vortex halos. Physical Review B, 2018, 97, .	3.2	41
40	Spatially modulated susceptibility in thin film $La_{1-x}Sr_xCuO_2$. Physical Review B, 2018, 98, .	3.2	15
41	Phases of a phenomenological model of twisted bilayer graphene. Physical Review B, 2018, 98, .	3.2	197
42	Superconductivity and non-Fermi liquid behavior near a nematic quantum critical point. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 4905-4910.	7.1	150
43	Charge- $4e$ superconductors: A Majorana quantum Monte Carlo study. Physical Review B, 2017, 95, .	3.2	25
44	Fractional charge and emergent mass hierarchy in diagonal two-leg t \hat{t} cylinders. Physical Review B, 2017, 95, .	3.2	6
45	Intertwined order in a frustrated four-leg t \hat{t} cylinder. Physical Review B, 2017, 95, .	3.2	33
46	Evidence of a fractional quantum Hall nematic phase in a microscopic model. Physical Review B, 2017, 96, .	3.2	25
47	Non-quasiparticle transport and resistivity saturation: a view from the large-N limit. Npj Quantum Materials, 2017, 2, .	5.2	27
48	Holon Wigner Crystal in a Lightly Doped Kagome Quantum Spin Liquid. Physical Review Letters, 2017, 119, 067002.	7.8	26
49	Critical divergence of the symmetric χ T $^{-1}$. Physical Review B, 2017, 96, .	3.2	20
50	Transverse fields to tune an Ising-nematic quantum phase transition. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 13430-13434.	7.1	24
51	Time to fix science prizes. Nature Physics, 2017, 13, 822-822.	16.7	1
52	Vestigial nematicity from spin and/or charge order in the cuprates. Physical Review B, 2017, 96, .	3.2	36
53	Hall number across a van Hove singularity. Physical Review B, 2017, 96, .	3.2	20
54	Ideal charge-density-wave order in the high-field state of superconducting YBCO. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 14645-14650.	7.1	83

#	ARTICLE	IF	CITATIONS
55	Defining emergence in physics. Npj Quantum Materials, 2016, 1, .	5.2	23
56	Ubiquitous signatures of nematic quantum criticality in optimally doped Fe-based superconductors. Science, 2016, 352, 958-962.	12.6	239
57	Electronic pair binding and Hund's rule violations in doped C_{60} . Physical Review B, 2016, 93, .	12.6	112
58	Necessity of Time-Reversal Symmetry Breaking for the Polar Kerr Effect in Linear Response. Physical Review Letters, 2016, 116, 093903.	7.8	5
59	Vestigial chiral and charge orders from bidirectional spin-density waves: Application to the iron-based superconductors. Physical Review B, 2016, 93, .	3.2	49
60	Quantum oscillations in a bilayer with broken mirror symmetry: A minimal model for $YBa_2Cu_3O_{6+\delta}$. Physical Review B, 2016, 93, .	3.2	18
61	Ising Nematic Quantum Critical Point in a Metal: A Monte-Carlo Study. Physical Review X, 2016, 6, .	8.9	105
62	Cold-spots and glassy nematicity in underdoped cuprates. Physical Review B, 2016, 94, .	3.2	16
63	Paired Insulators and High-Temperature Superconductors. , 2016, , 127-133.		3
64	Macroscopic character of composite high-temperature superconducting wires. Physical Review B, 2015, 92, .	3.2	12
65	Fluctuating orders and quenched randomness in the cuprates. Physical Review B, 2015, 92, .	3.2	22
66	Enhancement of Superconductivity near a Nematic Quantum Critical Point. Physical Review Letters, 2015, 114, 097001.	7.8	233
67	From quantum matter to high-temperature superconductivity in copper oxides. Nature, 2015, 518, 179-186.	27.8	1,606
68	One Hole in the Two-Legged Ladder and Adiabatic Continuity to the Noninteracting Limit. Physical Review Letters, 2015, 115, 056401.	7.8	23
69	Colloquium: Theory of intertwined orders in high temperature superconductors. Reviews of Modern Physics, 2015, 87, 457-482.	45.6	737
70	Three-dimensional charge density wave order in $YBa_2Cu_3O_{6.67}$ at high magnetic fields. Science, 2015, 350, 949-952.	12.6	280
71	Nematicity and quantum paramagnetism in FeSe. Nature Physics, 2015, 11, 959-963.	16.7	190
72	Theory of disordered unconventional superconductors. Journal of Experimental and Theoretical Physics, 2014, 119, 1109-1114.	0.9	2

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73	Coherent transmutation of electrons into fractionalized anyons. <i>Science</i> , 2014, 346, 722-725.	12.6	42
74	Quenched disorder and vestigial nematicity in the pseudogap regime of the cuprates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 7980-7985.	7.1	191
75	Band structure effects on the superconductivity in Hubbard models. <i>Physical Review B</i> , 2013, 88, .	3.2	40
76	Kerr effect as evidence of gyrotropic order in the cuprates. <i>Physical Review B</i> , 2013, 87, .	3.2	67
77	Correlations and renormalization of the electron-phonon coupling in the honeycomb Hubbard ladder and superconductivity in polyacene. <i>Physical Review B</i> , 2013, 88, .	3.2	13
78	Gapless spin liquids: Stability and possible experimental relevance. <i>Physical Review B</i> , 2013, 87, .	3.2	26
79	Field theory of the quantum Hall nematic transition. <i>Physical Review B</i> , 2013, 88, .	3.2	63
80	Evidence from tunneling spectroscopy for a quasi-one-dimensional origin of superconductivity in Sr RuO_4 . <i>Physical Review B</i> , 2013, 88, .	3.2	72
81	Charge and spin collective modes in a quasi-one-dimensional model of Sr 2RuO_4 . <i>Physical Review B</i> , 2012, 86, .	3.2	31
82	Phases of the Infinite U Hubbard Model on Square Lattices. <i>Physical Review Letters</i> , 2012, 108, 126406.	7.8	55
83	Effects of longer-range interactions on unconventional superconductivity. <i>Physical Review B</i> , 2012, 85, .	3.2	56
84	Ineluctable complexity. <i>Nature Physics</i> , 2012, 8, 864-866.	16.7	100
85	Microscopic Model of Quasiparticle Wave Packets in Superfluids, Superconductors, and Paired Hall States. <i>Physical Review Letters</i> , 2012, 109, 237004.	7.8	7
86	Typology for quantum Hall liquids. <i>Physical Review B</i> , 2012, 85, .	3.2	8
87	Electronic liquid crystalline phases in a spin-orbit coupled two-dimensional electron gas. <i>Physical Review B</i> , 2012, 85, .	3.2	45
88	Weakly Coupled Pfaffian as a Type I Quantum Hall Liquid. <i>Physical Review Letters</i> , 2011, 106, 236801.	7.8	13
89	Superconductivity from repulsive interactions in the two-dimensional electron gas. <i>Physical Review B</i> , 2011, 83, .	3.2	44
90	Fermi-surface reconstruction in a smectic phase of a high-temperature superconductor. <i>Physical Review B</i> , 2011, 84, .	3.2	57

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91	Thermodynamics of phase formation in the quantum critical metal SrRuO_7 . Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 16549-16553.	7.1	53
92	Pair-Density-Wave Correlations in the Kondo-Heisenberg Model. Physical Review Letters, 2010, 105, 146403.	7.8	72
93	Nematic valley ordering in quantum Hall systems. Physical Review B, 2010, 82, .	3.2	63
94	Properties of a diagonal two-orbital ladder model of the iron pnictide superconductors. Physical Review B, 2010, 81, .	3.2	24
95	Superconductivity in the repulsive Hubbard model: An asymptotically exact weak-coupling solution. Physical Review B, 2010, 81, .	3.2	228
96	Nematic Fermi Fluids in Condensed Matter Physics. Annual Review of Condensed Matter Physics, 2010, 1, 153-178.	14.5	561
97	Mesoscopics and the High T_c Problem. , 2010, , 239-247.		0
98	Theory of the striped superconductor. Physical Review B, 2009, 79, .	3.2	123
99	Microscopic theory of the nematic phase in SrRuO_3 . Physical Review B, 2009, 79, .	3.2	82
100	Algebraic Spin Liquid in an Exactly Solvable Spin Model. Physical Review Letters, 2009, 102, 217202.	7.8	89
101	Striped superconductors: how spin, charge and superconducting orders intertwine in the cuprates. New Journal of Physics, 2009, 11, 115004.	2.9	244
102	Charge-4e superconductivity from pair-density-wave order in certain high-temperature superconductors. Nature Physics, 2009, 5, 830-833.	16.7	186
103	In search of a theory of supercooled liquids. Nature Materials, 2008, 7, 831-833.	27.5	110
104	Theory of electron nematic order in LaFeAsO . Physical Review B, 2008, 77, .	3.2	588
105	Route to high-temperature superconductivity in composite systems. Physical Review B, 2008, 78, .	3.2	72
106	Optimal inhomogeneity for superconductivity: Finite-size studies. Physical Review B, 2008, 77, .	3.2	51
107	Theory of the nodal nematic quantum phase transition in superconductors. Physical Review B, 2008, 77, .	3.2	81
108	Superconductivity in zigzag CuO chains. Physical Review B, 2007, 76, .	3.2	12

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109	Myriad phases of the checkerboard Hubbard model. Physical Review B, 2007, 76, .	3.2	43
110	Dynamical Layer Decoupling in a Stripe-Ordered High- T_c Superconductor. Physical Review Letters, 2007, 99, 127003.	7.8	251
111	On the Absence of Ferromagnetism in Typical 2D Ferromagnets. Communications in Mathematical Physics, 2007, 274, 217-231.	2.2	13
112	How Optimal Inhomogeneity Produces High Temperature Superconductivity. , 2007, , 570-596.		6
113	Transport in two dimensional electronic micro-emulsions. Annals of Physics, 2006, 321, 2071-2115.	2.8	77
114	Magnetic model of the tetragonal-orthorhombic transition in the cuprates. Physical Review B, 2006, 74, .	3.2	7
115	Inferring effective interactions from the local density of states: Application to STM data from Bi ₂ Sr ₂ CaCu ₂ O ₈ + δ . Physical Review B, 2006, 74, .	3.2	7
116	Distinguishing patterns of charge order: Stripes or checkerboards. Physical Review B, 2006, 74, .	3.2	111
117	Surface pinning of fluctuating charge order: An extraordinary surface phase transition. Physical Review B, 2005, 71, .	3.2	21
118	Universal Aspects of Coulomb-Frustrated Phase Separation. Physical Review Letters, 2005, 94, 056805.	7.8	112
119	Enhancement of superconductivity by local inhomogeneities. Physical Review B, 2005, 72, .	3.2	64
120	Mechanism of high-temperature superconductivity in a striped Hubbard model. Physical Review B, 2004, 69, .	3.2	79
121	Quasi-one-dimensional dynamics and nematic phases in the two-dimensional Emery model. Physical Review B, 2004, 69, .	3.2	36
122	Order by Disorder, without Order, in a Two-Dimensional Spin System with O(2) Symmetry. Annales Henri Poincare, 2004, 5, 1181-1205.	1.7	19
123	Theory of the quantum Hall Smectic Phase. I. Low-energy properties of the quantum Hall smectic fixed point. Physical Review B, 2002, 65, .	3.2	37
124	Competing order in the mixed state of high-temperature superconductors. Physical Review B, 2002, 66, .	3.2	71
125	STATISTICAL PHASES AND THE FRACTIONAL QUANTUM HALL EFFECT. World Scientific Series in 20th Century Physics, 2002, , 265-269.	0.0	0
126	Quantum Theory of the Smectic Metal State in Stripe Phases. Physical Review Letters, 2000, 85, 2160-2163.	7.8	183

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127	Nematic Phase of the Two-Dimensional Electron Gas in a Magnetic Field. Physical Review Letters, 2000, 84, 1982-1985.	7.8	116
128	Classification and stability of phases of the multicomponent one-dimensional electron gas. Physical Review B, 1999, 59, 15641-15653.	3.2	43
129	Classical Phase Fluctuations in High Temperature Superconductors. Physical Review Letters, 1999, 83, 612-615.	7.8	101
130	Electronic liquid-crystal phases of a doped Mott insulator. Nature, 1998, 393, 550-553.	27.8	1,025
131	Spin-gap proximity effect mechanism of high-temperature superconductivity. Physical Review B, 1997, 56, 6120-6147.	3.2	581
132	Textured Edges in Quantum Hall Systems. Physical Review Letters, 1996, 77, 2061-2064.	7.8	64
133	Importance of phase fluctuations in superconductors with small superfluid density. Nature, 1995, 374, 434-437.	27.8	1,869
134	Pair binding in small Hubbard-model molecules. Physical Review B, 1992, 45, 5062-5065.	3.2	62
135	Long-range interactions and the quantum Hall effect. Physical Review B, 1992, 46, 13319-13325.	3.2	29
136	Doped antiferromagnets in the weak-hopping limit. Physical Review B, 1990, 42, 6523-6530.	3.2	180
137	Phase separation in the J-model. Physical Review Letters, 1990, 64, 475-478.	7.8	815
138	SHORT RANGE RESONATING VALENCE BOND THEORIES AND SUPERCONDUCTIVITY. Modern Physics Letters B, 1990, 04, 225-232.	1.9	120
139	Valence bond ground states in a frustrated two-dimensional spin-1/2 Heisenberg antiferromagnet. Communications in Mathematical Physics, 1989, 123, 53-83.	2.2	51
140	Statistics of holons in the quantum hard-core dimer gas. Physical Review B, 1989, 39, 259-264.	3.2	91
141	Superconductivity and the Quantum Hard-Core Dimer Gas. Physical Review Letters, 1988, 61, 2376-2379.	7.8	849
142	Topology of the resonating valence-bond state: Solitons and high-Tc superconductivity. Physical Review B, 1987, 35, 8865-8868.	3.2	795