

Assa Auerbach

List of Publications by Year in descending order

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96
papers

6,751
citations

87723

38
h-index

58464

82
g-index

103
all docs

103
docs citations

103
times ranked

3755
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Degeneracy-Projected Polarization Formulas for Hall-Type Conductivities. Physical Review Letters, 2022, 128, 036601. | 2.9 | 0 |
| 2 | Hall Coefficient of Semimetals. Physical Review Letters, 2021, 126, 076603. | 2.9 | 9 |
| 3 | Hall anomaly and moving vortex charge in layered superconductors. SciPost Physics, 2020, 8, . | 1.5 | 9 |
| 4 | Equilibrium formulae for transverse magnetotransport of strongly correlated metals. Physical Review B, 2019, 99, . | 1.1 | 16 |
| 5 | Doped Kondo chain, a heavy Luttinger liquid. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 5140-5144. | 3.3 | 12 |
| 6 | Hall Number of Strongly Correlated Metals. Physical Review Letters, 2018, 121, 066601. | 2.9 | 21 |
| 7 | Nonlinear Conductivity and Collective Charge Excitations in the Lowest Landau Level. Physical Review Letters, 2017, 119, 016601. | 2.9 | 0 |
| 8 | Collective Modes in a Quantum Solid. Physical Review Letters, 2016, 117, 085302. | 2.9 | 0 |
| 9 | Spin transport of weakly disordered Heisenberg chain at infinite temperature. Physical Review B, 2016, 93, . | 1.1 | 61 |
| 10 | The Higgs mode in disordered superconductors close to a quantum phase transition. Nature Physics, 2015, 11, 188-192. | 6.5 | 137 |
| 11 | Critical Capacitance and Charge-Vortex Duality Near the Superfluid-to-Insulator Transition. Physical Review Letters, 2014, 113, 240601. | 2.9 | 21 |
| 12 | Fate of the Higgs Mode Near Quantum Criticality. Physical Review Letters, 2013, 110, 140401. | 2.9 | 71 |
| 13 | Dynamics and conductivity near quantum criticality. Physical Review B, 2013, 88, . | 1.1 | 51 |
| 14 | p6chiral resonating valence bonds in the kagome antiferromagnet. Physical Review B, 2013, 87, . | 1.1 | 28 |
| 15 | Schwinger Bosons Approaches to Quantum Antiferromagnetism. Springer Series in Solid-state Sciences, 2011, , 365-377. | 0.3 | 4 |
| 16 | Visibility of the amplitude (Higgs) mode in condensed matter. Physical Review B, 2011, 84, . | 1.1 | 161 |
| 17 | Floquet Spectrum and Transport through an Irradiated Graphene Ribbon. Physical Review Letters, 2011, 107, 216601. | 2.9 | 322 |
| 18 | Reducing memory cost of exact diagonalization using singular value decomposition. Physical Review E, 2011, 84, 056701. | 0.8 | 4 |

| # | ARTICLE | IF | CITATIONS |
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| 19 | Conductivity of hard core bosons: A paradigm of a bad metal. <i>Physical Review B</i> , 2010, 81, . | 1.1 | 50 |
| 20 | Vortex dynamics and Hall conductivity of hard-core bosons. <i>Physical Review B</i> , 2010, 82, . | 1.1 | 17 |
| 21 | Majorana fermions of a two-dimensional $p + ix$ <i>Physical Review B</i> , 2009, 79, . | 1.1 | 43 |
| 22 | Temperature dependence of the order parameter of cuprate superconductors. <i>Physical Review B</i> , 2009, 80, . | 1.1 | 19 |
| 23 | Vortex Quantum Dynamics of Two Dimensional Lattice Bosons. <i>Physical Review Letters</i> , 2009, 102, 070403. | 2.9 | 11 |
| 24 | Testing for Majorana Zero Modes in $s + ip$ Superconductor at High Temperature by Tunneling Spectroscopy. <i>Physical Review Letters</i> , 2008, 101, 267002. | 2.9 | 38 |
| 25 | Quantum tunneling of vortices in two-dimensional superfluids. <i>Physical Review B</i> , 2008, 78, . | 1.1 | 10 |
| 26 | Nonlinear current of strongly irradiated quantum Hall gas. <i>Physical Review B</i> , 2007, 76, . | 1.1 | 38 |
| 27 | Magnetic analog of the isotope effect in cuprates. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 48 |
| 28 | Domain Patterns in the Microwave-Induced Zero-Resistance State. <i>Journal of Statistical Physics</i> , 2006, 125, 1093-1107. | 0.5 | 14 |
| 29 | Computing Effective Hamiltonians of Doped and Frustrated Antiferromagnets By Contractor Renormalization. <i>AIP Conference Proceedings</i> , 2006, , . | 0.3 | 2 |
| 30 | Quantum tunneling of vortices in two-dimensional condensates. <i>Physical Review B</i> , 2006, 74, . | 1.1 | 21 |
| 31 | Steady States of a Microwave-Irradiated Quantum-Hall Gas. <i>Physical Review Letters</i> , 2005, 94, 196801. | 2.9 | 81 |
| 32 | Low-Energy Singlets in the Heisenberg Antiferromagnet on the Kagome Lattice. <i>Physical Review Letters</i> , 2004, 93, 187205. | 2.9 | 83 |
| 33 | Singlet Excitations in Pyrochlore: A Study of Quantum Frustration. <i>Physical Review Letters</i> , 2003, 90, 147204. | 2.9 | 105 |
| 34 | Oscillating Superfluidity of Bosons in Optical Lattices. <i>Physical Review Letters</i> , 2002, 89, 250404. | 2.9 | 189 |
| 35 | Luttinger-Liquid Behavior in Tunneling through a Quantum Dot at Zero Magnetic Field. <i>Physical Review Letters</i> , 2002, 89, 256401. | 2.9 | 2 |
| 36 | Plaquette boson-fermion model of cuprates. <i>Physical Review B</i> , 2002, 65, . | 1.1 | 156 |

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| 37 | PROJECTED SO(5) HAMILTONIAN FOR CUPRATES AND ITS APPLICATIONS. International Journal of Modern Physics B, 2001, 15, 2509-2518. | 1.0 | 3 |
| 38 | Spontaneous macroscopic magnetization at the superconducting transition temperature of YBa ₂ Cu ₃ O _{7-δ} . Nature, 2000, 404, 853-855. | 13.7 | 55 |
| 39 | Andreev Peaks and Massive Magnons in Cuprate Superconductor-Normal-Superconductor Junctions. Physical Review Letters, 2000, 85, 3480-3483. | 2.9 | 7 |
| 40 | Correlations in doped antiferromagnets. Physical Review B, 2000, 62, 324-336. | 1.1 | 8 |
| 41 | Quantum Magnetism Approaches to Strongly Correlated Electrons. Springer Series in Solid-state Sciences, 2000, , 143-170. | 0.3 | 0 |
| 42 | Hall Resistivity and Dephasing in the Quantum Hall Insulator. Physical Review Letters, 1999, 82, 1253-1256. | 2.9 | 44 |
| 43 | Superconductivity and Quantum Spin Disorder in Cuprates. Physical Review Letters, 1999, 83, 4848-4851. | 2.9 | 15 |
| 44 | Haldane Gap and Fractional Oscillations in Gated Josephson Arrays. Physical Review Letters, 1998, 81, 4484-4487. | 2.9 | 17 |
| 45 | Comparison of Tunneling Rates of Fractional Charges and Electrons across a Quantum Hall Strip. Physical Review Letters, 1998, 80, 817-820. | 2.9 | 11 |
| 46 | Electronic Properties of Buckminsterfullerenes: Degeneracies and Surprises. Fullerenes, Nanotubes, and Carbon Nanostructures, 1998, 6, 1-29. | 0.6 | 1 |
| 47 | Transport through Quantum Melts. Physical Review Letters, 1998, 80, 3352-3355. | 2.9 | 136 |
| 48 | The quantized Hall insulator. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1998, 77, 1107-1113. | 0.6 | 1 |
| 49 | Superfluids and supersolids on frustrated two-dimensional lattices. Physical Review B, 1997, 55, 3104-3121. | 1.1 | 112 |
| 50 | Quantized Hall insulator: Transverse and longitudinal transport. Physical Review B, 1997, 55, 9817-9823. | 1.1 | 52 |
| 51 | A path decomposition expansion proof for the method of images. Journal of Physics A, 1997, 30, 5993-5995. | 1.6 | 7 |
| 52 | Even-odd correlations in capacitance fluctuations of quantum dots. Physical Review B, 1996, 54, R14289-R14292. | 1.1 | 20 |
| 53 | Mesoscopic Fluctuations in the Ground State Energy of Disordered Quantum Dots. Physical Review Letters, 1996, 77, 1123-1126. | 2.9 | 167 |
| 54 | Tetrahis(dimethylamino)ethylene-C60: Multicomponent superexchange and Mott ferromagnetism. Physical Review B, 1995, 52, 10114-10121. | 1.1 | 71 |

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| 55 | Vibrations and Berry phases of charged buckminsterfullerene. Physical Review Letters, 1994, 72, 2931-2934. | 2.9 | 27 |
| 56 | Vibrations and Berry Phases of Charged Buckminsterfullerene. Physical Review Letters, 1994, 72, 4156-4156. | 2.9 | 0 |
| 57 | Electron-vibron interactions in charged fullerenes. II. Pair energies and spectra. Physical Review B, 1994, 49, 13008-13016. | 1.1 | 107 |
| 58 | Interacting Electrons and Quantum Magnetism. Graduate Texts in Contemporary Physics, 1994, , . | 0.2 | 1,001 |
| 59 | Electron-vibron interactions in charged fullerenes. I. Berry phases. Physical Review B, 1994, 49, 12998-13007. | 1.1 | 156 |
| 60 | Schwinger Bosons Mean Field Theory. Graduate Texts in Contemporary Physics, 1994, , 187-204. | 0.2 | 1 |
| 61 | The Semiclassical Theory of the $t \hat{=} J$ Model. Graduate Texts in Contemporary Physics, 1994, , 205-222. | 0.2 | 0 |
| 62 | Spin tunneling, Berry phases, and doped antiferromagnets. Physical Review B, 1993, 48, 3287-3289. | 1.1 | 9 |
| 63 | $1/N$ expansion and long range antiferromagnetic order. Physical Review Letters, 1993, 70, 3808-3811. | 2.9 | 10 |
| 64 | Multicritical phase diagram and random field effects in superconducting bismuthates. Physical Review Letters, 1993, 70, 1874-1877. | 2.9 | 20 |
| 65 | $1/N$ expansion and spin correlations in constrained wave functions. Physical Review B, 1993, 47, 5118-5132. | 1.1 | 13 |
| 66 | Interactions, Pair Binding and Ferromagnetism on Spherical Molecules. Europhysics Letters, 1992, 19, 103-108. | 0.7 | 9 |
| 67 | Néel transition and sublattice magnetization of pure and doped La_2CuO_4 . Physical Review B, 1992, 45, 7430-7435. | 1.1 | 155 |
| 68 | C_{60} : Interacting electrons on a spherical molecule. Physical Review B, 1992, 46, 331-341. | 1.1 | 27 |
| 69 | Landau-level spin waves and Skyrmion energy in the two-dimensional Heisenberg antiferromagnet. Physical Review B, 1991, 43, 11515-11518. | 1.1 | 12 |
| 70 | Doped antiferromagnet: The instability of homogeneous magnetic phases. Physical Review B, 1991, 43, 7800-7809. | 1.1 | 98 |
| 71 | Relation between persistent currents and the scattering matrix. Physical Review Letters, 1991, 66, 76-79. | 2.9 | 118 |
| 72 | Small-polaron theory of doped antiferromagnets. Physical Review Letters, 1991, 66, 2262-2265. | 2.9 | 71 |

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| 73 | New approaches to the quantum Heisenberg models: Schwinger boson representations (invited). Journal of Applied Physics, 1990, 67, 5734-5739. | 1.1 | 14 |
| 74 | Assessment of Fermi-liquid description for the normal state of high-Tc superconductors. Physical Review B, 1989, 39, 11633-11647. | 1.1 | 73 |
| 75 | Functional integral theories of low-dimensional quantum Heisenberg models. Physical Review B, 1988, 38, 316-332. | 1.1 | 797 |
| 76 | Extended Heisenberg models of antiferromagnetism: Analogies to the fractional quantum Hall effect. Physical Review Letters, 1988, 60, 531-534. | 2.9 | 265 |
| 77 | Spin Dynamics in the Square-Lattice Antiferromagnet. Physical Review Letters, 1988, 61, 617-620. | 2.9 | 384 |
| 78 | Theory of antiferromagnetic correlations and neutron-scattering cross section in heavy-fermion metals. Physical Review Letters, 1988, 60, 623-626. | 2.9 | 34 |
| 79 | Universal low-temperature properties of normal heavy-fermion systems (invited). Journal of Applied Physics, 1987, 61, 3162-3167. | 1.1 | 18 |
| 80 | Anomalous isotope dependence of hydrogen diffusion rates on tungsten (110) surfaces: Implications for lattice-hydrogen interactions. Journal of Chemical Physics, 1987, 86, 2356-2361. | 1.2 | 78 |
| 81 | The Kondo boson theory of the dynamic susceptibility of heavy fermions. Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics, 1987, 148, 50-53. | 0.9 | 7 |
| 82 | THE KONDO BOSON THEORY OF THE DYNAMIC SUSCEPTIBILITY OF HEAVY FERMIONS. , 1987, , 50-53. | | 0 |
| 83 | The Anderson Lattice and Universal Properties of Heavy Fermion Systems. , 1987, , 345-356. | | 0 |
| 84 | Theory of the Coherent Heavy Fermion State: Universal Behavior, Pressure Dependence and Neutron Scattering Cross Section. Japanese Journal of Applied Physics, 1987, 26, 457. | 0.8 | 0 |
| 85 | An analysis of transverse fluctuations in multidimensional tunneling. Nuclear Physics B, 1986, 275, 93-120. | 0.9 | 11 |
| 86 | Experimental evidence for predicted universal behavior in low-temperature Kondo lattices. Physical Review B, 1986, 34, 3524-3527. | 1.1 | 64 |
| 87 | Large-amplitude quantum fluctuations and subgap optical absorption in trans-polyacetylene. Physical Review B, 1986, 33, 8171-8179. | 1.1 | 39 |
| 88 | The effect of finite resolution on the determination of diffusion coefficients by the field emission fluctuation method. Surface Science, 1986, 167, 493-501. | 0.8 | 29 |
| 89 | Kondo Bosons and the Kondo Lattice: Microscopic Basis for the Heavy Fermi Liquid. Physical Review Letters, 1986, 57, 877-880. | 2.9 | 307 |
| 90 | The role of transverse fluctuations in multidimensional tunneling. Lecture Notes in Physics, 1986, , 323-324. | 0.3 | 0 |

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| 91 | Tunneling in Surface Diffusion. Jerusalem Symposia on Quantum Chemistry and Biochemistry, 1986, , 281-295. | 0.2 | 0 |
| 92 | Sound attenuation in metals: Reformulation of Pippard theory to include microscopic band structure and scattering. Solid State Communications, 1985, 54, 135-137. | 0.9 | 6 |
| 93 | The path decomposition expansion and multidimensional tunneling. Nuclear Physics B, 1985, 257, 799-858. | 0.9 | 116 |
| 94 | Universal high-temperature saturation in phonon and electron transport. Physical Review B, 1984, 29, 2884-2890. | 1.1 | 43 |
| 95 | Path Decomposition for Multidimensional Tunneling. Physical Review Letters, 1984, 53, 2275-2275. | 2.9 | 5 |
| 96 | Path Decomposition for Multidimensional Tunneling. Physical Review Letters, 1984, 53, 411-414. | 2.9 | 38 |