Takashi Oka

List of Publications by Year
in descending order

66 papers	6,769 citations	117625 34 h-index	114465 63 g-index
68 all docs	68 docs citations	68 times ranked	5147 citing authors

#	Article	IF	Citations
1	Photovoltaic Hall effect in graphene. Physical Review B, 2009, 79, .	3.2	1,008
2	Transport properties of nonequilibrium systems under the application of light: Photoinduced quantum Hall insulators without Landau levels. Physical Review B, 2011, 84, .	3.2	820
3	Electrically Switchable Chiral Light-Emitting Transistor. Science, 2014, 344, 725-728.	12.6	675
4	Floquet Engineering of Quantum Materials. Annual Review of Condensed Matter Physics, 2019, 10, 387-408.	14.5	539
5	Nonequilibrium dynamical mean-field theory and its applications. Reviews of Modern Physics, 2014, 86, 779-837.	45.6	529
6	Diagrammatic Monte Carlo simulation of nonequilibrium systems. Physical Review B, 2009, 79, .	3.2	235
7	Brillouin-Wigner theory for high-frequency expansion in periodically driven systems: Application to Floquet topological insulators. Physical Review B, 2016, 93, .	3.2	233
8	Out-of-equilibrium electrons and the Hall conductance of a Floquet topological insulator. Physical Review B, 2015, 91, .	3.2	195
9	Dissipative Floquet topological systems. Physical Review B, 2014, 90, .	3.2	153
10	Correlated electron systems periodically driven out of equilibrium:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>Floquet</mml:mtext><mml:mo>+</mml:mo><mml:mtext>DMFT</mml:mtext></mml:mrow>	3.2	148
	Physical Review B, 2008, 78, .		
11	Interfaces of Correlated Electron Systems: Proposed Mechanism for Colossal Electroresistance. Physical Review Letters, 2005, 95, 266403.	7.8	141
12	Breakdown of a Mott Insulator: A Nonadiabatic Tunneling Mechanism. Physical Review Letters, 2003, 91, 066406.	7.8	140
13	Ground-State Decay Rate for the Zener Breakdown in Band and Mott Insulators. Physical Review Letters, 2005, 95, 137601.	7.8	133
14	Weak-coupling quantum Monte Carlo calculations on the Keldysh contour: Theory and application to the current-voltage characteristics of the Anderson model. Physical Review B, 2010, 81, .	3.2	118
15	Dielectric Breakdown of Mott Insulators in Dynamical Mean-Field Theory. Physical Review Letters, 2010, 105, 146404.	7.8	111
16	Dynamical Band Flipping in Fermionic Lattice Systems: An ac-Field-Driven Change of the Interaction from Repulsive to Attractive. Physical Review Letters, 2011, 106, 236401.	7.8	109
17	Nonequilibrium Steady State of Photoexcited Correlated Electrons in the Presence of Dissipation. Physical Review Letters, 2009, 103, 047403.	7.8	100
18	Breakdown of an Electric-Field Driven System: A Mapping to a Quantum Walk. Physical Review Letters, 2005, 94, 100602.	7.8	89

#	Article	IF	Citations
19	Nonlinear doublon production in a Mott insulator: Landau-Dykhne method applied to an integrable model. Physical Review B, 2012, 86, .	3.2	76
20	Dynamical stability of a many-body Kapitza pendulum. Annals of Physics, 2015, 360, 694-710.	2.8	75
21	Laser-Driven Multiferroics and Ultrafast Spin Current Generation. Physical Review Letters, 2016, 117, 147202.	7.8	70
22	Non-perturbative terahertz high-harmonic generation in the three-dimensional Dirac semimetal Cd3As2. Nature Communications, 2020, 11, 2451.	12.8	69
23	Chiral pumping effect induced by rotating electric fields. Physical Review B, 2016, 93, .	3.2	64
24	Probing and controlling spin chirality in Mott insulators by circularly polarized laser. Physical Review B, 2017, 96, .	3.2	55
25	Vacuum instability in electric fields via AdS/CFT: Euler-Heisenberg Lagrangian and Planckian thermalization. Journal of High Energy Physics, 2013, 2013, 1.	4.7	53
26	Dielectric breakdown in a Mott insulator: Many-body Schwinger-Landau-Zener mechanism studied with a generalized Bethe ansatz. Physical Review B, 2010, 81, .	3.2	52
27	Magnetization and phase transition induced by circularly polarized laser in quantum magnets. Physical Review B, 2014, 90, .	3.2	49
28	Laser-induced magnetization curve. Physical Review B, 2014, 90, .	3.2	48
29	Repulsion-to-attraction transition in correlated electron systems triggered by a monocycle pulse. Physical Review B, 2012, 85, .	3.2	44
30	Current-induced strong diamagnetism in the Mott insulator Ca ₂ RuO ₄. Science, 2017, 358, 1084-1087.	12.6	39
31	Emergent Weyl nodes and Fermi arcs in a Floquet Weyl semimetal. Physical Review B, 2017, 96, .	3.2	38
32	Dynamical synchronization transition in interacting electron systems. Physical Review B, 2019, 100, .	3.2	35
33	Wannier representation of Floquet topological states. Physical Review B, 2020, 101, .	3.2	34
34	Extraction of higher-order nonlinear electronic response in solids using high harmonic generation. Nature Communications, 2019, 10, 3272.	12.8	33
35	Electromagnetic instability in holographic QCD. Journal of High Energy Physics, 2015, 2015, 1.	4.7	30
36	Tight-binding photonic bands in metallophotonic waveguide networks and flat bands in kagome lattices. Physical Review B, 2010, 81, .	3.2	29

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37	Electronic properties of alkali-metal loaded zeolites: Supercrystal Mott insulators. Physical Review B, 2004, 69, .	3.2	27
38	Electric field quench in AdS/CFT. Journal of High Energy Physics, 2014, 2014, 1.	4.7	26
39	Magnetic instability in AdS/CFT: Schwinger effect and Euler-Heisenberg Lagrangian of supersymmetric QCD. Journal of High Energy Physics, 2014, 2014, 1.	4.7	24
40	h / e oscillations in interlayer transport of delafossites. Science, 2020, 368, 1234-1238.	12.6	24
41	Holographic Floquet states I: a strongly coupled Weyl semimetal. Journal of High Energy Physics, 2017, 2017, 1.	4.7	23
42	Photoinduced Tomonaga-Luttinger-like liquid in a Mott insulator. Physical Review B, 2008, 78, .	3.2	22
43	Scanning Tunneling Microscopy as a Single Majorana Detector of Kitaevâ€™s Chiral Spin Liquid. Physical Review Letters, 2021, 126, 127201.	7.8	21
44	Superconductivity assisted by interlayer pair hopping in multilayered cuprates. Physical Review B, 2013, 88, .	3.2	20
45	Holographic Floquet states II: Floquet condensation of vector mesons in nonequilibrium phase diagram. Journal of High Energy Physics, 2018, 2018, 1.	4.7	19
46	Supersolid states in a spin system: Phase diagram and collective excitations. Physical Review B, 2013, 88, .	3.2	15
47	All Optical Measurement Proposed for the Photovoltaic Hall Effect. Journal of Physics: Conference Series, 2011, 334, 012060.	0.4	14
48	Restricted phase-space approximation in real-time stochastic quantization. Annals of Physics, 2015, 353, 107-128.	2.8	12
49	Nonperturbative topological current in Weyl and Dirac semimetals in laser fields. Physical Review B, 2021, 103, .	3.2	12
50	Hidden kagome-lattice picture and origin of high conductivity in delafossite <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>PtCoO</mml:mi><mml:mn>2</mml:mn></mml:msub></r Physical Review Materials, 2019, 3, .	2.4	12
51	Turbulent meson condensation in quark deconfinement. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 746, 311-314.	4.1	10
52	Rapid thermalization by baryon injection in gauge/gravity duality. Physical Review D, 2011, 84, .	4.7	9
53	Heterodyne Hall effect in a two-dimensional electron gas. Physical Review B, 2016, 94, .	3.2	8
54	Photovoltaic Berry curvature in the honeycomb lattice. Journal of Physics: Conference Series, 2010, 200, 062017.	0.4	7

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55	Photo control of transport properties in a disordered wire: Average conductance, conductance statistics, and time-reversal symmetry. Annals of Physics, 2012, 327, 1868-1889.	2.8	7
56	Meson turbulence at quark deconfinement from AdS/CFT. Nuclear Physics B, 2015, 896, 738-762.	2.5	7
57	Nonadiabatic nonlinear optics and quantum geometry â€" Application to the twisted Schwinger effect. SciPost Physics, 2021, 11, .	4.9	7
58	Photo-induced Hall Effect in graphene â€" effect of boundary types. Journal of Physics: Conference Series, 2009, 148, 012061.	0.4	5
59	Nonequilibrium superconducting and magnetic phases in a correlated electron system coupled to electrodes. Physical Review B, 2010, 82, .	3.2	5
60	Nonlinear transport in a one-dimensional Mott insulator in strong electric fields. Physica B: Condensed Matter, 2005, 359-361, 759-761.	2.7	4
61	Non-equilibrium superconductivity in a correlated electron system studied with the Keldysh + FLEX approach. Physica C: Superconductivity and Its Applications, 2010, 470, S928-S929.	1.2	1
62	Photoinduced insulator-metal transition in correlated electrons â€" a Floquet analysis with the dynamical mean-field theory. Journal of Physics: Conference Series, 2009, 150, 042216.	0.4	0
63	Nonequilibrium steady states in correlated electron systems â€" Photoinduced insulator-metal transition and optical response. Journal of Physics: Conference Series, 2010, 200, 012212.	0.4	0
64	Publisherâ€™s Note: Rapid thermalization by baryon injection in gauge/gravity duality [Phys. Rev. D84, 066005 (2011)]. Physical Review D, 2011, 84, .	4.7	0
65	Topological Properties of Graphene and Photo-induced Effects. Hyomen Kagaku, 2011, 32, 196-201.	0.0	0
66	Extraction of higher-order nonlinear electronic response in solids using high harmonic generation. , 2020, , .		0