

# Xu-Guang Huang

## List of Publications by Year in descending order

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94  
papers

3,938  
citations

126907

33  
h-index

123424

61  
g-index

95  
all docs

95  
docs citations

95  
times ranked

1131  
citing authors

#	ARTICLE	IF	CITATIONS
1	Event-by-event generation of electromagnetic fields in heavy-ion collisions. Physical Review C, 2012, 85, .	2.9	535
2	Electromagnetic fields and anomalous transports in heavy-ion collisions—a pedagogical review. Reports on Progress in Physics, 2016, 79, 076302.	20.1	229
3	Azimuthally fluctuating magnetic field and its impacts on observables in heavy-ion collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 718, 1529-1535.	4.1	159
4	Vorticity in heavy-ion collisions. Physical Review C, 2016, 93, .	2.9	150
5	Anisotropic hydrodynamics, bulk viscosities, and $\chi$ -modes of strange quark stars with strong magnetic fields. Physical Review D, 2010, 81, .	4.7	128
6	Novel quantum phenomena induced by strong magnetic fields in heavy-ion collisions. Nuclear Science and Techniques/Hewuli, 2017, 28, 1.	3.4	117
7	Fate of spin polarization in a relativistic fluid: An entropy-current analysis. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2019, 795, 100-106.	4.1	117
8	Kubo formulas for relativistic fluids in strong magnetic fields. Annals of Physics, 2011, 326, 3075-3094.	2.8	107
9	Thermal vorticity and spin polarization in heavy-ion collisions. Physical Review C, 2019, 99, .	2.9	104
10	BCS-BEC Crossover in 2D Fermi Gases with Rashba Spin-Orbit Coupling. Physical Review Letters, 2012, 108, 145302.	7.8	99
11	Axial Current Generation from Electric Field: Chiral Electric Separation Effect. Physical Review Letters, 2013, 110, 232302.	7.8	91
12	Quark polarization in a viscous quark-gluon plasma. Physical Review C, 2011, 84, .	2.9	88
13	Anomalous chiral transports and spin polarization in heavy-ion collisions. Nuclear Science and Techniques/Hewuli, 2020, 31, 1.	3.4	84
14	Analogy between rotation and density for Dirac fermions in a magnetic field. Physical Review D, 2016, 93, .	4.7	80
15	Local spin polarization in high energy heavy ion collisions. Physical Review Research, 2019, 1, .	3.6	71
16	Testing the chiral magnetic effect with isobaric collisions. Physical Review C, 2016, 94, .	2.9	70
17	Chiral kinetic theory in curved spacetime. Physical Review D, 2019, 99, .	4.7	70
18	Electric fields and chiral magnetic effect in Cu + Au collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2015, 742, 296-302.	4.1	64

#	ARTICLE	IF	CITATIONS
19	Covariant spin kinetic theory I: collisionless limit *. Chinese Physics C, 2020, 44, 094101.	3.7	64
20	Bulk viscosity of quark-gluon plasma in strong magnetic fields. Physical Review D, 2017, 96, .	4.7	63
21	Nonresistive dissipative magnetohydrodynamics from the Boltzmann equation in the 14-moment approximation. Physical Review D, 2018, 98, .	4.7	62
22	Feed-down effect on $\langle \hat{b} \rangle$ spin polarization. Physical Review C, 2019, 100, .	2.9	61
23	Chiral vortical wave and induced flavor charge transport in a rotating quark-gluon plasma. Physical Review D, 2015, 92, .	4.7	57
24	Relativistic spin hydrodynamics with torsion and linear response theory for spin relaxation. Journal of High Energy Physics, 2021, 2021, 1.	4.7	57
25	Charge-dependent azimuthal correlations from AuAu to UU collisions. Nuclear Physics A, 2015, 939, 85-100.	1.5	55
26	Hydrodynamic study of hyperon spin polarization in relativistic heavy ion collisions. Physical Review C, 2021, 103, .	2.9	48
27	Chiral electric separation effect in the quark-gluon plasma. Physical Review D, 2015, 91, .	4.7	46
28	Vorticity in low-energy heavy-ion collisions. Physical Review C, 2020, 101, .	2.9	46
29	Anomalous effects of dense matter under rotation. Journal of High Energy Physics, 2018, 2018, 1.	4.7	44
30	Electrodynamics of chiral matter. Physical Review D, 2017, 95, .	4.7	43
31	Zilch vortical effect, Berry phase, and kinetic theory. Journal of High Energy Physics, 2020, 2020, 1.	4.7	37
32	Electromagnetic triangle anomaly and neutral pion condensation in QCD vacuum. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2016, 757, 1-5.	4.1	36
33	Local spin alignment of vector mesons in relativistic heavy-ion collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 817, 136325.	4.1	34
34	Chiral vortical effect for an arbitrary spin. Journal of High Energy Physics, 2019, 2019, 1.	4.7	33
35	Strange quark matter in strong magnetic fields within a confining model. Physical Review D, 2013, 88, .	4.7	32
36	Bulk viscosity and relaxation time of causal dissipative relativistic fluid dynamics. Physical Review C, 2011, 83, .	2.9	30

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37	Spin-polarized neutron matter: Critical unpairing and BCS-BEC precursor. <i>Physical Review C</i> , 2016, 93, .	2.9	30
38	BCS-BEC crossover in three-dimensional Fermi gases with spherical spin-orbit coupling. <i>Physical Review B</i> , 2012, 86, .	3.2	28
39	Nonperturbative effects on the ferromagnetic transition in repulsive Fermi gases. <i>Physical Review A</i> , 2012, 85, .	2.5	28
40	BCS-BEC crossovers and unconventional phases in dilute nuclear matter. <i>Physical Review C</i> , 2014, 90, .	2.9	25
41	Predictions for isobaric collisions at $\sqrt{s_{NN}} = 2.76$ GeV from a multiphase transport model. <i>Physical Review C</i> , 2018, 97, .	2.9	25
42	Superfluidity and collective modes in Rashba spin-orbit coupled Fermi gases. <i>Annals of Physics</i> , 2013, 337, 163-207.	2.8	23
43	Surface magnetic catalysis. <i>Physical Review D</i> , 2017, 96, .	4.7	22
44	Kinetic evolution of the glasma and thermalization in heavy-ion collisions. <i>International Journal of Modern Physics E</i> , 2014, 23, 1430003.	1.0	20
45	Stoner ferromagnetism of a strongly interacting Fermi gas in the quasirepulsive regime. <i>Physical Review A</i> , 2016, 93, .	2.5	20
46	Spin polarization formula for Dirac fermions at local equilibrium. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, .	5.1	20
47	Phase diagram of dilute nuclear matter: Unconventional pairing and the BCS-BEC crossover. <i>Physical Review C</i> , 2012, 86, .	2.9	19
48	Simulating Chiral Magnetic and Separation Effects with Spin-Orbit Coupled Atomic Gases. <i>Scientific Reports</i> , 2016, 6, 20601.	3.3	19
49	Kinetic theory with spin: From massive to massless fermions. <i>Physical Review D</i> , 2020, 102, .	4.7	19
50	Vorticity and Spin Polarization – A Theoretical Perspective. <i>Nuclear Physics A</i> , 2021, 1005, 121752.	1.5	19
51	BCS-BEC crossover in symmetric nuclear matter at finite temperature: Pairing fluctuation and pseudogap. <i>Physical Review C</i> , 2010, 81, .	2.9	18
52	BCS-BEC crossover at finite temperature in spin-orbit-coupled Fermi gases. <i>Physical Review A</i> , 2013, 87, .	2.5	18
53	Chiral phase transition and Schwinger mechanism in a pure electric field. <i>Physical Review D</i> , 2016, 93, .	4.7	18
54	Nambu–Jona-Lasinio model in a parallel electromagnetic field. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2018, 780, 273-282.	4.1	18

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55	Unusual Zeeman-field effects in two-dimensional spin-orbit-coupled Fermi superfluids. Physical Review A, 2012, 86, .	2.5	17
56	Glasma evolution and Bose-Einstein condensation with elastic and inelastic collisions. Physical Review D, 2015, 91, .	4.7	16
57	Spin-dependent dynamically assisted Schwinger mechanism. Physical Review D, 2019, 100, .	4.7	15
58	Gyrohydrodynamics: Relativistic spinful fluid with strong vorticity. Progress of Theoretical and Experimental Physics, 2022, 2022, .	6.6	15
59	Shear viscosity, bulk viscosity, and relaxation times of causal dissipative relativistic fluid-dynamics at finite temperature and chemical potential. Nuclear Physics A, 2012, 889, 73-92.	1.5	13
60	Consistency of field-theoretical and kinetic calculations of viscous transport coefficients for a relativistic fluid. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2012, 708, 174-178.	4.1	13
61	Possible observables for the chiral electric separation effect in Cu+Au collisions. Physical Review C, 2015, 91, .	2.9	13
62	Hydrodynamic response in simulations within a multiphase transport model. Physical Review C, 2018, 98, .	2.9	13
63	In search of chiral magnetic effect: separating flow-driven background effects and quantifying anomaly-induced charge separations. Nuclear Physics A, 2016, 956, 661-664.	1.5	12
64	Vector meson condensation in a pion superfluid. Physical Review D, 2016, 94, .	4.7	12
65	QCD Phase Structure Under Rotation. Lecture Notes in Physics, 2021, , 349-379.	0.7	12
66	Global spin polarization of multistrange hyperons and feed-down effect in heavy-ion collisions. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2022, 827, 136971.	4.1	12
67	Vorticity and Spin Polarization in Heavy Ion Collisions: Transport Models. Lecture Notes in Physics, 2021, , 281-308.	0.7	11
68	Phase diagram of chiral quark matter: Color and electrically neutral Fulde-Ferrell phase. Physical Review D, 2010, 82, .	4.7	10
69	Emergent QCD Kondo effect in two-flavor color superconducting phase. Physical Review D, 2019, 99, .	4.7	10
70	Hydrodynamic attractor in a Hubble expansion. Physical Review D, 2021, 104, .	4.7	9
71	Transition Radiation as a Probe of the Chiral Anomaly. Physical Review Letters, 2018, 121, 182301.	7.8	8
72	Local Spin Polarization in 200 GeV Au+Au and 2.76 TeV Pb+Pb Collisions. Nuclear Physics A, 2021, 1005, 121831.	1.5	8

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73	Asymmetric fermion superfluid with inter- and intra-species pairings. <i>New Journal of Physics</i> , 2007, 9, 375-375.	2.9	7
74	Chiral phase structure at finite temperature and density in Einstein universe. <i>Astroparticle Physics</i> , 2007, 28, 472-480.	4.3	7
75	Conventional and Unconventional Pairing and Condensates in Dilute Nuclear Matter. <i>Journal of Physics: Conference Series</i> , 2016, 702, 012012.	0.4	7
76	Chiral magnetic effect in isobaric collisions. <i>Nuclear Physics A</i> , 2017, 967, 736-739.	1.5	7
77	Chiral Vortical and Magnetic Effects in Anomalous Hydrodynamics. <i>Nuclear Physics A</i> , 2017, 967, 776-779.	1.5	7
78	Signatures of the vortical quark-gluon plasma in hadron yields. <i>Physical Review C</i> , 2020, 102, .	2.9	7
79	Inhomogeneous condensates in dilute nuclear matter and BCS-BEC crossovers. <i>Journal of Physics: Conference Series</i> , 2014, 496, 012008.	0.4	6
80	Quarksonic matter at high isospin density. <i>Chinese Physics C</i> , 2017, 41, 051001.	3.7	6
81	ASYMMETRIC FERMI SUPERFLUID WITH TWO TYPES OF PAIRINGS. <i>International Journal of Modern Physics E</i> , 2007, 16, 2307-2312.	1.0	5
82	Kosterlitz-Thouless transition and vortex-antivortex lattice melting in two-dimensional Fermi gases with $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle p \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ - or $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mi} \rangle d \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -wave pairing. <i>Physical Review A</i> , 2017, 96, .	2.5	5
83	Global hyperon polarization and effects of decay feeddown. <i>EPJ Web of Conferences</i> , 2022, 259, 11017.	0.3	5
84	Chiral Anomaly in Non-Relativistic Systems: Berry Curvature and Chiral Kinetic Theory. <i>Chinese Physics Letters</i> , 2022, 39, 021101.	3.3	5
85	Determination of the impact parameter in high-energy heavy-ion collisions via deep learning *. <i>Chinese Physics C</i> , 2022, 46, 074110.	3.7	5
86	NEUTRINO EMISSION IN INHOMOGENEOUS PION CONDENSED QUARK MATTER. <i>International Journal of Modern Physics E</i> , 2008, 17, 1906-1916.	1.0	4
87	Event-by-event generation of vorticity in heavy-ion collisions. <i>Journal of Physics: Conference Series</i> , 2017, 779, 012070.	0.4	4
88	Spontaneous generation of spin current from the vacuum by strong electric fields. <i>Progress of Theoretical and Experimental Physics</i> , 2019, 2019, .	6.6	4
89	Real-time dynamics of axion particle production due to spontaneous decay of a coherent axion field. <i>Physical Review D</i> , 2020, 101, .	4.7	4
90	Dynamic scale anomalous transport in QCD with electromagnetic background. <i>Journal of High Energy Physics</i> , 2020, 2020, 1.	4.7	4

#	ARTICLE	IF	CITATIONS
91	Strongly interacting matter under rotation. EPJ Web of Conferences, 2018, 171, 07004.	0.3	1
92	Phenomenology of anomalous chiral transports in heavy-ion collisions. EPJ Web of Conferences, 2018, 172, 01003.	0.3	1
93	Viscosities in chiral symmetry breaking phase. Chinese Physics C, 2010, 34, 1440-1442.	3.7	0
94	Anomaly-Induced Effects of Rotating Dense Matter. , 2019, , .		0