

# Kenji Fukushima

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7612129/publications.pdf>

Version: 2024-02-01

113  
papers

7,295  
citations

87888

38  
h-index

53230

85  
g-index

116  
all docs

116  
docs citations

116  
times ranked

3275  
citing authors

#	ARTICLE	IF	CITATIONS
1	Chiral magnetic effect. <i>Physical Review D</i> , 2008, 78, .	4.7	1,486
2	Chiral effective model with the Polyakov loop. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2004, 591, 277-284.	4.1	764
3	The phase diagram of dense QCD. <i>Reports on Progress in Physics</i> , 2011, 74, 014001.	20.1	663
4	Phase diagrams in the three-flavor Nambu–Jona-Lasinio model with the Polyakov loop. <i>Physical Review D</i> , 2008, 77, .	4.7	399
5	The phase diagram of nuclear and quark matter at high baryon density. <i>Progress in Particle and Nuclear Physics</i> , 2013, 72, 99-154.	14.4	186
6	Hadron production in ultra-relativistic nuclear collisions: Quarkyonic matter and a triple point in the phase diagram of QCD. <i>Nuclear Physics A</i> , 2010, 837, 65-86.	1.5	179
7	Chiral magnetic effect in the Polyakov–Nambu–Jona-Lasinio model. <i>Physical Review D</i> , 2010, 81, .	4.7	172
8	Magnetic Catalysis Versus Magnetic Inhibition. <i>Physical Review Letters</i> , 2013, 110, 031601.	7.8	172
9	Real-Time Dynamics of the Chiral Magnetic Effect. <i>Physical Review Letters</i> , 2010, 104, 212001.	7.8	118
10	Color Superconducting Matter in a Magnetic Field. <i>Physical Review Letters</i> , 2008, 100, 032007.	7.8	117
11	The evolving Glasma. <i>Nuclear Physics A</i> , 2012, 874, 108-129.	1.5	110
12	Electric-current susceptibility and the Chiral Magnetic Effect. <i>Nuclear Physics A</i> , 2010, 836, 311-336.	1.5	93
13	Interweaving chiral spirals. <i>Nuclear Physics A</i> , 2012, 875, 94-138.	1.5	85
14	Critical surface in hot and dense QCD with the vector interaction. <i>Physical Review D</i> , 2008, 78, .	4.7	83
15	Analytical and numerical evaluation of the Debye and Meissner masses in dense neutral three-flavor quark matter. <i>Physical Review D</i> , 2005, 72, .	4.7	81
16	Heavy quark diffusion in strong magnetic fields at weak coupling and implications for elliptic flow. <i>Physical Review D</i> , 2016, 93, .	4.7	81
17	Analogy between rotation and density for Dirac fermions in a magnetic field. <i>Physical Review D</i> , 2016, 93, .	4.7	80
18	Magnetic catalysis in hot and dense quark matter and quantum fluctuations. <i>Physical Review D</i> , 2012, 86, .	4.7	78

#	ARTICLE	IF	CITATIONS
19	Initial singularity of the little bang. Nuclear Physics A, 2007, 786, 107-130.	1.5	76
20	Boundary effects and gapped dispersion in rotating fermionic matter. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 764, 94-99.	4.1	73
21	Relation between the Polyakov loop and the chiral order parameter at strong coupling. Physical Review D, 2003, 68, .	4.7	70
22	Spin hydrodynamics and symmetric energy-momentum tensors " A current induced by the spin vorticity ". Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 817, 136346.	4.1	69
23	Polyakov loop modeling for hot QCD. Progress in Particle and Nuclear Physics, 2017, 96, 154-199.	14.4	68
24	QCD matter in extreme environments. Journal of Physics G: Nuclear and Particle Physics, 2012, 39, 013101.	3.6	65
25	Chiral pumping effect induced by rotating electric fields. Physical Review B, 2016, 93, .	3.2	64
26	THE QUARKYONIC STAR. Astrophysical Journal, 2016, 817, 180.	4.5	63
27	Model study of the sign problem in the mean-field approximation. Physical Review D, 2007, 75, .	4.7	60
28	Linking the chiral and deconfinement phase transitions. Physical Review D, 2004, 69, .	4.7	59
29	Heating (gapless) color-flavor locked quark matter. Physical Review D, 2005, 71, .	4.7	59
30	Finite-temperature spectral function of the vector mesons in a holographic QCD model. Physical Review D, 2009, 80, .	4.7	58
31	Two-color quark matter: $U(1)$ restoration, superfluidity, and quarkyonic phase. Physical Review D, 2009, 80, .	4.7	57
32	Gauge dynamics in the PNJL model: Color neutrality and Casimir scaling. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 676, 57-62.	4.1	56
33	Topological susceptibility at zero temperature and finite temperature in the Nambu " Jona-Lasinio model. Physical Review C, 2001, 63, .	2.9	52
34	Wess-Zumino-Witten action and photons from the chiral magnetic effect. Physical Review D, 2012, 86, .	4.7	46
35	Probing gluon saturation with next-to-leading order photon production at central rapidities in proton-nucleus collisions. Journal of High Energy Physics, 2017, 2017, 1.	4.7	45
36	Melting spectral functions of the scalar and vector mesons in a holographic QCD model. Physical Review D, 2010, 81, .	4.7	44

#	ARTICLE	IF	CITATIONS
37	Characterizing the Larkin-Ovchinnikov-Fulde-Ferrel phase induced by the chromomagnetic instability. Physical Review D, 2006, 73, .	4.7	40
38	Stabilizing perturbative Yang-Mills thermodynamics with Gribov quantization. Physical Review D, 2013, 88, .	4.7	37
39	Isentropic thermodynamics in the Polyakovâ€“Nambuâ€“Jona-Lasinio model. Physical Review D, 2009, 79, .	4.7	36
40	Initial energy density and gluon distribution from the glasma in heavy-ion collisions. Physical Review C, 2009, 79, .	2.9	35
41	Magnetic-field induced screening effect and collective excitations. Physical Review D, 2011, 83, .	4.7	34
42	Polyakov loop and QCD thermodynamics from the gluon and ghost propagators. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2013, 723, 360-364.	4.1	34
43	Effects of chiral restoration on the behaviour of the Polyakov loop at strong coupling. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 553, 38-44.	4.1	33
44	Thermodynamics of strong coupling 2-color QCD with chiral and diquark condensates. Physics Reports, 2004, 398, 281-300.	25.6	33
45	Initial fields and instabilities in the classical model of relativistic heavy-ion collisions. Physical Review C, 2007, 76, .	2.9	33
46	Hadron resonance gas and mean-field nuclear matter for baryon number fluctuations. Physical Review C, 2015, 91, .	2.9	32
47	Second-order and fluctuation-induced first-order phase transitions with functional renormalization group equations. Physical Review D, 2011, 83, .	4.7	31
48	Light projectile scattering off the Color Glass Condensate. Journal of High Energy Physics, 2007, 2007, 040-040.	4.7	30
49	Dielectric correction to the chiral magnetic effect. Physical Review D, 2010, 82, .	4.7	30
50	Multiparticle correlations in the Schwinger mechanism. Nuclear Physics A, 2009, 831, 184-214.	1.5	28
51	Hamilton dynamics for Lefschetz-thimble integration akin to the complex Langevin method. Progress of Theoretical and Experimental Physics, 2015, 2015, 111A01-111A01.	6.6	28
52	Deconfining phase boundary of rapidly rotating hot and dense matter and analysis of moment of inertia. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 816, 136184.	4.1	28
53	Number of QCD critical points with neutral color superconductivity. Physical Review D, 2009, 79, .	4.7	26
54	Chiral Mass-Gap in Curved Space. Physical Review Letters, 2014, 113, 091102.	7.8	25

#	ARTICLE	IF	CITATIONS
55	Magnetic Shift of the Chemical Freeze-out and Electric Charge Fluctuations. Physical Review Letters, 2016, 117, 102301.	7.8	25
56	$A \left( \frac{U}{T} \right)^{24}$	4.7	24
57	Physical Review D, 2009, 80, . Turbulent pattern formation and diffusion in the early-time dynamics in relativistic heavy-ion collisions. Physical Review C, 2014, 89, .	2.9	23
58	Instability of a gapless color superconductor with respect to inhomogeneous fluctuations. Physical Review D, 2006, 74, .	4.7	22
59	Boost invariant formulation of the chiral kinetic theory. Physical Review D, 2017, 96, .	4.7	21
60	Thermodynamic limit of the canonical partition function with respect to the quark number in QCD. Annals of Physics, 2003, 304, 72-88.	2.8	20
61	Randomness in infinitesimal extent in the McLerran-Venugopalan model. Physical Review D, 2008, 77, .	4.7	19
62	Simulating net particle production and chiral magnetic current in a $C \cdot P$ -odd domain. Physical Review D, 2015, 92, .	4.7	19
63	Photon from the annihilation process with CGC in the pA collision. Nuclear Physics A, 2017, 958, 1-24.	1.5	19
64	Phase diagram of hot and dense QCD constrained by the Statistical Model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 695, 387-391.	4.1	18
65	Evolution to the quark-gluon plasma. Reports on Progress in Physics, 2017, 80, 022301.	20.1	17
66	Quark description of the Nambu-Goldstone bosons in the color-flavor locked phase. Physical Review D, 2004, 70, .	4.7	16
67	Continuity from neutron matter to two-flavor quark matter with $S$	4.7	16
68	Larkin-Ovchinnikov-Fulde-Ferrell state in two-color quark matter. Physical Review D, 2007, 76, .	4.7	15
69	Two-gluon production and longitudinal correlations in the Color Glass Condensate. Nuclear Physics A, 2008, 813, 171-197.	1.5	15
70	Spatially Assisted Schwinger Mechanism and Magnetic Catalysis. Physical Review Letters, 2016, 117, 081603.	7.8	14
71	Spatial Modulation and Topological Current in Holographic QCD Matter. Physical Review Letters, 2013, 111, 051601.	7.8	13
72	Chiral symmetry and heavy-ion collisions. Journal of Physics G: Nuclear and Particle Physics, 2008, 35, 104020.	3.6	12

#	ARTICLE	IF	CITATIONS
73	Geometrically Induced Magnetic Catalysis and Critical Dimensions. Physical Review Letters, 2015, 114, 181601.	7.8	12
74	Restricted phase-space approximation in real-time stochastic quantization. Annals of Physics, 2015, 353, 107-128.	2.8	12
75	Equation of state of cold and dense QCD matter in resummed perturbation theory. Physical Review D, 2022, 105, .	4.7	12
76	Stability of the perturbative vacuum against spatial variations of the Polyakov loop. Journal of Physics G: Nuclear and Particle Physics, 2000, 26, 1397-1415.	3.6	11
77	Order Parameters with Higher Dimensionful Composite Fields. Progress of Theoretical Physics, 2004, 111, 967-972.	2.0	11
78	Collective excitations in a superfluid of color-flavor locked quark matter. Physical Review D, 2005, 71, .	4.7	10
79	Skyrmions in a magnetic field and $\langle \mathop{\text{Tr}}\limits^{\text{O}}$ domain wall formation in dense nuclear matter. Physical Review D, 2022, 105, .	4.7	10
80	General formulae for dipole Wilson line correlators with the Color Glass Condensate. Journal of High Energy Physics, 2017, 2017, 1.	4.7	9
81	Slope of the topological susceptibility at zero temperature and finite temperature in the Nambu–Jona-Lasinio model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 514, 200-203.	4.1	8
82	Characteristics of the eigenvalue distribution of the Dirac operator in dense two-color QCD. Journal of High Energy Physics, 2008, 2008, 083-083.	4.7	8
83	Title is missing!. Acta Physica Polonica B, 2011, 42, 2697.	0.8	8
84	Generic features of the phase transition in cold and dense quark matter. Physical Review D, 2012, 86, .	4.7	8
85	Schwinger mechanism with stochastic quantization. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2014, 735, 371-375.	4.1	8
86	Deconfinement and $P_C$ breaking at $\langle \mathop{\text{Tr}}\limits^{\text{O}}$ in Yang-Mills theories and a novel phase for SU(2). Physical Review D, 2020, 102, .	4.7	8
87	Lefschetz-thimble inspired analysis of the Dykhne–Davis–Pechukas method and an application for the Schwinger Mechanism. Annals of Physics, 2020, 415, 168111.	2.8	7
88	Effective model approach to the dense state of QCD matter. Physics of Particles and Nuclei Letters, 2011, 8, 838-844.	0.4	6
89	Baryonic matter and beyond. Nuclear Physics A, 2014, 931, 257-266.	1.5	6
90	Dynamic aspect of the chiral phase transition in the mode coupling theory. Nuclear Physics A, 2005, 748, 260-309.	1.5	5

#	ARTICLE	IF	CITATIONS
91	Gauge-invariant source terms in QCD. Nuclear Physics A, 2006, 770, 71-83.	1.5	5
92	Model analysis on thermal UV-cutoff effects on the critical boundary in hot QCD. Physical Review D, 2010, 81, .	4.7	5
93	Analytic studies of the complex Langevin equation with a Gaussian ansatz and multiple solutions in the unstable region. Physical Review D, 2016, 94, .	4.7	5
94	Anomaly inflow on QCD axial domain-walls and vortices. Physical Review D, 2018, 97, .	4.7	5
95	Spectral representation of the particle production out of equilibriumâ€”Schwinger mechanism in pulsed electric fields. New Journal of Physics, 2014, 16, 073031.	2.9	4
96	Deriving the Jalilian-Marianâ€”Iancuâ€”McLerranâ€”Weigertâ€”Leonidovâ€”Kovner equation with classical and quantum source terms. Nuclear Physics A, 2006, 775, 69-88.	1.5	3
97	Phases of QCD â€” <i>Baryon Rich State of Matter</i>â€”. Journal of Physics: Conference Series, 2011, 312, 012001.	0.4	3
98	Sign problem and the chiral spiral on the finite density lattice. Physical Review D, 2014, 89, .	4.7	3
99	Explicit conversion from the Casimir force to Planck's law of radiation. Physica A: Statistical Mechanics and Its Applications, 2001, 299, 455-460.	2.6	2
100	Strangeness in the PNJL model. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 064020.	3.6	2
101	Relation between colour deconfinement and chiral restoration. Journal of Physics G: Nuclear and Particle Physics, 2004, 30, S1263-S1266.	3.6	1
102	Instability of a gapless color superconductor with respect to inhomogeneous fluctuations. Nuclear Physics A, 2007, 785, 118-121.	1.5	1
103	Silver blaze puzzle in $1/N_c$ expansions of cold and dense QCD matter. Physical Review D, 2014, 89, .	4.7	1
104	Strangeness as a probe to baryon-rich QCD matter at NICA. European Physical Journal A, 2016, 52, 1.	2.5	1
105	Deconfinement and Chiral Restoration in Hot and Dense Matter. Nuclear Physics, Section B, Proceedings Supplements, 2005, 140, 580-582.	0.4	0
106	Phase Diagram and Instability of Dense Neutral Three-Flavor Quark Matter. AIP Conference Proceedings, 2006, , .	0.4	0
107	Chiral Magnetic Effect and the QCD Phase Transitions. , 2011, , .		0
108	What favors and disfavors the critical point of QCD?. Open Physics, 2012, 10, .	1.7	0

#	ARTICLE	IF	CITATIONS
109	Quest for the QCD phase diagram in extreme environments. <i>Hyperfine Interactions</i> , 2013, 215, 45-51.	0.5	0
110	What flows in the chirally anomalous transport?. <i>Nuclear Physics A</i> , 2016, 956, 665-668.	1.5	0
111	Photons from the Color Glass Condensate in p+A collisions. <i>EPJ Web of Conferences</i> , 2017, 141, 04004.	0.3	0
112	Electric conductivity of hot and dense quark matter in a magnetic field with Landau level resummation via kinetic equations. <i>Nuclear Physics A</i> , 2019, 982, 231-234.	1.5	0
113	Classification of magnetic vortices by angular momentum conservation. <i>Physical Review Research</i> , 2021, 3, .	3.6	0