Hannah Elfner

List of Publications by Year
in descending order

122 papers	3,816 citations	117625 34 h-index	128289 60 g-index
123 all docs	123 docs citations	123 times ranked	3255 citing authors

#	Article	IF	Citations
1	The BEST framework for the search for the QCD critical point and the chiral magnetic effect. Nuclear Physics A, 2022, 1017, 122343.	1.5	51
2	Collective flow at SIS energies within a hadronic transport approach: Influence of light nuclei formation and equationâof state. Physical Review C, 2022, 105, .	2.9	11
3	Transport model comparison studies of intermediate-energy heavy-ion collisions. Progress in Particle and Nuclear Physics, 2022, 125, 103962.	14.4	55
4	Out-of-equilibrium photon production in the late stages of relativistic heavy-ion collisions. Physical Review C, 2022, 105, .	2.9	6
5	Role of proton-antiproton regeneration in the late stages of heavy-ion collisions. Physical Review C, 2022, 105, .	2.9	7
6	Symmetry energy investigation with pion production from Sn+Sn systems. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 813, 136016.	4.1	40
7	Constraining resonance properties through kaon production in pionâ€"nucleus collisions at low energies. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 025109.	3.6	4
8	Particle production in AgAg collisions at <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>E</mml:mi><mml:mi>K</mml:mi></mml:msub></mml:mi> GeV within a hadronic transport approach. Physical Review C, 2021, 103, .	2.9	6
9	Multisystem Bayesian constraints on the transport coefficients of QCD matter. Physical Review C, 2021, 103, .	2.9	118
10	Phenomenological Constraints on the Transport Properties of QCD Matter with Data-Driven Model Averaging. Physical Review Letters, 2021, 126, 242301.	7.8	82
11	Determining the jet transport coefficient <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mover accent="true"><mml:mi>q</mml:mi><mml:mo>Ì‚</mml:mo></mml:mover></mml:math> from inclusive hadron suppression measurements using Bayesian parameter estimation. Physical Review C, 2021, 104, .	2.9	51
12	Comparison of heavy-ion transport simulations: Mean-field dynamics in a box. Physical Review C, 2021, 104, .	2.9	38
13	Deuteron production in relativistic heavy ion collisions via stochastic multiparticle reactions. Physical Review C, 2021, 104, .	2.9	26
14	Inclusive and effective bulk viscosities in the hadron gas. Journal of Physics G: Nuclear and Particle Physics, 2021, 48, 015005.	3.6	8
15	Cross-conductivity: Novel transport coefficients to constrain the hadronic degrees of freedom of nuclear matter. Physical Review D, 2020, 101, .	4.7	9
16	Influence of the neutron-skin effect on nuclear isobar collisions at energies available at the BNL Relativistic Heavy Ion Collider. Physical Review C, 2020, 101, .	2.9	23
17	Jet quenching in the hadron gas: An exploratory study. Physical Review C, 2020, 101, .	2.9	11
18	Particle production via strings and baryon stopping within a hadronic transport approach. Journal of Physics G: Nuclear and Particle Physics, 2020, 47, 065101.	3.6	38

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19	Strangeness production via resonances in heavy-ion collisions at energies available at the GSI Schwerionensynchrotron. Physical Review C, 2019, 99, .	2.9	15
20	Electrical conductivity and relaxation via colored noise in a hadronic gas. Physical Review D, 2019, 99, .	4.7	15
21	Benchmarking a nonequilibrium approach to photon emission in relativistic heavy-ion collisions. Physical Review D, 2019, 99, .	4.7	16
22	Comparison of heavy-ion transport simulations: Collision integral with pions and $\mathrm{\Delta}$ resonances in a box. Physical Review C, 2019, 100, .	2.9	60
23	Correlated gluonic hot spots meet symmetric cumulants data at LHC energies. Nuclear Physics A, 2019, 982, 463-466.	1.5	2
24	SMASH â€" A new hadronic transport approach. Nuclear Physics A, 2019, 982, 399-402.	1.5	22
25	Shear viscosity and resonance lifetimes in the hadron gas. Nuclear Physics A, 2019, 982, 807-810.	1.5	0
26	Classify QCD phase transition with deep learning. Nuclear Physics A, 2019, 982, 867-870.	1.5	5
27	Can Baryon Stopping Be Understood within a Hadronic Transport Approach. Proceedings (mdpi), 2019, 10, 2.	0.2	0
28	Centrality Dependence of Deuteron Production in PbPb Collisions at 2.76 TeV via Hydrodynamics and Hadronic Afterburner +. Proceedings (mdpi), 2019, 10, 6.	0.2	5
29	Bulk Observables within a Hybrid Approach for Heavy Ion Collisions with SMASH Afterburner. Proceedings (mdpi), 2019, 10, .	0.2	0
30	Microscopic study of deuteron production in PbPb collisions at $\sqrt{s}=$ TeV via hydrodynamics and a hadronic afterburner. Physical Review C, 2019, 99, .	2.9	73
31	An equation-of-state-meter of quantum chromodynamics transition from deep learning. Nature Communications, 2018, 9, 210.	12.8	118
32	Comparison of heavy-ion transport simulations: Collision integral in a box. Physical Review C, 2018, 97, .	2.9	91
33	Different realizations of Cooperâ€"Frye sampling with conservation laws. Journal of Physics G: Nuclear and Particle Physics, 2018, 45, 015001.	3.6	14
34	Dilepton production and resonance properties within a new hadronic transport approach in the context of the GSI-HADES experimental data. Physical Review C, 2018, 98, .	2.9	32
35	Melting and freeze-out conditions of hadrons in a thermal medium. EPJ Web of Conferences, 2018, 171, 14007.	0.3	0
36	Systematic errors in transport calculations of shear viscosity using the Green-Kubo formalism. Journal of Physics: Conference Series, 2018, 1024, 012028.	0.4	3

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37	Three-fluid Hydrodynamics-based Event Simulator Extended by UrQMD final State interactions (THESEUS) for FAIR-NICA-SPSBES/RHIC energies. EPJ Web of Conferences, 2018, 182, 02056.	0.3	12
38	Shear viscosity of a hadron gas and influence of resonance lifetimes on relaxation time. Physical Review C, 2018, 97, .	2.9	58
39	Identifying QCD Transition Using Deep Learning. EPJ Web of Conferences, 2018, 171, 16005.	0.3	2
40	Pseudorapidity distribution and decorrelation of anisotropic flow within the open-computing-language implementation CLVisc hydrodynamics. Physical Review C, 2018, 97, .	2.9	87
41	Strangeness Production in Nucleus-Nucleus Collisions at SIS Energies. Universe, 2018, 4, 37.	2.5	0
42	Symmetric cumulants as a probe of the proton substructure at LHC energies. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2018, 778, 128-136.	4.1	18
43	Forced canonical thermalization in a hadronic transport approach at high density. Journal of Physics G: Nuclear and Particle Physics, 2017, 44, 034001.	3.6	9
44	Correlated wounded hot spots in proton-proton interactions. Physical Review C, 2017, 95, .	2.9	14
45	Equilibration and freeze-out of an expanding gas in a transport approach in a Friedmannâ€"Robertsonâ€"Walker metric. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 770, 532-538.	4.1	11
46	The fastest-rotating fluid. Nature, 2017, 548, 34-35.	27.8	3
47	Local and global Î› polarization in a vortical fluid. Nuclear Physics A, 2017, 967, 772-775.	1.5	13
48	Beam energy scan theory: Status and open questions. Nuclear Physics A, 2017, 967, 145-152.	1.5	5
49	Gluonic hot spots and spatial correlations inside the proton. Nuclear Physics A, 2017, 967, 924-927.	1.5	2
50	Non-equilibrium dilepton production in hadronic transport approaches. Journal of Physics: Conference Series, 2017, 832, 012037.	0.4	4
51	Vorticity and Î› polarization in event-by-event (3+1)D viscous hydrodynamics. Journal of Physics: Conference Series, 2017, 779, 012069.	0.4	5
52	Effective dynamical coupling of hydrodynamics and transport for heavy-ion collisions. Journal of Physics: Conference Series, 2017, 832, 012052.	0.4	0
53	Dilepton production with the SMASH model. Journal of Physics: Conference Series, 2016, 742, 012034.	0.4	7
54	Particle production and equilibrium properties within a new hadron transport approach for heavy-ion collisions. Physical Review C, 2016, 94, .	2.9	170

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55	Longitudinal fluctuations and decorrelation of anisotropic flow. Nuclear Physics A, 2016, 956, 272-275.	1.5	3
56	Influence of kinematic cuts on the net charge distribution. Nuclear Physics A, 2016, 956, 336-339.	1.5	5
57	Deviations of the energy-momentum tensor from equilibrium in the initial state for hydrodynamics from transport approaches. Physical Review C, 2016, 93, .	2.9	30
58	Magnetic-field-induced squeezing effect at energies available at the BNL Relativistic Heavy Ion Collider and at the CERN Large Hadron Collider. Physical Review C, 2016, 93, .	2.9	38
59	Effects of EoS in viscous hydroâ€‰+â€‰cascade model for the RHIC Beam Energy Scan. Nuclear Physics A, 2016, 956, 834-837.	1.5	5
60	Vortical Fluid and Λ Spin Correlations in High-Energy Heavy-Ion Collisions. Physical Review Letters, 2016, 117, 192301.	7.8	143
61	Event simulation based on three-fluid hydrodynamics for collisions at energies available at the Dubna Nuclotron-based Ion Collider Facility and at the Facility for Antiproton and Ion Research in Darmstadt. Physical Review C, 2016, 94, .	2.9	40
62	Decorrelation of anisotropic flow along the longitudinal direction. European Physical Journal A, 2016, 52, 1.	2.5	60
63	Estimating η/s of QCD matter at high baryon densities. Journal of Physics: Conference Series, 2016, 668, 012063.	0.4	1
64	Estimation of the shear viscosity at finite net-baryon density from $A+A$ data at $\sqrt{s_{NN}} = 7.7 -$ Physical Review C, 2015, 91, .	2.9	129
65	Cooper-Frye Negative Contributions in a Coarse-Grained Transport Approach. Journal of Physics: Conference Series, 2015, 599, 012017.	0.4	2
66	3+1 dimensional viscous hydrodynamics at high baryon densities. Journal of Physics: Conference Series, 2015, 612, 012052.	0.4	1
67	Systematic investigation of negative Cooper-Frye contributions in heavy ion collisions using coarse-grained molecular dynamics. Physical Review C, 2015, 91, .	2.9	11
68	Beam energy scan using a viscous hydro+cascade model. Journal of Physics: Conference Series, 2014, 509, 012067.	0.4	5
69	3+1 dimensional viscous hydrodynamics at high baryon densities. Journal of Physics: Conference Series, 2014, 503, 012040.	0.4	11
70	Evolution of elliptic and triangular flow as a function of beam energy in a hybrid model. Journal of Physics: Conference Series, 2014, 503, 012025.	0.4	3
71	Anisotropic flow in transport + hydrodynamics hybrid approaches. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 124005.	3.6	26
72	Examination of directed flow as a signal for a phase transition in relativistic nuclear collisions. Physical Review C, 2014, 89, .	2.9	67

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73	What the collective flow excitation function can tell about the quark–gluon plasma. Nuclear Physics A, 2014, 931, 975-980.	1.5	0
74	Initial state fluctuations and final state correlations in relativistic heavy-ion collisions. Journal of Physics G: Nuclear and Particle Physics, 2014, 41, 063102.	3.6	137
75	Event-by-Event Observables and Fluctuations. Nuclear Physics A, 2013, 904-905, 278c-285c.	1.5	0
76	Initial state fluctuations and final state correlations: status and open questions. Physica Scripta, 2013, 87, 048001.	2.5	17
77	Classification of initial state granularity via 2D Fourier expansion. Journal of Physics G: Nuclear and Particle Physics, 2013, 40, 095103.	3.6	23
78	Evolution of elliptic and triangular flow as a function of s_{NN} in a hybrid model. Physical Review C, 2013, 88, .	2.9	46
79	Possibility of event shape selection in relativistic heavy ion collisions. Physical Review C, 2013, 88, .	2.9	9
80	Hot Quarks 2012: Workshop for Young Scientists on the Physics of Ultrarelativistic Nucleus–Nucleus Collisions. Journal of Physics: Conference Series, 2013, 446, 011001.	0.4	0
81	Quantifying Initial State Fluctuations in Heavy Ion Collisions. Acta Physica Polonica B, Proceedings Supplement, 2013, 6, 797.	0.1	1
82	FAIRNESS 2012: FAIR NExt Generation of ScientistS 2012. Journal of Physics: Conference Series, 2013, 426, 011001.	0.4	0
83	A systematic study of the sensitivity of triangular flow to the initial state fluctuations in relativistic heavy-ion collisions. Journal of Physics G: Nuclear and Particle Physics, 2012, 39, 055102.	3.6	26
84	Triangular flow in relativstic heavy ion collisions in an event-by-event hybrid approach. , 2012, , .		0
85	Comparative visualization of ensembles using ensemble surface slicing. Proceedings of SPIE, 2012, 8294, .	0.8	12
86	Increasing the perceptual salience of relationships in parallel coordinate plots. Proceedings of SPIE, 2012, 8294, 82940T.	0.8	5
87	Exploring ensemble visualization. Proceedings of SPIE, 2012, 8294, .	0.8	18
88	Particlization in hybrid models. European Physical Journal A, 2012, 48, 1.	2.5	136
89	Probing the QCD critical point with relativistic heavy-ion collisions. Open Physics, 2012, 10, .	1.7	5
90	Initial-state fluctuations at the RHIC and the LHC in event-by-event ideal hydrodynamics. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 124122.	3.6	2

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91	Collision Dynamics. Lecture Notes in Physics, 2011, , 531-680.	0.7	2
92	Multi-particle interactions within the UrQMD approach. EPJ Web of Conferences, 2011, 13, 06002.	0.3	1
93	HBT radii from the UrQMD transport approach at different energies. EPJ Web of Conferences, 2011, 13, 06003.	0.3	0
94	Shape analysis of strongly interacting systems: the heavy ion case. New Journal of Physics, 2011, 13, 065006.	2.9	22
95	Identified particle spectra and anisotropic flow in an event-by-event hybrid approach in Pb+Pb collisions at $\sqrt{s_{NN}} = 2.76$ TeV. Physical Review C, 2011, 84, .	2.9	26
96	Longitudinal correlation of the triangular flow event plane in a hybrid approach with hadron and parton cascade initial conditions. Physical Review C, 2011, 84, .	2.9	33
97	Medium-modified jets and initial state fluctuations as sources of charge correlations measured at energies available at the BNL Relativistic Heavy Ion Collider (RHIC). Physical Review C, 2011, 83, .	2.9	17
98	Constraining the initial state granularity with bulk observables in Au+Au collisions at sqrt{s_{m NN}}=200 GeV. Journal of Physics G: Nuclear and Particle Physics, 2011, 38, 045102.	3.6	45
99	k-meson production in Ir35*Ir collisions at $E_{lab} = 158A$. Evidence for relics of a thermal phase. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2010, 687, 320-326.	4.1	4
100	Strangeness production at SPS energies in a (3+1)-dimensional Boltzmann+hydrodynamics approach. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 094038.	3.6	1
101	Strangeness production in hadronic models and recombination models. Journal of Physics G: Nuclear and Particle Physics, 2010, 37, 094010.	3.6	1
102	Translation of collision geometry fluctuations into momentum anisotropies in relativistic heavy-ion collisions. Physical Review C, 2010, 82, .	2.9	170
103	Hydrodynamics with a chiral hadronic equation of state including quark degrees of freedom. Physical Review C, 2010, 81, .	2.9	61
104	Eccentricity fluctuations in an integrated hybrid approach: Influence on elliptic flow. Physical Review C, 2010, 81, .	2.9	42
105	Triangular flow in event-by-event ideal hydrodynamics in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV. Physical Review C, 2010, 81, .	2.9	182
106	AN INTEGRATED HYDRO AND BOLTZMANN APPROACH TO HEAVY ION REACTIONS. International Journal of Modern Physics D, 2010, 19, 1651-1659.	2.1	0
107	Ideal hydrodynamics and elliptic flow at CERN Super Proton Synchrotron (SPS) energies: Importance of the initial conditions. Physical Review C, 2009, 79, .	2.9	39
108	Centrality and system size dependence of (multi-strange) hyperons at40Aand158AÂGeV: A comparison between a binary collision model and a Boltzmann+hydrodynamic hybrid model. Physical Review C, 2009, 80, .	2.9	18

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109	Charged-particle (pseudo-)rapidity distributions in p+p̄/p+p and Pb+Pb/Au+Au collisions from UrQMD calculations at energies available at the CERN Super Proton Synchrotron to the Large Hadron Collider. Physical Review C, 2009, 79, .	2.9	33
110	The â·<i>m_T</i>â© excitation function: freeze-out and equation of state dependence. Journal of Physics G: Nuclear and Particle Physics, 2009, 36, 055104.	3.6	31
111	A transport calculation with an embedded (3+1)d hydrodynamic evolution: Elliptic flow as a function of transverse momentum at SPS energies. Nuclear Physics A, 2009, 830, 283c-286c.	1.5	3
112	Effects of a phase transition on HBT correlations in an integrated Boltzmann+hydrodynamics approach. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 674, 111-116.	4.1	45
113	Strangeness fluctuations and MEMO production at FAIR. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2009, 676, 126-131.	4.1	32
114	Elliptic flow in an integrated (3+1)d microscopic + macroscopic approach with fluctuating initial conditions. European Physical Journal C, 2009, 62, 31-36.	3.9	11
115	Fully integrated transport approach to heavy ion reactions with an intermediate hydrodynamic stage. Physical Review C, 2008, 78, .	2.9	309
116	How sensitive are di-leptons from Ï•mesons to the high baryon density region?. Physical Review C, 2008, 78, .	2.9	17
117	(3+1)-dimensional hydrodynamic expansion with a critical point from realistic initial conditions. Physical Review C, 2008, 77, .	2.9	74
118	Studying the energy dependence of elliptic and directed flow within a relativistic transport approach. European Physical Journal C, 2007, 49, 91-96.	3.9	7
119	Radial and Elliptic Flow in High Energetic Nuclear Collisions. AIP Conference Proceedings, 2006, , .	0.4	1
120	Anisotropic flow at RHIC: how unique is the number-of-constituent-quark scaling?. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, 1121-1129.	3.6	25
121	Elliptic flow and constituent quark scaling from hadron-string transport models. Journal of Physics G: Nuclear and Particle Physics, 2006, 32, S365-S371.	3.6	3
122	Directed and elliptic flow in heavy-ion collisions from $E_{beam}=90MeV/nucleon$ to $E_{c.m.}=200GeV/nucleon$. Physical Review C, 2006, 74, .	2.9	68