

Roman Häggwieser

List of Publications by Year in descending order

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687363

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docs citations

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times ranked

828
citing authors

#	ARTICLE	IF	CITATIONS
1	Charmonium Spectrum from $(N_{\text{f}}=3+1)$ Lattice QCD. Acta Physica Polonica B, Proceedings Supplement, 2021, 14, 209.	0.1	0
2	Corrections of order $O(d_{1e23}^2)$ Results in Physics, 2021, 21, 103806.	4.1	10
3	Influence of Fermions on Vortices in $SU(2)$ -QCD. Universe, 2021, 7, 130.	2.5	2
4	On the correlation coefficient $T(E)$ of the neutron beta decay, caused by the correlation structure invariant under discrete P, C and T symmetries. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2021, 816, 136263.	4.1	2
5	Structure of the correlation coefficients $O(S)$ and $O(U)$ of the neutron	4.7	2
6	Theoretical description of the neutron beta decay in the standard model at the level of $O(10^5)$	2.9	3
7	Physical Review D, 2021, 104, .	4.7	3
8	Energy of a pointlike neutron in an external electromagnetic field. Physical Review D, 2021, 104, .	4.7	0
9	Electrodisintegration of Deuteron into Dark Matter and Proton Close to Threshold. Symmetry, 2021, 13, 2169.	2.2	0
10	Precision analysis of pseudoscalar interactions in neutron beta decays. Nuclear Physics B, 2020, 951, 114891.	2.5	6
11	Non-perturbative renormalization by decoupling. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2020, 807, 135571.	4.1	9
12	Plane Center Vortices and Fractional Topological Charge. International Journal of Theoretical Physics, 2020, 59, 2397-2403.	1.2	1
13	Constrained hybrid Monte Carlo algorithms for gauge-Higgs models. Computer Physics Communications, 2020, 254, 107192.	7.5	1
14	Transition of a spherical vortex to a Dirac monopole with fractional topological charge. Modern Physics Letters A, 2020, 35, 2050118.	1.2	2
15	Scale setting for $(N_{\text{f}}=3+1)$ QCD. European Physical Journal C, 2020, 80, 1.	3.9	5
16	Radiative corrections of order $O(\hat{1}\pm E_e/m_N)$ to Sirlin's radiative corrections of order $O(\hat{1}\pm/\hat{1}\epsilon)$ to the neutron lifetime. Physical Review D, 2019, 99, .	4.7	7
17	Comment on "Fractional topological charges and the lowest Dirac modes" International Journal of Modern Physics A, 2019, 34, 1975001.	1.5	2
18	Tests of the standard model in neutron beta decay with polarized electrons and unpolarized neutrons and protons. Physical Review D, 2019, 99, .	4.7	12

#	ARTICLE	IF	CITATIONS
19	Gauge and infrared properties of hadronic structure of nucleon in neutron beta decay to order $O(\hat{1}\pm/\hat{1}\epsilon)$ in standard $V\hat{a}^{\sim}A$ effective theory with QED and linear sigma model of strong low-energy interactions. International Journal of Modern Physics A, 2019, 34, 1950010.	1.5	2
20	Neutron dark matter decays and correlation coefficients of neutron $\hat{1}^2\hat{a}^{\sim}$ -decays. Nuclear Physics B, 2019, 938, 114-130.	2.5	16
21	Gauge properties of hadronic structure of nucleon in neutron radiative beta decay to order $O(\hat{1}\pm/\hat{1}\epsilon)$ in standard $V\hat{a}^{\sim}A$ effective theory with QED and linear sigma model of strong low-energy interactions. International Journal of Modern Physics A, 2018, 33, 1850199.	1.5	3
22	Preliminary QCD phase transition line for 695 MeV dynamical staggered fermions from effective Polyakov line actions. EPJ Web of Conferences, 2018, 175, 07022.	0.3	0
23	Tests of the standard model in neutron $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"}\langle\text{mml:mi}\rangle\hat{1}^2\langle\text{mml:mi}\rangle\langle\text{mml:math}\rangle$ decay with a polarized neutron and electron and an unpolarized proton. Physical Review C, 2018, 98, .	2.9	10
24	Finite-density transition line for QCD with 695 MeV dynamical fermions. Physical Review D, 2018, 97, .	4.7	4
25	The QCD phase diagram from effective Polyakov line actions. AIP Conference Proceedings, 2018, , .	0.4	0
26	The QCD Phase Diagram from the Lattice. Acta Physica Polonica B, Proceedings Supplement, 2018, 11, 545.	0.1	0
27	Polyakov line actions from SU(3) lattice gauge theory with dynamical fermions via relative weights. EPJ Web of Conferences, 2017, 137, 03007.	0.3	3
28	Precision theoretical analysis of neutron radiative beta decay. Physical Review D, 2017, 95, .	4.7	5
29	Precision analysis of electron energy spectrum and angular distribution of neutron $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"}\langle\text{mml:msup}\rangle\langle\text{mml:mi}\rangle\hat{1}^2\langle\text{mml:mi}\rangle\langle\text{mml:mo}\rangle\hat{a}^{\sim}\langle\text{mml:mo}\rangle\langle\text{mml:msup}\rangle\langle\text{mml:mi}\rangle\langle\text{mml:math}\rangle$ decay with polarized neutron and electron. Physical Review C, 2017, 95, .	2.9	10
30	Precision theoretical analysis of neutron radiative beta decay to order $O(\hat{1}\pm 2/\hat{1}\epsilon^2)$. Physical Review D, 2017, 95, .	4.7	7
31	Chiral symmetry breaking on the lattice. Progress in Particle and Nuclear Physics, 2017, 97, 312-355.	14.4	22
32	Center Vortices, Topological Charge and Chiral Symmetry Breaking. Acta Physica Polonica B, Proceedings Supplement, 2017, 10, 1001.	0.1	4
33	How center vortices break chiral symmetry. AIP Conference Proceedings, 2016, , .	0.4	3
34	Relative weights approach to SU(3) gauge theories with dynamical fermions at finite density. Physical Review D, 2016, 94, .	4.7	9
35	Model of random center vortex lines in continuous 2+1 -dimensional spacetime. Physical Review D, 2016, 94, .	4.7	9
36	Exact solution for chameleon field, self-coupled through the Ratra-Peebles potential with $\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"}\text{display="inline"}\langle\text{mml:mi}\rangle n\langle\text{mml:mi}\rangle\langle\text{mml:mo}\rangle =\langle\text{mml:mo}\rangle\langle\text{mml:mn}\rangle 1\langle\text{mml:mn}\rangle\langle\text{mml:math}\rangle$ and confined between two parallel plates. Physical Review D, 2016, 94, .	4.7	16

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37	Confining bond rearrangement in the random center vortex model. Physical Review D, 2016, 93, .	4.7	10
38	Random center vortex lines in continuous 3D space-time. AIP Conference Proceedings, 2016, , .	0.4	6
39	ApproachingSU(2)gauge dynamics with smearedZ(2)vortices. Physical Review D, 2015, 92, .	4.7	13
40	Colorful plane vortices and chiral symmetry breaking in SU(2) lattice gauge theory. Journal of High Energy Physics, 2015, 2015, 1.	4.7	11
41	Center vortices, area law and the catenary solution. International Journal of Modern Physics A, 2015, 30, 1550207.	1.5	12
42	Double-winding Wilson loops and monopole confinement mechanisms. Physical Review D, 2015, 91, .	4.7	26
43	Center Vortex Versus Abelian Models of the QCD Vacuum. Acta Physica Polonica B, Proceedings Supplement, 2015, 8, 509.	0.1	1
44	Publisher's Note: Internal bremsstrahlung of $\hat{\Gamma}^2$ decay of atomic S and S^2 ions. Physical Review C, 2014, 90, .	2.9	1
45	$\hat{\Gamma}^2$ -decay rates of bareAg10847+and H-likeAg10846+ions. Physical Review C, 2014, 90, .	2.9	1
46	Internal bremsstrahlung of $\hat{\Gamma}^2$ decay of atomic S and S^2 ions. Physical Review C, 2014, 90, .	2.9	2
47	QCD and strongly coupled gauge theories: challenges and perspectives. European Physical Journal C, 2014, 74, 2981.	3.9	397
48	Chiral Symmetry Breaking from Center Vortices. , 2014, , .		4
49	Vortices and Chiral Symmetry Breaking. Acta Physica Polonica B, Proceedings Supplement, 2014, 7, 457.	0.1	4
50	Center Vortices and Chiral Symmetry Breaking. Nuclear Physics, Section B, Proceedings Supplements, 2013, 245, 9-16.	0.4	0
51	Colorful SU(2) center vortices in the continuum and on the lattice. Physical Review D, 2013, 87, .	4.7	16
52	Proton recoil energy and angular distribution of neutron radiative $\hat{\Gamma}^2$ decay. Physical Review D, 2013, 88, .	4.7	10
53	Center vortices and chiral symmetry breaking in S^2 decay of atomic S and S^2 ions. Physical Review C, 2014, 90, .	4.7	25
54	Deficit of reactor antineutrinos at distances smaller than 100 m and inverse $\hat{\Gamma}^2$ decay. Physical Review C, 2013, 88, .	2.9	9

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55	Influence of the chameleon field potential on transition frequencies of gravitationally bound quantum states of ultracold neutrons. <i>Physical Review D</i> , 2013, 87, .	4.7	35
56	Center Vortices and Topological Charge. , 2013, , .		1
57	Critical analysis of topological charge determination in the background of center vortices in SU(2) lattice gauge theory. <i>Physical Review D</i> , 2012, 86, .	4.7	15
58	Correlations between Center Vortices and low-lying Dirac eigenmodes. , 2012, , .		0
59	Intersections of thick center vortices, Dirac eigenmodes and fractional topological charge in SU(2) lattice gauge theory. <i>Journal of High Energy Physics</i> , 2011, 2011, 1.	4.7	22
60	Violations of the Lattice Index Theorem for Spherical Center Vortices. , 2011, , .		0
61	Lattice Index Theorem and Fractional Topological Charge. , 2011, , .		0
62	DISTRIBUTION OF MAGNETIC MONOPOLES WITHIN CUBES IN COMPACT QED. <i>International Journal of Modern Physics A</i> , 2010, 25, 1853-1862.	1.5	1
63	Center vortices and the Dirac spectrum. <i>Physical Review D</i> , 2008, 78, .	4.7	39
64	Tests of the lattice index theorem. <i>Physical Review D</i> , 2008, 77, .	4.7	16