

Franco Strocchi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6279516/publications.pdf>

Version: 2024-02-01

67
papers

1,576
citations

430754

18
h-index

302012

39
g-index

69
all docs

69
docs citations

69
times ranked

402
citing authors

#	ARTICLE	IF	CITATIONS
1	Some rigorous results on symmetry breakings in gauge QFT. SciPost Physics Proceedings, 2022, , .	0.2	0
2	Manifold topology, observables, and gauge group. Journal of Mathematical Physics, 2021, 62, 112102.	0.5	0
3	Corrections to Wignerâ€Eckart Relations by Spontaneous Symmetry Breaking. Symmetry, 2020, 12, 1120.	1.1	0
4	Generalized criteria of symmetry breaking. A strategy for quantum time crystals. Annals of Physics, 2020, 415, 168097.	1.0	2
5	Spontaneous symmetry breaking. , 2019, , 1-23.		0
6	Breaking gauge symmetries. Higgs mechanism. , 2019, , 25-66.		0
7	Dynamics of Dollard asymptotic variables. Asymptotic fields in Coulomb scattering. Reviews in Mathematical Physics, 2016, 28, 1650001.	0.7	2
8	The Infrared Problem in QED: A Lesson from a Model with Coulomb Interaction and Realistic Photon Emission. Annales Henri Poincare, 2016, 17, 2699-2739.	0.8	6
9	Gauge Invariance and Symmetry Breaking by Topology and Energy Gap. Mathematics, 2015, 3, 984-1000.	1.1	1
10	A non-perturbative argument for the non-abelian Higgs mechanism. Annals of Physics, 2013, 336, 112-117.	1.0	4
11	The physical principles of quantum mechanics. A critical review. European Physical Journal Plus, 2012, 127, 1.	1.2	9
12	Chiral symmetry breaking and $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" display="inline" overflow="scroll" \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \hat{1} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ vacuum structure in QCD. Annals of Physics, 2009, 324, 2236-2254.	1.0	3
13	Classical and quantum mechanics from the universal Poisson-Rinehart algebra of a manifold. Reports on Mathematical Physics, 2009, 64, 33-48.	0.4	2
14	The Lieâ€Rinehart Universal Poisson Algebra of Classical and Quantum Mechanics. Letters in Mathematical Physics, 2008, 86, 135-150.	0.5	3
15	Localization and symmetries. Journal of Physics A: Mathematical and Theoretical, 2007, 40, 3173-3187.	0.7	5
16	Quantum Mechanics on Manifolds and Topological Effects. Letters in Mathematical Physics, 2007, 82, 219-236.	0.5	8
17	Relativistic Quantum Mechanics and Field Theory. Foundations of Physics, 2004, 34, 501-527.	0.6	13
18	Charge density and electric charge in quantum electrodynamics. Journal of Mathematical Physics, 2003, 44, 5569.	0.5	12

#	ARTICLE	IF	CITATIONS
19	Mathematical structure of the temporal gauge in quantum electrodynamics. Journal of Mathematical Physics, 2003, 44, 5095-5107.	0.5	9
20	Quantum Delocalization of the Electric Charge. Annals of Physics, 2001, 290, 53-66.	1.0	15
21	The classical counterpart of the Goldstone theorem. Physics Letters, Section A: General, Atomic and Solid State Physics, 2000, 267, 40-44.	0.9	4
22	Irreducible representations of the Heisenberg algebra in Krein spaces. Journal of Mathematical Physics, 1998, 39, 2969-2982.	0.5	18
23	Grassmanian and chiral anomaly. Journal of Geometry and Physics, 1997, 22, 219-244.	0.7	11
24	A Quantum Mechanical Gauge Model and a Possible Dynamical Solution of the Strong CP Problem. Annals of Physics, 1996, 250, 367-388.	1.0	9
25	Infrared singular fields and nonregular representations of canonical commutation relation algebras. Journal of Mathematical Physics, 1993, 34, 899-914.	0.5	35
26	Nonregular representations of CCR algebras and algebraic fermion bosonization. Reports on Mathematical Physics, 1993, 33, 7-19.	0.4	6
27	Quantum corrections to the Wigner crystal: A Hartree-Fock expansion. Physical Review B, 1993, 48, 5306-5314.	1.1	14
28	Infrared and vacuum structure in two-dimensional models of local quantum field theory. II. Fermion bosonization. Journal of Mathematical Physics, 1992, 33, 777-790.	0.5	12
29	Infrared and vacuum structure in two-dimensional local quantum field theory models. The massless scalar field. Journal of Mathematical Physics, 1990, 31, 1467-1477.	0.5	46
30	Effective non-symmetric Hamiltonians and Goldstone boson spectrum. Annals of Physics, 1988, 185, 241-269.	1.0	4
31	The Schwinger model revisited. Annals of Physics, 1988, 188, 217-238.	1.0	39
32	Euclidean formulation of quantum field theory without positivity. Communications in Mathematical Physics, 1988, 119, 529-541.	1.0	20
33	Krein structures for Wightman and Schwinger functions. Journal of Mathematical Physics, 1988, 29, 1231-1235.	0.5	9
34	Mathematical structures for long-range dynamics and symmetry breaking. Journal of Mathematical Physics, 1987, 28, 622-635.	0.5	49
35	Long-range dynamics and broken symmetries in gauge models. The Schwinger model. Journal of Mathematical Physics, 1987, 28, 1912-1919.	0.5	13
36	Long range dynamics and broken symmetries in gauge models. The Stükelberg-Kibble model. Communications in Mathematical Physics, 1987, 111, 593-612.	1.0	8

#	ARTICLE	IF	CITATIONS
37	Infrared problem in QED and electric charge renormalization. Annals of Physics, 1986, 168, 27-45.	1.0	6
38	Spontaneous breaking of the Galilei group and the plasmon energy gap. Annals of Physics, 1986, 170, 310-332.	1.0	13
39	Confinement of massless charged particles in QED4 and of charged particles in QED3. Annals of Physics, 1986, 172, 267-279.	1.0	10
40	Spontaneous symmetry breaking and energy gap generated by variables at infinity. Communications in Mathematical Physics, 1985, 99, 153-175.	1.0	32
41	Charged sectors and scattering states in quantum electrodynamics. Annals of Physics, 1979, 119, 241-284.	1.0	106
42	Local and covariant gauge quantum field theories. Cluster property, superselection rules, and the infrared problem. Physical Review D, 1978, 17, 2010-2021.	1.6	67
43	Neutral currents in gauge theories. Physical Review D, 1978, 18, 2062-2064.	1.6	8
44	Hilbert space sectors for solutions of non-linear relativistic field equations. Communications in Mathematical Physics, 1977, 53, 65-96.	1.0	13
45	Spontaneous symmetry breaking in local gauge quantum field theory; the Higgs mechanism. Communications in Mathematical Physics, 1977, 56, 57-78.	1.0	65
46	Wigner's theorem on symmetries in indefinite metric spaces. Communications in Mathematical Physics, 1975, 41, 289-299.	1.0	44
47	Local and covariant quantizations of linearized Einstein's equations. II. Journal of Mathematical Physics, 1975, 16, 2522-2526.	0.5	2
48	Some remarks on local operators in quantum electrodynamics. Communications in Mathematical Physics, 1974, 35, 25-38.	1.0	71
49	Proof of the charge superselection rule in local relativistic quantum field theory. Journal of Mathematical Physics, 1974, 15, 2198-2224.	0.5	299
50	Local and Covariant Quantization of Linearized Einstein's Equations. Journal of Mathematical Physics, 1972, 13, 1151-1163.	0.5	6
51	Extension of Jost and Schroer's Theorem to Quantum Electrodynamics. Physical Review D, 1972, 6, 1193-1195.	1.6	9
52	Spontaneous Breakings of Chiral Symmetries. II. Mass Relations and Particle Mixings. Physical Review D, 1972, 6, 301-318.	1.6	24
53	Precise Test of SU(2) Chiral Breaking. A Coleman-Glashow Formula for Pseudoscalar Mesons. Physical Review Letters, 1972, 29, 1702-1704.	2.9	17
54	Einstein's equations and locality. Communications in Mathematical Physics, 1972, 24, 289-302.	1.0	3

#	ARTICLE	IF	CITATIONS
55	Spontaneous Breakings of Chiral Symmetries. Physical Review D, 1970, 1, 1197-1203.	1.6	13
56	T-Violation Effects and Final-State Interactions. II. Photoproduction, Electroproduction, and Neutrino-Induced Production of a Single Pion. Physical Review D, 1970, 1, 191-199.	1.6	8
57	Gauge Problem in Quantum Field Theory. III. Quantization of Maxwell Equations and Weak Local Commutativity. Physical Review D, 1970, 2, 2334-2340.	1.6	27
58	Spontaneous Breakdown of Chiral $su(3) \hat{=} su(3)$ Symmetry. Physical Review Letters, 1969, 22, 497-499.	2.9	17
59	Gauge Problem in Quantum Field Theory. II. Difficulties of Combining Einstein Equations and Wightman Theory. Physical Review, 1968, 166, 1302-1307.	2.7	17
60	T-Violation Effects and Final-State Interactions. Physical Review, 1968, 174, 1957-1968.	2.7	9
61	TCPIvariance and $K^0 \rightarrow 2\pi$ Decays. Physical Review Letters, 1967, 19, 1456-1458.	2.9	3
62	Gauge Problem in Quantum Field Theory. Physical Review, 1967, 162, 1429-1438.	2.7	75
63	Complex Coordinates and Quantum Mechanics. Reviews of Modern Physics, 1966, 38, 36-40.	16.4	135
64	Possible Test of T-Invariance Violation in Electromagnetic Interactions. Physical Review Letters, 1966, 16, 633-635.	2.9	3
65	Goldstone's Theorem and Approximate Symmetries in Strong Interactions. Physical Review Letters, 1966, 16, 822-824.	2.9	1
66	Mass Gap and Violation of Discrete Symmetries in Quantum Field Theory. Physical Review, 1966, 152, 1505-1507.	2.7	0
67	Gauge Independence and Path Independence. Physical Review, 1965, 139, B476-B482.	2.7	40