Manuel Fiolhais

List of Publications by Year
in descending order

95	1,256	471509 17	395702 33
papers	citations	h-index	g-index

97	97	97	456
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Pseudospin symmetry and the relativistic harmonic oscillator. Physical Review C, 2004, 69, .	2.9	217
2	Isospin Asymmetry in the Pseudospin Dynamical Symmetry. Physical Review Letters, 2001, 86, 5015-5018.	7.8	101
3	Pseudospin symmetry as a relativistic dynamical symmetry in the nucleus. Physical Review C, 2002, 65, .	2.9	98
4	Spin and pseudospin symmetries in the antinucleon spectrum of nuclei. Physical Review C, 2010, 81, .	2.9	53
5	The generalized hedgehog and the projected chiral soliton model. Nuclear Physics A, 1988, 481, 727-764.	1.5	52
6	Nucleon form factors in the projected linear chiral soliton model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1988, 208, 75-78.	4.1	40
7	The role of the pion cloud in electroproduction of the Î”(1232). Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1996, 373, 229-234.	4.1	38
8	Toys in physics lectures and demonstrationsâ€”a brief review. Physics Education, 2009, 44, 53-64.	0.5	36
9	Nucleon description in a projected chiral soliton model with dynamical confinement. Nuclear Physics A, 1993, 560, 909-944.	1.5	30
10	Metastable strange matter and compact quark stars. Journal of Physics G: Nuclear and Particle Physics, 2003, 29, 1045-1051.	3.6	30
11	Rolling cylinder on a horizontal plane. Physics Education, 2001, 36, 250-254.	0.5	28
12	Quark matter in the chiral color-dielectric model. Nuclear Physics A, 1995, 588, 801-818.	1.5	26
13	Experiments with the drinking bird. American Journal of Physics, 2003, 71, 1257-1263.	0.7	23
14	PERTURBATIVE BREAKING OF THE PSEUDOSPIN SYMMETRY IN THE RELATIVISTIC HARMONIC OSCILLATOR. International Journal of Modern Physics D, 2004, 13, 1447-1451.	2.1	21
15	On the Hedgehog solution for the chiral bag. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 150, 253-255.	4.1	20
16	The electroproduction of the Î”(1232) in the chiral quarkâ€“soliton model. Nuclear Physics A, 2000, 675, 637-657.	1.5	20
17	Pion electro-production in the Roper region in chiral quark models. European Physical Journal A, 2009, 42, 185.	2.5	20
18	The Goldberger-Treiman relation and the chiral soliton model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1987, 194, 187-191.	4.1	17

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19	Forces on wheels and fuel consumption in cars. European Journal of Physics, 2013, 34, 1005-1013.	0.6	17
20	From mechanics to thermodynamicsâ€"analysis of selected examples. European Journal of Physics, 2013, 34, 345-357.	0.6	17
21	The Cartesian diver and the fold catastrophe. American Journal of Physics, 2002, 70, 710-714.	0.7	16
22	Nâˆ— electroproduction amplitudes in a model with dynamical confinement. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2001, 523, 273-279.	4.1	15
23	INVESTIGATION OF THE EXISTENCE OF HYBRID STARS USING NAMBUâ€"JONAâ€"LASINIO MODELS. International Journal of Modern Physics D, 2010, 19, 1521-1524.	2.1	14
24	The hedgehog baryon as a variational mean field solution of the spherical linear chiral soliton model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1985, 164, 249-252.	4.1	13
25	On the relativistic L - S coupling. European Journal of Physics, 1998, 19, 553-562.	0.6	13
26	Analysis of the projected hedgehog approximation for quarks and mesons. Journal of Physics G: Nuclear and Particle Physics, 1992, 18, 49-74.	3.6	12
27	Revisiting Blackâ€™s experiments on the latent heats of water. Physics Teacher, 2002, 40, 26-31.	0.3	12
28	Quark dynamics and spin structure in the chiral chromodielectric model. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1994, 338, 433-436.	4.1	11
29	Î”(1232)electroproduction amplitudes in chiral soliton models of the nucleon. Physical Review C, 2000, 62, .	2.9	11
30	The color flavor locked phase in the chromodielectric model and quark stars. Brazilian Journal of Physics, 2006, 36, 1391-1396.	1.4	11
31	Neutron-proton mass difference in a baryonic medium and the Nolen-Schiffer anomaly. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 269, 43-48.	4.1	10
32	Axial amplitudes for Î” excitation in chiral quark models. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2003, 553, 51-60.	4.1	10
33	Physics of the fire piston and the fog bottle. European Journal of Physics, 2007, 28, 1199-1205.	0.6	10
34	Relativistic rotation dynamics â€"Formalism and examples. Europhysics Letters, 2017, 119, 10001.	2.0	10
35	Linear and angular momentum projected observables in the chiral chromodielectric model of the nucleon. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1991, 268, 1-5.	4.1	9
36	Recoil effects on nucleon electromagnetic form factors. Nuclear Physics A, 1996, 609, 488-500.	1.5	9

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37	Reproducing Black's experiments: freezing point depression and supercooling of water. European Journal of Physics, 2002, 23, 83-91.	0.6	9
38	The principle of relativity and the de Broglie relation. American Journal of Physics, 2016, 84, 443-447.	0.7	9
39	Energetics of charge distributions. European Journal of Physics, 2002, 23, 427-431.	0.6	8
40	The physics of a walking robot. Physics Education, 2013, 48, 455-458.	0.5	8
41	Relativistic mechanicalâ€“thermodynamical formalismâ€”description of inelastic collisions. European Journal of Physics, 2016, 37, 015602.	0.6	8
42	Medium effects on Î” properties and N-Î” transition form factors. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 1990, 243, 333-340.	4.1	7
43	Relativistic pseudospin and spin symmetries in physical systems â€“ recent results. Journal of Physics: Conference Series, 2014, 490, 012069.	0.4	7
44	Nucleon form factors in a projected chiral soliton model with dynamical confinement. Nuclear Physics A, 1994, 570, 782-796.	1.5	6
45	Quarks stars in SU(2) Nambu-Jona-Lasinio model with vector coupling. Nuclear Physics, Section B, Proceedings Supplements, 2010, 199, 325-328.	0.4	6
46	Thermodynamics in rotating systemsâ€”analysis of selected examples. European Journal of Physics, 2014, 35, 015013.	0.6	6
47	A Demonstration Apparatus for the Cartesian Diver. Physics Teacher, 2003, 41, 495-496.	0.3	5
48	Direct calculation of the K-matrix for pion electro-production in the delta channel. European Physical Journal A, 2005, 26, 99-106.	2.5	5
49	Color superconductivity and quark stars. Nuclear Physics A, 2007, 790, 562c-565c.	1.5	5
50	Dissipation effects in mechanics and thermodynamics. European Journal of Physics, 2016, 37, 045101.	0.6	5
51	Principles of time evolution in classical physics. European Journal of Physics, 2018, 39, 045010.	0.6	5
52	Soliton formation inÏ‚ models. Physical Review C, 1997, 56, 3311-3319.	2.9	4
53	Equivalence of thermodynamical fundamental equations. European Journal of Physics, 2000, 21, 395-404.	0.6	4
54	Sadi Carnot on Carnotâ€™s theorem. American Journal of Physics, 2002, 70, 42-47.	0.7	4

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55	Thermodynamical asymmetries in whirling, jumping and walking. European Journal of Physics, 2014, 35, 035008.	0.6	4
56	Relativistic solar sails. European Journal of Physics, 2018, 39, 035601.	0.6	4
57	Relativistic rotation â€" how does the energy vary with angular momentum?. Journal of Physics: Conference Series, 2018, 1141, 012131.	0.4	4
58	Relativistic description of the photoelectric effect. American Journal of Physics, 2018, 86, 825-830.	0.7	4
59	Four-vector description of the photon-in-a-box problem. European Journal of Physics, 2019, 40, 025601.	0.6	4
60	Form factors in the projected linear chiral sigma model. Zeitschrift FÃ¼r Physik A, Atomic Nuclei, 1990, 336, 449-460.	0.3	3
61	COMPARISON OF APPROXIMATE AND ACCURATE METHODS IN QUARKâ€"PION MODELS. International Journal of Modern Physics A, 1999, 14, 731-759.	1.5	3
62	Thermodynamics at work: The pressure derivative of the specific heat. American Journal of Physics, 1999, 67, 1100-1104.	0.7	3
63	Cylinder on an incline as a fold catastrophe system. European Journal of Physics, 2003, 24, 115-123.	0.6	3
64	PEIERLSâ€"YOCCOZ PROJECTION IN Ïƒâ€"Ï‰ MODELS. International Journal of Modern Physics E, 2005, 14, 1171-1196.	1.0	3
65	Virial theorems for the pion cloud in one-radial-mode models. Journal of Physics G: Nuclear and Particle Physics, 1995, 21, 1657-1664.	3.6	2
66	E2M1 and C2M1 for the electroproduction of the Î"(1232) in the chiral quark-soliton model. Progress in Particle and Nuclear Physics, 2000, 44, 211-212.	14.4	2
67	Experiments with a sunbird. American Journal of Physics, 2003, 71, 1264-1267.	0.7	2
68	Quantitative experiments on supersaturated solutions for the undergraduate thermodynamics laboratory. European Journal of Physics, 2005, 26, 25-31.	0.6	2
69	Center-of-mass correction in a relativistic Hartree approximation including meson degrees of freedom. Physical Review C, 2007, 75, .	2.9	2
70	A 4-vector formalism for classical mechanics. Revista Brasileira De Ensino De Fisica, 2013, 35, 1-13.	0.2	2
71	Center-of-mass correction in a relativistic Hartree approximation. Brazilian Journal of Physics, 2006, 36, 1375-1378.	1.4	2
72	The nucleon as a projected chiral soliton: Vacuum and medium properties. Progress in Particle and Nuclear Physics, 1990, 24, 283-302.	14.4	1

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73	A Big Sunbird. Physics Teacher, 2004, 42, 307-309.	0.3	1
74	The physics of articulated toysâ€"a jumping and rotating kangaroo. European Journal of Physics, 2014, 35, 045018.	0.6	1
75	Mechanical apparatus for the fold catastrophe demonstration. European Journal of Physics, 2021, 42, 045001.	0.6	1
76	Many-Body Physics. , 1994, , .		1
77	STABILITY OF QUARK MATTER AND QUARK STARS. , 2003, , .		1
78	On the Hadronic Neutron-Proton Mass Splitting in Chiral Soliton Models of Valence Quarks. Europhysics Letters, 1994, 25, 571-577.	2.0	0
79	Counting pions in the nucleon. Progress in Particle and Nuclear Physics, 1996, 36, 151-159.	14.4	0
80	Small Quark Stars in the Chromodielectric Model. AIP Conference Proceedings, 2002, , .	0.4	0
81	CENTER-OF-MASS CORRECTIONS IN RELATIVISTIC MEAN FIELD DESCRIPTIONS OF LIGHT NUCLEI. , 2003, , .		0
82	Electroweak amplitudes in chiral quark models. AIP Conference Proceedings, 2004, , .	0.4	0
83	Medium modification of nucleon properties in a Walecka â€" Linear Sigma Model description. AIP Conference Proceedings, 2004, , .	0.4	0
84	Superconducting quark matter in the Chromodielectric Model. AIP Conference Proceedings, 2004, , .	0.4	0
85	Harmonic oscillator and nuclear pseudospin. AIP Conference Proceedings, 2004, , .	0.4	0
86	Color Superconductivity and Confinement in the Chromodielectric Model. Nuclear Physics, Section B, Proceedings Supplements, 2010, 199, 308-313.	0.4	0
87	THE EFFECT OF CONFINEMENT ON THE CFL QUARK PAIRING IN THE CHROMODIELECTRIC MODEL. International Journal of Modern Physics D, 2010, 19, 1737-1741.	2.1	0
88	Pion Electro-Production in the Region of Low-Lying P11 and S11 Resonances. Few-Body Systems, 2011, 50, 355-358.	1.5	0
89	â€œWalkingâ€•Along a Free Rotating Bicycle Wheel (Round and Round). Physics Teacher, 2015, 53, 90-92.	0.3	0
90	On the work of internal forces. European Journal of Physics, 2015, 36, 045008.	0.6	0

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91	RECOIL EFFECTS IN THE ELECTROPRODUCTION OF THE DELTA. , 2001, , .		0
92	ROPER ELECTROPRODUCTION AMPLITUDES IN A CHIRAL CONFINEMENT MODEL. , 2002, , .		0
93	RADIAL EXCITED STATES OF THE NUCLEON IN QUARK MODELS WITH DYNAMICAL CONFINEMENT. , 2003, , .		0
94	DYNAMICAL NATURE OF THE NUCLEAR PSEUDOSPIN AND ITS ISOSPIN ASYMMETRY. , 2003, , .		0
95	Modelling meson clouds using coherent states. Journal of Physics: Conference Series, 2019, 1391, 012061.	0.4	0