Juan A Monsoriu

List of Publications by Year
in descending order

127	2,512	218677	243625
papers	citations	26 h-index	44 g-index

128	128	128	1189
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Assessment of a New Trifocal Diffractive Corneal Inlay for Presbyopia Correction Using an Adaptive Optics Visual Simulator. Photonics, 2022, 9, 135.	2.0	5
2	In Vitro Chromatic Performance of Three Presbyopia-Correcting Intraocular Lenses with Different Optical Designs. Journal of Clinical Medicine, 2022, 11, 1212.	2.4	10
3	A new trifocal corneal inlay for presbyopia. Scientific Reports, 2021, 11, 6620.	3.3	9
4	Analyzing the Dynamics of a Yo-Yo Using a Smartphone Gyroscope Sensor. Physics Teacher, 2020, 58, 569-571.	0.3	9
5	Proposal of a new diffractive corneal inlay to improve near vision in a presbyopic eye. Applied Optics, 2020, 59, D54.	1.8	4
6	Imaging Performance of a Diffractive Corneal Inlay for Presbyopia in a Model Eye. IEEE Access, 2019, 7, 163933-163938.	4.2	2
7	Demonstration of the parallel axis theorem through a smartphone. Physics Teacher, 2019, 57, 340-341.	0.3	8
8	Design and evaluation of a threeâ€dimensional virtual laboratory on vector operations. Computer Applications in Engineering Education, 2019, 27, 690-697.	3.4	1
9	Optical Evaluation of New Designs of Multifocal Diffractive Corneal Inlays. Journal of Ophthalmology, 2019, 2019, 1-6.	1.3	6
10	Multiplexing THz Vortex Beams With a Single Diffractive 3-D Printed Lens. IEEE Transactions on Terahertz Science and Technology, 2019, 9, 63-66.	3.1	15
11	Terahertz Sieves. IEEE Transactions on Terahertz Science and Technology, 2018, 8, 140-143.	3.1	8
12	Characterization of linear light sources with the smartphoneâ€™s ambient light sensor. Physics Teacher, 2018, 56, 562-563.	0.3	7
13	Multiple-plane image formation by Walsh zone plates. Optics Express, 2018, 26, 21210.	3.4	20
14	Fractal-structured multifocal intraocular lens. PLoS ONE, 2018, 13, e0200197.	2.5	14
15	A computer-assisted experiment to study the influence of the point spread function in the image formation process. European Journal of Physics, 2018, 39, 065301.	0.6	0
16	Relative Peripheral Myopia Induced by Fractal Contact Lenses. Current Eye Research, 2018, 43, 1514-1521.	1.5	6
17	A label-free diffraction-based sensing displacement immunosensor to quantify low molecular weight organic compounds. Analytica Chimica Acta, 2018, 1033, 173-179.	5.4	16
18	El smartphone como barÃ³metro en experimentos de FÃsica. Modelling in Science Education and Learning, 2018, 11, 15.	0.2	1

#	Article	IF	Citations
19	Unconventional imaging with radial Walsh filters. , 2018, , .		0
20	On the power profiles of contact lenses measured with NIMO TR1504. Journal of Optometry, 2017, 10, 265-266.	1.3	3
21	Diffractive corneal inlay for presbyopia. Journal of Biophotonics, 2017, 10, 1110-1114.	2.3	13
22	Determining the efficiency of optical sources using a smartphoneâ€™s ambient light sensor. European Journal of Physics, 2017, 38, 025301.	0.6	11
23	Direct Visualization of Mechanical Beats by Means of an Oscillating Smartphone. Physics Teacher, 2017, 55, 424-425.	0.3	10
24	Stereopsis assessment at multiple distances with an iPad application. Displays, 2017, 50, 35-40.	3.7	11
25	Influence of different types of astigmatism on visual acuity. Journal of Optometry, 2017, 10, 141-148.	1.3	21
26	Diffractive m-bonacci lenses. Optics Express, 2017, 25, 8267.	3.4	34
27	Wavefront sensing using a graphical user interface. Computer Applications in Engineering Education, 2016, 24, 255-262.	3.4	2
28	3D printed diffractive terahertz lenses. Optics Letters, 2016, 41, 1748.	3.3	114
29	Comparison of two different devices to assess intraocular lenses. Optik, 2016, 127, 10108-10114.	2.9	4
30	Inter-Display Reproducibility of Contrast Sensitivity Measurement with iPad. Optometry and Vision Science, 2016, 93, 1532-1536.	1.2	8
31	Visual acuity and contrast sensitivity screening with a new iPad application. Displays, 2016, 44, 15-20.	3.7	12
32	Frequency analyser: A new Android application for high precision frequency measurement. Computer Applications in Engineering Education, 2015, 23, 471-476.	3.4	6
33	Focusing properties of diffractive lenses constructed with the aperiodicm-bonacci sequence. , 2015, , .		2
34	Undergraduate experiments with aperiodic gratings based on the Fibonacci sequence. , 2015, , .		1
35	Diffraction by m- bonacci gratings. European Journal of Physics, 2015, 36, 065005.	0.6	7
36	Designing a new test for contrast sensitivity function measurement with iPad. Journal of Optometry, 2015, 8, 101-108.	1.3	47

#	Article	IF	Citations
37	Guiding Properties of a Photonic Quasi-Crystal Fiber Based on the Thueâ€“Morse Sequence. IEEE Photonics Technology Letters, 2015, 27, 1903-1906.	2.5	8
38	Bifractal focusing and imaging properties of Thueâ€“Morse Zone Plates. Optics Express, 2015, 23, 19846.	3.4	58
39	Characterizing the movement of a falling rigid rod. European Journal of Physics, 2015, 36, 055036.	0.6	3
40	The study of two-dimensional oscillations using a smartphone acceleration sensor: example of Lissajous curves. Physics Education, 2015, 50, 580-586.	0.5	20
41	Multifocal intraocular lenses with fractal geometry. Optica Pura Y Aplicada, 2015, 48, 1-8.	0.1	3
42	Using a smartphone acceleration sensor to study uniform and uniformly accelerated circular motions. Revista Brasileira De Ensino De Fisica, 2014, 36, .	0.2	4
43	Imaging Properties of Kinoform Fibonacci Lenses. IEEE Photonics Journal, 2014, 6, 1-6.	2.0	29
44	Smart physics with smartphone sensors. , 2014, , .		10
45	Diffraction by electronic components of everyday use. American Journal of Physics, 2014, 82, 257-261.	0.7	17
46	The Effect of Fractal Contact Lenses on Peripheral Refraction in Myopic Model Eyes. Current Eye Research, 2014, 39, 1151-1160.	1.5	6
47	Study on band gap structure of Fibonacci quantum superlattices by using the transfer matrix method. Modern Physics Letters B, 2014, 28, 1450053.	1.9	4
48	The acoustic Doppler effect applied to the study of linear motions. European Journal of Physics, 2014, 35, 025006.	0.6	33
49	Direct measurement of the speed of sound using a microphone and a speaker. Physics Education, 2014, 49, 310-313.	0.5	8
50	Using a mobile phone acceleration sensor in physics experiments on free and damped harmonic oscillations. American Journal of Physics, 2013, 81, 472-475.	0.7	74
51	Fractal square zone plates. Optics Communications, 2013, 286, 42-45.	2.1	20
52	Generation of programmable 3D optical vortex structures through devilâ€™s vortex-lens arrays. Applied Optics, 2013, 52, 5822.	1.8	19
53	Cantor dust zone plates. Optics Express, 2013, 21, 2701.	3.4	15
54	Twin axial vortices generated by Fibonacci lenses. Optics Express, 2013, 21, 10234.	3.4	41

#	Article	IF	Citations
55	Imaging quality of multifocal intraocular lenses: automated assessment setup. Ophthalmic and Physiological Optics, 2013, 33, 420-426.	2.0	15
56	A quantitative analysis of coupled oscillations using mobile accelerometer sensors. European Journal of Physics, 2013, 34, 737-744.	0.6	47
57	Oscillations studied with the smartphone ambient light sensor. European Journal of Physics, 2013, 34, 1349-1354.	0.6	62
58	Bifocal Fibonacci Diffractive Lenses. IEEE Photonics Journal, 2013, 5, 3400106-3400106.	2.0	72
59	VÃ³rtices no estacionarios en un vaso de agua. Revista Brasileira De Ensino De Fisica, 2013, 35, .	0.2	0
60	Synthesis of fractal light pulses by quasi-direct space-to-time pulse shaping. Optics Letters, 2012, 37, 1145.	3.3	11
61	Multiplexing of encrypted data using fractal masks. Optics Letters, 2012, 37, 2895.	3.3	23
62	Through-focus response of multifocal intraocular lenses evaluated with a spatial light modulator. Applied Optics, 2012, 51, 8594.	1.8	5
63	SELF-SIMILAR BEHAVIOR IN SEMICONDUCTOR SUPERLATTICES. Fractals, 2012, 20, 89-95.	3.7	3
64	Experimental generation and characterization of Devilâ€™s vortex-lenses. Applied Physics B: Lasers and Optics, 2012, 106, 915-919.	2.2	26
65	Promoting mathematical skills using the instructive program Kriging. , 2011, , .		0
66	Self-similar focusing with generalized devilâ€™s lenses. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 210.	1.5	3
67	Undergraduate experiment with fractal diffraction gratings. European Journal of Physics, 2011, 32, 687-694.	0.6	10
68	Multifractal zone plates. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2010, 27, 1851.	1.5	31
69	Optical filters with fractal transmission spectra based on diffractive optics. Optics Letters, 2009, 34, 560.	3.3	15
70	m-bonacci metamaterial multilayers: location of the zero-average index bandgap edges. Optics Letters, 2009, 34, 3172.	3.3	11
71	Fractal generalized zone plates. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 1161.	1.5	16
72	Polyadic devil's lenses. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2009, 26, 2532.	1.5	13

#	Article	IF	Citations
73	Role of dispersion on zero-average-index bandgaps. Journal of the Optical Society of America B: Optical Physics, 2009, 26, 581.	2.1	16
74	Devilâ€™s vortex-lenses. Optics Express, 2009, 17, 21891.	3.4	69
75	Zero-average index band-gap edges in m -bonacci metamaterial multilayers. , 2009, , .		0
76	Tunneling in quantum superlattices with variable lacunarity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 3801-3807.	2.1	10
77	Testing theoretical models of magnetic damping using an air track. European Journal of Physics, 2008, 29, 335-343.	0.6	12
78	Self-similar non-Bragg band gaps in fractal metamaterial multilayers. , 2007, 6581, 263.		0
79	Broadband focused waves with compensated spatial dispersion: transverse versus axial balance. Optics Letters, 2007, 32, 853.	3.3	7
80	White-light imaging with fractal zone plates. Optics Letters, 2007, 32, 2109.	3.3	83
81	Devilâ€™s lenses. Optics Express, 2007, 15, 13858.	3.4	53
82	Diffraction by fractal metallic supergratings. Optics Express, 2007, 15, 15628.	3.4	3
83	Non-Bragg band gaps in 1D metamaterial aperiodic multilayers. Journal of the European Optical Society-Rapid Publications, 2007, 2, .	1.9	17
84	Introductory quantum physics courses using a LabVIEW multimedia module. Computer Applications in Engineering Education, 2007, 15, 124-133.	3.4	7
85	Lacunar fractal photon sieves. Optics Communications, 2007, 277, 1-4.	2.1	26
86	Zero permeability and zero permittivity band gaps in 1D metamaterial photonic crystals. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 364, 352-355.	2.1	44
87	Quantum fractal superlattices. American Journal of Physics, 2006, 74, 831-836.	0.7	15
88	Focusing properties of aperiodic zone plates. , 2006, , .		0
89	Fractal conical lenses. Optics Express, 2006, 14, 9077.	3.4	22
90	Fractal photon sieve. Optics Express, 2006, 14, 11958.	3.4	92

#	Article	IF	Citations
91	Interaction between non-Bragg band gaps in 1D metamaterial photonic crystals. Optics Express, 2006, 14, 12958.	3.4	42
92	Fractal axicons. Optics Communications, 2006, 263, 1-5.	2.1	21
93	Spatial effects in nonlinear photonic crystal fibers. , 2005, 5950, 176.		0
94	Cantor-like fractal photonic crystal waveguides. Optics Communications, 2005, 252, 46-51.	2.1	52
95	A transfer matrix method for the analysis of fractal quantum potentials. European Journal of Physics, 2005, 26, 603-610.	0.6	18
96	Vortex Transmutation. Physical Review Letters, 2005, 95, 123901.	7.8	64
97	Measuring coupled oscillations using an automated video analysis technique based on image recognition. European Journal of Physics, 2005, 26, 1149-1155.	0.6	26
98	Nodal solitons and the nonlinear breaking of discrete symmetry. Optics Express, 2005, 13, 1072.	3.4	23
99	Sloped-wall thin-film photonic crystal waveguides. IEEE Photonics Technology Letters, 2005, 17, 354-356.	2.5	3
100	Analysis of Inhomogeneously Dielectric Filled Cavities Coupled to Dielectric-Loaded Waveguides: Application to the Study of NRD-Guide Components. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 1693-1701.	4.6	12
101	Spectral anomalies in focused waves of different Fresnel numbers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 2418.	1.5	10
102	Vortex solitons in photonic crystal fibers. Optics Express, 2004, 12, 817.	3.4	83
103	Fractal zone plates with variable lacunarity. Optics Express, 2004, 12, 4227.	3.4	64
104	<title>Using 3D virtual environments to visualize wave interference phenomena</title>. , 2004, , .		0
105	A robust and efficient method for obtaining the complex modes in inhomogeneously filled waveguides. Microwave and Optical Technology Letters, 2003, 37, 218-222.	1.4	5
106	Fractal zone plates. Optics Letters, 2003, 28, 971.	3.3	179
107	Photonic Structures: Fractal Zone Plates Produce Axial Irradiance With Fractal Profile. Optics and Photonics News, 2003, 14, 31.	0.5	3
108	Spatial soliton formation in photonic crystal fibers. Optics Express, 2003, 11, 452.	3.4	71

#	Article	IF	Citations
109	High-index-core Bragg fibers: dispersion properties. Optics Express, 2003, 11, 1400.	3.4	33
110	Assessment of a Wigner-distribution-function-based method to compute the polychromatic axial response given by an aberrated optical system. Optical Engineering, 2003, 42, 753.	1.0	1
111	Using image recognition to automate video analysis of physical processes. American Journal of Physics, 2003, 71, 1075-1079.	0.7	14
112	Axial behaviour of Cantor ring diffractals. Journal of Optics, 2003, 5, S361-S364.	1.5	2
113	Dispersion-compensated high-index core Bragg fibers. , 2003, , .		0
114	Axial behavior of Cantor rings diffractals. , 2003, , .		0
115	Analysis of dielectric-loaded cavities using an orthonormal-basis method. IEEE Transactions on Microwave Theory and Techniques, 2002, 50, 2545-2552.	4.6	26
116	Contribution of digital simulation in visualizing physics processes. Computer Applications in Engineering Education, 2002, 10, 45-49.	3.4	19
117	Digital simulation of wave motion. Computer Applications in Engineering Education, 2002, 10, 161-166.	3.4	7
118	<title>Axial irradiance computation using the Wigner distribution function: assessment of the method</title>. , 2001, , .		0
119	<title>Analysis of three-dimensional dielectric structures using an orthonormal-basis method: thin film photonic crystal waveguides</title>. , 2001, , .		0
120	Designing a photonic crystal fibre with flattened chromatic dispersion. Electronics Letters, 1999, 35, 325.	1.0	54
121	Dispersion-flattened properties of high-index-core Bragg fibers. , 0, , .		0
122	Volumetric multiple optical traps produced by Devil's lenses. Journal of the European Optical Society-Rapid Publications, 0, 5, .	1.9	15
123	Fractal Light Vortices. , 0, , .		6
124	SimulaciÃ³n de esfuerzos en pÃ³rticos. Modelling in Science Education and Learning, 0, 4, 207.	0.2	0
125	Ophthalmic: Laboratorio virtual para el diseÃ±o de nuevas lentes oftÃ¡lmicas. Modelling in Science Education and Learning, 0, 6, 173.	0.2	1
126	GeneraciÃ³n de fractales a partir del mÃ©todo de Newton. Modelling in Science Education and Learning, 0, 6, 137.	0.2	0

#	Article	IF	Citations
127	Aperiodic Diffract: Study of diffraction gratings. Modelling in Science Education and Learning, 0, 7, 131.	0.2	0