## J Antonio Del Rio

List of Publications by Year in descending order

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99 papers

1,807 citations

20 h-index 315739 38 g-index

100 all docs

 $\begin{array}{c} 100 \\ \\ \text{docs citations} \end{array}$ 

100 times ranked 1303 citing authors

#	Article	IF	CITATIONS
1	Temperature distribution inside a porous silicon photonic mirror. Journal Physics D: Applied Physics, 2022, 55, 065101.	2.8	O
2	Optical and thermal performance of a toroidal compound parabolic concentrator. Applied Optics, 2021, 60, 2213.	1.8	2
3	Quantum mechanics for non-inertial reference frames. European Journal of Physics, 2021, 42, 045405.	0.6	1
4	Optical and thermal properties of edible coatings for application in solar drying. Scientific Reports, 2021, 11, 10051.	3.3	7
5	Applied physics in Mexico: mining the past to predict the future. Scientometrics, 2020, 125, 187-212.	3.0	2
6	Thermographic visualization of a flow instability in an electromagnetically driven electrolyte layer. Experimental Thermal and Fluid Science, 2019, 109, 109882.	2.7	3
7	Modeling an urban highway: A statistical physics point of view for a nonphysical system. Revista Mexicana De Fisica E, 2019, 65, 114-127.	0.1	O
8	A plausible approach to heat transfer enhancement: non-Fourier heat transfer in fluids under oscillating conditions. Journal of Physics Communications, 2018, 2, 055006.	1.2	0
9	Stochastic optimization of broadband reflecting photonic structures. Scientific Reports, 2018, 8, 1193.	3.3	16
10	Network characterization of the Entangled Model for sustainability indicators. Analysis of the network properties for scenarios. PLoS ONE, 2018, 13, e0208718.	2.5	4
11	The Influence of the External Signal Modulation Waveform and Frequency on the Performance of a Photonic Forced Oscillator. Materials, 2018, 11, 854.	2.9	4
12	Refractive index evaluation of porous silicon using Bragg reflectors. Revista Mexicana De FÃsica, 2017, 64, 72-81.	0.4	17
13	Diffusion of Charged Species in Liquids. Scientific Reports, 2016, 6, 35211.	3.3	3
14	Role of an Oxidant Mixture as Surface Modifier of Porous Silicon Microstructures Evaluated by Spectroscopic Ellipsometry. Scientific Reports, 2016, 6, 24798.	3.3	5
15	The importance of mean time in power resource assessment for small wind turbine applications. Energy for Sustainable Development, 2016, 30, 32-38.	4.5	11
16	Wind Power Error Estimation in Resource Assessments. PLoS ONE, 2015, 10, e0124830.	2.5	15
17	An Entangled Model for Sustainability Indicators. PLoS ONE, 2015, 10, e0135250.	2.5	14
18	Improved method for estimating static formation temperatures in geothermal and petroleum wells. Geothermics, 2015, 57, 73-83.	3.4	8

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19	Staggered Pad $ ilde{A}$ © wavelength distribution for multi-Bragg photonic mirrors. Solar Energy Materials and Solar Cells, 2015, 141, 315-321.	6.2	6
20	Heat transfer in photonic mirrors. Journal of Materials Science: Materials in Electronics, 2014, 25, 4348-4355.	2.2	4
21	Solar Energy Research in Ibero-America, a Citation Mining Approach. Energy Procedia, 2014, 57, 930-939.	1.8	2
22	The bifoil photodyne: a photonic crystal oscillator. Scientific Reports, 2014, 4, 3705.	3.3	9
23	Ab initio simulations of p-type porous silicon nanostructures. Journal of Nanostructure in Chemistry, 2013, 3, 1.	9.1	2
24	Analysis about sampling, uncertainties and selection of a reliable probabilistic model of wind speed data used on resource assessment. Renewable Energy, 2013, 50, 244-252.	8.9	9
25	Theoretical and experimental study of electromagnetic forces induced in one-dimensional photonic crystals. , 2013, , .		1
26	Thermodynamic characterization of the diffusive transport to wave propagation transition in heat conducting thin films. Journal of Applied Physics, 2012, 112, .	2.5	16
27	Ab initio simulation of p-type silicon crystals. Solid State Communications, 2012, 152, 1619-1624.	1.9	2
28	A plausible explanation for heart rates in mammals. Journal of Theoretical Biology, 2010, 265, 599-603.	1.7	20
29	Anomalous patterned scattering spectra of one-dimensional porous silicon photonic crystals. Optics Express, 2010, 18, 22808.	3.4	12
30	DETERMINATION OF THE COMPLEX REFRACTIVE INDEX OF POROUS SILICON LAYERS ON CRYSTALLINE SILICON SUBSTRATES. International Journal of Modern Physics B, 2010, 24, 4835-4850.	2.0	15
31	Perfect light transmission in Fibonacci arrays of dielectric multilayers. Journal of Physics Condensed Matter, 2009, 21, 155901.	1.8	41
32	Thermodynamic analysis of a solar coffee maker. Energy Conversion and Management, 2009, 50, 2407-2412.	9.2	7
33	Refractive index contrast in porous silicon multilayers. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 1721-1724.	0.8	18
34	Heat transfer enhancement in oscillatory flows of Newtonian and viscoelastic fluids. International Journal of Heat and Mass Transfer, 2009, 52, 5472-5478.	4.8	14
35	Multiband negative refraction in one-dimensional photonic crystals. Optics Express, 2009, 17, 3036.	3.4	29
36	Chemical modification of porous silicon mirror for biosensing applications. , 2007, , .		1

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37	Instabilities in the oscillatory flow of a complex fluid. Physical Review E, 2007, 75, 056307.	2.1	14
38	Fluorescence tuning of confined molecules in porous silicon mirrors. Applied Physics Letters, 2007, 91, 121909.	3.3	18
39	Clustering methodologies for identifying country core competencies. Journal of Information Science, 2007, 33, 21-40.	3.3	17
40	Solar oven for intertropical zones: Optogeometrical design. Energy Conversion and Management, 2007, 48, 2649-2656.	9.2	16
41	Collaboration in science among Latin American countries. Revista Espanola De Documentacion Cientifica, 2007, 30, .	0.4	21
42	Enhanced heat transfer using oscillatory flows in solar collectors. Solar Energy, 2006, 80, 1296-1302.	6.1	24
43	Electrical properties of porous silicon/polypyrrole heterojunctions. Solar Energy Materials and Solar Cells, 2006, 90, 2413-2420.	6.2	16
44	Duplicate publication and †paper inflation†in the fractals literature. Science and Engineering Ethics, 2006, 12, 543-554.	2.9	13
45	Morphology Study of a Hybrid Structure Based on Porous Silicon and Polypyrrole. Materials Research Society Symposia Proceedings, 2006, 939, 1.	0.1	0
46	FILTERS, MIRRORS AND MICROCAVITIES FROM POROUS SILICON. International Journal of Modern Physics B, 2006, 20, 99-110.	2.0	14
47	New guide for first order multiplet analysis by modified J doubling in the frequency domain. Arkivoc, 2006, 2003, 213-226.	0.5	0
48	Cellular automata for one-lane traffic flow modeling. Transportation Research Part C: Emerging Technologies, 2005, 13, 63-74.	7.6	44
49	The structure and infrastructure of Mexico's science and technology. Technological Forecasting and Social Change, 2005, 72, 798-814.	11.6	22
50	Rayleigh scattering in multilayered structures of porous silicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 3544-3547.	0.8	11
51	Photon losses in porous silicon microcavities. Physica Status Solidi A, 2005, 202, 2626-2632.	1.7	5
52	Measurements of the bulk and interfacial velocity profiles in oscillating Newtonian and Maxwellian fluids. Physical Review E, 2005, 72, 016308.	2.1	23
53	New kind of phase separation in a CA traffic model with anticipation. Journal of Physics A, 2004, 37, 3769-3781.	1.6	33
54	Optimal behavior of viscoelastic flow at resonant frequencies. Physical Review E, 2004, 70, 056302.	2.1	7

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55	Photon Bloch Oscillations in Porous Silicon Optical Superlattices. Physical Review Letters, 2004, 92, 097401.	7.8	127
56	Viscoelastic fingering with a pulsed pressure signal. Journal of Physics Condensed Matter, 2004, 16, S2055-S2060.	1.8	6
57	Macromolecule mass spectrometry: Citation mining of user documents. Journal of the American Society for Mass Spectrometry, 2004, 15, 281-287.	2.8	15
58	Effect of the electric field on the luminescence of self-supporting porous silicon. Physica Status Solidi A, 2003, 197, 345-349.	1.7	4
59	Light transmission in quasiperiodic multilayers of porous silicon. Journal of Non-Crystalline Solids, 2003, 329, 140-143.	3.1	151
60	Photonic Quasiperiodic Multilayers of Porous Silicon. Materials Research Society Symposia Proceedings, 2003, 797, 140.	0.1	1
61	Tailoring the photonic band gap of a porous silicon dielectric mirror. Applied Physics Letters, 2003, 82, 1512-1514.	3.3	117
62	Experimental observation of dramatic differences in the dynamic response of Newtonian and Maxwellian fluids. Physical Review E, 2003, 68, 046301.	2.1	38
63	A theoretical and experimental thermal study of SiO2optical fibres transmitting concentrated radiative energy. Journal Physics D: Applied Physics, 2002, 35, 95-102.	2.8	11
64	Optical fibres for a mini-dish/Stirling system: thermodynamic optimization. Journal Physics D: Applied Physics, 2002, 35, 1241-1250.	2.8	20
65	Two effective temperatures in traffic flow models: analogies with granular flow. Physica A: Statistical Mechanics and Its Applications, 2002, 307, 527-547.	2.6	7
66	The impact of physics research. Physics World, 2001, 14, 47-52.	0.0	6
67	Optical properties of charged inclusions. Solid State Communications, 2001, 117, 555-559.	1.9	4
68	Reversible charging effects on optical properties of porous silicon. Solid State Communications, 2001, 120, 21-24.	1.9	1
69	Citation mining: Integrating text mining and bibliometrics for research user profiling. Journal of the Association for Information Science and Technology, 2001, 52, 1148-1156.	2.6	90
70	Electrohydrodynamics in Porous Media. Transport in Porous Media, 2001, 44, 385-405.	2.6	35
71	Dynamic permeability of electrically conducting fluids under magnetic fields in annular ducts. Physical Review E, 2001, 64, 016313.	2.1	13
72	Effective Medium Correlations for Experimental Absorption Data. Physica Status Solidi A, 2000, 182, 291-295.	1.7	3

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73	Non-linear model for absorption in SiO2 optical fibres: Transport of concentrated solar energy. Solar Energy Materials and Solar Cells, 2000, 64, 209-224.	6.2	11
74	Renormalized Impact Factor. Scientometrics, 2000, 47, 3-9.	3.0	61
75	Maxwell's Equations in Two-Phase Systems II: Two-Equation Model. Transport in Porous Media, 2000, 39, 259-287.	2.6	26
76	Maxwell's Equations in Two-Phase Systems I: Local Electrodynamic Equilibrium. Transport in Porous Media, 2000, 39, 159-186.	2.6	49
77	Consequences of a generalized Ohm's law for magnetic transport in conducting media. Journal Physics D: Applied Physics, 1999, 32, 639-643.	2.8	4
78	A thermal study of optical fibres transmitting concentrated solar energy. Journal Physics D: Applied Physics, 1999, 32, 1000-1005.	2.8	26
79	Classical field theory and stochastic properties of hyperbolic equations of dissipative processes. Physica A: Statistical Mechanics and Its Applications, 1999, 268, 482-498.	2.6	9
80	Influence of Nonlinear Local Properties on Effective Transport. Transport in Porous Media, 1998, 31, 89-108.	2.6	2
81	Path integral approach to fluctuations in relativistic transport. Physica A: Statistical Mechanics and Its Applications, 1998, 253, 290-300.	2.6	5
82	Formula for the conductivity of a two-component material based on the reciprocity theorem. Solid State Communications, 1998, 106, 183-186.	1.9	34
83	Surface contributions to the effective optical properties of porous silicon. Solar Energy Materials and Solar Cells, 1998, 52, 239-249.	6.2	13
84	Application of fiber optics in the hydrogen production by photoelectrolysis. International Journal of Hydrogen Energy, 1998, 23, 985-993.	7.1	11
85	Enhancement in the dynamic response of a viscoelastic fluid flowing in a tube. Physical Review E, 1998, 58, 6323-6327.	2.1	77
86	Influence of surface coverage on the effective optical properties of porous silicon modeled as a Si-wire array. Journal of Applied Physics, 1997, 81, 1923-1928.	2.5	36
87	Fluctuations far from equilibrium: Hyperbolic transport. Physical Review E, 1997, 55, 5033-5043.	2.1	13
88	Effective conductivity of chemically deposited ZnO thin films. Thin Solid Films, 1997, 293, 320-326.	1.8	8
89	Flow of Maxwell fluids in porous media. Transport in Porous Media, 1996, 25, 167-192.	2.6	57
90	Comments on the Existence of Hamiltonian Principles for Non-Selfadjoint Operators. Journal of Non-Equilibrium Thermodynamics, 1996, 21, .	4.2	11

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91	Nonlinear Heat Waves In Extended Irreversible Thermodynamics. Journal of Non-Equilibrium Thermodynamics, 1995, 20, .	4.2	8
92	Dynamic effective conductivity of porous silicon. Journal of Non-Crystalline Solids, 1995, 182, 206-211.	3.1	2
93	Effective conductivity of porous silicon: A theoretical approach. Physica A: Statistical Mechanics and Its Applications, 1994, 207, 163-167.	2.6	4
94	Transverse component of the electrical conductivity of porous silicon $\hat{a} \in $ " I. Solid State Communications, 1994, 90, 411-415.	1.9	8
95	Effective electrical conductivity of porous silicon: A novel theoretical approach. Solid State Communications, 1993, 87, 541-545.	1.9	18
96	Nonequilibrium variational principle for the time evolution of an ionized gas. Physical Review E, 1993, 47, 178-183.	2.1	10
97	The Non-Equilibrium Thermodynamics of the Soil Water System: A Variational Approach. Journal of Non-Equilibrium Thermodynamics, 1992, 17, .	4.2	5
98	A Generalization of the Richards Equation Within Extended Irreversible Thermodynamics. Water Resources Research, 1991, 27, 2141-2142.	4.2	10
99	On the Criteria for Deriving Approximations of Different Orders in Extended Irreversible Thermodynamics. Journal of Non-Equilibrium Thermodynamics, 1990, 15, .	4.2	4