# Juan Carlos Castro-Palacio

List of Publications by Year
in descending order



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|---|---|---|---|
| 49 papers | 617 citations | 623734 14 h-index | 642732 23 g-index |
| 52 all docs | 52 docs citations | 52 times ranked | 444 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Human Reaction Times: Linking Individual and Collective Behaviour Through Physics Modeling. Symmetry, 2021, 13, 451. | 2.2 | 5 |
| 2 | Passive Strategies to Improve the Comfort Conditions in a Geodesic Dome. Mathematics, 2021, 9, 663. | 2.2 | 1 |
| 3 | Monte Carlo Simulation of a Modified Chi Distribution Considering Asymmetry in the Generating Functions: Application to the Study of Health-Related Variables. Symmetry, 2021, 13, 924. | 2.2 | 5 |
| 4 | Monte Carlo Simulation of a Modified Chi Distribution with Unequal Variances in the Generating Gaussians. A Discrete Methodology to Study Collective Response Times. Mathematics, 2021, 9, 77. | 2.2 | 4 |
| 5 | Formation of Hollow Gold Nanocrystals by Nanosecond Laser Irradiation. Journal of Physical Chemistry Letters, 2020, 11, 670-677. | 4.6 | 15 |
| 6 | Machinery Failure Approach and Spectral Analysis to Study the Reaction Time Dynamics over Consecutive Visual Stimuli: An Entropy-Based Model. Mathematics, 2020, 8, 1979. | 2.2 | 5 |
| 7 | The cosmological constant of emergent spacetime in the Newtonian approximation. International Journal of Modern Physics D, 2020, 29, 2050093. | 2.1 | 4 |
| 8 | Hollow Gold Nanoparticles Produced by Femtosecond Laser Irradiation. Journal of Physical Chemistry Letters, 2020, 11, 5108-5114. | 4.6 | 16 |
| 9 | Correlations between Background Radiation Inside a Multilayer Interleaving Structure, Geomagnetic Activity, and Cosmic Radiation: A Fourth-Order Cumulant-Based Correlation Analysis. Mathematics, 2020, 8, 344. | 2.2 | 6 |
| 10 | Sliding Modes Control for Heat Transfer in Geodesic Domes. Mathematics, 2020, 8, 902. | 2.2 | 4 |
| 11 | Fluctuations in measured radioactive decay rates inside a modified Faraday cage: Correlations with space weather. Scientific Reports, 2020, 10, 8525. | 3.3 | 9 |
| 12 | Percentile Study of Ï‡ Distribution. Application to Response Time Data. Mathematics, 2020, 8, 514. | 2.2 | 5 |
| 13 | A Probabilistic Classification Procedure Based on Response Time Analysis Towards a Quick Pre-Diagnosis of Studentâ€™s Attention Deficit. Mathematics, 2019, 7, 473. | 2.2 | 9 |
| 14 | Rotational relaxation of CF+(X1Î£) in collision with He(1S). Monthly Notices of the Royal Astronomical Society, 2018, 473, 1438-1443. | 4.4 | 7 |
| 15 | Characterization of linear light sources with the smartphoneâ€™s ambient light sensor. Physics Teacher, 2018, 56, 562-563. | 0.3 | 7 |
| 16 | Ab initio intermolecular potential energy surface for the CO2â€”N2 system and related thermophysical properties. Journal of Chemical Physics, 2018, 148, 214306. | 3.0 | 24 |
| 17 | El smartphone como barÃ³metro en experimentos de FÃsica. Modelling in Science Education and Learning, 2018, 11, 15. | 0.2 | 1 |
| 18 | Direct Visualization of Mechanical Beats by Means of an Oscillating Smartphone. Physics Teacher, 2017, 55, 424-425. | 0.3 | 10 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Desarrollo de habilidades de modelaciÃ³n desde las ecuaciones mÃ¡s simples de la HidrodinÃ¡mica. Modelling in Science Education and Learning, 2017, 10, 211. | 0.2 | 0 |
| 20 | Collision-induced rotational excitation in N2+(2Î£g+,v=)â€“Ar: Comparison of computations and experiment. Journal of Chemical Physics, 2016, 144, 224307. | 3.0 | 16 |
| 21 | Dilute gas viscosity of n-alkanes represented by rigid Lennard-Jones chains. Molecular Physics, 2016, 114, 3171-3182. | 1.7 | 5 |
| 22 | STUDY OF TWO-DIMENSIONAL COUPLED OSCILLATIONS USING A SMARTPHONE ACCELERATION SENSOR FOR PHYSICS TEACHING. , 2016, , . | | 0 |
| 23 | Communication: Equilibrium rate coefficients from atomistic simulations: The O(3P) + NO(2Î) â†' O2(X3Î£gâ^') + N(4S) reaction at temperatures relevant to the hypersonic flight regime. Journal of Chemical Physics, 2015, 142, 091104. | 3.0 | 22 |
| 24 | Frequency analyser: A new Android application for high precision frequency measurement. Computer Applications in Engineering Education, 2015, 23, 471-476. | 3.4 | 6 |
| 25 | Extended canonical Monte Carlo methods: Improving accuracy of microcanonical calculations using a reweighting technique. Physical Review E, 2015, 91, 033308. | 2.1 | 5 |
| 26 | The study of two-dimensional oscillations using a smartphone acceleration sensor: example of Lissajous curves. Physics Education, 2015, 50, 580-586. | 0.5 | 20 |
| 27 | Computational study of collisions between O(3P) and NO(2Î) at temperatures relevant to the hypersonic flight regime. Journal of Chemical Physics, 2014, 141, 164319. | 3.0 | 34 |
| 28 | Smart physics with smartphone sensors. , 2014, , . | | 10 |
| 29 | Diffraction by electronic components of everyday use. American Journal of Physics, 2014, 82, 257-261. | 0.7 | 17 |
| 30 | 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 |
| 31 | The acoustic Doppler effect applied to the study of linear motions. European Journal of Physics, 2014, 35, 025006. | 0.6 | 33 |
| 32 | Direct measurement of the speed of sound using a microphone and a speaker. Physics Education, 2014, 49, 310-313. | 0.5 | 8 |
| 33 | 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 |
| 34 | Improving the efficiency of Monte Carlo simulations of systems that undergo temperature-driven phase transitions. Physical Review E, 2013, 88, 013311. | 2.1 | 6 |
| 35 | Molecular dynamics study of one dimensional nanoscale Si/SiO2 interfaces. European Physical Journal D, 2013, 67, 1. | 1.3 | 1 |
| 36 | A quantitative analysis of coupled oscillations using mobile accelerometer sensors. European Journal of Physics, 2013, 34, 737-744. | 0.6 | 47 |

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|---|---|---|---|
| 37 | SELF-SIMILAR BEHAVIOR IN SEMICONDUCTOR SUPERLATTICES. Fractals, 2012, 20, 89-95. | 3.7 | 3 |
| 38 | Promoting mathematical skills using the instructive program Kriging. , 2011, , . | | 0 |
| 39 | An ab initio study of Xeâ€“NO(X2Π) and Xeâ€“NO(A2Î£+) potential energy surfaces. Procedia Computer Science, 2011, 4, 1135-1144. | 2.0 | 1 |
| 40 | Argon Solid Response upon Rydberg Photoexcitation of the NO Chromosphore: Case of Using ab Initio Potential Energy Surfaces and Comparison to Similar Studied Systems. Journal of Physical Chemistry A, 2010, 114, 9673-9680. | 2.5 | 3 |
| 41 | Hyperspherical and related views of the dynamics of nanoclusters. Physica Scripta, 2009, 80, 048103. | 2.5 | 6 |
| 42 | An ab initio study of the Arâ€“NO(Aâ€‰Î£2+) intermolecular potential. Journal of Chemical Physics, 2009, 131, 044506. | 3.0 | 8 |
| 43 | Molecular dynamics simulations and hyperspherical mode analysis of NO in Kr crystals with the use of ab initio potential energy surfaces for the Krâ€NO complex. International Journal of Quantum Chemistry, 2008, 108, 1821-1830. | 2.0 | 13 |
| 44 | Ab initioground and excited state potential energy surfaces for NOâ€“Kr complex and dynamics of Kr solids with NO impurity. Journal of Chemical Physics, 2007, 126, 134315. | 3.0 | 11 |
| 45 | Normal and hyperspherical mode analysis of NO-doped Kr crystals upon Rydberg excitation of the impurity. Journal of Chemical Physics, 2007, 126, 174701. | 3.0 | 30 |
| 46 | NO in Kr and Xe solids: Molecular dynamics and normal mode analysis. Computational and Theoretical Chemistry, 2005, 730, 255-261. | 1.5 | 8 |
| 47 | Dynamics of structural relaxation upon Rydberg excitation of an NO impurity in rare gas solid matrices. Physica Status Solidi (B): Basic Research, 2005, 242, 1747-1753. | 1.5 | 9 |
| 48 | Stability of terrestrial planets in the habitable zone of GlÂ777ÂA, HD 72659, Gl 614, 47 Uma and HD 4208. Astronomy and Astrophysics, 2004, 426, 353-365. | 5.1 | 65 |
| 49 | Study of the structural photoinduced dynamics of a solid Kr matrix with an NO impurity. European Physical Journal D, 2003, 25, 149-155. | 1.3 | 15 |