Rafael BenÃtez

List of Publications by Year
in descending order

38 papers	794 citations	516710 16 h-index	526287 27 g-index
38 all docs	38 docs citations	38 times ranked	1040 citing authors

#	Article	IF	Citations
1	Stress relaxation and creep on living cells with the atomic force microscope: a means to calculate elastic moduli and viscosities of cell components. Nanotechnology, 2010, 21, 445101.	2.6	110
2	A wavelet-based tool for studying non-periodicity. Computers and Mathematics With Applications, 2010, 60, 634-641.	2.7	81
3	Stress relaxation microscopy: Imaging local stress in cells. Journal of Biomechanics, 2010, 43, 349-354.	2.1	66
4	Interest rate changes and stock returns: A European multi-country study with wavelets. International Review of Economics and Finance, 2016, 44, 1-12.	4.5	62
5	A new automatic contact point detection algorithm for AFM force curves. Microscopy Research and Technique, 2013, 76, 870-876.	2.2	50
6	Microtubule disruption changes endothelial cell mechanics and adhesion. Scientific Reports, 2019, 9, 14903.	3.3	40
7	Measuring biomaterials mechanics with atomic force microscopy. 1. Influence of the loading rate and applied force (pyramidal tips). Microscopy Research and Technique, 2019, 82, 1392-1400.	2.2	37
8	Looking at cell mechanics with atomic force microscopy: Experiment and theory. Microscopy Research and Technique, 2014, 77, 947-958.	2.2	32
9	Interactions between financial stress and economic activity for the U.S.: A time- and frequency-varying analysis using wavelets. Physica A: Statistical Mechanics and Its Applications, 2018, 492, 446-462.	2.6	32
10	Mechanical properties of gelatin nanoparticles in dependency of crosslinking time and storage. Colloids and Surfaces B: Biointerfaces, 2019, 175, 713-720.	5.0	32
11	Interdependence between Green Financial Instruments and Major Conventional Assets: A Wavelet-Based Network Analysis. Mathematics, 2021, 9, 900.	2.2	26
12	Resveratrol-Induced Temporal Variation in the Mechanical Properties of MCF-7 Breast Cancer Cells Investigated by Atomic Force Microscopy. International Journal of Molecular Sciences, 2019, 20, 3275.	4.1	25
13	Shrub encroachment of Iberian dehesas: implications on total forage productivity. Agroforestry Systems, 2015, 89, 587-598.	2.0	21
14	The windowed scalogram difference: A novel wavelet tool for comparing time series. Applied Mathematics and Computation, 2017, 312, 49-65.	2.2	19
15	afmToolkit: an R Package for Automated AFM Force-Distance Curves Analysis. R Journal, 2017, 9, 291.	1.8	19
16	A Short-Term Data Based Water Consumption Prediction Approach. Energies, 2019, 12, 2359.	3.1	18
17	Unweighted TOPSIS: a new multi-criteria tool for sustainability analysis. International Journal of Sustainable Development and World Ecology, 2021, 28, 36-48.	5.9	15
18	How do management techniques affect carbon stock in intensive hardwood plantations?. Forest Ecology and Management, 2017, 389, 228-239.	3.2	14

#	Article	IF	Citations
19	The Wavelet Scalogram in the Study of Time Series. SEMA SIMAI Springer Series, 2014, , 147-154.	0.7	12
20	A New Wavelet Tool to Quantify Non-Periodicity of Non-Stationary Economic Time Series. Mathematics, 2020, 8, 844.	2.2	11
21	Measuring (biological) materials mechanics with atomic force microscopy. 2. Influence of the loading rate and applied force (colloidal particles). Microscopy Research and Technique, 2021, 84, 1078-1088.	2.2	8
22	deaR-Shiny: An Interactive Web App for Data Envelopment Analysis. Sustainability, 2021, 13, 6774.	3.2	8
23	Measuring biological materials mechanics with atomic force microscopy â€•Determination of viscoelastic cell properties from stress relaxation experiments. Microscopy Research and Technique, 2022, 85, 3284-3295.	2.2	8
24	A Note on the Uniqueness and Attractive Behavior of Solutions for Nonlinear Volterra Equations. Journal of Integral Equations and Applications, 2001, 13, 305.	0.6	7
25	Existence and uniqueness of nontrivial collocation solutions of implicitly linear homogeneous Volterra integral equations. Journal of Computational and Applied Mathematics, 2011, 235, 3661-3672.	2.0	7
26	Aspects of the behaviour of solutions of nonlinear Abel equations. Nonlinear Analysis: Theory, Methods & Applications, 2003, 54, 1241-1249.	1.1	6
27	Nonconvolution nonlinear integral volterra equations with monotone operators. Computers and Mathematics With Applications, 2005, 50, 1405-1414.	2.7	6
28	Searching events in AFM forceâ€extension curves: A wavelet approach. Microscopy Research and Technique, 2017, 80, 153-159.	2.2	6
29	A High-Frequency Data-Driven Machine Learning Approach for Demand Forecasting in Smart Cities. Scientific Programming, 2019, 2019, 1-16.	0.7	3
30	Attraction Properties of Unbounded Solutions for a Nonlinear Abel Integral Equation. Journal of Integral Equations and Applications, 2007, 19, .	0.6	2
31	Invariant manifolds of the Bonhoefferâ€"van der Pol oscillator. Chaos, Solitons and Fractals, 2009, 40, 2170-2180.	5.1	2
32	Comment on â€œMechanical Properties of Giant Liposomes Compressed between Two Parallel Plates: Impact of Artificial Actin Shellsâ€. Langmuir, 2014, 30, 7928-7930.	3.5	2
33	Blow-up collocation solutions of nonlinear homogeneous Volterra integral equations. Applied Mathematics and Computation, 2015, 256, 754-768.	2.2	2
34	A Probabilistic Model for Crystal Growth Applied to Protein Deposition at the Microscale. Materials, 2019, 12, 479.	2.9	2
35	Managing high quality timber plantations as silvopastoral systems: tree growth, soil water dynamics and nitrate leaching risk. New Forests, 2020, 51, 985-1002.	1.7	2
36	Non-Lipschitz Homogeneous Volterra Integral Equations. Understanding Complex Systems, 2019, , 237-259.	0.6	1

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37	Measurements of total ozone amount over Badajoz (Southwestern Spain) by means of a GUV multiband radiometer. Optica Pura Y Aplicada, 2012, 45, 39-43.	0.1	0
38	THE USE OF WHATSAPP FOR IMPROVING THE STUDENT ATTENTION FROM THE TUTORIAL ACTION PLAN. , 2016, , .		0