

Massimo Materassi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5779455/publications.pdf>

Version: 2024-02-01

48
papers

540
citations

687363

13
h-index

713466

21
g-index

52
all docs

52
docs citations

52
times ranked

560
citing authors

#	ARTICLE	IF	CITATIONS
1	New insights and best practices for the successful use of Empirical Mode Decomposition, Iterative Filtering and derived algorithms. <i>Scientific Reports</i> , 2020, 10, 15161.	3.3	89
2	Adaptive Local Iterative Filtering: A Promising Technique for the Analysis of Nonstationary Signals. <i>Journal of Geophysical Research: Space Physics</i> , 2018, 123, 1031-1046.	2.4	40
3	A canonical realization of the BMS algebra. <i>Journal of Mathematical Physics</i> , 1999, 40, 480-500.	1.1	39
4	Wavelet analysis of GPS amplitude scintillation: A case study. <i>Radio Science</i> , 2007, 42, n/a-n/a.	1.6	33
5	Predictive Space Weather: An information theory approach. <i>Advances in Space Research</i> , 2011, 47, 877-885.	2.6	25
6	Anisotropic scaling features and complexity in magnetospheric-cusp: a case study. <i>Nonlinear Processes in Geophysics</i> , 2005, 12, 817-825.	1.3	19
7	Determining the verse of magnetic turbulent cascades in the Earth's magnetospheric cusp via transfer entropy analysis: preliminary results. <i>Nonlinear Processes in Geophysics</i> , 2007, 14, 153-161.	1.3	19
8	Information Theory Analysis of Cascading Process in a Synthetic Model of Fluid Turbulence. <i>Entropy</i> , 2014, 16, 1272-1286.	2.2	19
9	Role of the external drivers in the occurrence of low-latitude ionospheric scintillation revealed by multi-scale analysis. <i>Journal of Space Weather and Space Climate</i> , 2019, 9, A35.	3.3	17
10	A stretched logistic equation for pandemic spreading. <i>Chaos, Solitons and Fractals</i> , 2020, 140, 110113.	5.1	16
11	Long-term trends of the critical frequency of the F2 layer at northern and southern high latitude regions. <i>Physics and Chemistry of the Earth</i> , 2002, 27, 607-612.	2.9	14
12	Detrend effect on the scalograms of GPS power scintillation. <i>Advances in Space Research</i> , 2009, 43, 1740-1748.	2.6	13
13	Metriplectic framework for dissipative magneto-hydrodynamics. <i>Physica D: Nonlinear Phenomena</i> , 2012, 241, 729-734.	2.8	13
14	Imaging space weather over Europe. <i>Space Weather</i> , 2013, 11, 69-78.	3.7	13
15	Kleptoparasitism and Scavenging Can Stabilize Ecosystem Dynamics. <i>American Naturalist</i> , 2017, 190, 398-409.	2.1	13
16	Modelling ionospheric scintillation under the crest of the equatorial anomaly. <i>Advances in Space Research</i> , 2017, 60, 1698-1707.	2.6	12
17	COLLECTIVE AND RELATIVE VARIABLES FOR A CLASSICAL KLEINâ€™GORDON FIELD. <i>International Journal of Modern Physics A</i> , 1999, 14, 3387-3420.	1.5	10
18	Turning the resistive MHD into a stochastic field theory. <i>Nonlinear Processes in Geophysics</i> , 2008, 15, 701-709.	1.3	10

#	ARTICLE	IF	CITATIONS
19	STATISTICS OF THE VELOCITY GRADIENT TENSOR IN SPACE PLASMA TURBULENT FLOWS. <i>Astrophysical Journal</i> , 2015, 812, 84.	4.5	10
20	Some fractal thoughts about the COVID-19 infection outbreak. <i>Chaos, Solitons and Fractals: X</i> , 2019, 4, 100032.	2.1	10
21	Magnetic Reconnection Rate in Space Plasmas: A Fractal Approach. <i>Physical Review Letters</i> , 2007, 99, 175002.	7.8	9
22	Universal fluctuations in tropospheric radar measurements. <i>Europhysics Letters</i> , 2010, 89, 20006.	2.0	9
23	Kleptoparasitism and complexity in a multi-trophic web. <i>Ecological Complexity</i> , 2017, 29, 49-60.	2.9	9
24	On Geometrical Invariants of the Magnetic Field Gradient Tensor in Turbulent Space Plasmas: Scale Variability in the Inertial Range. <i>Astrophysical Journal</i> , 2019, 878, 124.	4.5	8
25	Ionospheric scintillation monitoring and modelling. <i>Annals of Geophysics</i> , 2009, 52, .	1.0	8
26	Metriplectic torque for rotation control of a rigid body. <i>Cybernetics and Physics</i> , 2018, , 78-86.	0.3	7
27	Stepping into the Equatorward Boundary of the Auroral Oval: preliminary results of multi scale statistical analysis. <i>Annals of Geophysics</i> , 2019, 61, .	1.0	7
28	A CANONICAL DECOMPOSITION IN COLLECTIVE AND RELATIVE VARIABLES OF A KLEINâ€™GORDON FIELD IN THE REST-FRAME WIGNER-COVARIANT INSTANT FORM. <i>International Journal of Modern Physics A</i> , 2000, 15, 2821-2916.	1.5	6
29	Metriplectic Algebra for Dissipative Fluids in Lagrangian Formulation. <i>Entropy</i> , 2015, 17, 1329-1346.	2.2	6
30	Entropy as a Metric Generator of Dissipation in Complete Metriplectic Systems. <i>Entropy</i> , 2016, 18, 304.	2.2	6
31	Optimum parameter for estimating phase fluctuations on transionospheric signals at high latitudes. <i>Advances in Space Research</i> , 2011, 47, 2188-2193.	2.6	5
32	Fractal-Radiomics as Complexity Analysis of CT and MRI Cancer Images. , 2018, , .		5
33	The stochastic tetrad magneto-hydrodynamics via functional formalism. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	4
34	Stochastic field theory for the ionospheric fluctuations in Equatorial Spread F. <i>Chaos, Solitons and Fractals</i> , 2019, 121, 186-210.	5.1	3
35	Steering complex networks toward desired dynamics. <i>Scientific Reports</i> , 2020, 10, 20744.	3.3	2
36	Scintillation modeling. , 2020, , 277-299.		2

#	ARTICLE	IF	CITATIONS
37	The complex ionosphere. , 2020, , 199-222.		2
38	Algebrizing friction: a brief look at the Metriplectic Formalism. Intellectual Archive, 2012, 1, 45-52.	0.1	2
39	Lagrangian evolution of field gradient tensor invariants in magneto-hydrodynamic theory. Chaos, Solitons and Fractals: X, 2022, 9, 100080.	2.1	2
40	Statistics in the p-model. Chaos, Solitons and Fractals, 2006, 30, 642-655.	5.1	1
41	Stochastic Lagrangian for the two-dimensional visco-resistive magnetohydrodynamics. Plasma Physics and Controlled Fusion, 2010, 52, 075004.	2.1	1
42	Exposing Cancer's Complexity Using Radiomics in Clinical Imaging An Investigation on the Role of Histogram Analysis as Imaging Biomarker to Unravel Intra-Tumour Heterogeneity. , 2018, , .		1
43	Report on the long term trend of the critical frequency of the F2 layer at high latitudes. Acta Geodaetica Et Geophysica Hungarica, 2002, 37, 297-302.	0.4	1
44	Conformal nature of the Hawking radiation. Journal of High Energy Physics, 2000, 2000, 032-032.	4.7	0
45	Low latitude scintillations: A comparison of modeling and observations within the CIGALA project. , 2011, , .		0
46	Stochastic Lagrangians for noisy dynamics. Chaos, Solitons and Fractals, 2020, 134, 109713.	5.1	0
47	Advanced statistical tools in the near-Earth space science. , 2020, , 243-256.		0
48	Metriplectic Structure of a Radiationâ€Matter-Interaction Toy Model. Entropy, 2022, 24, 506.	2.2	0