

# Massimo Materassi

## List of Publications by Year in descending order

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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	Metriplectic Structure of a Radiation-Matter-Interaction Toy Model. Entropy, 2022, 24, 506.	2.2	0
2	Lagrangian evolution of field gradient tensor invariants in magneto-hydrodynamic theory. Chaos, Solitons and Fractals: X, 2022, 9, 100080.	2.1	2
3	A stretched logistic equation for pandemic spreading. Chaos, Solitons and Fractals, 2020, 140, 110113.	5.1	16
4	New insights and best practices for the successful use of Empirical Mode Decomposition, Iterative Filtering and derived algorithms. Scientific Reports, 2020, 10, 15161.	3.3	89
5	Steering complex networks toward desired dynamics. Scientific Reports, 2020, 10, 20744.	3.3	2
6	Scintillation modeling. , 2020, , 277-299.		2
7	Stochastic Lagrangians for noisy dynamics. Chaos, Solitons and Fractals, 2020, 134, 109713.	5.1	0
8	Advanced statistical tools in the near-Earth space science. , 2020, , 243-256.		0
9	The complex ionosphere. , 2020, , 199-222.		2
10	On Geometrical Invariants of the Magnetic Field Gradient Tensor in Turbulent Space Plasmas: Scale Variability in the Inertial Range. Astrophysical Journal, 2019, 878, 124.	4.5	8
11	Stochastic field theory for the ionospheric fluctuations in Equatorial Spread F. Chaos, Solitons and Fractals, 2019, 121, 186-210.	5.1	3
12	Some fractal thoughts about the COVID-19 infection outbreak. Chaos, Solitons and Fractals: X, 2019, 4, 100032.	2.1	10
13	Role of the external drivers in the occurrence of low-latitude ionospheric scintillation revealed by multi-scale analysis. Journal of Space Weather and Space Climate, 2019, 9, A35.	3.3	17
14	Stepping into the Equatorward Boundary of the Auroral Oval: preliminary results of multi scale statistical analysis. Annals of Geophysics, 2019, 61, .	1.0	7
15	Adaptive Local Iterative Filtering: A Promising Technique for the Analysis of Nonstationary Signals. Journal of Geophysical Research: Space Physics, 2018, 123, 1031-1046.	2.4	40
16	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
17	Fractal-Radiomics as Complexity Analysis of CT and MRI Cancer Images. , 2018, , .		5
18	Metriplectic torque for rotation control of a rigid body. Cybernetics and Physics, 2018, , 78-86.	0.3	7

#	ARTICLE	IF	CITATIONS
19	Kleptoparasitism and complexity in a multi-trophic web. <i>Ecological Complexity</i> , 2017, 29, 49-60.	2.9	9
20	Modelling ionospheric scintillation under the crest of the equatorial anomaly. <i>Advances in Space Research</i> , 2017, 60, 1698-1707.	2.6	12
21	Kleptoparasitism and Scavenging Can Stabilize Ecosystem Dynamics. <i>American Naturalist</i> , 2017, 190, 398-409.	2.1	13
22	Entropy as a Metric Generator of Dissipation in Complete Metriplectic Systems. <i>Entropy</i> , 2016, 18, 304.	2.2	6
23	The stochastic tetrad magneto-hydrodynamics via functional formalism. <i>Journal of Plasma Physics</i> , 2015, 81, .	2.1	4
24	STATISTICS OF THE VELOCITY GRADIENT TENSOR IN SPACE PLASMA TURBULENT FLOWS. <i>Astrophysical Journal</i> , 2015, 812, 84.	4.5	10
25	Metriplectic Algebra for Dissipative Fluids in Lagrangian Formulation. <i>Entropy</i> , 2015, 17, 1329-1346.	2.2	6
26	Information Theory Analysis of Cascading Process in a Synthetic Model of Fluid Turbulence. <i>Entropy</i> , 2014, 16, 1272-1286.	2.2	19
27	Imaging space weather over Europe. <i>Space Weather</i> , 2013, 11, 69-78.	3.7	13
28	Metriplectic framework for dissipative magneto-hydrodynamics. <i>Physica D: Nonlinear Phenomena</i> , 2012, 241, 729-734.	2.8	13
29	Algebrizing friction: a brief look at the Metriplectic Formalism. <i>Intellectual Archive</i> , 2012, 1, 45-52.	0.1	2
30	Predictive Space Weather: An information theory approach. <i>Advances in Space Research</i> , 2011, 47, 877-885.	2.6	25
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	Low latitude scintillations: A comparison of modeling and observations within the CIGALA project. , 2011, , .		0
33	Universal fluctuations in tropospheric radar measurements. <i>Europhysics Letters</i> , 2010, 89, 20006.	2.0	9
34	Stochastic Lagrangian for the two-dimensional visco-resistive magnetohydrodynamics. <i>Plasma Physics and Controlled Fusion</i> , 2010, 52, 075004.	2.1	1
35	Detrend effect on the scalograms of GPS power scintillation. <i>Advances in Space Research</i> , 2009, 43, 1740-1748.	2.6	13
36	Ionospheric scintillation monitoring and modelling. <i>Annals of Geophysics</i> , 2009, 52, .	1.0	8

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37	Turning the resistive MHD into a stochastic field theory. <i>Nonlinear Processes in Geophysics</i> , 2008, 15, 701-709.	1.3	10
38	Magnetic Reconnection Rate in Space Plasmas: A Fractal Approach. <i>Physical Review Letters</i> , 2007, 99, 175002.	7.8	9
39	Wavelet analysis of GPS amplitude scintillation: A case study. <i>Radio Science</i> , 2007, 42, n/a-n/a.	1.6	33
40	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
41	Statistics in the p-model. <i>Chaos, Solitons and Fractals</i> , 2006, 30, 642-655.	5.1	1
42	Anisotropic scaling features and complexity in magnetospheric-cusp: a case study. <i>Nonlinear Processes in Geophysics</i> , 2005, 12, 817-825.	1.3	19
43	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
44	Report on the long term trend of the critical frequency of the F2 layer at high latitudes. <i>Acta Geodaetica Et Geophysica Hungarica</i> , 2002, 37, 297-302.	0.4	1
45	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
46	Conformal nature of the Hawking radiation. <i>Journal of High Energy Physics</i> , 2000, 2000, 032-032.	4.7	0
47	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
48	A canonical realization of the BMS algebra. <i>Journal of Mathematical Physics</i> , 1999, 40, 480-500.	1.1	39