## Olivier de Viron

List of Publications by Year in descending order

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88 papers 2,043 citations

236612 25 h-index 276539 41 g-index

98 all docs 98 docs citations

98 times ranked 1574 citing authors

#	Article	IF	CITATIONS
1	Extreme Hydrometeorological Events, a Challenge for Gravimetric and Seismology Networks. Earth's Future, 2022, $10$ , .	2.4	1
2	The Global Patterns of Interannual and Intraseasonal Mass Variations in the Oceans from GRACE and GRACE Follow-On Records. Remote Sensing, 2022, 14, 1861.	1.8	2
3	Detecting hydrological connectivity using causal inference from time series: synthetic and real karstic case studies. Hydrology and Earth System Sciences, 2022, 26, 2181-2199.	1.9	6
4	Impact of offsets on assessing the low-frequency stochastic properties of geodetic time series. Journal of Geodesy, 2022, 96, .	1.6	5
5	Comparing global seismic tomography models using varimax principal component analysis. Solid Earth, 2021, 12, 1601-1634.	1.2	3
6	Influence of Aperiodic Nonâ€Tidal Atmospheric and Oceanic Loading Deformations on the Stochastic Properties of Global GNSS Vertical Land Motion Time Series. Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022370.	1.4	18
7	Energy Transfers and Reflection of Infragravity Waves at a Dissipative Beach Under Storm Waves. Journal of Geophysical Research: Oceans, 2020, 125, e2019JC015714.	1.0	19
8	Assessment of Tide Gauge Biases and Precision by the Combination of Multiple Collocated Time Series. Journal of Atmospheric and Oceanic Technology, 2019, 36, 1983-1996.	0.5	7
9	Vertical land motion in the Southwest and Central Pacific from available GNSS solutions and implications for relative sea levels. Geophysical Journal International, 2019, 218, 1537-1551.	1.0	17
10	Thermohaline Contribution of the Caspian Sea Water Dynamic. Journal of Geography Environment and Earth Science International, 2018, 17, 1-10.	0.2	1
11	Geophysics From Terrestrial Timeâ€Variable Gravity Measurements. Reviews of Geophysics, 2017, 55, 938-992.	9.0	157
12	Atmospheric torques and Earth's rotation: what drove the millisecond-level length-of-day response to the 2015–2016ÂElÂNiño?. Earth System Dynamics, 2017, 8, 1009-1017.	2.7	3
13	Direct measurement of evapotranspiration from a forest using a superconducting gravimeter. Geophysical Research Letters, 2016, 43, 10,225.	1.5	20
14	The slightness of gravimetry. Nature Physics, 2016, 12, 816-816.	6.5	3
15	Separating climateâ€induced mass transfers and instrumental effects from tectonic signal in repeated absolute gravity measurements. Geophysical Research Letters, 2016, 43, 4313-4320.	1.5	24
16	Optimized strategy for the calibration of superconducting gravimeters at the one per mille level. Journal of Geodesy, 2016, 90, 91-99.	1.6	28
17	Impact of the North Atlantic Oscillation on Southern Europe Water Distribution: Insights from Geodetic Data. Earth Interactions, 2015, 19, 1-16.	0.7	3
18	Reply to Comment on: â€The quest for a consistent signal in ground and GRACE gravity time series', by Michel Van Camp, Olivier de Viron, Laurent Métivier, Bruno Meurers and Olivier Francis. Geophysical Journal International, 2014, 199, 1818-1822.	1.0	1

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19	The two types of Elâ€Niño and their impacts on the length of day. Geophysical Research Letters, 2014, 41, 3407-3412.	1.5	8
20	Evaluation of MODIS data for improved monitoring of the Caspian Sea. International Journal of Remote Sensing, 2014, 35, 6060-6075.	1.3	6
21	The quest for a consistent signal in ground and GRACE gravity time-series. Geophysical Journal International, 2014, 197, 192-201.	1.0	16
22	Comparative study of temporal variations in the earth's gravity field using GRACE gravity models in the regions of three recent giant earthquakes. Izvestiya, Physics of the Solid Earth, 2014, 50, 177-191.	0.2	10
23	Characterization and implications of intradecadal variations in length of day. Nature, 2013, 499, 202-204.	13.7	113
24	Improving the determination of the gravity rate of change by combining superconducting with absolute gravimeter data. Computers and Geosciences, 2013, 51, 49-55.	2.0	9
25	Numerical modelling of post-seismic rupture propagation after the Sumatra 26.12.2004 earthquake constrained by GRACE gravity data. Geophysical Journal International, 2013, 194, 640-650.	1.0	18
26	Using altimetry and seafloor pressure data to estimate vertical deformation offshore: Vanuatu case study. Advances in Space Research, 2013, 51, 1335-1351.	1.2	7
27	Global modes of climate variability. Geophysical Research Letters, 2013, 40, 1832-1837.	1.5	36
28	Local stress sources in Western Europe lithosphere from geoid anomalies. Lithosphere, 2013, 5, 235-246.	0.6	21
29	Assessing the precision in loading estimates by geodetic techniques in Southern Europe. Geophysical Journal International, 2013, 194, 1441-1454.	1.0	16
30	Recent changes of the Earth's core derived from satellite observations of magnetic and gravity fields. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 19129-19133.	3.3	33
31	Detection of the Earth rotation response to a rapid fluctuation of Southern Ocean circulation in November 2009. Geophysical Research Letters, 2012, 39, .	1.5	7
32	Repeated absolute gravity measurements for monitoring slow intraplate vertical deformation in western Europe. Journal of Geophysical Research, 2011, 116, .	3.3	34
33	Abrupt atmospheric torque changes and their role in the 1976–1977 climate regime shift. Journal of Geophysical Research, 2011, 116, .	3.3	9
34	Pacific geoid anomalies revisited in light of thermochemical oscillating domes in the lower mantle. Earth and Planetary Science Letters, 2011, 306, 123-135.	1.8	24
35	Atmospheric contributions to nutations and implications for the estimation of deep Earth's properties from nutation observations. Geophysical Journal International, 2011, 185, 1255-1265.	1.0	15
36	Atmospheric angular momentum variations of Earth, Mars and Venus at seasonal time scales. Planetary and Space Science, 2011, 59, 923-933.	0.9	15

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37	Revisiting absolute gravimeter intercomparisons. Metrologia, 2011, 48, 290-298.	0.6	5
38	Air Temperature and Anthropogenic Forcing: Insights from the Solid Earth. Journal of Climate, 2011, 24, 569-574.	1.2	25
39	Constraints on the coupling at the core-mantle and inner core boundaries inferred from nutation observations. Geophysical Journal International, 2010, 182, 1279-1294.	1.0	47
40	Closure in the Earth's angular momentum budget observed from subseasonal periods down to four days: No core effects needed. Geophysical Research Letters, $2010, 37, .$	1.5	9
41	Characterizing longâ€ŧime scale hydrological effects on gravity for improved distinction of tectonic signals. Journal of Geophysical Research, 2010, 115, .	3.3	21
42	Interannual atmospheric torque and El Niño–Southern Oscillation: Where is the polar motion signal?. Journal of Geophysical Research, 2010, 115, .	3.3	6
43	Improving DORIS geocenter time series using an empirical rescaling of solar radiation pressure models. Advances in Space Research, 2009, 44, 1279-1287.	1.2	51
44	A seafloor experiment to monitor vertical deformation at the Lucky Strike volcano, Mid-Atlantic Ridge. Journal of Geodesy, 2009, 83, 147-159.	1.6	32
45	Systematic biases in DORIS-derived geocenter time series related to solar radiation pressure mis-modeling. Journal of Geodesy, 2009, 83, 849-858.	1.6	45
46	Lander radioscience for obtaining the rotation and orientation of Mars. Planetary and Space Science, 2009, 57, 1050-1067.	0.9	32
47	Evidence of earthquake triggering by the solid earth tides. Earth and Planetary Science Letters, 2009, 278, 370-375.	1.8	106
48	The GHYRAF (Gravity and Hydrology in Africa) experiment: Description and first results. Journal of Geodynamics, 2009, 48, 172-181.	0.7	28
49	Leading modes of torsional oscillations within the Earth's core. Geophysical Research Letters, 2009, 36, .	1.5	14
50	Retrieving earthquake signature in grace gravity solutions. Geophysical Journal International, 2008, 174, 14-20.	1.0	40
51	Estimation of Earth interior parameters from a Bayesian inversion of very long baseline interferometry nutation time series. Journal of Geophysical Research, 2008, 113, .	3.3	32
52	Axial Atmospheric Angular Momentum Budget at Diurnal and Subdiurnal Periodicities. Journals of the Atmospheric Sciences, 2008, 65, 156-171.	0.6	7
53	Noise reduction through joint processing of gravity and gravity gradient data. Geophysics, 2008, 73, 123-134.	1.4	28
54	Stability of VLBI, SLR, DORIS, and GPS positioning. Earth, Planets and Space, 2007, 59, 475-497.	0.9	31

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55	Coseismic and post-seismic signatures of the Sumatra 2004 December and 2005 March earthquakes in GRACE satellite gravity. Geophysical Journal International, 2007, 171, 177-190.	1.0	103
56	Excitation of Mars polar motion. Astronomy and Astrophysics, 2006, 446, 345-355.	2.1	12
57	Does the magnetic field in the fluid core contribute a lot to Earth nutation?. Proceedings of the International Astronomical Union, 2006, 2, 483-483.	0.0	0
58	The 3D representation of the new transformation from the terrestrial to the celestial system. Proceedings of the International Astronomical Union, 2006, 2, 486-486.	0.0	0
59	Atmospheric Angular Momentum Time-Series: Characterization of their Internal Noise and Creation of a Combined Series. Journal of Geodesy, 2006, 79, 663-674.	1.6	53
60	The effects of seasonal mass redistribution and interior structure on Length-of-Day variations of Mars. Advances in Space Research, 2006, 38, 739-744.	1.2	14
61	Geomagnetic jerks and a high-resolution length-of-day profile for core studies. Geophysical Journal International, 2005, 160, 435-439.	1.0	68
62	Atmospheric and oceanic excitation of the rotation of a three-layer Earth. Astronomy and Astrophysics, 2005, 438, 1149-1161.	2.1	13
63	Geophysical excitation of the Earth orientation parameters EOP and its contribution to GGOS. Journal of Geodynamics, 2005, 40, 394-399.	0.7	1
64	Diurnal and subdiurnal effects of the atmosphere on the Earth rotation and geocenter motion. Journal of Geophysical Research, 2005, $110$ , .	3.3	23
65	Low-frequency excitation of length of day and polar motion by the atmosphere. Journal of Geophysical Research, 2004, 109, .	3.3	8
66	Geodetic effects of the ocean response to atmospheric forcing in an ocean general circulation model. Journal of Geophysical Research, 2004, 109, .	3.3	10
67	Atmospheric Contributions to Earth Nutation: Geodetic Constraints and Limitations of the Torque Approach. Journals of the Atmospheric Sciences, 2004, 61, 352-356.	0.6	9
68	Tests on the validity of atmospheric torques on Earth computed from atmospheric model outputs. Journal of Geophysical Research, 2003, 108, .	3.3	9
69	Coherent interannual and decadal variations in the atmosphere-ocean system. Geophysical Research Letters, 2003, 30, .	1.5	18
70	Remaining error sources in the nutation at the submilliarc second level. Journal of Geophysical Research, 2003, 108, .	3.3	27
71	Can a solid inner core of Mars be detected from observations of polar motion and nutation of Mars?. Journal of Geophysical Research, 2003, 108, .	3.3	20
72	Analysis of the Residuals between Theoretical Nutations and VLBI Observations. Highlights of Astronomy, 2002, 12, 124-125.	0.0	1

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73	Degree-one displacements on Mars. Geophysical Research Letters, 2002, 29, 6-1.	1.5	3
74	Effect of changes in total atmospheric mass on length-of-day modeling. Geophysical Research Letters, 2002, 29, 30-1-30-4.	1.5	1
75	Recent Earth Oblateness Variations: Unraveling Climate and Postglacial Rebound Effects. Science, 2002, 298, 1975-1977.	6.0	93
76	Atmospheric excitation of the Earth's nutation: Comparison of different atmospheric models. Journal of Geophysical Research, 2002, 107, ETG 2-1.	3.3	17
77	Influence of the seasonal winds and the CO2mass exchange between atmosphere and polar caps on Mars' rotation. Journal of Geophysical Research, 2002, 107, 9-1.	3.3	38
78	Effect of global warming on the length-of-day. Geophysical Research Letters, 2002, 29, 50-1.	1.5	20
79	Annual atmospheric torques: Processes and regional contributions. Geophysical Research Letters, 2002, 29, 44-1.	1.5	4
80	Earth rotation as an interdisciplinary topic shared by astronomers, geodesists and geophysicists. Advances in Space Research, 2002, 30, 163-173.	1.2	13
81	Atmospheric torques during the winter of 1989: Impact of ENSO and NAO positive phases. Geophysical Research Letters, 2001, 28, 1985-1988.	1.5	13
82	Diurnal angular momentum budget of the atmosphere and its consequences for Earth's nutation. Journal of Geophysical Research, 2001, 106, 26747-26759.	3.3	12
83	Indirect effect of the atmosphere through the oceans on the Earth nutation using the torque approach. Journal of Geophysical Research, 2001, 106, 8841-8851.	3.3	15
84	Links between intraseasonal (extended MJO) and ENSO timescales: Insights via geodetic and atmospheric analysis. Geophysical Research Letters, 2001, 28, 3465-3468.	1.5	10
85	Mars rotation variations induced by atmosphere and ice caps. Journal of Geophysical Research, 2000, 105, 24563-24570.	3.3	45
86	Earth's Rotation And High Frequency Equatorial Angular Momentum Budget Of The Atmosphere. , 1999, 20, 441-462.		13
87	Atmospheric torque on the Earth and comparison with atmospheric angular momentum variations. Journal of Geophysical Research, 1999, 104, 4861-4875.	3.3	41
88	Considerations concerning the non-rigid Earth nutation theory. Celestial Mechanics and Dynamical Astronomy, 1998, 72, 245-309.	0.5	41