Fabrice Papa

List of Publications by Year
in descending order

108 papers	7,091 citations	61984 43 h-index	66911 78 g-index
129 all docs	129 docs citations	129 times ranked	6536 citing authors

#	Article	IF	Citations
1	Contribution of anthropogenic and natural sources to atmospheric methane variability. Nature, 2006, 443, 439-443.	27.8	935
2	Characterization and Spaceâ€“Time Downscaling of the Inundation Extent over the Inner Niger Delta Using GIEMS and MODIS Data. Journal of Hydrometeorology, 2014, 15, 171-192.	1.9	530
3	Global inundation dynamics inferred from multiple satellite observations, 1993â€“2000. Journal of Geophysical Research, 2007, 112, .	3.3	385
4	Interannual variability of surface water extent at the global scale, 1993â€“2004. Journal of Geophysical Research, 2010, 115, .	3.3	251
5	Development of a global inundation map at high spatial resolution from topographic downscaling of coarse-scale remote sensing data. Remote Sensing of Environment, 2015, 158, 348-361.	11.0	213
6	Changes in land surface water dynamics since the 1990s and relation to population pressure. Geophysical Research Letters, 2012, 39, .	4.0	184
7	An attempt to quantify the impact of changes in wetland extent on methane emissions on the seasonal and interannual time scales. Global Biogeochemical Cycles, 2010, 24, .	4.9	177
8	Satellite altimeterâ€derived monthly discharge of the Gangaâ€Brahmaputra River and its seasonal to interannual variations from 1993 to 2008. Journal of Geophysical Research, 2010, 115, .	3.3	174
9	Present state of global wetland extent and wetland methane modelling: methodology of a model inter-comparison project (WETCHIMP). Geoscientific Model Development, 2013, 6, 617-641.	3.6	165
10	Gangaâ€Brahmaputra river discharge from Jasonâ€2 radar altimetry: An update to the longâ€term satelliteâ€derived estimates of continental freshwater forcing flux into the Bay of Bengal. Journal of Geophysical Research, 2012, 117, .	3.3	138
11	A modeling study of the processes of surface salinity seasonal cycle in the Bay of Bengal. Journal of Geophysical Research: Oceans, 2014, 119, 3926-3947.	2.6	125
12	Surface freshwater storage and dynamics in the Amazon basin during the 2005 exceptional drought. Environmental Research Letters, 2012, 7, 044010.	5.2	120
13	The Hydrological Modeling and Analysis Platform (HyMAP): Evaluation in the Amazon Basin. Journal of Hydrometeorology, 2012, 13, 1641-1665.	1.9	111
14	Global off-line evaluation of the ISBA-TRIP flood model. Climate Dynamics, 2012, 38, 1389-1412.	3.8	110
15	Interannual variations of river water storage from a multiple satellite approach: A case study for the Rio Negro River basin. Journal of Geophysical Research, 2008, 113, .	3.3	99
16	ENVISAT radar altimeter measurements over continental surfaces and ice caps using the ICE-2 retracking algorithm. Remote Sensing of Environment, 2005, 95, 150-163.	11.0	98
17	A new river flooding scheme for global climate applications: Offâ€line evaluation over South America. Journal of Geophysical Research, 2008, 113, .	3.3	98
18	The upper Bay of Bengal salinity structure in a high-resolution model. Ocean Modelling, 2014, 74, 36-52.	2.4	88

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19	Nearâ€surface salinity and stratification in the north Bay of Bengal from moored observations. Geophysical Research Letters, 2016, 43, 4448-4456.	4.0	87
20	Monitoring Flood and Discharge Variations in the Large Siberian Rivers From a Multi-Satellite Technique. Surveys in Geophysics, 2008, 29, 297-317.	4.6	86
21	Water level changes, subsidence, and sea level rise in the Gangesâ€“Brahmaputraâ€“Meghna delta. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1867-1876.	7.1	86
22	The Lake Chad hydrology under current climate change. Scientific Reports, 2020, 10, 5498.	3.3	84
23	A global analysis of extreme coastal water levels with implications for potential coastal overtopping. Nature Communications, 2021, 12, 3775.	12.8	84
24	Variations of surface water extent and water storage in large river basins: A comparison of different global data sources. Geophysical Research Letters, 2008, 35, .	4.0	79
25	Observed interannual variability of nearâ€surface salinity in the <scp>B</scp>ay of <scp>B</scp>engal. Journal of Geophysical Research: Oceans, 2015, 120, 3315-3329.	2.6	79
26	Evolution of Sea Level of the Big Aral Sea from Satellite Altimetry and Its Implications for Water Balance. Journal of Great Lakes Research, 2005, 31, 520-534.	1.9	74
27	Satellite-based estimates of groundwater storage variations in large drainage basins with extensive floodplains. Remote Sensing of Environment, 2011, 115, 1588-1594.	11.0	71
28	Salinity Measurements Collected by Fishermen Reveal a â€œRiver in the Seaâ€•Flowing Along the Eastern Coast of India. Bulletin of the American Meteorological Society, 2014, 95, 1897-1908.	3.3	71
29	A Global Dynamic Long-Term Inundation Extent Dataset at High Spatial Resolution Derived through Downscaling of Satellite Observations. Journal of Hydrometeorology, 2017, 18, 1305-1325.	1.9	62
30	Impact of Gangesâ€“Brahmaputra interannual discharge variations on Bay of Bengal salinity and temperature during 1992â€“1999 period. Journal of Earth System Science, 2011, 120, 859-872.	1.3	61
31	Modelling sub-grid wetland in the ORCHIDEE global land surface model: evaluation against river discharges and remotely sensed data. Geoscientific Model Development, 2012, 5, 941-962.	3.6	58
32	Preliminary Assessment of SARAL/AltiKa Observations over the Ganges-Brahmaputra and Irrawaddy Rivers. Marine Geodesy, 2015, 38, 568-580.	2.0	58
33	Satellite-derived surface and sub-surface water storage in the Gangesâ€“Brahmaputra River Basin. Journal of Hydrology: Regional Studies, 2015, 4, 15-35.	2.4	56
34	Evaluation of the ISBA-TRIP continental hydrologic system over the Niger basin using in situ and satellite derived datasets. Hydrology and Earth System Sciences, 2012, 16, 1745-1773.	4.9	55
35	Stable atmospheric methane in the 2000s: key-role of emissions from natural wetlands. Atmospheric Chemistry and Physics, 2013, 13, 11609-11623.	4.9	55
36	Satellite-based estimates of surface water dynamics in the Congo River Basin. International Journal of Applied Earth Observation and Geoinformation, 2018, 66, 196-209.	2.8	55

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37	Ob' River flood inundations from satellite observations: A relationship with winter snow parameters and river runoff. Journal of Geophysical Research, 2007, 112, .	3.3	53
38	Amazon Hydrology From Space: Scientific Advances and Future Challenges. Reviews of Geophysics, 2021, 59, e2020RG000728.	23.0	53
39	The spatio-temporal variability of groundwater storage in the Amazon River Basin. Advances in Water Resources, 2019, 124, 41-52.	3.8	52
40	Sea ice cover in the Caspian and Aral Seas from historical and satellite data. Journal of Marine Systems, 2004, 47, 89-100.	2.1	51
41	Modern hydro-biological state of the Small Aral sea. Environmetrics, 2005, 16, 375-392.	1.4	51
42	Modeling surface water dynamics in the Amazon Basin using MOSART-Inundation v1.0: impacts of geomorphological parameters and river flow representation. Geoscientific Model Development, 2017, 10, 1233-1259.	3.6	48
43	Surface freshwater storage and variability in the Amazon basin from multiâ€satellite observations, 1993â€“2007. Journal of Geophysical Research D: Atmospheres, 2013, 118, 11,951.	3.3	47
44	Use of the Topexâ€“Poseidon dual-frequency radar altimeter over land surfaces. Remote Sensing of Environment, 2003, 87, 136-147.	11.0	46
45	Diagnosing water variations within the Amazon basin using satellite data. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	46
46	Towards improved storm surge models in the northern Bay of Bengal. Continental Shelf Research, 2017, 135, 58-73.	1.8	46
47	Wetland dynamics using a suite of satellite observations: A case study of application and evaluation for the Indian Subcontinent. Geophysical Research Letters, 2006, 33, .	4.0	44
48	Impact of Continental Freshwater Runoff on Coastal Sea Level. Surveys in Geophysics, 2019, 40, 1437-1466.	4.6	43
49	Inundated wetland dynamics over boreal regions from remote sensing: the use of Topexâ€Poseidon dualâ€frequency radar altimeter observations. International Journal of Remote Sensing, 2006, 27, 4847-4866.	2.9	42
50	Comparison of visible and multi-satellite global inundation datasets at high-spatial resolution. Remote Sensing of Environment, 2018, 216, 427-441.	11.0	42
51	Estimating terrestrial snow depth with the TOPEX-Poseidon altimeter and radiometer. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2162-2169.	6.3	41
52	A Long-Term, High-Resolution Wetland Dataset over the Amazon Basin, Downscaled from a Multiwavelength Retrieval Using SAR Data. Journal of Hydrometeorology, 2013, 14, 594-607.	1.9	41
53	Observed year-to-year sea surface salinity variability in the Bay of Bengal during the 2009â€“2014 period. Ocean Dynamics, 2015, 65, 173-186.	2.2	41
54	A study of Bangladesh's sub-surface water storages using satellite products and data assimilation scheme. Science of the Total Environment, 2018, 625, 963-977.	8.0	41

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55	Interannual variations of the terrestrial water storage in the Lower Ob' Basin from a multisatellite approach. Hydrology and Earth System Sciences, 2010, 14, 2443-2453.	4.9	40
56	Combining data sets of satelliteâ€retrieved products for basinâ€scale water balance study: 2. Evaluation on the Mississippi Basin and closure correction model. Journal of Geophysical Research D: Atmospheres, 2014, 119, 12,100.	3.3	39
57	Surface Freshwater Storage Variations in the Orinoco Floodplains Using Multi-Satellite Observations. Remote Sensing, 2015, 7, 89-110.	4.0	38
58	Water Resources in Africa under Global Change: Monitoring Surface Waters from Space. Surveys in Geophysics, 2023, 44, 43-93.	4.6	38
59	A modeling study of processes controlling the Bay of Bengal sea surface salinity interannual variability. Journal of Geophysical Research: Oceans, 2016, 121, 8471-8495.	2.6	37
60	Bay of Bengal Sea surface salinity variability using a decade of improved SMOS re-processing. Remote Sensing of Environment, 2020, 248, 111964.	11.0	37
61	Mapping Dynamic Water Fraction under the Tropical Rain Forests of the Amazonian Basin from SMOS Brightness Temperatures. Water (Switzerland), 2017, 9, 350.	2.7	34
62	High resolution mapping of inundation area in the Amazon basin from a combination of L-band passive microwave, optical and radar datasets. International Journal of Applied Earth Observation and Geoinformation, 2019, 81, 58-71.	2.8	34
63	Water level estimation by remote sensing for the 2008 flooding of the Kosi River. International Journal of Remote Sensing, 2014, 35, 424-440.	2.9	32
64	Ice cover variability in the Caspian and Aral seas from active and passive microwave satellite data. Polar Research, 2003, 22, 43-50.	1.6	31
65	Improved Bathymetric Dataset and Tidal Model for the Northern Bay of Bengal. Marine Geodesy, 2016, 39, 422-438.	2.0	31
66	Hydrological Variability and Changes in the Arctic Circumpolar Tundra and the Three Largest Pan-Arctic River Basins from 2002 to 2016. Remote Sensing, 2018, 10, 402.	4.0	30
67	Seasonal modulation of M2 tide in the Northern Bay of Bengal. Continental Shelf Research, 2017, 137, 154-162.	1.8	28
68	Toward a High-Resolution Monitoring of Continental Surface Water Extent and Dynamics, at Global Scale: from GIEMS (Global Inundation Extent from Multi-Satellites) to SWOT (Surface Water Ocean) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	4.6	27
69	Tradeâ€Offs Between 1â€D and 2â€D Regional River Hydrodynamic Models. Water Resources Research, 2020, 56, e2019WR026812.	4.2	27
70	Hydrological Applications of Satellite AltimetryRivers, Lakes, Man-Made Reservoirs, Inundated Areas. , 2017, , 459-504.		27
71	Surface Water Storage in Rivers and Wetlands Derived from Satellite Observations: A Review of Current Advances and Future Opportunities for Hydrological Sciences. Remote Sensing, 2021, 13, 4162.	4.0	26
72	Recent salinity intrusion in the Bengal delta: Observations and possible causes. Continental Shelf Research, 2020, 202, 104142.	1.8	22

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73	Comparisons of Global Terrestrial Surface Water Datasets over 15 Years. Journal of Hydrometeorology, 2017, 18, 993-1007.	1.9	21
74	Low-water maps of the groundwater table in the central Amazon by satellite altimetry. Geophysical Research Letters, 2014, 41, 1981-1987.	4.0	20
75	Monsoonal intraseasonal oscillations in the ocean heat content over the surface layers of the Bay of Bengal. Journal of Marine Systems, 2017, 167, 19-32.	2.1	19
76	Signature of Indian Ocean Dipole on the western boundary current of the Bay of Bengal. Deep-Sea Research Part I: Oceanographic Research Papers, 2018, 136, 91-106.	1.4	19
77	Variations of Surface and Subsurface Water Storage in the Lower Mekong Basin (Vietnam and) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.7	19
78	Uncertainties in Mean River Discharge Estimates Associated With Satellite Altimeter Temporal Sampling Intervals: A Case Study for the Annual Peak Flow in the Context of the Future SWOT Hydrology Mission. IEEE Geoscience and Remote Sensing Letters, 2012, 9, 569-573.	3.1	18
79	Multiangle Backscattering Observations of Continental Surfaces in Ku-Band (13 GHz) From Satellites: Understanding the Signals, Particularly in Arid Regions. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 1364-1373.	6.3	18
80	High-Resolution Intertidal Topography from Sentinel-2 Multi-Spectral Imagery: Synergy between Remote Sensing and Numerical Modeling. Remote Sensing, 2019, 11, 2888.	4.0	18
81	How much inundation occurs in the Amazon River basin?. Remote Sensing of Environment, 2022, 278, 113099.	11.0	18
82	Synergy of active and passive satellite microwave data for the study of first-year sea ice in the Caspian and Aral seas. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 2170-2176.	6.3	17
83	Hotspots of Relative Sea Level Rise in the Tropics. , 2019, , 203-262.		16
84	Evaluation of â€œall weatherâ€•microwave-derived land surface temperatures with in situ CEOP measurements. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	14
85	Fifteen Years (1993â€“2007) of Surface Freshwater Storage Variability in the Ganges-Brahmaputra River Basin Using Multi-Satellite Observations. Water (Switzerland), 2017, 9, 245.	2.7	14
86	Backscattering signatures at Ka, Ku, C and S bands from low resolution radar altimetry over land. Advances in Space Research, 2021, 68, 989-1012.	2.6	14
87	Impact of the inundation occurrence on the deep convection at continental scale from satellite observations and modeling experiments. Journal of Geophysical Research, 2011, 116, n/a-n/a.	3.3	13
88	Long-term total water storage change from a Satellite Water Cycle reconstruction over large southern Asian basins. Hydrology and Earth System Sciences, 2020, 24, 3033-3055.	4.9	13
89	Historical and future contributions of inland waters to the Congo Basin carbon balance. Earth System Dynamics, 2021, 12, 37-62.	7.1	13
90	Global-scale analysis of satellite-derived time series of naturally inundated areas as a basis for floodplain modeling. Advances in Geosciences, 0, 27, 45-50.	12.0	12

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91	Ice cover variability in the Caspian and Aral seas from active and passive microwave satellite data. Polar Research, 2003, 22, 43-50.	1.6	11
92	A combined use of in situ and satellite-derived observations to characterize surface hydrology and its variability in the Congo River basin. Hydrology and Earth System Sciences, 2022, 26, 1857-1882.	4.9	10
93	Topography of the intertidal zone along the shoreline of Chittagong (Bangladesh) using PROBA-V imagery. International Journal of Remote Sensing, 2018, 39, 9004-9024.	2.9	8
94	Disentangling vertical land motion and waves from coastal sea level altimetry and tide gauges. Continental Shelf Research, 2021, 231, 104596.	1.8	8
95	Assessing the Potential of Upcoming Satellite Altimeter Missions in Operational Flood Forecasting Systems. Remote Sensing, 2021, 13, 4459.	4.0	8
96	The Cause of an Extremely Low Salinity Anomaly in the Bay of Bengal During 2012 Spring. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017361.	2.6	7
97	Toward a High-Resolution Monitoring of Continental Surface Water Extent and Dynamics, at Global Scale: from GIEMS (Global Inundation Extent from Multi-Satellites) to SWOT (Surface Water Ocean) Tj ETQq1 1 0.784314 rgBT /Over		8
98	Surface Freshwater Storage Variations in the Orinoco Floodplains Using Multi-Satellite Observations. Remote Sensing, 2015, 7, 89-110.	4.0	5
99	River Flood Modeling and Remote Sensing Across Scales: Lessons from Brazil. , 2021, , 61-103.		4
100	Coherent Satellite Monitoring of the Water Cycle Over the Amazon. Part 1: Methodology and Initial Evaluation. Water Resources Research, 2021, 57, e2020WR028647.	4.2	4
101	Variations of sea ice extent in the Caspian and Aral seas derived from combination of active and passive satellite microwave data. , 0, , .		3
102	Study and monitoring of sea ice cover in the caspian and aral seas from TOPEX/POSEIDON microwave data. Elsevier Oceanography Series, 2003, 69, 141-145.	0.1	3
103	Redistribution of riverine and rainfall freshwater by the Bay of Bengal circulation. Ocean Dynamics, 2021, 71, 1113-1139.	2.2	3
104	Satellite Altimetry for Monitoring Lake Level Changes. , 2005, , 141-146.		3
105	Correction to â€œWetland dynamics using a suite of satellite observations: A case study of application and evaluation for the Indian Subcontinentâ€• Geophysical Research Letters, 2006, 33, .	4.0	0
106	Altimetry backscattering signatures at Ku and S bands over land and ice sheets. Proceedings of SPIE, 2015, , .	0.8	0
107	Backscattering Signatures at Ku Band Over Africa from Jason-3 and Swim. , 2021, , .		0
108	Amazon Water Cycle Observed from Space. Eos, 2022, 103, .	0.1	0