Frank Peeters

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/6887274/publications.pdf

Version: 2024-02-01

71 papers	3,614 citations	147801 31 h-index	133252 59 g-index
72 all docs	72 docs citations	72 times ranked	3495 citing authors

#	Article	IF	Citations
1	Palaeotemperature reconstruction from noble gases in ground water taking into account equilibration with entrapped air. Nature, 2000, 405, 1040-1044.	27.8	287
2	Interpretation of dissolved atmospheric noble gases in natural waters. Water Resources Research, 1999, 35, 2779-2792.	4.2	282
3	Noble Gases in Lakes and Ground Waters. Reviews in Mineralogy and Geochemistry, 2002, 47, 615-700.	4.8	261
4	Earlier onset of the spring phytoplankton bloom in lakes of the temperate zone in a warmer climate. Global Change Biology, 2007, 13, 1898-1909.	9.5	169
5	Modeling 50 years of historical temperature profiles in a large central European lake. Limnology and Oceanography, 2002, 47, 186-197.	3.1	155
6	Kinetic Model of Gas Bubble Dissolution in Groundwater and Its Implications for the Dissolved Gas Composition. Environmental Science & Technology, 2003, 37, 1337-1343.	10.0	123
7	Prediction of surface temperature in lakes with different morphology using air temperature. Limnology and Oceanography, 2014, 59, 2185-2202.	3.1	106
8	Modeling lakes and reservoirs in the climate system. Limnology and Oceanography, 2009, 54, 2315-2329.	3.1	101
9	Temporal scales of water-level fluctuations in lakes and their ecological implications. Hydrobiologia, 2008, 613, 85-96.	2.0	99
10	Processes of deepâ€water renewal in Lake Baikal. Limnology and Oceanography, 1997, 42, 841-855.	3.1	98
11	Analysis of deep-water exchange in the Caspian Sea based on environmental tracers. Deep-Sea Research Part I: Oceanographic Research Papers, 2000, 47, 621-654.	1.4	97
12	Waveâ€induced release of methane: Littoral zones as source of methane in lakes. Limnology and Oceanography, 2010, 55, 1990-2000.	3.1	94
13	Experimental investigations on the formation of excess air in quasi-saturated porous media. Geochimica Et Cosmochimica Acta, 2002, 66, 4103-4117.	3.9	88
14	Turbulent mixing and phytoplankton spring bloom development in a deep lake. Limnology and Oceanography, 2007, 52, 286-298.	3.1	86
15	Importance of the Autumn Overturn and Anoxic Conditions in the Hypolimnion for the Annual Methane Emissions from a Temperate Lake. Environmental Science & Technology, 2014, 48, 7297-7304.	10.0	86
16	Improving noble gas based paleoclimate reconstruction and groundwater dating using 20Ne/22Ne ratios. Geochimica Et Cosmochimica Acta, 2003, 67, 587-600.	3.9	79
17	Shear-induced convective mixing in bottom boundary layers on slopes. Limnology and Oceanography, 2005, 50, 1612-1619.	3.1	71
18	The relative importance of wind and ship waves in the littoral zone of a large lake. Limnology and Oceanography, 2008, 53, 368-380.	3.1	71

#	Article	IF	Citations
19	On the methane paradox: Transport from shallow water zones rather than in situ methanogenesis is the major source of CH₄ in the open surface water of lakes. Journal of Geophysical Research G: Biogeosciences, 2016, 121, 2717-2726.	3.0	66
20	Horizontal mixing in lakes. Journal of Geophysical Research, 1996, 101, 18361-18375.	3.3	64
21	Evidence for periods of wetter and cooler climate in the Sahel between 6 and 40 kyr BP derived from groundwater. Geophysical Research Letters, 2003, 30, .	4.0	64
22	Toward a Unified Scaling Relation for Interfacial Fluxes. Journal of Physical Oceanography, 2006, 36, 955-961.	1.7	63
23	Sediment fluxes rather than oxic methanogenesis explain diffusive CH4 emissions from lakes and reservoirs. Scientific Reports, 2019, 9, 243.	3.3	59
24	Temperature is the key factor explaining interannual variability of Daphnia development in spring: a modelling study. Oecologia, 2008, 157, 531-543.	2.0	57
25	Internal waves and the generation of turbulence in the thermocline of a large lake. Limnology and Oceanography, 2010, 55, 2353-2365.	3.1	54
26	Effect of climatic changes on stratification and deepâ€water renewal in Lake Constance assessed by sensitivity studies with a 3D hydrodynamic model. Limnology and Oceanography, 2014, 59, 1035-1052.	3.1	51
27	Deepâ€water renewal in Lake Issykâ€Kul driven by differential cooling. Limnology and Oceanography, 2003, 48, 1419-1431.	3.1	44
28	Impact of lake level change on deepâ€water renewal and oxic conditions in deep saline Lake Van, Turkey. Water Resources Research, 2010, 46, .	4.2	44
29	Modeling Transport Rates in Lake Baikal:Â Gas Exchange and Deep Water Renewal. Environmental Science & Technology, 1997, 31, 2973-2982.	10.0	38
30	Rapid deepâ€water renewal in Lake Issykâ€Kul (Kyrgyzstan) indicated by transient tracers. Limnology and Oceanography, 2002, 47, 1210-1216.	3.1	36
31	Effects of a half a millennium winter on a deep lake â€“ a shape of things to come?. Global Change Biology, 2010, 16, 2844-2856.	9.5	35
32	Lake Metabolism: Comparison of Lake Metabolic Rates Estimated from a Diel CO2- and the Common Diel O2-Technique. PLoS ONE, 2016, 11, e0168393.	2.5	32
33	Wind and ship waveâ€induced resuspension in the littoral zone of a large lake. Water Resources Research, 2011, 47, .	4.2	31
34	Role of phytoplankton cell size on the competition for nutrients and light in incompletely mixed systems. Journal of Theoretical Biology, 2012, 300, 330-343.	1.7	29
35	Dissolved noble gases in the porewater of lacustrine sediments as palaeolimnological proxies. Geochimica Et Cosmochimica Acta, 2005, 69, 1665-1674.	3.9	27
36	Trophic mismatch requires seasonal heterogeneity of warming. Ecology, 2015, 96, 2794-2805.	3.2	27

#	Article	IF	Citations
37	Analysis of dissolved noble gases in the porewater of lacustrine sediments. Limnology and Oceanography: Methods, 2003, 1, 51-62.	2.0	26
38	Active and passive vertical motion of zooplankton in a lake. Limnology and Oceanography, 2011, 56, 695-706.	3.1	25
39	Noble Gas and Major Element Constraints on the Water Dynamics in an Alpine Floodplain. Ground Water, 2001, 39, 841-852.	1.3	24
40	A comparison between the oxidation of bulk lead and that of lead deposits on Au(111): An auger study. Surface Science, 1989, 214, 85-96.	1.9	22
41	What prevents outgassing of methane to the atmosphere in Lake Tanganyika?. Journal of Geophysical Research, 2011, 116, .	3.3	22
42	High-frequency internal waves in the littoral zone of a large lake. Limnology and Oceanography, 2006, 51, 1935-1939.	3.1	21
43	Implications of seasonal mixing for phytoplankton production and bloom development. Theoretical Ecology, 2013, 6, 115-129.	1.0	21
44	The Consequences of Internal Waves for Phytoplankton Focusing on the Distribution and Production of Planktothrix rubescens. PLoS ONE, 2014, 9, e104359.	2.5	21
45	Seasonal variation of solitary wave properties in Lake Constance. Journal of Geophysical Research, 2012, 117, .	3.3	20
46	Modeling wind waves and wave exposure of nearshore zones in medium-sized lakes. Limnology and Oceanography, 2013, 58, 23-36.	3.1	20
47	Seasonal, interâ€annual and long term variation in topâ€“down versus bottomâ€“up regulation of primary production. Oikos, 2013, 122, 223-234.	2.7	19
48	Comparison of results from two 3D hydrodynamic models with field data: internal seiches and horizontal currents. Inland Waters, 2019, 9, 239-260.	2.2	19
49	1,000-Year Environmental History of Lake Issyk-Kul. NATO Science Series Series IV, Earth and Environmental Sciences, 2004, , 253-285.	0.3	19
50	Influence of low and decreasing food levels on Daphnia-algal interactions: Numerical experiments with a new dynamic energy budget model. Ecological Modelling, 2010, 221, 2642-2655.	2.5	17
51	Oxic methanogenesis is only a minor source of lake-wide diffusive CH4 emissions from lakes. Nature Communications, 2021, 12, 1206.	12.8	17
52	In-Situ Optical and Acoustical Measurements of the Buoyant Cyanobacterium P. Rubescens: Spatial and Temporal Distribution Patterns. PLoS ONE, 2013, 8, e80913.	2.5	16
53	Modelling interâ€annual and spatial variability of ice cover in a temperate lake with complex morphology. Hydrological Processes, 2020, 34, 691-704.	2.6	15
54	Lengthâ€scale dependence of horizontal dispersion in the surface water of lakes. Limnology and Oceanography, 2015, 60, 1917-1934.	3.1	13

#	Article	IF	Citations
55	Local and continentalâ€scale controls of the onset of spring phytoplankton blooms: Conclusions from a proxyâ€based model. Global Change Biology, 2021, 27, 1976-1990.	9.5	11
56	Intrinsic Breaking of Internal Solitary Waves in a Deep Lake. PLoS ONE, 2012, 7, e41674.	2.5	11
57	Assessment of ecosystem health of tropical shallow waterbodies in eastern India using turbulence model. Aquatic Ecosystem Health and Management, 2009, 12, 215-225.	0.6	10
58	Temporal scales of water-level fluctuations in lakes and their ecological implications. , 2008, , 85-96.		10
59	Diurnal Pumpedâ€Storage Operation Minimizes Methane Ebullition Fluxes From Hydropower Reservoirs. Water Resources Research, 2020, 56, e2020WR027221.	4.2	9
60	Currents in Stratified Water Bodies 1: Density-Driven Flows. , 2009, , 530-538.		6
61	On the calculation of lake metabolic rates: Diel O2 and 18/16O technique. Water Research, 2019, 165, 114990.	11.3	6
62	Trait selection and co-existence of phytoplankton in partially mixed systems: Trait based modelling and potential of an aggregated approach. PLoS ONE, 2018, 13, e0194076.	2.5	5
63	Internal solitary waves in Upper Lake Constance. Hydrobiologia, 2014, 731, 65-80.	2.0	3
64	Erosion Hazards and Efficient Preservation Measures in Prehistoric Cultural Layers in the Littoral of Lake Constance (Germany, Switzerland). Conservation and Management of Archaeological Sites, 2016, 18, 217-229.	0.5	3
65	Dietary map of Nile tilapia using stable isotopes in three tropical lakes, Ethiopia. Ecology of Freshwater Fish, 2018, 27, 460-470.	1.4	3
66	Vertical migration patterns of the different larval instars of Chaoborus flavicans and the influence of dissolved oxygen concentrations. Canadian Journal of Fisheries and Aquatic Sciences, 2018, 75, 1142-1150.	1.4	2
67	Interannual Variability of Methane Storage and Emission During Autumn Overturn in a Small Lake. Journal of Geophysical Research G: Biogeosciences, 2021, 126, e2021JG006388.	3.0	2
68	Comment on â€œParticle dispersal due to interplay of motions in the surface layer of a small reservoirâ€• (by P. Okely, J. Imberger, and K. Shimizu) and â€œProcesses affecting horizontal mixing and dispersion in Winam Gulf, Lake Victoriaâ€•(by P. Okely, J. Imberger, and J. P. Antenucci). Limnology and Oceanography, 2012, 57, 382-386.	3.1	1
69	A diffusion model for the development of a boundary layer in lakes. Aquatic Sciences, 1997, 59, 95.	1.5	1
70	Response to the comment by G. Favreau, A. Guero, and J. Seidel on â€œImproving noble gas based paleoclimate reconstruction and groundwater dating using 20 Ne/ 22 Ne ratiosâ€•(2003) Geochim. Cosmochim. Acta , 67, 587â€“600 1 1Associate editor: B. Marty. Geochimica Et Cosmochimica Acta, 2004, 68, 1437-1438.	3.9	0
71	Reply for comment on â€œon the calculation of lake metabolic rates: Diel O2 and 18/16O techniqueâ€•by Peeters etÂal. [Water research 165 2019, 114990]. Water Research, 2020, 180, 115849.	11.3	0