

# Victor G Gorshkov

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2680212/publications.pdf>

Version: 2024-02-01

46  
papers

1,674  
citations

331259

21  
h-index

301761

39  
g-index

46  
all docs

46  
docs citations

46  
times ranked

1781  
citing authors

#	ARTICLE	IF	CITATIONS
1	Mean mass-specific metabolic rates are strikingly similar across life's major domains: Evidence for life's metabolic optimum. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 16994-16999.	3.3	276
2	Where do winds come from? A new theory on how water vapor condensation influences atmospheric pressure and dynamics. Atmospheric Chemistry and Physics, 2013, 13, 1039-1056.	1.9	99
3	Energetics of the smallest: do bacteria breathe at the same rate as whales?. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 2219-2224.	1.2	96
4	Precipitation on land versus distance from the ocean: Evidence for a forest pump of atmospheric moisture. Ecological Complexity, 2009, 6, 302-307.	1.4	77
5	Physical and Biological Bases of Life Stability. , 1995, , .		76
6	A Note on Metabolic Rate Dependence on Body Size in Plants and Animals. Journal of Theoretical Biology, 2003, 221, 301-307.	0.8	70
7	Revisiting forest impact on atmospheric water vapor transport and precipitation. Theoretical and Applied Climatology, 2013, 111, 79-96.	1.3	70
8	Size- and temperature-independence of minimum life-supporting metabolic rates. Functional Ecology, 2006, 20, 83-96.	1.7	62
9	Temperature-associated upper limits to body size in terrestrial poikilotherms. Oikos, 2005, 111, 425-436.	1.2	61
10	Energy budget of the biosphere and civilization: Rethinking environmental security of global renewable and non-renewable resources. Ecological Complexity, 2008, 5, 281-288.	1.4	61
11	Gigantism, temperature and metabolic rate in terrestrial poikilotherms. Proceedings of the Royal Society B: Biological Sciences, 2005, 272, 2325-2328.	1.2	57
12	Ontogenetic growth: models and theory. Ecological Modelling, 2004, 176, 15-26.	1.2	55
13	Why Does Air Passage over Forest Yield More Rain? Examining the Coupling between Rainfall, Pressure, and Atmospheric Moisture Content*. Journal of Hydrometeorology, 2014, 15, 411-426.	0.7	51
14	Revising the distributive networks models of West, Brown and Enquist (1997) and Banavar, Maritan and Rinaldo (1999): Metabolic inequity of living tissues provides clues for the observed allometric scaling rules. Journal of Theoretical Biology, 2005, 237, 291-301.	0.8	49
15	Why do population density and inverse home range scale differently with body size?. Ecological Complexity, 2005, 2, 259-271.	1.4	49
16	The Biotic Pump: Condensation, atmospheric dynamics and climate. International Journal of Water, 2010, 5, 365.	0.1	49
17	Conservation of water cycle on land via restoration of natural closed-canopy forests: implications for regional landscape planning. Ecological Research, 2006, 21, 897-906.	0.7	45
18	Body size, energy consumption and allometric scaling: a new dimension in the diversity-stability debate. Ecological Complexity, 2004, 1, 139-175.	1.4	39

#	ARTICLE	IF	CITATIONS
19	Revising the fundamentals of ecological knowledge: the biota–environment interaction. <i>Ecological Complexity</i> , 2004, 1, 17-36.	1.4	37
20	Biochemical universality of living matter and its metabolic implications. <i>Functional Ecology</i> , 2005, 19, 547-557.	1.7	35
21	ENERGY PARTITIONING BETWEEN DIFFERENT-SIZED ORGANISMS AND ECOSYSTEM STABILITY. <i>Ecology</i> , 2004, 85, 1811-1813.	1.5	32
22	Fuel for cyclones: The water vapor budget of a hurricane as dependent on its movement. <i>Atmospheric Research</i> , 2017, 193, 216-230.	1.8	30
23	A critique of some modern applications of the Carnot heat engine concept: the dissipative heat engine cannot exist. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2010, 466, 1893-1902.	1.0	21
24	On the dependence of speciation rates on species abundance and characteristic population size. <i>Journal of Biosciences</i> , 2004, 29, 119-128.	0.5	19
25	Condensation-induced kinematics and dynamics of cyclones, hurricanes and tornadoes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 4201-4205.	0.9	18
26	Comment on “Energy Uptake and Allocation During Ontogeny”. <i>Science</i> , 2009, 325, 1206-1206.	6.0	13
27	Condensational theory of stationary tornadoes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 2259-2261.	0.9	13
28	The Key Physical Parameters Governing Frictional Dissipation in a Precipitating Atmosphere. <i>Journals of the Atmospheric Sciences</i> , 2013, 70, 2916-2929.	0.6	13
29	Condensation-induced dynamic gas fluxes in a mixture of condensable and non-condensable gases. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 2801-2804.	0.9	11
30	Radial profiles of velocity and pressure for condensation-induced hurricanes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 1053-1058.	0.9	11
31	Electrodynamic processes in colliding beams of high-energy particles. <i>Uspekhi Fizicheskikh Nauk</i> , 1973, 16, 322-338.	0.3	10
32	The anomalous pole singularities in atomic processes. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1974, 46, 467-468.	0.9	10
33	Condensational power of air circulation in the presence of a horizontal temperature gradient. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014, 378, 294-298.	0.9	10
34	Distributive network model of Banavar, Damuth, Maritan and Rinaldo (2002): Critique and perspective. <i>Journal of Theoretical Biology</i> , 2006, 239, 394-397.	0.8	8
35	The equations of motion for moist atmospheric air. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 7300-7307.	1.2	7
36	The forest biotic pump of river basins. <i>Russian Journal of Ecology</i> , 2008, 39, 537-540.	0.3	6

#	ARTICLE	IF	CITATIONS
37	Empirical evidence for the condensational theory of hurricanes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2396-2398.	0.9	6
38	Comments on "The Tropospheric Land-Sea Warming Contrast as the Driver of Tropical Sea Level Pressure Changes". Journal of Climate, 2015, 28, 4293-4307.	1.2	6
39	Re-calibrating the snake palaeothermometer. Nature, 2009, 460, E2-E3.	13.7	5
40	Energetics of the biosphere. Uspekhi Fizicheskikh Nauk, 1980, 23, 386-408.	0.3	4
41	How Valid are the Biological and Ecological Principles Underpinning Global Change Science?. Energy and Environment, 2002, 13, 299-310.	2.7	3
42	Governance of Societies. , 2016, , 75-115.		2
43	A strategy for the survival of humanity is on the agenda. Herald of the Russian Academy of Sciences, 2006, 76, 139-143.	0.2	1
44	Have Ecological Human Rights Been Globally Lost? A Conflict of Ecological Spatial Requirements and Cultural Landscape Opportunities in Modern Homo sapiens. Structure and Function of Mountain Ecosystems in Japan, 2011, , 129-137.	0.1	1
45	On the Natural Biological Regulation of the Environment. Environmental Conservation, 1995, 22, 170-174.	0.7	0
46	Comprehending ecological and economic sustainability. Annals of the New York Academy of Sciences, 2010, 1195, E1-E18.	1.8	0