

# Bishakhdatta Gayen

## List of Publications by Year in descending order

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39  
papers

860  
citations

394421

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h-index

501196

28  
g-index

42  
all docs

42  
docs citations

42  
times ranked

781  
citing authors

#	ARTICLE	IF	CITATIONS
1	Topographic influence on submesoscale dynamics in the Southern Ocean. <i>Geophysical Research Letters</i> , 2015, 42, 1139-1147.	4.0	61
2	Stability transitions and turbulence in horizontal convection. <i>Journal of Fluid Mechanics</i> , 2014, 751, 698-724.	3.4	53
3	The Sensitivity of the Antarctic Ice Sheet to a Changing Climate: Past, Present, and Future. <i>Reviews of Geophysics</i> , 2020, 58, e2019RG000663.	23.0	49
4	Large eddy simulation of a stratified boundary layer under an oscillatory current. <i>Journal of Fluid Mechanics</i> , 2010, 643, 233-266.	3.4	47
5	Turbulence During the Generation of Internal Tide on a Critical Slope. <i>Physical Review Letters</i> , 2010, 104, 218502.	7.8	45
6	Direct and large-eddy simulations of internal tide generation at a near-critical slope. <i>Journal of Fluid Mechanics</i> , 2011, 681, 48-79.	3.4	42
7	Energetics of horizontal convection. <i>Journal of Fluid Mechanics</i> , 2013, 716, .	3.4	42
8	Algebraic and exponential instabilities in a sheared micropolar granular fluid. <i>Journal of Fluid Mechanics</i> , 2006, 567, 195.	3.4	39
9	Simulation of convection at a vertical ice face dissolving into saline water. <i>Journal of Fluid Mechanics</i> , 2016, 798, 284-298.	3.4	34
10	Completing the Mechanical Energy Pathways in Turbulent Rayleigh-Bénard Convection. <i>Physical Review Letters</i> , 2013, 111, 124301.	7.8	32
11	Boundary mixing by density overturns in an internal tidal beam. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	31
12	Peptide Programmed Hydrogels as Safe Sanctuary Microenvironments for Cell Transplantation. <i>Advanced Functional Materials</i> , 2020, 30, 1900390.	14.9	29
13	Horizontal convection dynamics: insights from transient adjustment. <i>Journal of Fluid Mechanics</i> , 2013, 726, 559-595.	3.4	28
14	Degradation of an internal wave beam by parametric subharmonic instability in an upper ocean pycnocline. <i>Journal of Geophysical Research: Oceans</i> , 2013, 118, 4689-4698.	2.6	27
15	Tidal conversion and turbulence at a model ridge: direct and large eddy simulations. <i>Journal of Fluid Mechanics</i> , 2013, 715, 181-209.	3.4	26
16	Available potential energy in Rayleigh-Bénard convection. <i>Journal of Fluid Mechanics</i> , 2013, 729, .	3.4	25
17	Orientational Correlation and Velocity Distributions in Uniform Shear Flow of a Dilute Granular Gas. <i>Physical Review Letters</i> , 2008, 100, 068002.	7.8	22
18	Ablation of sloping ice faces into polar seawater. <i>Journal of Fluid Mechanics</i> , 2019, 863, 545-571.	3.4	21

#	ARTICLE	IF	CITATIONS
19	The role of double-diffusive convection in basal melting of Antarctic ice shelves. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	21
20	Negative turbulent production during flow reversal in a stratified oscillating boundary layer on a sloping bottom. Physics of Fluids, 2011, 23, .	4.0	20
21	Turbulence during the reflection of internal gravity waves at critical and near-critical slopes. Journal of Fluid Mechanics, 2013, 729, 47-68.	3.4	17
22	Mixing and dissipation in a geostrophic buoyancy-driven circulation. Journal of Geophysical Research: Oceans, 2016, 121, 6076-6091.	2.6	16
23	Convection Enhances Mixing in the Southern Ocean. Geophysical Research Letters, 2018, 45, 4198-4207.	4.0	15
24	Ocean Gyres Driven by Surface Buoyancy Forcing. Geophysical Research Letters, 2020, 47, e2020GL088539.	4.0	15
25	Development of a novel wind to electrical energy converter of passive ferrofluid levitation through its parameter modelling and optimization. Sustainable Energy Technologies and Assessments, 2021, 48, 101641.	2.7	12
26	The Impact of Turbulence and Convection on Transport in the Southern Ocean. Journal of Geophysical Research: Oceans, 2019, 124, 4208-4221.	2.6	9
27	Ultra-low friction self-levitating nanomagnetic fluid bearing for highly efficient wind energy harvesting. Sustainable Energy Technologies and Assessments, 2022, 52, 102024.	2.7	9
28	Effect of Coulomb friction on orientational correlation and velocity distribution functions in a sheared dilute granular gas. Physical Review E, 2011, 84, 021304.	2.1	7
29	PSI to turbulence during internal wave beam refraction through the upper ocean pycnocline. Geophysical Research Letters, 2014, 41, 8953-8960.	4.0	7
30	Turbulent horizontal convection under spatially periodic forcing: a regime governed by interior inertia. Journal of Fluid Mechanics, 2017, 831, 491-523.	3.4	7
31	Geostrophic and chimney regimes in rotating horizontal convection with imposed heat flux. Journal of Fluid Mechanics, 2017, 823, 57-99.	3.4	7
32	Transport by deep convection in basin-scale geostrophic circulation: turbulence-resolving simulations. Journal of Fluid Mechanics, 2019, 865, 681-719.	3.4	7
33	Roles of Shear and Convection in Driving Mixing in the Ocean. Geophysical Research Letters, 2021, 48, e2020GL089455.	4.0	7
34	Eddy Induced Trapping and Homogenization of Freshwater in the Bay of Bengal. Journal of Geophysical Research: Oceans, 2021, 126, e2021JC017180.	2.6	7
35	Regimes and Transitions in the Basal Melting of Antarctic Ice Shelves. Journal of Physical Oceanography, 2022, 52, 2589-2608.	1.7	7
36	Ocean Convection. Fluids, 2021, 6, 360.	1.7	6

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37	The Dynamics of Mixed Layer Deepening during Open-Ocean Convection. Journal of Physical Oceanography, 2020, 50, 1625-1641.	1.7	4
38	Turbulent Convection Insights from Small-Scale Thermal Forcing with Zero Net Heat Flux at a Horizontal Boundary. Physical Review Letters, 2015, 115, 204301.	7.8	3
39	Melting Driven Convection at the Ice-seawater Interface. Procedia IUTAM, 2015, 15, 78-85.	1.2	3