Eugene A Ryzhov

List of Publications by Year
in descending order

44 papers	413 citations	687220 13 h-index	887953 17 g-index
52 all docs	52 docs citations	52 times ranked	116 citing authors

#	Article	IF	Citations
1	Ellipsoidal vortex in a nonuniform flow: Dynamics and chaotic advections. Journal of Marine Research, 2011, 69, 435-461.	0.3	25
2	Diffusion-affected passive scalar transport in an ellipsoidal vortex in a shear flow. Nonlinear Processes in Geophysics, 2013, 20, 437-444.	0.6	22
3	Estimating the size of the regular region of a topographically trapped vortex. Geophysical and Astrophysical Fluid Dynamics, 2011, 105, 536-551.	0.4	21
4	Background current concept and chaotic advection in an oceanic vortex flow. Theoretical and Computational Fluid Dynamics, 2010, 24, 59-64.	0.9	20
5	Passive scalar advection in the vicinity of two point vortices in a deformation flow. European Journal of Mechanics, B/Fluids, 2012, 34, 121-130.	1.2	20
6	Interaction of a monopole vortex with an isolated topographic feature in a three-layer geophysical flow. Nonlinear Processes in Geophysics, 2013, 20, 107-119.	0.6	20
7	Chaotic transport and mixing of a passive admixture by vortex flows behind obstacles. Izvestiya - Atmospheric and Oceanic Physics, 2010, 46, 184-191.	0.2	16
8	Parametric resonance with a point-vortex pair in a nonstationary deformation flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 744-747.	0.9	16
9	Dynamics of a vortex pair interacting with a fixed point vortex. Europhysics Letters, 2013, 102, 44004.	0.7	15
10	Interaction of a two-layer vortex pair with a submerged cylindrical obstacle in a two layer rotating fluid. Physics of Fluids, 2016, 28, .	1.6	15
11	On data-driven induction of the low-frequency variability in a coarse-resolution ocean model. Ocean Modelling, 2020, 153, 101664.	1.0	15
12	The effects of chaotic advection in a three-layer ocean model. Izvestiya - Atmospheric and Oceanic Physics, 2011, 47, 241-251.	0.2	14
13	Entrapping of a vortex pair interacting with a fixed point vortex revisited. I. Point vortices. Physics of Fluids, 2018, 30, .	1.6	14
14	Effect of the vertical component of diffusion on passive scalar transport in an isolated vortex model. Physical Review E, 2015, 92, 053021.	0.8	13
15	On data-driven augmentation of low-resolution ocean model dynamics. Ocean Modelling, 2019, 142, 101464.	1.0	13
16	Vortex Interactions Subjected to Deformation Flows: A Review. Fluids, 2019, 4, 14.	0.8	12
17	On dynamically unresolved oceanic mesoscale motions. Journal of Fluid Mechanics, 2021, 920, .	1.4	11
18	On changing the size of the atmosphere of a vortex pair embedded in a periodic external shear flow. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3884-3889.	0.9	10

#	Article	IF	Citations
19	Parametric resonance in the dynamics of an elliptic vortex in a periodically strained environment. Nonlinear Processes in Geophysics, 2017, 24, 1-8.	0.6	9
20	Resonance phenomena in a two-layer two-vortex shear flow. Chaos, 2016, 26, 113116.	1.0	8
21	Entrapping of a vortex pair interacting with a fixed point vortex revisited. II. Finite size vortices and the effect of deformation. Physics of Fluids, 2018, 30, 096604.	1.6	8
22	Data-adaptive harmonic analysis of oceanic waves and turbulent flows. Chaos, 2020, 30, 061105.	1.0	8
23	Correlation-based flow decomposition and statistical analysis of the eddy forcing. Journal of Fluid Mechanics, 2021, 924, .	1.4	8
24	Evaluating the stochastic layer thickness in a two-layer topographic vortex model. Technical Physics Letters, 2008, 34, 531-534.	0.2	7
25	Irregular mixing due to a vortex pair interacting with a fixed vortex. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 3301-3307.	0.9	7
26	Global chaotization of fluid particle trajectories in a sheared two-layer two-vortex flow. Chaos, 2015, 25, 103108.	1.0	7
27	Clustering of floating tracers in weakly divergent velocity fields. Physical Review E, 2019, 100, 063108.	0.8	7
28	Ventilation of a trapped topographic eddy by a captured free eddy. Izvestiya - Atmospheric and Oceanic Physics, 2011, 47, 780-791.	0.2	6
29	Parametric instability of a many point-vortex system in a multi-layer flow under linear deformation. Regular and Chaotic Dynamics, 2016, 21, 254-266.	0.3	5
30	Interaction of an along-shore propagating vortex with a vortex enclosed in a circular bay. Physics of Fluids, 2018, 30, 016602.	1.6	5
31	Clustering of Floating Tracer Due to Mesoscale Vortex and Submesoscale Fields. Geophysical Research Letters, 2020, 47, e2019GL086504.	1.5	5
32	Floating tracer clustering in divergent random flows modulated by an unsteady mesoscale ocean field. Geophysical and Astrophysical Fluid Dynamics, 2020, 114, 690-714.	0.4	5
33	Two-point-vortex evolution in an oscillatory shear flow with rotation. Europhysics Letters, 2014, 108, 24002.	0.7	4
34	Steady and perturbed motion of a point vortex along a boundary with a circular cavity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 896-902.	0.9	4
35	A modification of the invariant imbedding method for a singular boundary value problem. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 459-470.	1.7	3
36	Toroidal vortices over isolated topography in geophysical flows. Fluid Dynamics Research, 2014, 46, 031405.	0.6	3

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37	Local parametric instability near elliptic points in vortex flows under shear deformation. Chaos, 2016, 26, 083111.	1.0	3
38	On transport tensor of dynamically unresolved oceanic mesoscale eddies. Journal of Fluid Mechanics, 2022, 939, .	1.4	3
39	Vortex dynamics of a fluid near a boundary with a circular cavity. Izvestiya - Atmospheric and Oceanic Physics, 2014, 50, 420-425.	0.2	2
40	Nonlinear dynamics of an elliptic vortex embedded in an oscillatory shear flow. Chaos, 2017, 27, 113101.	1.0	2
41	Advection of passive scalars induced by a bay-trapped nonstationary vortex. Ocean Dynamics, 2018, 68, 411-422.	0.9	2
42	Fluid particle advection in the vicinity of the FÃ¶ppl vortex system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 3208-3212.	0.9	0
43	Vortex tori above bottom perturbations in a rotating fluid. Doklady Physics, 2013, 58, 186-190.	0.2	0
44	10.1063/5.0012077.3. , 2020, , .		0