Kai Schneider

List of Publications by Year
in descending order

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181 papers	3,779 citations	147801 31 h-index	161849 54 g-index
195 all docs	195 docs citations	195 times ranked	1866 citing authors

#	Article	IF	Citations
1	Non-Gaussianity and coherent vortex simulation for two-dimensional turbulence using an adaptive orthogonal wavelet basis. Physics of Fluids, 1999, 11, 2187-2201.	4.0	301
2	Wavelet Methods in Computational Fluid Dynamics. Annual Review of Fluid Mechanics, 2010, 42, 473-503.	25.0	222
3	Coherent Vortex Extraction in 3D Turbulent Flows Using Orthogonal Wavelets. Physical Review Letters, 2001, 87, 054501.	7.8	196
4	Coherent Vortex Simulation (CVS), A Semi-Deterministic Turbulence Model Using Wavelets. Flow, Turbulence and Combustion, 2001, 66, 393-426.	2.6	122
5	A conservative fully adaptive multiresolution algorithm for parabolic PDEs. Journal of Computational Physics, 2003, 188, 493-523.	3.8	116
6	A Fourier spectral method for the Navierâ€“Stokes equations with volume penalization for moving solid obstacles. Journal of Computational Physics, 2009, 228, 5687-5709.	3.8	109
7	Nonlinear wavelet thresholding: A recursive method to determine the optimal denoising threshold. Applied and Computational Harmonic Analysis, 2005, 18, 177-185.	2.2	99
8	Coherent vortex extraction in three-dimensional homogeneous turbulence: Comparison between CVS-wavelet and POD-Fourier decompositions. Physics of Fluids, 2003, 15, 2886.	4.0	96
9	An Adaptive Waveletâ€“Vaguelette Algorithm for the Solution of PDEs. Journal of Computational Physics, 1997, 130, 174-190.	3.8	91
10	An adaptive multiresolution scheme with local time stepping for evolutionary PDEs. Journal of Computational Physics, 2008, 227, 3758-3780.	3.8	80
11	Numerical simulation of the transient flow behaviour in chemical reactors using a penalisation method. Computers and Fluids, 2005, 34, 1223-1238.	2.5	79
12	A volume penalization method for incompressible flows and scalar advectionâ€“diffusion with moving obstacles. Journal of Computational Physics, 2012, 231, 4365-4383.	3.8	79
13	Coherent vortices in high resolution direct numerical simulation of homogeneous isotropic turbulence: A wavelet viewpoint. Physics of Fluids, 2007, 19, .	4.0	68
14	Fourier spectral and wavelet solvers for the incompressible Navierâ€“Stokes equations with volume-penalization: Convergence of a dipoleâ€“wall collision. Journal of Computational Physics, 2007, 227, 919-945.	3.8	58
15	Coherent vortex simulation of three-dimensional turbulent mixing layers using orthogonal wavelets. Journal of Fluid Mechanics, 2005, 534, 39-66.	3.4	57
16	Comparison of an Adaptive Wavelet Method and Nonlinearly Filtered Pseudospectral Methods for Two-Dimensional Turbulence. Theoretical and Computational Fluid Dynamics, 1997, 9, 191-206.	2.2	56
17	Decaying Two-Dimensional Turbulence in a Circular Container. Physical Review Letters, 2005, 95, 244502.	7.8	52
18	Spaceâ€“time adaptive multiresolution methods for hyperbolic conservation laws: Applications to compressible Euler equations. Applied Numerical Mathematics, 2009, 59, 2303-2321.	2.1	52

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19	Bumblebees minimize control challenges by combining active and passive modes in unsteady winds. Scientific Reports, 2016, 6, 35043.	3.3	46
20	Numerical simulation of the transient flow behaviour in tube bundles using a volume penalization method. Journal of Fluids and Structures, 2005, 20, 555-566.	3.4	43
21	Numerical simulation of fluidâ€“structure interaction with the volume penalization method. Journal of Computational Physics, 2015, 281, 96-115.	3.8	42
22	Adaptive Wavelet Simulation of a Flow around an Impulsively Started Cylinder Using Penalisation. Applied and Computational Harmonic Analysis, 2002, 12, 374-380.	2.2	41
23	Two- and three-dimensional numerical simulations of the clapâ€“flingâ€“sweep of hovering insects. Journal of Fluids and Structures, 2011, 27, 784-791.	3.4	35
24	FluSI: A Novel Parallel Simulation Tool for Flapping Insect Flight Using a Fourier Method with Volume Penalization. SIAM Journal of Scientific Computing, 2016, 38, S3-S24.	2.8	35
25	Wavelet Smoothing of Evolutionary Spectra by Nonlinear Thresholding. Applied and Computational Harmonic Analysis, 1996, 3, 268-282.	2.2	34
26	Numerical Simulation of Decaying Turbulence in an Adaptive Wavelet Basis. Applied and Computational Harmonic Analysis, 1996, 3, 393-397.	2.2	34
27	An adaptive multiresolution method for combustion problems: application to flame ballâ€“vortex interaction. Computers and Fluids, 2005, 34, 817-831.	2.5	34
28	An adaptive two-dimensional wavelet-vaguelette algorithm for the computation of flame balls. Combustion Theory and Modelling, 1999, 3, 177-198.	1.9	34
29	Wavelet transforms and their applications to MHD and plasma turbulence: a review. Journal of Plasma Physics, 2015, 81, .	2.1	33
30	Aerodynamic Ground Effect in Fruitfly Sized Insect Takeoff. PLoS ONE, 2016, 11, e0152072.	2.5	33
31	Extraction of coherent bursts from turbulent edge plasma in magnetic fusion devices using orthogonal wavelets. Physics of Plasmas, 2006, 13, 042304.	1.9	32
32	The dynamics of passive feathering rotation in hovering flight of bumblebees. Journal of Fluids and Structures, 2019, 91, 102628.	3.4	31
33	Coherent Structures in the Boundary and Cloud Layers: Role of Updrafts, Subsiding Shells, and Environmental Subsidence. Journals of the Atmospheric Sciences, 2016, 73, 1789-1814.	1.7	30
34	Small-scale intermittency in anisotropic turbulence. Physical Review E, 2007, 76, 046310.	2.1	28
35	The Lighthillâ€“Weis-Fogh clapâ€“flingâ€“sweep mechanism revisited. Journal of Fluid Mechanics, 2011, 676, 572-606.	3.4	27
36	Kinetic Turbulence in Astrophysical Plasmas: Waves and/or Structures?. Physical Review X, 2019, 9, .	8.9	26

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37	On the structure and dynamics of sheared and rotating turbulence: Direct numerical simulation and wavelet-based coherent vortex extraction. Physics of Fluids, 2008, 20, .	4.0	25
38	Intermittency and scale-dependent statistics in fully developed turbulence. Physical Review E, 2009, 79, 026303.	2.1	25
39	Adaptive multiresolution schemes with local time stepping for two-dimensional degenerate reactionâ€“diffusion systems. Applied Numerical Mathematics, 2009, 59, 1668-1692.	2.1	24
40	Adaptive Multiresolution Methods for the Simulation ofÂWaves in Excitable Media. Journal of Scientific Computing, 2010, 43, 261-290.	2.3	24
41	Coherent vortex extraction and simulation of 2D isotropic turbulence. Journal of Turbulence, 2006, 7, N44.	1.4	23
42	Investigation of steady-state tokamak issues by long pulse experiments on Tore Supra. Nuclear Fusion, 2009, 49, 104010.	3.5	23
43	Approximation of the Laplace and Stokes operators with Dirichlet boundary conditions through volume penalization: a spectral viewpoint. Numerische Mathematik, 2014, 128, 301-338.	1.9	23
44	Final states of decaying 2D turbulence in bounded domains: Influence of the geometry. Physica D: Nonlinear Phenomena, 2008, 237, 2228-2233.	2.8	21
45	Fully adaptive multiresolution schemes for strongly degenerate parabolic equations in one space dimension. ESAIM: Mathematical Modelling and Numerical Analysis, 2008, 42, 535-563.	1.9	21
46	Comparison of Adaptive Multiresolution and Adaptive Mesh Refinement Applied to Simulations of the Compressible Euler Equations. SIAM Journal of Scientific Computing, 2016, 38, S173-S193.	2.8	21
47	Extreme Lagrangian Acceleration in Confined Turbulent Flow. Physical Review Letters, 2008, 100, 184503.	7.8	20
48	Coherent Vortex Simulation of weakly compressible turbulent mixing layers using adaptive multiresolution methods. Journal of Computational Physics, 2010, 229, 2267-2286.	3.8	20
49	Simulation of confined magnetohydrodynamic flows with Dirichlet boundary conditions using a pseudo-spectral method with volume penalization. Journal of Computational Physics, 2014, 274, 64-94.	3.8	20
50	Immersed boundary methods for numerical simulation of confined fluid and plasma turbulence in complex geometries: a review. Journal of Plasma Physics, 2015, 81, .	2.1	20
51	Adaptive multiresolution methods. ESAIM: Proceedings and Surveys, 2011, 34, 1-96.	0.4	19
52	Computation of decaying turbulence in an adaptive wavelet basis. Physica D: Nonlinear Phenomena, 1999, 134, 337-361.	2.8	18
53	Rapid Generation of Angular Momentum in Bounded Magnetized Plasma. Physical Review Letters, 2008, 101, 235003.	7.8	18
54	Wavelet-based coherent vorticity sheet and current sheet extraction from three-dimensional homogeneous magnetohydrodynamic turbulence. Physics of Plasmas, 2009, 16, 082306.	1.9	18

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55	Energy Dissipating Structures Produced by Walls in Two-Dimensional Flows at Vanishing Viscosity. Physical Review Letters, 2011, 106, 184502.	7.8	18
56	SPATIAL INTERMITTENCY IN TWO-DIMENSIONAL TURBULENCE: A WAVELET APPROACH. Series on Knots and Everything, 2004, , 302-328.	0.0	18
57	Numerical simulation of three-dimensional instabilities of spherical flame structures. Proceedings of the Combustion Institute, 2000, 28, 793-799.	3.9	17
58	Wavelet-based density estimation for noise reduction in plasma simulations using particles. Journal of Computational Physics, 2010, 229, 2821-2839.	3.8	17
59	Numerical simulations on the stability of spherical flame structures. Combustion and Flame, 2003, 132, 247-271.	5.2	16
60	Analysis and discretization of the volume penalized Laplace operator with Neumann boundary conditions. Applied Numerical Mathematics, 2015, 95, 238-249.	2.1	16
61	Review of Some Fundamentals of Data Processing. , 2007, , 1337-1398.		16
62	Wavelet filtering to study mixing in 2D isotropic turbulence. Communications in Nonlinear Science and Numerical Simulation, 2003, 8, 537-545.	3.3	15
63	A penalization method applied to the wave equation. Comptes Rendus - Mecanique, 2005, 333, 79-85.	2.1	15
64	Two-dimensional simulation of the fluttering instability using a pseudospectral method with volume penalization. Computers and Structures, 2013, 122, 101-112.	4.4	15
65	Angular multiscale statistics of turbulence in a porous bed. Physical Review Fluids, 2018, 3, .	2.5	15
66	Numerical study of mixing of passive and reactive scalars in two-dimensional turbulent flows using orthogonal wavelet filtering. Chemical Engineering Science, 2003, 58, 1463-1477.	3.8	14
67	Fully adaptive multiresolution schemes for strongly degenerate parabolic equations with discontinuous flux. Journal of Engineering Mathematics, 2008, 60, 365-385.	1.2	14
68	An adaptive multiresolution method for parabolic PDEs with timeâ€step control. International Journal for Numerical Methods in Engineering, 2009, 78, 652-670.	2.8	14
69	Vorticity generation during the clapâ€“flingâ€“sweep of some hovering insects. Theoretical and Computational Fluid Dynamics, 2010, 24, 209-215.	2.2	14
70	On the structure and dynamics of sheared and rotating turbulence: Anisotropy properties and geometrical scale-dependent statistics. Physics of Fluids, 2010, 22, .	4.0	14
71	A pseudo-spectral method with volume penalisation for magnetohydrodynamic turbulence in confined domains. Computer Physics Communications, 2011, 182, 2-7.	7.5	14
72	Reduced-Order Modelling of Turbulent Jets for Noise Control. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2009, , 3-27.	0.3	14

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73	Impact of turbulence on flying insects in tethered and free flight: High-resolution numerical experiments. Physical Review Fluids, 2019, 4, .	2.5	14
74	Numerical simulation of the mixing of passive and reactive scalars in two-dimensional flows dominated by coherent vortices. Chemical Engineering Science, 2000, 55, 4255-4269.	3.8	13
75	Lagrangian dynamics of drift-wave turbulence. Physica D: Nonlinear Phenomena, 2010, 239, 1269-1277.	2.8	13
76	Intrinsic Rotation of Toroidally Confined Magnetohydrodynamics. Physical Review Letters, 2012, 109, 175002.	7.8	13
77	Angular Statistics of Lagrangian Trajectories in Turbulence. Physical Review Letters, 2015, 114, 214502.	7.8	13
78	Volume penalization for inhomogeneous Neumann boundary conditions modeling scalar flux in complicated geometry. Journal of Computational Physics, 2019, 390, 452-469.	3.8	13
79	Multiresolution analysis as a criterion for effective dynamic mesh adaptation â€“ A case study for Euler equations in the SAMR framework AMROC. Computers and Fluids, 2020, 205, 104583.	2.5	13
80	A Wavelet-Adaptive Method for Multiscale Simulation of Turbulent Flows in Flying Insects. Communications in Computational Physics, 2021, 30, 1118-1149.	1.7	13
81	Numerical study of thermodiffusive flame structures interacting with adiabatic walls using an adaptive multiresolution scheme. Combustion Theory and Modelling, 2006, 10, 273-288.	1.9	12
82	Adaptive multiresolution or adaptive mesh refinement? A case study for 2D Euler equations. ESAIM: Proceedings and Surveys, 2009, 29, 28-42.	0.4	12
83	Intermittency and geometrical statistics of three-dimensional homogeneous magnetohydrodynamic turbulence: A wavelet viewpoint. Physics of Plasmas, 2011, 18, .	1.9	12
84	Scale-wise coherent vorticity extraction for conditional statistical modeling of homogeneous isotropic two-dimensional turbulence. Physica D: Nonlinear Phenomena, 2012, 241, 186-201.	2.8	12
85	Divergence and convergence of inertial particles in high-Reynolds-number turbulence. Journal of Fluid Mechanics, 2020, 905, .	3.4	12
86	Extraction of coherent clusters and grid adaptation in particle-laden turbulence using wavelet filters. Physical Review Fluids, 2017, 2, .	2.5	12
87	Divergence-free Wavelets for Coherent Vortex Extraction in 3D homogeneous isotropic turbulence. ESAIM: Proceedings and Surveys, 2007, 16, 146-163.	0.4	11
88	Wavelets meet Burgulence: CVS-filtered Burgers equation. Physica D: Nonlinear Phenomena, 2008, 237, 2151-2157.	2.8	11
89	The decay of magnetohydrodynamic turbulence in a confined domain. Physics of Plasmas, 2008, 15, 092304.	1.9	11
90	Origin of Lagrangian Intermittency in Drift-Wave Turbulence. Physical Review Letters, 2010, 105, 145001.	7.8	11

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91	Coherent Vorticity Simulation of Three-Dimensional Forced Homogeneous Isotropic Turbulence. Multiscale Modeling and Simulation, 2011, 9, 1144-1161.	1.6	11
92	Simulation of forced deformable bodies interacting with two-dimensional incompressible flows: Application to fish-like swimming. International Journal of Heat and Fluid Flow, 2015, 51, 88-109.	2.4	11
93	Coherent structure extraction in turbulent channel flow using boundary adapted wavelets. Journal of Turbulence, 2017, 18, 352-372.	1.4	11
94	On spaceâ€“time adaptive schemes for the numerical solution of PDEs. ESAIM: Proceedings and Surveys, 2007, 16, 181-194.	0.4	10
95	Numerical simulations of falling leaves using a pseudo-spectral method with volume penalization. Theoretical and Computational Fluid Dynamics, 2010, 24, 169-173.	2.2	10
96	Coherent vorticity extraction in resistive drift-wave turbulence: Comparison of orthogonal wavelets versus proper orthogonal decomposition. Comptes Rendus Physique, 2011, 12, 123-131.	0.9	10
97	Numerical simulation of flows past flat plates using volume penalization. Computational and Applied Mathematics, 2014, 33, 481-495.	1.3	10
98	Numerical Modelling of Flexible Heaving Foils. Journal of Aero Aqua Bio-mechanisms, 2013, 3, 22-28.	1.0	10
99	Numerical simulation of a mixing layer in an adaptive wavelet basis. Comptes Rendus De L'Academie De Sciences - Serie IIb: Mecanique, Physique, Chimie, Astronomie, 2000, 328, 263-269.	0.1	9
100	Leading-edge vortex shedding from rotating wings. Fluid Dynamics Research, 2014, 46, 031421.	1.3	9
101	Numerical simulation of vortex-induced drag of elastic swimmer models. Theoretical and Applied Mechanics Letters, 2017, 7, 280-285.	2.8	9
102	Helical vortices generated by flapping wings of bumblebees. Fluid Dynamics Research, 2018, 50, 011419.	1.3	9
103	Energy dissipation caused by boundary layer instability at vanishing viscosity. Journal of Fluid Mechanics, 2018, 849, 676-717.	3.4	9
104	Scale-dependent statistics of inertial particle distribution in high Reynolds number turbulence. Physical Review Fluids, 2021, 6, .	2.5	9
105	Wavelet denoising for postprocessing of a 2D ParticleÂ-ÂInÂ-ÂCell code. ESAIM: Proceedings and Surveys, 2007, 16, 195-210.	0.4	8
106	Craya decomposition using compactly supported biorthogonal wavelets. Applied and Computational Harmonic Analysis, 2010, 28, 267-284.	2.2	8
107	A mass-spring fluid-structure interaction solver: Application to flexible revolving wings. Computers and Fluids, 2020, 200, 104426.	2.5	8
108	Self-organization and symmetry-breaking in two-dimensional plasma turbulence. Physics of Plasmas, 2010, 17, 092302.	1.9	7

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109	Conditional vorticity budget of coherent and incoherent flow contributions in fully developed homogeneous isotropic turbulence. Physics of Fluids, 2012, 24, 035108.	4.0	7
110	The effect of toroidicity on reversed field pinch dynamics. Plasma Physics and Controlled Fusion, 2014, 56, 095024.	2.1	7
111	An adaptive multiresolution method for ideal magnetohydrodynamics using divergence cleaning with parabolicâ€“hyperbolic correction. Applied Numerical Mathematics, 2015, 95, 199-213.	2.1	7
112	Comparison of a spectral method with volume penalization and a finite volume method with body fitted grids for turbulent flows. Computers and Fluids, 2016, 133, 140-150.	2.5	7
113	Wavelet methods for studying the onset of strong plasma turbulence. Physics of Plasmas, 2018, 25, .	1.9	7
114	Wavelet-based parallel dynamic mesh adaptation for magnetohydrodynamics in the AMROC framework. Computers and Fluids, 2019, 190, 374-381.	2.5	7
115	Coherent Structure Eduction in Wavelet-Forced Two-Dimensional Turbulent Flows. Fluid Mechanics and Its Applications, 1998, , 65-83.	0.2	7
116	Wavelet forcing for numerical simulation of two-dimensional turbulence. Comptes Rendus De L'AcadÃ©mie Des Sciences - Series IIB - Mechanics-Physics-Chemistry-Astronomy, 1997, 325, 263-270.	0.1	6
117	Particle-in-wavelets scheme for the 1D Vlasov-Poisson equations. ESAIM: Proceedings and Surveys, 2011, 32, 134-148.	0.4	6
118	Adaptive Gradient-Augmented Level Set Method with Multiresolution Error Estimation. Journal of Scientific Computing, 2016, 66, 116-140.	2.3	5
119	Local time-stepping for adaptive multiresolution using natural extension of Rungeâ€“Kutta methods. Journal of Computational Physics, 2019, 382, 291-318.	3.8	5
120	A Characteristic Mapping method for the two-dimensional incompressible Euler equations. Journal of Computational Physics, 2021, 424, 109781.	3.8	5
121	Directional change of fluid particles in two-dimensional turbulence and of football players. Physical Review Fluids, 2017, 2, .	2.5	5
122	Computing and Analyzing Turbulent Flows Using Wavelets. , 2001, , 181-216.		4
123	Adaptive numerical simulation of pulsating planar flames for large Lewis and Zeldovich ranges. Communications in Nonlinear Science and Numerical Simulation, 2006, 11, 463-480.	3.3	4
124	Influence of initial mean helicity on homogeneous turbulent shear flow. Physical Review E, 2011, 84, 056319.	2.1	4
125	Coherent vorticity extraction in turbulent boundary layers using orthogonal wavelets. Journal of Physics: Conference Series, 2011, 318, 022011.	0.4	4
126	Adaptive Multiresolution Computations Applied to Detonations. Zeitschrift Fur Physikalische Chemie, 2015, 229, 931-953.	2.8	4

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127	Structure of sheared and rotating turbulence: Multiscale statistics of Lagrangian and Eulerian accelerations and passive scalar dynamics. Physical Review E, 2016, 93, 013113.	2.1	4
128	Wavelet-based regularization of the Galerkin truncated three-dimensional incompressible Euler flows. Physical Review E, 2017, 96, 063119.	2.1	4
129	Wing Morphology and Inertial Properties of Bumblebees. Journal of Aero Aqua Bio-mechanisms, 2019, 8, 41-47.	1.0	4
130	Wavelet adaptive proper orthogonal decomposition for large-scale flow data. Advances in Computational Mathematics, 2022, 48, 1.	1.6	4
131	Clustering of inertial particles in turbulent flow through a porous unit cell. Journal of Fluid Mechanics, 2022, 937, .	3.4	4
132	Directional and scale-dependent statistics of quasi-static magnetohydrodynamic turbulence. ESAIM: Proceedings and Surveys, 2011, 32, 95-102.	0.4	3
133	On helical multiscale characterization of homogeneous turbulence. Journal of Turbulence, 2012, 13, N35.	1.4	3
134	Small-scale anisotropic intermittency in magnetohydrodynamic turbulence at low magnetic Reynolds numbers. Physical Review E, 2014, 89, 033013.	2.1	3
135	Magnetohydrodynamically generated velocities in confined plasma. Physics of Plasmas, 2015, 22, .	1.9	3
136	Influence of wing flexibility on the aerodynamic performance of a tethered flapping bumblebee. Theoretical and Applied Mechanics Letters, 2020, 10, 382-389.	2.8	3
137	Wavelet filtering of three-dimensional turbulence. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2001, 81, 465-466.	1.6	2
138	Geometrical alignment properties in Fourier- and wavelet-filtered statistically stationary two-dimensional turbulence. Physical Review E, 2002, 66, 046307.	2.1	2
139	Numerical investigations on premixed spherical flames for Lewis numbers larger than unity. Microgravity Science and Technology, 2005, 17, 94-100.	1.4	2
140	Coherent vortex extraction in 3D homogeneous isotropic turbulence using orthogonal wavelets. ESAIM: Proceedings and Surveys, 2007, 16, 164-180.	0.4	2
141	Is the CFL Condition Sufficient? Some Remarks. , 2013, , 139-146.		2
142	Self-organization of helically forced MHD flow in confined cylindrical geometries. Fluid Dynamics Research, 2014, 46, 061422.	1.3	2
143	Adaptive wavelet simulation of weakly compressible flow in a channel with a suddenly expanded section. ESAIM Proceedings and Surveys, 2016, 53, 38-48.	0.4	2
144	Efficiency of laminar and turbulent mixing in wall-bounded flows. Physical Review E, 2020, 101, 043104.	2.1	2

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145	Coherent vorticity extraction in 3D homogeneous isotropic turbulence: influence of the Reynolds number and geometrical statistics. Brazilian Journal of Physics, 2009, 39, 531-538.	1.4	2
146	An experimental data-driven mass-spring model of ï¬‚exible Calliphora wings. Bioinspiration and Biomimetics, 2021, , .	2.9	2
147	Rotating shallow water flow past an obstacle. , 2004, , 137-142.		2
148	Simulation and Analysis of Mixing in Two-Dimensional Turbulent Flows Using Fourier and Wavelet Techniques. , 1999, , 344-351.		1
149	Intermittency of quasi-static magnetohydrodynamic turbulence: A wavelet viewpoint. Journal of Physics: Conference Series, 2011, 318, 072035.	0.4	1
150	Vortex tubes in shear-stratified turbulent flows. , 2002, , 217-228.		1
151	Numerical Simulation of Turbulent Flows in Complex Geometries Using the Coherent Vortex Simulation Approach Based on Orthonormal Wavelet Decomposition. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2009, , 175-200.	0.3	1
152	On the verification of adaptive three-dimensional multiresolution computations of the magneto hydrodynamic equations. Journal of Applied Nonlinear Dynamics, 2018, 7, 231-242.	0.3	1
153	On Decaying Two-Dimensional Turbulence in a Circular Container. , 2007, , 91-97.		1
154	Wavelet-Based Extraction of Coherent Vortices from High Reynolds Number Homogeneous Isotropic Turbulence. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 243-248.	0.2	1
155	28. Direkte numerische Simulation des Mischverhaltens in zweidimensionalen turbulenten StrÃ¶mungen. Chemie-Ingenieur-Technik, 1999, 71, 950-951.	0.8	0
156	Coherent Vortex Simulation (CVS) of two-dimensional turbulence. ZAMM Zeitschrift Fur Angewandte Mathematik Und Mechanik, 2001, 81, 485-486.	1.6	0
157	Foreword for the special issue on â€˜Large Eddy Simulation, Coherent Vortex Simulation & Vortex Methodsâ€™ dedicated to the memory of Joel Ferziger. Journal of Turbulence, 2006, 7, N42.	1.4	0
158	Multiresolution schemes for an extended clarifierâ€“thickener model. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 1041803-1041804.	0.2	0
159	Adaptive multiresolution schemes for reaction-diffusion systems. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10969-10970.	0.2	0
160	Coexistence of two dissipative mechanisms in two-dimensional turbulent flows. Journal of Physics: Conference Series, 2011, 318, 042057.	0.4	0
161	Helical Properties of Sheared and Rotating Turbulence. Journal of Physics: Conference Series, 2011, 318, 082025.	0.4	0
162	Influence of waves on Lagrangian acceleration in two-dimensional turbulent flows. ESAIM: Proceedings and Surveys, 2011, 32, 231-241.	0.4	0

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163	Numerical Simulations of the Clap-Fling-Sweep Mechanism of Hovering Insects. Advances in Science and Technology, 2012, 84, 57-58.	0.2	0
164	FOREWORD: Turbulence Colloquium Marseille 2011. Journal of Turbulence, 2013, 14, 39-42.	1.4	0
165	Der Hummelflug in Turbulenz. Physik in Unserer Zeit, 2016, 47, 111-112.	0.0	0
166	Energy dissipation caused by boundary layer instability at vanishing viscosity â€“ ERRATUM. Journal of Fluid Mechanics, 2018, 857, 952-952.	3.4	0
167	Numerical Simulation of Wall-Bounded Flows using a Spectral Method with Volume Penalization. ESAIM Proceedings and Surveys, 2018, 63, 280-289.	0.4	0
168	Local Multiwavelet-Based Adaptation within a Discontinuous Galerkin Framework. , 2021, , .		0
169	The Dynamics of Bumblebee Wing Pitching Rotation: Measurement and Modelling. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2021, , 125-133.	0.3	0
170	Adaptive two- and three-dimensional multiresolution computations of resistive magnetohydrodynamics. Advances in Computational Mathematics, 2021, 47, 1.	1.6	0
171	Lagrangian and Eulerian accelerations in turbulent stratified shear flows. Physical Review Fluids, 2021, 6, .	2.5	0
172	Decaying 2D Turbulence in Bounded Domains: Influence of the Geometry. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2008, , 249-253.	0.2	0
173	Coherent enstrophy production and dissipation in 2D turbulence with and without walls. Springer Proceedings in Physics, 2009, , 909-909.	0.2	0
174	On the Role of Coherent Structures in a Lid Driven Cavity Flow. Notes on Numerical Fluid Mechanics and Multidisciplinary Design, 2010, , 207-214.	0.3	0
175	Space-Time Adaptive Multiresolution Techniques for Compressible Euler Equations. , 2013, , 101-117.		0
176	Video: Bumblebee flight in turbulence: high resolution numerical simulations. , 0, , .		0
177	An adaptive multiresolution scheme with second order local time-stepping for reaction-diffusion equations. Journal of Applied Nonlinear Dynamics, 2018, 7, 287-295.	0.3	0
178	Extraction of coherent vortex tubes in a 3D turbulent mixing layer using orthogonal wavelets. , 2002, , 211-216.		0
179	Contribution of Coherent and Incoherent Vorticity Fields to High Reynolds Number Homogeneous Isotropic Turbulence : a Wavelet Viewpoint. , 2007, , 535-536.		0
180	Final states of decaying 2D turbulence in di3erent geometries with no-slip walls. , 2007, , 147-149.		0

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181	Effect of shaping on turbulent dynamics in reversed-field pinch simulations. Journal of Plasma Physics, 2021, 87, .	2.1	0