Joachim Peinke

List of Publications by Year in Descending Order

398 papers	7,271 citations	40 h-index	71 g-index
429 ext. papers	8,295 ext. citations	2.5 avg, IF	5.99 L-index

#	Paper	IF	Citations
398	Application of the Townsend-George theory for free shear flows to single and double wind turbine wakes – a wind tunnel study. *Wind Energy Science*, **2022**, 7, 201-219	3.2	0
397	Reduction and analysis of rotor blade misalignments on a model wind turbine. *Journal of Physics: Conference Series*, **2022**, 2265, 022071	0.3	2
396	How long can constant wind speed periods last in the turbulent atmospheric boundary layer?. *Journal of Physics: Conference Series*, **2022**, 2265, 022036	0.3	
395	Experimental Investigation on the Effect of Lateral Turbine Spacing on Interactions of Wakes. *Journal of Physics: Conference Series*, **2022**, 2265, 042064	0.3	
394	Surrogate modelling of wind fields from point-wise atmospheric turbulence measurements. *Journal of Physics: Conference Series*, **2022**, 2265, 022026	0.3	1
393	Energy Dissipation and Total Entropy Production in SHREK Experiment. *Springer Proceedings in Physics*, **2021**, 57-63	0.2	
392	An investigation of the impact of turbulence intermittency on the rotor loads of a small wind turbine. *Renewable Energy*, **2021**, 169, 582-597	8.1	1
391	Exploring the capabilities of active grids. *Experiments in Fluids*, **2021**, 62, 1	2.5	3
390	Evaluating Global Blockage engineering parametrizations with LES. *Journal of Physics: Conference Series*, **2021**, 1934, 012021	0.3	4
389	Application of the Townsend-George wake theory to field measurements of wind turbine wakes. *Journal of Physics: Conference Series*, **2021**, 1934, 012004	0.3	2
388	Experimental investigation of an active slat for airfoil load alleviation. *Journal of Renewable and Sustainable Energy*, **2021**, 13, 043304	2.5	2
387	Pressure-based lift estimation and its application to feedforward load control employing trailing-edge flaps. *Wind Energy Science*, **2021**, 6, 221-245	3.2	6
386	Cutting-Edge Turbulence Simulation Methods for Wind Energy and Aerospace Problems. *Fluids*, **2021**, 6, 288	1.6	3
385	Comparison of the turbulence in the wakes of an actuator disc and a model wind turbine by higher order statistics: A wind tunnel study. *Renewable Energy*, **2021**, 179, 1650-1662	8.1	3
384	Introduction to Turbulence **2021**, 1-27		
383	Numerical Estimation of Anti-icing Heating Power for NREL 5MW Wind Turbine Blades in Cold Climate. *Journal of Physics: Conference Series*, **2020**, 1618, 052075	0.3	
382	Distinct Turbulent Regions in the Wake of a Wind Turbine and Their Inflow-Dependent Locations: The Creation of a Wake Map. *Energies*, **2020**, 13, 5392	3.1	7

381	Disentangling stochastic signals superposed on short localized oscillations. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2020**, 384, 126307	2.3	2
380	Wind turbine partial wake merging description and quantification. *Wind Energy*, **2020**, 23, 1610-1618	3.4	7
379	Correlated power time series of individual wind turbines: A data driven model approach. *Journal of Renewable and Sustainable Energy*, **2020**, 12, 023301	2.5	3
378	Small scale structures of turbulence in terms of entropy and fluctuation theorems. *Physical Review Fluids*, **2020**, 5,	2.8	2
377	Multipoint reconstruction of wind speeds. *Wind Energy Science*, **2020**, 5, 1211-1223	3.2	3
376	Generation of Atmospheric Turbulence with Unprecedentedly Large Reynolds Number in a Wind Tunnel. *Physical Review Letters*, **2020**, 125, 154503	7.4	3
375	Experimental study of fluid-structure interaction at a model wind turbine blade using optical measurement techniques. *Journal of Physics: Conference Series*, **2020**, 1618, 032025	0.3	0
374	Fluid-structure coupled investigations of the NREL 5 MW wind turbine for two downwind configurations. *Renewable Energy*, **2020**, 146, 1113-1123	8.1	5
373	Fluid Dynamics: Turbulence **2020**, 107-131		1
372	Round-robin tests of porous disc models. *Journal of Physics: Conference Series*, **2019**, 1256, 012004	0.3	7
371	Wind turbine wake intermittency dependence on turbulence intensity and pitch motion. *Journal of Renewable and Sustainable Energy*, **2019**, 11, 053302	2.5	8
370	Micro-scale wind resource assessment in complex terrain based on CFD coupled measurement from multiple masts. *Applied Energy*, **2019**, 238, 806-815	10.7	27
369	A Rigorous Entropy Law for the Turbulent Cascade. *ERCOFTAC Series*, **2019**, 17-25	0.1	0
368	Propagation of wind-power-induced fluctuations in power grids. *Physical Review E*, **2019**, 99, 050301	2.4	25
367	Detecting Hidden Units and Network Size from Perceptible Dynamics. *Physical Review Letters*, **2019**, 122, 158301	7.4	12
366	Multi-scale/fractal processes in the wake of a wind turbine array boundary layer. *Journal of Turbulence*, **2019**, 20, 93-120	2.1	12
365	Insights into the periodic gust response of airfoils. *Journal of Fluid Mechanics*, **2019**, 876, 237-263	3.7	21
364	Grand challenges in the science of wind energy. *Science*, **2019**, 366,	33.3	198

363	Wind turbine load dynamics in the context of turbulence intermittency. *Wind Energy Science*, **2019**, 4, 581-594	3.2	6
362	Scaling Laws and Intermittency in Cryogenic Turbulence Using SHREK Experiment. *Springer Proceedings in Physics*, **2019**, 179-184	0.2	0
361	Turbulence Generation by Active Grids. *Springer Proceedings in Physics*, **2019**, 191-196	0.2	2
360	Turbulent velocity measurements in high Reynolds cryogenic helium facilities at Service des Basses Temp□atures (SBT). *IOP Conference Series: Materials Science and Engineering*, **2019**, 502, 012201	0.4	1
359	Residual Predictive Information Flow in the Tight Coupling Limit: Analytic Insights from a Minimalistic Model. *Entropy*, **2019**, 21, 1010	2.8	1
358	Bridging between load-flow and Kuramoto-like power grid models: A flexible approach to integrating electrical storage units. *Chaos*, **2019**, 29, 103151	3.3	7
357	Heterogeneities in electricity grids strongly enhance non-Gaussian features of frequency fluctuations under stochastic power input. *Chaos*, **2019**, 29, 103149	3.3	12
356	A topology-dynamics-based control strategy for multi-dimensional complex networked dynamical systems. *Scientific Reports*, **2019**, 9, 19831	4.9	1
355	The Fokker□Planck Approach to Complex Spatiotemporal Disordered Systems. *Annual Review of Condensed Matter Physics*, **2019**, 10, 107-132	19.7	21
354	Adaptation of reference volumes for correlation-based digital holographic particle tracking. *Measurement Science and Technology*, **2018**, 29, 045207	2	1
353	Aerodynamics and Percolation: Unfolding Laminar Separation Bubble on Airfoils. *Physical Review X*, **2018**, 8,	9.1	1
352	Analyzing a stochastic process driven by Ornstein-Uhlenbeck noise. *Physical Review E*, **2018**, 97, 012113	2.4	12
351	The footprint of atmospheric turbulence in power grid frequency measurements. *Europhysics Letters*, **2018**, 121, 30001	1.6	20
350	Investigation of the small-scale statistics of turbulence in the Modane S1MA wind tunnel. *CEAS Aeronautical Journal*, **2018**, 9, 269-281	1.3	13
349	Optimization of Airfoils Using the Adjoint Approach and the Influence of Adjoint Turbulent Viscosity. *Computation*, **2018**, 6, 5	2.2	6
348	Stochastic Wake Modelling Based on POD Analysis. *Energies*, **2018**, 11, 612	3.1	23
347	An engineering model for wind turbines under yawed conditions derived from high fidelity models. *Wind Energy*, **2018**, 21, 618-633	3.4	18
346	Optimize Rotating Wind Energy Rotor Blades Using the Adjoint Approach. *Applied Sciences (Switzerland)*, **2018**, 8, 1112	2.6	4

345	On universal features of the turbulent cascade in terms of non-equilibrium thermodynamics. *Journal of Fluid Mechanics*, **2018**, 848, 117-153	3.7	14
344	Wind tunnel experiments on wind turbine wakes in yaw: redefining the wake width. *Wind Energy Science*, **2018**, 3, 257-273	3.2	33
343	Wind tunnel experiments on wind turbine wakes in yaw: effects of inflow turbulence and shear. *Wind Energy Science*, **2018**, 3, 329-343	3.2	38
342	Remote surface damage detection on rotor blades of operating wind turbines by means of infrared thermography. *Wind Energy Science*, **2018**, 3, 639-650	3.2	6
341	Blind test comparison on the wake behind a yawed wind turbine. *Wind Energy Science*, **2018**, 3, 883-903	3.2	16
340	Dynamics and Synchronisation in Wind Farms **2018**, 383-388		1
339	Investigation of the validity of the Blade Element Momentum Theory for wind turbine simulations in turbulent inflow by means of Computational Fluid Dynamics. *Journal of Physics: Conference Series* , **2018**, 1102, 012012	0.3	1
338	High speed PIV measurements of an adaptive camber airfoil under highly gusty inflow conditions. *Journal of Physics: Conference Series*, **2018**, 1037, 072007	0.3	3
337	A comparative analysis of built environment and open terrain wind data by higher order statistics and performance evaluation of 5 kW HAWT using FAST. *Journal of Physics: Conference Series*, **2018**, 1037, 072022	0.3	
336	Validating subspace predictive repetitive control under turbulent wind conditions with wind tunnel experiment. *Journal of Physics: Conference Series*, **2018**, 1037, 032008	0.3	1
335	Generation of user defined turbulent inflow conditions by an active grid for validation experiments. *Journal of Physics: Conference Series*, **2018**, 1037, 052002	0.3	14
334	Comparison of the Blade Element Momentum Theory with Computational Fluid Dynamics for Wind Turbine Simulations in Turbulent Inflow. *Applied Sciences (Switzerland)*, **2018**, 8, 2513	2.6	5
333	On the effect of blade deformations on the aerodynamic performance of wind turbine rotors subjected to yawed inflow. *Journal of Physics: Conference Series*, **2018**, 1037, 022030	0.3	
332	Mitigating loads by means of an active slat. *Journal of Physics: Conference Series*, **2018**, 1037, 022032	0.3	2
331	Fatigue load estimations of intermittent wind dynamics based on a Blade Element Momentum method. *Journal of Physics: Conference Series*, **2018**, 1037, 072040	0.3	11
330	Fluid-structure coupled computations of the NREL 5 MW wind turbine by means of CFD. *Renewable Energy*, **2018**, 129, 591-605	8.1	32
329	Dynamic wake development of a floating wind turbine in free pitch motion subjected to turbulent inflow generated with an active grid. *Renewable Energy*, **2017**, 112, 1-16	8.1	18
328	Modelling the structural loading of a small wind turbine at a highly turbulent site via modifications to the Kaimal turbulence spectra. *Renewable Energy*, **2017**, 105, 288-300	8.1	19

327	Note on the limitations of the Theodorsen and Sears functions. *Journal of Fluid Mechanics*, **2017**, 811,	3.7	19
326	Conditional Granger causality of diffusion processes. *European Physical Journal B*, **2017**, 90, 1	1.2	4
325	Comparative study on the wake deflection behind yawed wind turbine models. *Journal of Physics: Conference Series*, **2017**, 854, 012032	0.3	16
324	Suppressing power output fluctuations of photovoltaic power plants. *Solar Energy*, **2017**, 157, 735-743	6.8	17
323	The impact of turbulent renewable energy production on power grid stability and quality. *European Physical Journal B*, **2017**, 90, 1	1.2	46
322	Parameter-free resolution of the superposition of stochastic signals. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2017**, 381, 194-206	2.3	11
321	Rogue waves and entropy consumption. *Europhysics Letters*, **2017**, 120, 30008	1.6	6
320	Normal Behaviour Models for Wind Turbine Vibrations: Comparison of Neural Networks and a Stochastic Approach. *Energies*, **2017**, 10, 1944	3.1	34
319	On the impact of non-Gaussian wind statistics on wind turbines an experimental approach. *Wind Energy Science*, **2017**, 2, 1-13	3.2	26
318	Brief communication: On the influence of vertical wind shear on the combined power output of two model wind turbines in yaw. *Wind Energy Science*, **2017**, 2, 439-442	3.2	9
317	Percolation: Statistical Description of a Spatial and Temporal Highly Resolved Boundary Layer Transition. *Springer Proceedings in Physics*, **2017**, 11-16	0.2	
316	Comparison of the Development of a Wind Turbine Wake Under Different Inflow Conditions. *Springer Proceedings in Physics*, **2017**, 177-182	0.2	
315	Wake to wake interaction of floating wind turbine models in free pitch motion: An eddy viscosity and mixing length approach. *Renewable Energy*, **2016**, 85, 666-676	8.1	30
314	Granger-causality maps of diffusion processes. *Physical Review E*, **2016**, 93, 022213	2.4	9
313	Navier-Stokes-based predictions of the aerodynamic behaviour of stall regulated wind turbines using OpenFOAM. *Progress in Computational Fluid Dynamics*, **2016**, 16, 339	0.7	5
312	Design and implementation of a controllable model wind turbine for experimental studies. *Journal of Physics: Conference Series*, **2016**, 753, 072030	0.3	10
311	Capturing rogue waves by multi-point statistics. *New Journal of Physics*, **2016**, 18, 013017	2.9	12
310	Investigation of the validity of BEM for simulation of wind turbines in complex load cases and comparison with experiment and CFD. *Journal of Physics: Conference Series*, **2016**, 749, 012015	0.3	10

309	DDES and URANS comparison of the NREL phase-VI wind turbine at deep stall **2016**,		3
308	Towards the optimization of wind turbine rotor blades by means of computational fluid dynamics and the adjoint approach **2016**,		1
307	Stochastic Analysis of a Fractal Grid Wake. *CISM International Centre for Mechanical Sciences, Courses and Lectures*, **2016**, 165-177	0.6	0
306	Development and application of a grid generation tool for aerodynamic simulations of wind turbines. *Wind Engineering*, **2016**, 40, 148-172	1.2	13
305	Progress in Turbulence VI. *Springer Proceedings in Physics*, **2016**,	0.2	2
304	Analysis of Noisy Spatio-Temporal Data. *Understanding Complex Systems*, **2016**, 319-324	0.4	
303	Wind tunnel tests on controllable model wind turbines in yaw **2016**,		14
302	Particle depth position detection by 2D correlation in digital in-line holography. *Optics Letters*, **2016**, 41, 4947-4950	3	5
301	Long-term research challenges in wind energy – a research agenda by the European Academy of Wind Energy. *Wind Energy Science*, **2016**, 1, 1-39	3.2	103
300	Detailed analysis of the blade root flow of a horizontal axis wind turbine. *Wind Energy Science*, **2016**, 1, 89-100	3.2	21
299	The Langevin Approach: An R Package for Modeling Markov Processes. *Journal of Open Research Software*, **2016**, 4,	2.3	12
298	Numerical and experimental investigation of an airfoil with load control in the wake of an active grid. *Journal of Physics: Conference Series*, **2016**, 753, 022036	0.3	1
297	Short term fluctuations of wind and solar power systems. *New Journal of Physics*, **2016**, 18, 063027	2.9	106
296	Effects of particle locations on reconstructed particle images in digital holography. *Applied Optics*, **2016**, 55, 9532-9545	0.2	3
295	Experimental airfoil characterization under tailored turbulent conditions. *Journal of Physics: Conference Series*, **2016**, 753, 072020	0.3	5
294	Simulation and Optimization of an Airfoil with Leading Edge Slat. *Journal of Physics: Conference Series*, **2016**, 753, 022052	0.3	10
293	Phase locking of wind turbines leads to intermittent power production. *Europhysics Letters*, **2016**, 116, 60009	1.6	3
292	Disentangling the stochastic behavior of complex time series. *Scientific Reports*, **2016**, 6, 35435	4.9	34

291	Investigation of the current yaw engineering models for simulation of wind turbines in BEM and comparison with CFD and experiment. *Journal of Physics: Conference Series*, **2016**, 753, 022016	0.3	13
290	Fluid-structure coupled computations of the NREL 5MW wind turbine blade during standstill. *Journal of Physics: Conference Series*, **2016**, 753, 022034	0.3	5
289	Application of an Integral Fluctuation Theorem to Turbulent Flows. *Springer Proceedings in Physics*, **2016**, 19-25	0.2	2
288	Gradual wavelet reconstruction of the velocity increments for turbulent wakes. *Physics of Fluids*, **2015**, 27, 025104	4.4	14
287	Dynamics of quasi-stationary systems: Finance as an example. *Europhysics Letters*, **2015**, 110, 68003	1.6	11
286	Towards a Simplified DynamicWake Model Using POD Analysis. *Energies*, **2015**, 8, 895-920	3.1	24
285	Stochastic analysis of aerodynamic forces acting on a self-adaptive camber airfoil in turbulent inflow **2015**,		1
284	Fully developed turbulence in the view of horizontal visibility graphs. *Journal of Statistical Mechanics: Theory and Experiment*, **2015**, 2015, P08031	1.9	25
283	Stability and hierarchy of quasi-stationary states: financial markets as an example. *Journal of Statistical Mechanics: Theory and Experiment*, **2015**, 2015, P08011	1.9	13
282	Analyzing a stochastic time series obeying a second-order differential equation. *Physical Review E*, **2015**, 91, 062113	2.4	4
281	Characterizing Wake Turbulence with Staring Lidar Measurements. *Journal of Physics: Conference Series*, **2015**, 625, 012006	0.3	12
280	A new approach to highly resolved measurements of turbulent flow. *Measurement Science and Technology*, **2015**, 26, 055302	2	5
279	Langevin power curve analysis for numerical wind energy converter models with new insights on high frequency power performance. *Wind Energy*, **2015**, 18, 1953-1971	3.4	7
278	The Langevin Approach: A Simple Stochastic Method for Complex Phenomena. *Mathematical Engineering*, **2015**, 125-141	0.8	1
277	Stochastic modeling of driver behavior by Langevin equations. *European Physical Journal B*, **2015**, 88, 1	1.2	0
276	Stochastic Model for Aerodynamic Force Dynamics on Wind Turbine Blades in Unsteady Wind Inflow. *Journal of Computational and Nonlinear Dynamics*, **2015**, 10,	1.4	1
275	Stochastic modeling of lift and drag dynamics under turbulent wind inflow conditions. *Wind Energy*, **2015**, 18, 317-337	3.4	5
274	The aeroacoustic behavior of a cylindrical surface with a small cavity. *Experiments in Fluids*, **2014**, 55, 1	2.5	1

273	Kolmogorov spectrum of renewable wind and solar power fluctuations. *European Physical Journal: Special Topics*, **2014**, 223, 2637-2644	2.3	26
272	Stochastic analysis of ocean wave states with and without rogue waves. *New Journal of Physics*, **2014**, 16, 053037	2.9	10
271	Aerodynamic Simulation of the MEXICO Rotor. *Journal of Physics: Conference Series*, **2014**, 555, 012051	0.3	5
270	Highly resolved measurements of atmospheric turbulence with the new 2d-Atmospheric Laser Cantilever Anemometer. *Journal of Physics: Conference Series*, **2014**, 555, 012054	0.3	2
269	Reconstructing the intermittent dynamics of the torque in wind turbines. *Journal of Physics: Conference Series*, **2014**, 524, 012179	0.3	1
268	Stochastic modeling and performance monitoring of wind farm power production. *Journal of Renewable and Sustainable Energy*, **2014**, 6, 033119	2.5	23
267	2D Numerical Investigation of the Laminar and Turbulent Flow Over Different Airfoils Using OpenFOAM. *Journal of Physics: Conference Series*, **2014**, 555, 012070	0.3	10
266	POD Analysis of a Wind Turbine Wake in a Turbulent Atmospheric Boundary Layer. *Journal of Physics: Conference Series*, **2014**, 524, 012153	0.3	8
265	Insight into Rotational Effects on a Wind Turbine Blade Using Navier-Stokes Computations. *Energies*, **2014**, 7, 6798-6822	3.1	31
264	Fatigue Load Estimation through a Simple Stochastic Model. *Energies*, **2014**, 7, 8279-8293	3.1	24
263	Experimental Study on Influence of Pitch Motion on the Wake of a Floating Wind Turbine Model. *Energies*, **2014**, 7, 1954-1985	3.1	39
262	Wind Energy: A Turbulent, Intermittent Resource. *Research Topics in Wind Energy*, **2014**, 73-78	0.2	4
261	Self-organized synchronization and voltage stability in networks of synchronous machines. *European Physical Journal: Special Topics*, **2014**, 223, 2577-2592	2.3	57
260	Progress in Turbulence V. *Springer Proceedings in Physics*, **2014**,	0.2	2
259	DES Study of Airfoil Lift Coefficient Sensitivity to Flow Turbulence. *Research Topics in Wind Energy*, **2014**, 9-15	0.2	
258	Stochastic nature of series of waiting times. *Physical Review E*, **2013**, 87, 062139	2.4	8
257	Multi-scale generation of turbulence with fractal grids and an active grid. *Fluid Dynamics Research*, **2013**, 45, 061407	1.2	29
256	Stochastic method for in-situ damage analysis. *European Physical Journal B*, **2013**, 86, 1	1.2	10

255	Turbulent character of wind energy. *Physical Review Letters*, **2013**, 110, 138701	7.4	142
254	Scale dependence of the directional relationships between coupled time series. *Journal of Statistical Mechanics: Theory and Experiment*, **2013**, 2013, P02042	1.9	2
253	Wind Turbine Power Performance and Application to Monitoring. *Energy Systems*, **2013**, 673-708	0.4	1
252	The level crossing and inverse statistic analysis of German stock market index (DAX) and daily oil price time series. *Physica A: Statistical Mechanics and Its Applications*, **2012**, 391, 209-216	3.3	5
251	A Generalization of Scaling Models of Turbulence. *Journal of Statistical Physics*, **2012**, 146, 25-32	1.5	3
250	The Turbulent Flow in the Close-Up Region of Fractal Grids. *Springer Proceedings in Physics*, **2012**, 151-154	0.2	
249	A classification scheme for turbulence based on the velocity-intermittency structure with an application to near-wall flow and with implications for bed load transport. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		23
248	Multiscale probability distribution of pressure fluctuations in fluidized beds. *Journal of Statistical Mechanics: Theory and Experiment*, **2012**, 2012, P07008	1.9	2
247	Characterization of wind turbulence by higher-order statistics. *Wind Energy*, **2012**, 15, 391-406	3.4	64
246	Wake classification of heaving airfoils using the spectral/hp element method. *Journal of Computational and Applied Mathematics*, **2012**, 236, 3774-3782	2.4	5
245	The turbulent nature of the atmospheric boundary layer and its impact on the wind energy conversion process. *Journal of Turbulence*, **2012**, 13, N26	2.1	32
244	Investigations of Cavity Noise Generation on a Cylinder. *Springer Proceedings in Physics*, **2012**, 119-122	0.2	1
243	The Relevance of Turbulence for Wind Energy Related Research. *Springer Proceedings in Physics*, **2012**, 247-250	0.2	1
242	Numerical Modeling of a WECs Power Performance under the Influence of Atmospheric and Synthetic Wind Fields. *Springer Proceedings in Physics*, **2012**, 167-170	0.2	
241	Multi-scale Analysis of Turbulence in CFD-Simulations. *Springer Proceedings in Physics*, **2012**, 41-44	0.2	
240	Optimization of a Digital In-line Holography Setup Used with a High-Speed Camera. *Springer Proceedings in Physics*, **2012**, 97-100	0.2	
239	Development of Highly Resolving Drag Based Anemometers. *Springer Proceedings in Physics*, **2012**, 101-104	0.2	
238	Wind Energy and the Turbulent Nature of the Atmospheric Boundary Layer **2011**,		1

237	New anemometer for offshore use. *Journal of Physics: Conference Series*, **2011**, 318, 072015	0.3	1
236	Turbulence and wind turbines. *Journal of Physics: Conference Series*, **2011**, 318, 072005	0.3	11
235	Towards a stochastic multi-point description of turbulence. *Journal of Physics: Conference Series*, **2011**, 318, 042012	0.3	1
234	Approaching complexity by stochastic methods: From biological systems to turbulence. *Physics Reports*, **2011**, 506, 87-162	27.7	207
233	High-order numerical simulations of the flow around a heaving airfoil. *Computers and Fluids*, **2011**, 51, 68-84	2.8	12
232	Atmospheric wind field conditions generated by active grids. *Experiments in Fluids*, **2011**, 51, 471-481	2.5	44
231	Atmospheric turbulence and its influence on the alternating loads on wind turbines. *Wind Energy*, **2011**, 14, 301-316	3.4	92
230	Power performance of wind energy converters characterized as stochastic process: applications of the Langevin power curve. *Wind Energy*, **2011**, 14, 711-717	3.4	11
229	Different methods to estimate the Einstein-Markov coherence length in turbulence. *Physical Review E*, **2011**, 83, 046319	2.4	3
228	Principal axes for stochastic dynamics. *Physical Review E*, **2011**, 84, 031103	2.4	10
227	Defining a new class of turbulent flows. *Physical Review Letters*, **2010**, 104, 194501	7.4	48
226	Extracting strong measurement noise from stochastic time series: applications to empirical data. *Physical Review E*, **2010**, 81, 041125	2.4	19
225	Towards a stochastic multi-point description of turbulence. *New Journal of Physics*, **2010**, 12, 103046	2.9	30
224	Multi-scale description and prediction of financial time series. *New Journal of Physics*, **2010**, 12, 083021	2.9	11
223	Anomalous fluctuations of vertical velocity of Earth and their possible implications for earthquakes. *Physical Review E*, **2010**, 82, 036105	2.4	12
222	Drift and diffusion based models of driver behavior. *European Physical Journal B*, **2010**, 76, 99-107	1.2	3
221	Power curves for wind turbines. *WIT Transactions on State-of-the-art in Science and Engineering*, **2010**, 595-612		2
220	Characterization of short time fluctuations in atmospheric wind speeds by LIDAR measurements. *Meteorologische Zeitschrift*, **2009**, 18, 277-280	3.1	6

219	Exploring the dynamics of balance data movement variability in terms of drift and diffusion. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2009**, 373, 811-816	2.3	16
218	Dynamic Stall Measurements. *Proceedings in Applied Mathematics and Mechanics*, **2009**, 9, 447-448	0.2	
217	Measurements with a 2D Laser-Cantilever-Anemometer compared to an x-wire probe. *Proceedings in Applied Mathematics and Mechanics*, **2009**, 9, 461-462	0.2	1
216	Mapping stochastic processes onto complex networks. *Journal of Statistical Mechanics: Theory and Experiment*, **2009**, 2009, P07046	1.9	55
215	Turbulencelike behavior of seismic time series. *Physical Review Letters*, **2009**, 102, 014101	7.4	47
214	Spatial Multi-Point Correlations in Inhomogeneous Turbulence. *Springer Proceedings in Physics*, **2009**, 33-36	0.2	1
213	Impact of Atmospheric Turbulence on the Power Output of Wind Turbines. *Springer Proceedings in Physics*, **2009**, 95-98	0.2	1
212	Synthetic Turbulence Models for Wind Turbine Applications. *Springer Proceedings in Physics*, **2009**, 111-114	0.2	6
211	Active grid generated turbulence. *Springer Proceedings in Physics*, **2009**, 903-903	0.2	2
210	Stochastic Analysis of Turbulence n-Scale Correlations in Regular and Fractal-Generated Turbulence. *Springer Proceedings in Physics*, **2009**, 49-52	0.2	
209	Multi-scale correlations in regular and fractal-generated turbulence. *Springer Proceedings in Physics*, **2009**, 711-714	0.2	
208	Using the 2D Laser-Cantilever-Anemometer for Two-Dimensional Measurements in Turbulent Flows. *Springer Proceedings in Physics*, **2009**, 61-64	0.2	1
207	Measurement of Lagrangian Particle Trajectories by Digital in-line Holography. *Springer Proceedings in Physics*, **2009**, 39-42	0.2	
206	The Sphere Anemometer A Fast Alternative to Cup Anemometry. *Springer Proceedings in Physics*, **2009**, 69-72	0.2	
205	How to improve the estimation of power curves for wind turbines. *Environmental Research Letters*, **2008**, 3, 015005	6.2	66
204	On the definition and handling of different drift and diffusion estimates. *New Journal of Physics*, **2008**, 10, 083034	2.9	50
203	Wind velocity measurements using a pulsed LIDAR system: first results. *IOP Conference Series: Earth and Environmental Science*, **2008**, 1, 012066	0.3	5
202	Increase of order in seismic processes around large reservoir induced by water level periodic variation. *Nonlinear Dynamics*, **2008**, 51, 399-407	5	19

201	Markovian power curves for wind turbines. *Wind Energy*, **2008**, 11, 219-232	3.4	34
200	Multiscale analysis and reconstruction of time series of stochastic cascade processes. *Proceedings in Applied Mathematics and Mechanics*, **2008**, 8, 10769-10770	0.2	
199	Multi-Scale Analysis of Turbulence. *IUTAM Symposium on Cellular, Molecular and Tissue Mechanics*, **2008**, 99-104	0.3	
198	Medium and small-scale analysis of financial data. *Physica A: Statistical Mechanics and Its Applications*, **2007**, 382, 193-198	3.3	8
197	Complete multiplier statistics explained by stochastic cascade processes. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2007**, 371, 34-38	2.3	1
196	Dynamic stall measurements on airfoils. *Proceedings in Applied Mathematics and Mechanics*, **2007**, 7, 4090021-4090022	0.2	
195	Slowly mixing cylinder in a cone-shaped nozzle. *Experiments in Fluids*, **2007**, 42, 811-814	2.5	1
194	Small and large scale fluctuations in atmospheric wind speeds. *Stochastic Environmental Research and Risk Assessment*, **2007**, 21, 299-308	3.5	68
193	Dynamic lift measurements on a FX79W151A airfoil via pressure distribution on the wind tunnel walls. *Journal of Physics: Conference Series*, **2007**, 75, 012026	0.3	6
192	Markov properties in presence of measurement noise. *Physical Review E*, **2007**, 76, 041109	2.4	12
191	Improved estimation of Fokker-Planck equations through optimization. *Physical Review E*, **2007**, 76, 056102	2.4	23
190	Sphere anemometer - a faster alternative solution to cup anemometry. *Journal of Physics: Conference Series*, **2007**, 75, 012064	0.3	6
189	Stochastic modelling of a wind turbine's power output with special respect to turbulent dynamics. *Journal of Physics: Conference Series*, **2007**, 75, 012045	0.3	16
188	Analysing flow structures around a blade using spectral/hp method and HPIV. *Journal of Physics: Conference Series*, **2007**, 75, 012025	0.3	
187	Markov analysis and Kramers-Moyal expansion of nonstationary stochastic processes with application to the fluctuations in the oil price. *Physical Review E*, **2007**, 75, 060102	2.4	41
186	Multiplier Statistics Explained by Stochastic Cascade Processes **2007**, 53-56		
185	Statistics of the Temperature Fluctuations as a Passive Scalar in a Freejet Experiment **2007**, 103-106		
184	Superposition Model for Atmospheric Turbulence **2007**, 115-118		

183	Numerical Simulation of Dynamic Stall using Spectral/hp Method **2007**, 241-244		
182	Anemometry in Snow Particle Flows **2007**, 75-78		1
181	Phenomenological Response Theory to Predict Power Output **2007**, 153-158		3
180	Characterisation of the Power Curve for Wind Turbines by Stochastic Modelling **2007**, 173-177		3
179	Handling Systems Driven by Different Noise Sources: Implications for Power Curve Estimations **2007**, 179-182		6
178	Modelling Turbulence Intensities Inside Wind Farms **2007**, 253-257		1
177	Stochastic Analysis and New Insights into Turbulence **2007**, 494-496		1
176	Reconstruction of complex dynamical systems affected by strong measurement noise. *Physical Review Letters*, **2006**, 97, 090603	7.4	55
175	Joint multi-scale statistics of longitudinal and transversal increments in small-scale wake turbulence. *Journal of Turbulence*, **2006**, 7, N50	2.1	8
174	STATISTICAL PROPERTIES OF THE INTERBEAT INTERVAL CASCADE IN HUMAN HEARTS. *International Journal of Modern Physics C*, **2006**, 17, 571-580	1.1	9
173	Fully developed turbulent dynamo at low magnetic Prandtl numbers. *Journal of Turbulence*, **2006**, 7, N39	2.1	33
172	New computational approaches to the analysis of interbeat intervals in human subjects. *Computing in Science and Engineering*, **2006**, 8, 54-65	1.5	15
171	Influence of periodic variations in water level on regional seismic activity around a large reservoir: Field data and laboratory model. *Physics of the Earth and Planetary Interiors*, **2006**, 156, 130-142	2.3	26
170	Short-Term Prediction of Mediumand Large-Size Earthquakes Based on Markov and Extended Self-Similarity Analysis of Seismic Data **2006**, 281-301		4
169	Using laser-cantilever anemometry under various flow conditions. *Proceedings in Applied Mathematics and Mechanics*, **2006**, 6, 525-526	0.2	
168	Longitudinal and transversal two-point correlations in a turbulent flow. *Proceedings in Applied Mathematics and Mechanics*, **2006**, 6, 551-552	0.2	
167	Stochastic Modelling of Wind Speed Power Production Correlations. *Proceedings in Applied Mathematics and Mechanics*, **2006**, 6, 665-666	0.2	3
166	The Markov-Einstein coherence length—a new meaning for the Taylor length in turbulence. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 359, 335-338	2.3	50

165	Multiscale reconstruction of time series. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2006**, 360, 234-237	2.3	32
164	Small scale behavior of financial data. *European Physical Journal B*, **2006**, 50, 147-151	1.2	4
163	Analysis of non-stationary data for heart-rate fluctuations in terms of drift and diffusion coefficients. *Journal of Biological Physics*, **2006**, 32, 117-28	1.6	35
162	Stochastic analysis of single particle segregational dynamics. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 336, 428-433	2.3	9
161	An iterative procedure for the estimation of drift and diffusion coefficients of Langevin processes. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2005**, 346, 42-46	2.3	53
160	Regeneration of stochastic processes: an inverse method. *European Physical Journal B*, **2005**, 47, 411-415	1.2	27
159	Wind Gusts and Small Scale Intermittency in Atmospheric Flows. *Proceedings in Applied Mathematics and Mechanics*, **2005**, 5, 561-562	0.2	4
158	Analysis and characterization of surface topographies with the theory of Markov processes. *Proceedings in Applied Mathematics and Mechanics*, **2005**, 5, 701-702	0.2	
157	Laser-cantilever anemometer: A new high-resolution sensor for air and liquid flows. *Review of Scientific Instruments*, **2005**, 76, 075110	1.7	25
156	A Simple Relation Between Longitudinal and Transverse Increments **2005**, 63-66		
155	Laser-Cantilever-Anemometer **2005**, 129-132		
154	Different cascade speeds for longitudinal and transverse velocity increments of small-scale turbulence. *Physical Review E*, **2004**, 70, 015302	2.4	11
153	Increment definitions for scale-dependent analysis of stochastic data. *Physical Review E*, **2004**, 70, 055102	2.4	9
152	RECONSTRUCTION OF THE DETERMINISTIC DYNAMICS OF STOCHASTIC SYSTEMS. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **2004**, 14, 2005-2010	2	14
151	Stochastic analysis of different rough surfaces. *European Physical Journal B*, **2004**, 41, 259-277	1.2	42
150	Anomalous statistics in turbulence, financial markets and other complex systems. *Annalen Der Physik*, **2004**, 13, 450-460	2.6	16
149	Turbulence, a challenging problem for wind energy. *Physica A: Statistical Mechanics and Its Applications*, **2004**, 338, 187-193	3.3	34
148	A phenomenological model for the dynamic response of wind turbines to turbulent wind. *Journal of Wind Engineering and Industrial Aerodynamics*, **2004**, 92, 159-183	3.7	19

147	Fat Tail Statistics and Beyond. *Advances in Solid State Physics*, **2004**, 363-374		3
146	Stochastic analysis of surface roughness. *Europhysics Letters*, **2003**, 64, 579-585	1.6	28
145	On the Statistics of Wind Gusts. *Boundary-Layer Meteorology*, **2003**, 108, 163-173	3.4	68
144	On a quantitative method to analyze dynamical and measurement noise. *Europhysics Letters*, **2003**, 61, 466-472	1.6	75
143	Experimental indications for Markov properties of small scale turbulence. *Proceedings in Applied Mathematics and Mechanics*, **2002**, 1, 462	0.2	1
142	Stochastic modeling of fat-tailed probabilities of foreign exchange rates. *Complexity*, **2002**, 8, 34-42	1.6	14
141	Reconstruction of dynamical equations for traffic flow. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2002**, 299, 287-291	2.3	43
140	Comment on "Indispensable finite time corrections for Fokker-Planck equations from time series data". *Physical Review Letters*, **2002**, 89, 149401; author reply 149402	7.4	62
139	Universality of small scale turbulence. *Physical Review Letters*, **2002**, 89, 124502	7.4	48
138	Estimation of Deterministic and Stochastic Rules Underlying Fluctuating Data. *Studies in Computational Finance*, **2002**, 375-399		
137	Light-in-flight holography with switched reference beams for cross-correlation in deep volume PIV **2002**, 3-23		
136	Turbulence and Financial Market Data Analyzed with Respect to Their Scale Dependent Complexity **2002**, 151-169		
135	Evidence of Markov properties of high frequency exchange rate data. *Physica A: Statistical Mechanics and Its Applications*, **2001**, 298, 499-520	3.3	72
134	Experimental indications for Markov properties of small-scale turbulence. *Journal of Fluid Mechanics*, **2001**, 433, 383-409	3.7	176
133	On a Complete Statistical Characterization of Turbulence. *Fluid Mechanics and Its Applications*, **2001** , 107-116	0.2	1
132	Extracting model equations from experimental data. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2000**, 271, 217-222	2.3	154
131	MARKOV PROPERTIES OF HIGH FREQUENCY EXCHANGE RATE DATA. *International Journal of Theoretical and Applied Finance*, **2000**, 03, 415-416	0.5	3
130	Orientational transition in nematic liquid crystals under oscillatory Poiseuille flow. *Europhysics Letters*, **2000**, 51, 48-54	1.6	9

129	How to quantify deterministic and random influences on the statistics of the foreign exchange market. *Physical Review Letters*, **2000**, 84, 5224-7	7.4	154
128	Uniform Statistical Description of the Transition between Near and Far Field Turbulence in a Wake Flow. *Physical Review Letters*, **1999**, 83, 5495-5498	7.4	21
127	Determination of fokker-planck equations from experimental data sets of complex systems **1999**, 273-281		
126	A new method to characterize inhomogeneous turbulence **1999**, 361-364		0
125	On the statistics of small-scale turbulence and its universality **1999**, 353-360		
124	Analysis of data sets of stochastic systems. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1998**, 243, 275-280	2.3	208
123	Conditional statistics of velocity fluctuations in turbulence. *Physica D: Nonlinear Phenomena*, **1998**, 113, 73-78	3.3	24
122	A note on three-point statistics of velocity increments in turbulence. *Europhysics Letters*, **1998**, 41, 153-158	1.8	29
121	Improved multifractal box-counting algorithm, virtual phase transitions, and negative dimensions. *Physical Review E*, **1998**, 57, 5489-5493	2.4	21
120	Dynamics of disordered patterns in electroconvection of homeotropically aligned nematic liquid crystals. *Physical Review E*, **1998**, 58, 1983-1991	2.4	29
119	Formation of chevrons in the dielectric regime of electroconvection in nematic liquid crystals. *Physical Review E*, **1998**, 58, 2018-2026	2.4	29
118	Disordered structures analyzed by the theory of Markov processes **1998**, 313-326		4
117	Toward a better understanding of fractality in nature **1998**, 79-92		2
116	Unifying iteration rule for fractal objects. *Journal of Physics A*, **1997**, 30, 1887-1896		
115	Fokker-Planck equation for the energy cascade in turbulence. *Physical Review E*, **1997**, 56, 6719-6722	2.4	34
114	A New Approach to Characterize Disordered Structures. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1997**, 52, 588-592	1.4	5
113	Devisenmärkte und Turbulenz. *Physik Journal*, **1997**, 53, 339-340		1
112	Description of a Turbulent Cascade by a Fokker-Planck Equation. *Physical Review Letters*, **1997**, 78, 863-866	7.4	280

111	Scaling Properties of Traffic-flow Data. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1997**, 52, 600-604	1.4	17
110	Whispering Gallery Orbits in the Bunimovich Stadium. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1997**, 52, 581-584	1.4	2
109	Statistical properties of a turbulent cascade. *Physica D: Nonlinear Phenomena*, **1997**, 102, 147-155	3.3	72
108	Chaotic billiards seen as mirror cabinets. *Physica D: Nonlinear Phenomena*, **1997**, 102, 227-233	3.3	3
107	On the form invariance of phase length distributions of type-I intermittency observed in a low-temperature semiconductor experiment. *Europhysics Letters*, **1996**, 36, 675-680	1.6	2
106	Structure functions in turbulence, in various flow configurations, at Reynolds number between 30 and 5000, using extended self-similarity. *Europhysics Letters*, **1996**, 34, 411-416	1.6	197
105	Conditional probability distributions of a turbulent cascade **1996**, 54-62		
104	Statistical dependency of eddies of different sizes in turbulence. *Zeitschrift F Physik B-Condensed Matter*, **1996**, 101, 157-159		9
103	Turbulent cascades in foreign exchange markets. *Nature*, **1996**, 381, 767-770	50.4	479
102	Turbulence and Financial Markets. *Fluid Mechanics and Its Applications*, **1996**, 167-170	0.2	1
101	Multiplicative Process in Turbulent Velocity Statistics: A Simplified Analysis. *Journal De Physique II*, **1996**, 6, 455-460		14
100	Symmetry-breaking and fractal dependence on initial conditions in dynamical systems: One-dimensional noninvertible mappings. *Chaos, Solitons and Fractals*, **1995**, 5, 783-796	9.3	1
99	Dweiltime Analysis of Symmetry-Breaking Dynamical Systems. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1995**, 50, 1117-1122	1.4	1
98	Attractor Merging Crisis in the Double-Scroll Oscillator. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1995**, 50, 1105-1107	1.4	1
97	Transition toward developed turbulence. *Physical Review Letters*, **1994**, 73, 3227-3230	7.4	89
96	Type-I intermittency in semiconductor breakdown: An experimental confirmation. *Physical Review B* , **1994**, 49, 8738-8746	3.3	6
95	Velocity probability density functions in developed turbulence: A finite Reynolds theory. *Physica B: Condensed Matter*, **1994**, 194-196, 695-696	2.8	4
94	Turbulence at helium temperature: velocity measurements. *Physica B: Condensed Matter*, **1994**, 194-196, 697-698	2.8	4

93	On the Relation between Statistics of Scalar and Velocity Fluctuations in Developed Turbulence. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1994**, 49, 831-834	1.4	
92	Velocity intermittency in turbulence : how to objectively characterize it ?. *Journal De Physique II*, **1994**, 4, 215-224		12
91	Anemometry in gaseous 4He around 4 K. *Journal De Physique III*, **1994**, 4, 671-674		8
90	On chaos, fractals and turbulence. *Physica Scripta*, **1993**, T49B, 672-676	2.6	4
89	Stochastic Resonance in Experiment. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1993**, 48, 633-635	1.4	4
88	Experimental realization of mode locking during intrinsic quasiperiodicity in p-type germanium. *Physical Review B*, **1993**, 48, 12603-12608	3.3	2
87	Spatial coherence of nonlinear dynamics in a semiconductor experiment. *Physical Review B*, **1993**, 47, 115-124	3.3	3
86	Reaction Time to Voltage Pulses Applied to Semiconductor Impact Ionization Breakdown. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1993**, 48, 639-640	1.4	4
85	On a Fractal Model for Turbulence. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1993**, 48, 646-650	1.4	
84	Symbolic-dynamical analysis of a transition between different limit cycles observed in a semiconductor experiment. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1993**, 177, 148-152	2.3	1
83	Type-I intermittency in semiconductor breakdown - experimental consequences of bifurcations from a toroidal attractor. *Physica D: Nonlinear Phenomena*, **1993**, 66, 187-194	3.3	1
82	A hot wire anemometer for cryogenic hydrodynamic experiments. *Flow, Turbulence and Combustion* , **1993**, 51, 143-148		1
81	Logarithmic frequency scaling of semiconductor oscillations caused by a modified saddle-node bifurcation on a limit cycle. *European Physical Journal B*, **1993**, 91, 527-529	1.2	5
80	On Negative Differential Resistance and Spontaneous Dissipative Structure Formation in the Electric Break-Down of p-Ge at Low Temperatures. *NATO ASI Series Series B: Physics*, **1993**, 261-268		
79	An oscillation mechanism of semiconductor breakdown due to magnetic field induced transverse motion of current filaments. *Semiconductor Science and Technology*, **1992**, 7, B486-B487	1.8	1
78	Critical Dynamics of the Quasi-One-Dimensional Blue Bronze K 0.3 MoO 3 at Low Temperatures. *Europhysics Letters*, **1992**, 18, 125-131	1.6	9
77	Low-temperature avalanche breakdown in p-Ge: Influence of the acceptor concentration. *Journal of Applied Physics*, **1992**, 71, 3336-3338	2.5	5
76	A generic mechanism determining the fractality of basin boundary structures. *Physica A: Statistical Mechanics and Its Applications*, **1992**, 191, 571-575	3.3	

75	Spatial correlation of chaotic and hyperchaotic dynamics in a semiconductor experiment. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1992**, 164, 201-205	2.3	3
74	A hot wire anemometer for cryogenic hydrodynamic experiments. *Cryogenics*, **1992**, 32, 545-548	1.8	5
73	Encounter with Chaos **1992**,		68
72	Nonlinear Dynamics **1992**, 42-170		
71	Current Instabilites in the Interplay Between Chaos and Semiconductor Physics **1992**, 51-67		
70	Semiconductor Physics **1992**, 9-41		
69	Self-Organized Critical Dynamics and Phase Transition Behavior During Avalanche Breakdown in p-Germanium. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1991**, 46, 1009-1011	1.4	2
68	Reconstruction of traveling waves in semi-insulating GaAs. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1991**, 152, 356-360	2.3	9
67	Resonant imaging of a critical dynamical state in the low-temperature electric transport of p-Ge. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1991**, 153, 385-389	2.3	5
66	Phase transitions in experimental systems. *Physica D: Nonlinear Phenomena*, **1991**, 50, 405-411	3.3	15
65	Evidence of Type-III Intermittency in the Electric Breakdown of p -Type Germanium. *Europhysics Letters*, **1991**, 14, 1-6	1.6	19
64	Nowhere Differentiable Boundaries in Differentiable Systems. A Proposed Explanation. *Europhysics Letters*, **1991**, 14, 615-620	1.6	12
63	Classification of spontaneous oscillations at the onset of avalanche breakdown in p-type germanium. *Physical Review B*, **1991**, 43, 2255-2262	3.3	37
62	HOW TWO COMPETING CHARACTERISTIC EXPONENTS GENERATE DIFFERENT CLASSES OF FRACTAL BOUNDARIES. *International Journal of Bifurcation and Chaos in Applied Sciences and Engineering*, **1991**, 01, 599-604	2	4
61	Dynamics of current filaments in p-type germanium under the influence of a transverse magnetic field. *Journal of Applied Physics*, **1991**, 70, 232-235	2.5	22
60	Toward a better understanding of fractality in nature. *Computers and Graphics*, **1991**, 15, 583-596	1.8	2
59	On the Scaling of Type-1 Intermittency in a Semiconductor Experiment. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1991**, 46, 1012-1014	1.4	5
58	Spatio Temporal Correlations in Semiconductors **1991**, 145-176		4

57	First Evidence of Self-Organized Criticality in the Impact Ionization Breakdown of Semiconductors. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1990**, 45, 835-836	1.4	
56	Report: Nonequilibrium Phase Transitions of Impact Ionization Breakdown in Extrinsic Semiconductors. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1990**, 45, 1048-1050	1.4	
55	Observation of a Large-Scale Sheetlike Current Filament in a Thinn-GaAs Layer. *Journal of the Physical Society of Japan*, **1990**, 59, 420-423	1.5	21
54	Electron-beam induced instability during filamentary current transport inn-GaAs. *European Physical Journal B*, **1990**, 81, 53-58	1.2	18
53	Circuit-limited oscillation at the onset of avalanche breakdown in semiconductors. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1990**, 147, 229-233	2.3	11
52	Nascent states of current filamentation in semiconductors governed by negative differential resistance. *Solid State Communications*, **1990**, 73, 369-372	1.6	4
51	Existence of Nowhere Differentiable Boundaries in a Realistic Map. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1990**, 45, 1377-1379	1.4	2
50	Self-Organized Critical Behaviour in the Low-Temperature Impact Ionization Breakdown of p-Ge. *Europhysics Letters*, **1990**, 12, 423-428	1.6	17
49	Quasi-Periodic Behavior of d.c.-Biased Semiconductor Electronic Breakdown. *Europhysics Letters*, **1990**, 12, 13-18	1.6	10
48	Nonequilibrium phase transition in the electronic transport of p-type germanium at low temperatures. *Physical Review B*, **1990**, 42, 9019-9024	3.3	10
47	Breakdown of symmetry in an exemplary turing system. *Dynamical Systems*, **1990**, 5, 99-112		1
46	Impact ionization avalanche breakdown in short crystal regions of p-Ge. *Journal of Applied Physics*, **1990**, 67, 2980-2984	2.5	16
45	Critical Dynamics near the Onset of Spontaneous Oscillations in p -Germanium. *Europhysics Letters*, **1989**, 9, 743-748	1.6	20
44	Symmetry-breaking pattern formation in semiconductor physics: Spatio-temporal current structures during avalanche breakdown. *Computers and Mathematics With Applications*, **1989**, 17, 467-473	2.7	1
43	A p-Ge semiconductor experiment showing chaos and hyperchaos. *Physica D: Nonlinear Phenomena*, **1989**, 35, 425-435	3.3	41
42	Impact ionization breakdown in p-germanium samples with very short contact distances. *Solid-State Electronics*, **1989**, 32, 1197-1200	1.7	2
41	Imaging of spatio-temporal structures in semiconductors. *Solid-State Electronics*, **1989**, 32, 1365-1369	1.7	21
40	Experimental progress in the nonlinear behavior of semiconductors. *Applied Physics A: Solids and Surfaces*, **1989**, 48, 107-110		24

39	Classification of current instabilities during low-temperature breakdown in germanium. *Applied Physics A: Solids and Surfaces*, **1989**, 48, 155-160		29
38	Characteristic Relaxation Times of Low-temperature Semiconductor Breakdown Kinetics. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1989**, 44, 629-632	1.4	2
37	Evidence of Chaotic Hierarchy in a Semiconductor Experiment. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1989**, 44, 1046-1050	1.4	2
36	Resonance Transition of the Spatial Correlation Factor of Self-Generated Oscillations in the Postbreakdown Regime of p-Ge. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1989**, 44, 1139-1144	1.4	5
35	Cryoelectronic Application of a Hybrid Device Concept Based on Semiconducting and Superconducting Components **1989**, 575-578		
34	SYMMETRY-BREAKING PATTERN FORMATION IN SEMICONDUCTOR PHYSICS: SPATIO-TEMPORAL CURRENT STRUCTURES DURING AVALANCHE BREAKDOWN **1989**, 467-473		
33	Resonance imaging of dynamical filamentary current structures in a semiconductor. *Physica D: Nonlinear Phenomena*, **1988**, 32, 306-317	3.3	34
32	Spatio-temporal instabilities in the electric breakdown of p-germanium. *Solid-State Electronics*, **1988**, 31, 817-820	1.7	21
31	Determination of electric transport properties in the pre- and post-breakdown regime ofp-germanium. *European Physical Journal B*, **1988**, 72, 225-233	1.2	30
30	Switching behavior of current filaments inp-germanium connected in parallel. *European Physical Journal B*, **1988**, 71, 305-310	1.2	9
29	Hall-effect measurements during low-temperature avalanche breakdown of p-germanium. *Philosophical Magazine Letters*, **1988**, 57, 311-314	1	2
28	Smooth Decomposition of Generalized Fatou Set Explains Smooth Structure in Generalized Mandelbrot Set. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1988**, 43, 14-16	1.4	5
27	Non-Differentiable Structure in the Generalized Mandelbrot Set. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1988**, 43, 287-288	1.4	3
26	SPATIO-TEMPORAL INSTABILITIES IN THE ELECTRIC BREAKDOWN OF P-GERMANIUM **1988**, 817-820		
25	Notizen: Comparison Between a Generic Reaction- Diffusion Model and a Synergetic Semiconductor System. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1987**, 42, 655-656	1.4	14
24	Spatial and Temporal Current Instabilities in Germanium. *Physica Scripta*, **1987**, T19B, 505-510	2.6	32
23	Self-Organized Formation of Spatial and Temporal Dissipative Structures in Semiconductors. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1987**, 42, 329-332	1.4	6
22	Different Types of Current Instabilities During Low-Temperature Avalanche Breakdown of p-Germanium. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1987**, 42, 441-443	1.4	12

21	Spatially resolved observation of current filament dynamics in semiconductors. *Solid State Communications*, **1987**, 63, 55-59	1.6	89
20	Exemplary locking sequence during self-generated quasiperiodicity of extrinsic germanium. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1987**, 124, 335-339	2.3	27
19	Spatial correlations of chaotic oscillations in the post-breakdown regime of p-Ge. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1987**, 119, 419-424	2.3	40
18	Spontaneous resistance oscillations inp-germanium at low temperatures and their spatial correlation. *European Physical Journal B*, **1987**, 66, 515-521	1.2	17
17	Positive and negative differential resistance in electrical conductors. *European Physical Journal B*, **1987**, 66, 65-73	1.2	33
16	Chaos in semiconductors. *Nuclear Physics, Section B, Proceedings Supplements*, **1987**, 2, 3-11		13
15	Instability of the Mandelbrot Set. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1987**, 42, 263-266	1.4	8
14	Quasiperiodicity and Mode Locking of Undriven Spontaneous Oscillations in Germanium Crystals. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1987**, 42, 841-845	1.4	20
13	Turbulent Morphogenesis of a Prototype Model Reaction-Diffusion System **1987**, 91-95		1
12	The Classes of Fractals. *Springer Series in Synergetics*, **1987**, 275-281	0.4	
11	Chaos and hyperchaos in the electric avalanche breakdown of p-germanium at 4.2 K. *Physica D: Nonlinear Phenomena*, **1986**, 23, 176-180	3.3	7
10	A simple morphogenetic reaction-diffusion model describing nonlinear transport phenomena in semiconductors. *European Physical Journal B*, **1986**, 65, 259-266	1.2	20
9	Magnetic control and switching of current filaments in a semiconductor. *Solid State Communications*, **1986**, 58, 323-325	1.6	9
8	Crosstalk of the dynamical dissipative behavior between different parts in a current-carrying semiconductor. *Applied Physics Letters*, **1986**, 48, 233-235	3.4	7
7	Hyperchaos and Julia Sets. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1986**, 41, 819-822	1.4	18
6	Spontaneous oscillations and chaos in p-germanium. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **1985**, 108, 407-412	2.3	94
5	Chaos and Hyperchaos in the post-breakdown regime of p-germanium. *Physica B: Physics of Condensed Matter & C: Atomic, Molecular and Plasma Physics, Optics*, **1985**, 134, 281-287		7
4	Hyperchaos in the Post-Breakdown Regime of p-Germanium. *Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences*, **1985**, 40, 562-566	1.4	31

3	How to Design a 2D Active Grid for Dynamic Inflow Modulation. *Flow, Turbulence and Combustion*,1	2.5	0
2	IEA Wind TCP: Results of IEA Wind TCP Workshop on a Grand Vision for Wind Energy Technology		5
1	Explicit construction of joint multipoint statistics in complex systems. *Journal of Physics Complexity*,	1.8	4