

# Rainer Hegger

## List of Publications by Year in descending order

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28  
papers

1,668  
citations

471509

17  
h-index

526287

27  
g-index

28  
all docs

28  
docs citations

28  
times ranked

1446  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dihedral angle principal component analysis of molecular dynamics simulations. Journal of Chemical Physics, 2007, 126, 244111.	3.0	279
2	On noise reduction methods for chaotic data. Chaos, 1993, 3, 127-141.	2.5	240
3	Identifying and Modeling Delay Feedback Systems. Physical Review Letters, 1998, 81, 558-561.	7.8	185
4	Construction of the free energy landscape of biomolecules via dihedral angle principal component analysis. Journal of Chemical Physics, 2008, 128, 245102.	3.0	170
5	Simulations of three-dimensional $\hat{I}_p$ polymers. Journal of Chemical Physics, 1995, 102, 6881-6899.	3.0	136
6	How Complex Is the Dynamics of Peptide Folding?. Physical Review Letters, 2007, 98, 028102.	7.8	85
7	Optimizing of recurrence plots for noise reduction. Physical Review E, 2002, 65, 021102.	2.1	78
8	Coping with Nonstationarity by Overembedding. Physical Review Letters, 2000, 84, 4092-4095.	7.8	76
9	Fitting partial differential equations to space-time dynamics. Physical Review E, 1999, 59, 337-342.	2.1	64
10	Multidimensional Langevin modeling of biomolecular dynamics. Journal of Chemical Physics, 2009, 130, 034106.	3.0	48
11	Simulations of $\beta$ -Polymers in 2 Dimensions. Journal De Physique, I, 1995, 5, 597-606.	1.2	43
12	Dynamical properties of a ferroelectric capacitor observed through nonlinear time series analysis. Chaos, 1998, 8, 727-736.	2.5	40
13	Denoising Human Speech Signals Using Chaostlike Features. Physical Review Letters, 2000, 84, 3197-3200.	7.8	36
14	The symmetrical quasi-classical approach to electronically nonadiabatic dynamics applied to ultrafast exciton migration processes in semiconducting polymers. Journal of Chemical Physics, 2018, 149, 044101.	3.0	31
15	Hidden Complexity of Protein Free-Energy Landscapes Revealed by Principal Component Analysis by Parts. Journal of Physical Chemistry Letters, 2010, 1, 2769-2773.	4.6	24
16	Analysis of vocal disorders in a feature space. Medical Engineering and Physics, 2000, 22, 413-418.	1.7	22
17	Multidimensional Langevin Modeling of Nonoverdamped Dynamics. Physical Review Letters, 2015, 115, 050602.	7.8	20
18	First-Principles Quantum and Quantum-Classical Simulations of Exciton Diffusion in Semiconducting Polymer Chains at Finite Temperature. Journal of Chemical Theory and Computation, 2020, 16, 5441-5455.	5.3	13

#	ARTICLE	IF	CITATIONS
19	A noise reduction method for multivariate time series. Physics Letters, Section A: General, Atomic and Solid State Physics, 1992, 170, 305-310.	2.1	12
20	'Smart' self-avoiding trails and the collapse of chain polymers in three dimensions. Journal of Physics A, 1996, 29, 279-288.	1.6	12
21	Estimating the Lyapunov spectrum of time delay feedback systems from scalar time series. Physical Review E, 1999, 60, 1563-1566.	2.1	11
22	Data driven Langevin modeling of biomolecular dynamics. Journal of Chemical Physics, 2013, 138, 204106.	3.0	10
23	Simulations of single polymer chains in the dense limit. Annalen Der Physik, 1995, 507, 230-250.	2.4	9
24	Experimental Verification of Noise Induced Attractor Deformation. Physical Review Letters, 1999, 82, 2274-2277.	7.8	9
25	DETERMINATION OF THE DYNAMICAL PROPERTIES OF FERROELECTRICS USING NONLINEAR TIME SERIES ANALYSIS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 1019-1034.	1.7	6
26	Communication: Microsecond peptide dynamics from nanosecond trajectories: A Langevin approach. Journal of Chemical Physics, 2014, 141, 241102.	3.0	6
27	Electron-Hole Separation in Perylene Diimide Based Self-Assembled Nanostructures: Microelectrostatics Analysis and Kinetic Monte Carlo Simulations. Journal of Physical Chemistry C, 2022, 126, 9762-9776.	3.1	3
28	Nonlinear Noise Reduction. Studies in Computational Finance, 2002, , 401-416.	0.1	0