Awadhesh Prasad

List of Publications by Year in descending order

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114 papers 4,436 citations

147801 31 h-index 110387 64 g-index

115 all docs

115
does citations

115 times ranked 2000 citing authors

#	Article	IF	CITATIONS
1	Hidden attractors in dynamical systems. Physics Reports, 2016, 637, 1-50.	25.6	531
2	Adaptive epileptic seizure prediction system. IEEE Transactions on Biomedical Engineering, 2003, 50, 616-627.	4.2	370
3	Amplitude death: The emergence of stationarity in coupled nonlinear systems. Physics Reports, 2012, 521, 205-228.	25.6	307
4	Amplitude death in the absence of time delays in identical coupled oscillators. Physical Review E, 2007, 76, 035201.	2.1	206
5	Long-term prospective on-line real-time seizure prediction. Clinical Neurophysiology, 2005, 116, 532-544.	1.5	185
6	STRANGE NONCHAOTIC ATTRACTORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2001, 11, 291-309.	1.7	134
7	Amplitude death in coupled chaotic oscillators. Physical Review E, 2005, 72, 056204.	2.1	129
8	Controlling Dynamics of Hidden Attractors. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1550061.	1.7	119
9	Dynamical Resetting of the Human Brain at Epileptic Seizures: Application of Nonlinear Dynamics and Global Optimization Techniques. IEEE Transactions on Biomedical Engineering, 2004, 51, 493-506.	4.2	113
10	Intermittency Route to Strange Nonchaotic Attractors. Physical Review Letters, 1997, 79, 4127-4130.	7.8	105
11	Amplitude death in nonlinear oscillators with nonlinear coupling. Physical Review E, 2010, 81, 027201.	2.1	105
12	Phase-flip bifurcation induced by time delay. Physical Review E, 2006, 74, 035204.	2.1	94
13	Time-delay-induced phase-transition to synchrony in coupled bursting neurons. Chaos, 2011, 21, 023116.	2.5	82
14	Characteristic distributions of finite-time Lyapunov exponents. Physical Review E, 1999, 60, 2761-2766.	2.1	80
15	Perpetual points and hidden attractors in dynamical systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2591-2596.	2.1	71
16	Amplitude modulation in a pair of time-delay coupled external-cavity semiconductor lasers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 318, 71-77.	2.1	70
17	Complicated basins and the phenomenon of amplitude death in coupled hidden attractors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 713-718.	2.1	69
18	Universal occurrence of the phase-flip bifurcation in time-delay coupled systems. Chaos, 2008, 18, 023111.	2.5	68

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19	Stable phase-locking of an external-cavity diode laser subjected to external optical injection. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 135402.	1.5	64
20	Strange nonchaotic attractors in the quasiperiodically forced logistic map. Physical Review E, 1998, 57, 1576-1584.	2.1	63
21	Controlling bistability by linear augmentation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 2329-2332.	2.1	57
22	Existence of Perpetual Points in Nonlinear Dynamical Systems and Its Applications. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2015, 25, 1530005.	1.7	56
23	Collision and Symmetry Breaking in the Transition to Strange Nonchaotic Attractors. Physical Review Letters, 1999, 83, 4530-4533.	7.8	47
24	Targeting fixed-point solutions in nonlinear oscillators through linear augmentation. Physical Review E, 2011, 83, 067201.	2.1	47
25	Universal occurrence of mixed-synchronization in counter-rotating nonlinear coupled oscillators. Chaos, Solitons and Fractals, 2010, 43, 42-46.	5.1	45
26	Birth of strange nonchaotic attractors through formation and merging of bubbles in a quasiperiodically forced Chua£1/4s oscillator. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 612-621.	2.1	40
27	Infinite Number of Hidden Attractors in Memristor-Based Autonomous Duffing Oscillator. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2018, 28, 1850013.	1.7	37
28	Synchronization regimes in conjugate coupled chaotic oscillators. Chaos, 2009, 19, 033143.	2.5	35
29	Dynamical effects of integrative time-delay coupling. Physical Review E, 2010, 82, 017201.	2.1	35
30	Phase-flip transition in relay-coupled nonlinear oscillators. Physical Review E, 2011, 84, 016226.	2.1	35
31	Nonlinear Time Series Analysis of Sunspot Data. Solar Physics, 2009, 260, 441-449.	2.5	34
32	Dynamical hysteresis and spatial synchronization in coupled non-identical chaotic oscillators. Pramana - Journal of Physics, 2005, 64, 513-523.	1.8	32
33	Perpetual Points: New Tool for Localization of Coexisting Attractors in Dynamical Systems. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2017, 27, 1750063.	1.7	32
34	Nature of the phase-flip transition in the synchronized approach to amplitude death. Physical Review E, 2010, 82, 046219.	2.1	31
35	Fractalization route to strange nonchaotic dynamics. Physical Review E, 2004, 70, 046203.	2.1	30
36	APERIODIC NONCHAOTIC ATTRACTORS, STRANGE AND OTHERWISE. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2007, 17, 3397-3407.	1.7	29

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37	THE NATURE OF ATTRACTOR BASINS IN MULTISTABLE SYSTEMS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2008, 18, 1675-1688.	1.7	29
38	Control of coexisting attractors via temporal feedback. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 2127-2132.	2.1	29
39	Visibility-Graph Analysis of the Solar Wind Velocity. Solar Physics, 2014, 289, 379-389.	2.5	27
40	Controlling dynamical behavior of drive-response system through linear augmentation. European Physical Journal: Special Topics, 2014, 223, 1531-1539.	2.6	26
41	Complicated basins in external-cavity semiconductor lasers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2003, 314, 44-50.	2.1	25
42	Thermoluminescence and photoluminescence of LiNaSO4:Eu irradiated with 24 and 48MeV 7Li ion beam. Journal of Luminescence, 2006, 121, 497-506.	3.1	25
43	Strange bifurcation and phase-locked dynamics in mutually coupled diode laser systems. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 145401.	1.5	25
44	Multilayered bubbling route to SNA in a quasiperiodically forced electronic circuit with experimental and analytical confirmation. Chaos, Solitons and Fractals, 2015, 75, 96-110.	5.1	23
45	Bifurcations and transitions in the quasiperiodically driven logistic map. Physica D: Nonlinear Phenomena, 2000, 145, 1-12.	2.8	21
46	Unexpected robustness against noise of a class of nonhyperbolic chaotic attractors. Physical Review E, 2002, 65, 026209.	2.1	21
47	Driving-induced multistability in coupled chaotic oscillators: Symmetries and riddled basins. Chaos, 2016, 26, 063111.	2.5	19
48	Emergent rhythms in coupled nonlinear oscillators due to dynamic interactions. Chaos, 2021, 31, 011105.	2.5	19
49	Some new solitary and travelling wave solutions of certain nonlinear diffusion–reaction equations using auxiliary equation method. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 3395-3399.	2.1	18
50	Frequency discontinuity and amplitude death with time-delay asymmetry. Physical Review E, 2012, 85, 046204.	2.1	18
51	Describing chaotic attractors: Regular and perpetual points. Chaos, 2018, 28, 033604.	2.5	18
52	Strange nonchaotic attractors in driven excitable systems. Physical Review E, 2003, 68, 037201.	2.1	17
53	Time-varying interaction leads to amplitude death in coupled nonlinear oscillators. Pramana - Journal of Physics, 2013, 81, 407-415.	1.8	17
54	Traveling of extreme events in network of counter-rotating nonlinear oscillators. Chaos, 2021, 31, 093136.	2.5	17

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55	Solitary wave solutions of selective nonlinear diffusion-reaction equations using homogeneous balance method. Pramana - Journal of Physics, 2010, 75, 607-616.	1.8	16
56	Quasiperiodic forcing of coupled chaotic systems. Physical Review E, 2010, 81, 026202.	2.1	16
57	Chaos and regularity in semiconductor microcavities. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1970-1977.	2.1	16
58	Perpetual points and periodic perpetual loci in maps. Chaos, 2016, 26, 103103.	2.5	16
59	Soliton-like solutions of certain types of nonlinear diffusion–reaction equations with variable coefficient. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 1862-1866.	2.1	15
60	Targeted control of amplitude dynamics in coupled nonlinear oscillators. Physical Review E, 2010, 82, 027201.	2.1	15
61	Enhancement of photon intensity in forced coupled quantum wells inside a semiconductor microcavity. Physical Review E, 2013, 87, 022916.	2.1	15
62	Convergence of chaotic attractors due to interaction based on closeness. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 125997.	2.1	15
63	Basin bifurcations in quasiperiodically forced coupled systems. Physical Review E, 2005, 72, 036215.	2.1	14
64	Effect of parameter mismatch and time delay interaction on density-induced amplitude death in coupled nonlinear oscillators. Nonlinear Dynamics, 2014, 76, 1797-1806.	5 . 2	14
65	Experimental evidence for amplitude death induced by a time-varying interaction. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2845-2850.	2.1	14
66	Emergence of chimeras through induced multistability. Physical Review E, 2017, 95, 032203.	2.1	14
67	Measuring the Direction and the Strength of Coupling in Nonlinear Systems—A Modeling Approach in the State Space. IEEE Signal Processing Letters, 2004, 11, 617-620.	3.6	12
68	Understanding the alternate bearing phenomenon: Resource budget model. Chaos, 2015, 25, 123102.	2.5	12
69	Emergence of extreme events in coupled systems with time-dependent interactions. Communications in Nonlinear Science and Numerical Simulation, 2022, 107, 106170.	3.3	12
70	The effect of time-delay on anomalous phase synchronization. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 6150-6154.	2.1	11
71	Theoretical and numerical modelling of chaotic electrostatic ion cyclotron (EIC) oscillations by Jerk equation. Physics of Plasmas, 2014, 21, 022311.	1.9	11
72	Dynamical effects of breaking rotational symmetry in counter-rotating Stuart-Landau oscillators. Physical Review E, 2018, 98, 022212.	2.1	11

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73	On the exact solutions of nonlinear diffusion-reaction equations with quadratic and cubic nonlinearities. Pramana - Journal of Physics, 2006, 67, 249-256.	1.8	10
74	Hysteresis in a Solar Activity Cycle. Solar Physics, 2012, 276, 407-414.	2.5	10
75	Generalized synchronization in a conservative and nearly conservative systems of star network. Chaos, 2018, 28, 113107.	2.5	10
76	Hysteresis in amplitudes of self-excited oscillations for co-axial electrode-geometry DC glow discharge plasma. Physics of Plasmas, 2014, 21, 123501.	1.9	9
77	Low-frequency fluctuations in external cavity semiconductor lasers: understanding based on a simple dynamical model. Journal of Optics B: Quantum and Semiclassical Optics, 2001, 3, 242-250.	1.4	8
78	Optical phase dynamics in mutually coupled diode laser systems exhibiting power synchronization. Journal of Physics B: Atomic, Molecular and Optical Physics, 2011, 44, 235403.	1.5	8
79	Amplitude death: The cessation of oscillations in coupled nonlinear dynamical systems. , 2014, , .		8
80	Direct coupling: a possible strategy to control fruit production in alternate bearing. Scientific Reports, 2017, 7, 39890.	3.3	8
81	Driving-induced bistability in coupled chaotic attractors. Physical Review E, 2013, 87, 042909.	2.1	7
82	Semiconductor Laser Dynamics With Two Filtered Optical Feedbacks. IEEE Journal of Quantum Electronics, 2013, 49, 340-349.	1.9	7
83	Effects of quasiperiodic forcing in epidemic models. Chaos, 2016, 26, 093115.	2.5	7
84	Oscillation death and revival by coupling with damped harmonic oscillator. Chaos, 2017, 27, 093104.	2. 5	7
85	A new approach of denoising the regular and chaotic signals using Empirical Mode Decomposition: Comparison and application. Review of Scientific Instruments, 2013, 84, 075117.	1.3	6
86	New topological tool for multistable dynamical systems. Chaos, 2018, 28, 111101.	2.5	6
87	Dynamics of nonlinear oscillator with transient feedback. International Journal of Dynamics and Control, 2019, 7, 1015-1020.	2.5	6
88	Bifurcation delay, travelling waves and chimera-like states in a network of coupled oscillators. European Physical Journal: Special Topics, 2020, 229, 2307-2325.	2.6	6
89	Chimera states in a class of hidden oscillatory networks. Nonlinear Dynamics, 2021, 104, 1645-1655.	5.2	6
90	Analytical signal analysis of strange nonchaotic dynamics. Physical Review E, 2008, 77, 046220.	2.1	5

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91	Delay-coupled discrete maps: Synchronization, bistability, and quasiperiodicity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 2636-2639.	2.1	5
92	Investigation on Unconventional Synthesis of Astroinformatic Data Classifier Powered by Irregular Dynamics. IEEE Intelligent Systems, 2018, 33, 63-77.	4.0	5
93	Period-3 dominant phase synchronisation of Zelkova serrata: border-collision bifurcation observed in a plant population. Scientific Reports, 2019, 9, 15568.	3.3	5
94	Ordered slow and fast dynamics of unsynchronized coupled phase oscillators. Chaos, 2021, 31, 081102.	2.5	5
95	Existence and Control of Hidden Oscillations in a Memristive Autonomous Duffing Oscillator. Studies in Systems, Decision and Control, 2018, , 327-344.	1.0	5
96	Analysis of the solar wind flow during an activity cycle. Planetary and Space Science, 2008, 56, 530-536.	1.7	4
97	Chaotic motion of ions in polymer gel electrolytes: First observations. Solid State Ionics, 2012, 225, 751-754.	2.7	4
98	Chaotic behavior of ion exchange phenomena in polymer gel electrolytes through irradiated polymeric membrane. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1915-1918.	2.1	4
99	Amplitude death phenomena in delay-coupled Hamiltonian systems. Physical Review E, 2013, 87, 052912.	2.1	4
100	Pulse shape analysis of a two fold clover detector with an EMD based new algorithm: A comparison. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2014, 741, 108-116.	1.6	4
101	Effects of quantum noise on the nonlinear dynamics of a semiconductor laser subject to two spectrally filtered, time-delayed optical feedbacks. Optics Communications, 2016, 370, 209-221.	2.1	4
102	Time-delayed conjugate coupling in dynamical systems. European Physical Journal: Special Topics, 2017, 226, 1903-1910.	2.6	4
103	Ageing in mixed populations of Stuart–Landau oscillators: the role of diversity. Journal of Physics A: Mathematical and Theoretical, 2019, 52, 464001.	2.1	4
104	Melting behavior of heterogenous atomic clusters: Gapless coexisting phases in (Ar–Xe)13. Journal of Chemical Physics, 1999, 110, 501-507.	3.0	3
105	Brain Dynamics and Modeling in Epilepsy: Prediction and Control Studies. Understanding Complex Systems, 2009, , 185-214.	0.6	3
106	Phase-locked regimes in delay-coupled oscillator networks. Chaos, 2014, 24, 043111.	2.5	3
107	Symbolic analysis of slow solar wind data using rank order statistics. Planetary and Space Science, 2012, 62, 55-60.	1.7	2
108	Chaotic Behavior of Ionic Transportation Through Synthetic Ion Channels. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2019, 29, 1950107.	1.7	2

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109	The effect of finite response–time in coupled dynamical systems. Pramana - Journal of Physics, 2011, 77, 865-871.	1.8	1
110	Exact solutions of certain nonlinear chemotaxis diffusion reaction equations. Pramana - Journal of Physics, 2016, 86, 1043-1053.	1.8	1
111	Relaying phase synchrony in chaotic oscillator chains. Physical Review E, 2011, 84, 056205.	2.1	O
112	Effect of counter rotation of oscillations on surface acoustic wave (SAW) coupled synchronized oscillators sensor. , 2015, , .		0
113	Memristor emulator causes dissimilarity on a coupled memristive systems. AIP Conference Proceedings, 2018, , .	0.4	O
114	Theoretical Study of the Effect of Quantum Noise on the Nonlinear Dynamics of a Semiconductor Laser Subject to Two Filter Optical Feedbacks. , 2015 , , .		0