

Ash Roy Chowdhury

List of Publications by Year in descending order

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124
papers

551
citations

840585

11
h-index

713332

21
g-index

126
all docs

126
docs citations

126
times ranked

305
citing authors

#	ARTICLE	IF	CITATIONS
1	Modulation of dust acoustic waves with a quantum correction. <i>Physics of Plasmas</i> , 2006, 13, 072305.	0.7	93
2	Modulational instability of dust acoustic waves in a dusty plasma with nonthermal electrons and ions. <i>European Physical Journal D</i> , 2006, 39, 49-57.	0.6	47
3	A Darboux-Bäcklund transformation associated with a discrete nonlinear Schrödinger equation. <i>Letters in Mathematical Physics</i> , 1983, 7, 313-317.	0.5	34
4	On the Bäcklund transformation and Hamiltonian properties of superevaluation equations. <i>Journal of Mathematical Physics</i> , 1986, 27, 2464-2468.	0.5	23
5	The quasiperiodic solutions to the discrete nonlinear Schrödinger equation. <i>Journal of Mathematical Physics</i> , 1987, 28, 134-137.	0.5	23
6	To the complete integrability of long-wave-short-wave interaction equations. <i>Journal of Mathematical Physics</i> , 1986, 27, 707-709.	0.5	22
7	Higher-order corrections to the ion-acoustic waves in a relativistic plasma (isothermal case). <i>Journal of Plasma Physics</i> , 1988, 40, 359-367.	0.7	17
8	Outer synchronization of networks with different node dynamics. <i>European Physical Journal: Special Topics</i> , 2014, 223, 1509-1518.	1.2	17
9	Effects of obliqueness and external magnetic field on the large amplitude solitary waves in a dusty plasma. <i>Planetary and Space Science</i> , 2007, 55, 1380-1387.	0.9	16
10	Competitive modes and estimation of ultimate bound sets for a chaotic dynamical financial system. <i>Nonlinear Dynamics</i> , 2021, 106, 3601-3614.	2.7	14
11	On a Painlevé test of a coupled system of Boussinesq and Schrödinger equations. <i>Journal of Mathematical Physics</i> , 1988, 29, 843-850.	0.5	11
12	On the higher-order corrections to the ion-acoustic cnoidal waves in a relativistic plasma with cold ions and two-temperature electrons. <i>Journal of Plasma Physics</i> , 1989, 41, 447-456.	0.7	11
13	On the complete integrability of the supersymmetric nonlinear Schrödinger equation. <i>Journal of Mathematical Physics</i> , 1987, 28, 1809-1812.	0.5	10
14	Ion-acoustic solitons and shocks in negative ion-beam relativistic plasma. <i>IEEE Transactions on Plasma Science</i> , 1998, 26, 987-994.	0.6	10
15	FUNCTIONAL SYNCHRONIZATION AND ITS APPLICATION TO SECURE COMMUNICATIONS. <i>International Journal of Modern Physics B</i> , 2009, 23, 2285-2295.	1.0	10
16	Nonlinear oscillations in a magnetized dusty plasma with two-temperature trapped ions. <i>Chaos, Solitons and Fractals</i> , 2009, 40, 758-765.	2.5	10
17	Painlevé test for long-wave, short-wave interaction equation. II. <i>International Journal of Theoretical Physics</i> , 1988, 27, 901-919.	0.5	8
18	On the Bifurcation Pattern and Normal Form in a Modified Predator-Prey Nonlinear System. <i>Journal of Computational and Nonlinear Dynamics</i> , 2007, 2, 267-273.	0.7	8

#	ARTICLE	IF	CITATIONS
19	Analytical Bethe Ansatz, Canonical Bäcklund Transformation and Q-Operator For A New Discrete Integrable Hierarchy. International Journal of Theoretical Physics, 2007, 46, 1389-1402.	0.5	8
20	Nonlinear observer-based impulsive synchronization in chaotic systems with multiple attractors. Nonlinear Dynamics, 2010, 60, 607-613.	2.7	8
21	Modulational instability and on the existence of rogue wave in electron-ion-positron plasma with kappa distributed electrons. Chaos, Solitons and Fractals, 2016, 91, 406-413.	2.5	7
22	Nonlinear Landau damping in a relativistic electron-ion plasma – non-local nonlinear Schrödinger-equation and Krylov Bogoliubov Mitropolsky method. Physica Scripta, 2018, 93, 075601.	1.2	7
23	Title is missing!. Astrophysics and Space Science, 1998, 259, 15-30.	0.5	6
24	Effect of dust charge fluctuation on the Alfvén wave propagation in a magnetized dusty plasma. Physics of Plasmas, 2001, 8, 4318-4324.	0.7	6
25	Stimulated Brillouin scattering in a magnetized dusty plasma with charge fluctuation. Physics of Plasmas, 2002, 9, 3752-3757.	0.7	6
26	Higher-order corrections to solitary waves in a non-isothermal relativistic plasma with cold ions and two-temperature electrons. Journal of Plasma Physics, 1990, 44, 253-263.	0.7	5
27	Ion acoustic solitons in a streaming relativistic plasma with negative ions. International Journal of Theoretical Physics, 1992, 31, 343-352.	0.5	5
28	Nonlinear Landau damping in a relativistic plasma. Journal of Plasma Physics, 1994, 52, 55-74.	0.7	5
29	On the characterization of non-stationary chaotic systems: Autonomous and non-autonomous cases. Physica A: Statistical Mechanics and Its Applications, 2010, 389, 5077-5083.	1.2	5
30	Prolongation structure for Langmuir solitons. Journal of Mathematical Physics, 1979, 20, 1559-1561.	0.5	4
31	On the inverse problem and prolongation structure for the modified anisotropic Heisenberg spin chain. Journal of Mathematical Physics, 1987, 28, 319-322.	0.5	4
32	Dissipative formation of hole-like excitation in ion-acoustic plasma. International Journal of Theoretical Physics, 1992, 31, 1335-1343.	0.5	4
33	ON THE STUDY OF DELAY FEEDBACK CONTROL AND ADAPTIVE SYNCHRONIZATION NEAR SUB-CRITICAL HOPF BIFURCATION. International Journal of Modern Physics C, 2008, 19, 169-185.	0.8	4
34	On a study of optically coupled memristive Chua circuits – rhythmogenesis and amplitude death. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 1418-1424.	0.9	4
35	Competitive mode and topological properties of nonlinear systems with hidden attractor. Nonlinear Dynamics, 2017, 88, 1989-2001.	2.7	4
36	On a Nonlinear Schrödinger Equation in an External Field – A Bethe Ansatz Approach. Journal of the Physical Society of Japan, 1988, 57, 1511-1513.	0.7	3

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37	On the envelope soliton near critical density in a plasma with cold ions and two-temperature electrons. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1993, 15, 1043-1051.	0.4	3
38	REDUCTION PROBLEM FOR FOUR WAVE INTERACTION AND THE CLASSICAL r MATRIX. International Journal of Modern Physics A, 1999, 14, 3871-3883.	0.5	3
39	GENERALIZED AND PHASE SYNCHRONIZATION BETWEEN TWO DIFFERENT TIME-DELAYED SYSTEMS. Modern Physics Letters B, 2008, 22, 1867-1878.	1.0	3
40	On the Nonlinear Excitation in Self Gravitating Quantum Dusty Plasma. International Journal of Theoretical Physics, 2009, 48, 1132-1141.	0.5	3
41	Heteroclinic Orbit, Forced Lorenz System, and Chaos. Journal of Computational and Nonlinear Dynamics, 2010, 5, .	0.7	3
42	Generation of amplitude death and rhythmogenesis in coupled hidden attractor system with experimental demonstration. Nonlinear Dynamics, 2017, 87, 1393-1404.	2.7	3
43	KBM approach to dust acoustic envelope soliton in strongly coupled plasma. Chaos, Solitons and Fractals, 2018, 109, 252-258.	2.5	3
44	Loop Algebra of Lie symmetries for a short-wave equation. International Journal of Theoretical Physics, 1988, 27, 47-55.	0.5	2
45	A Riemann-Hilbert Approach to Discrete Heisenberg-Spin Chain. Journal of the Physical Society of Japan, 1989, 58, 817-820.	0.7	2
46	UNSTABLE NONLINEAR SCHRÖDINGER EQUATION – A DRINFELD-SOKOLOV APPROACH AND BI-HAMILTONIAN STRUCTURE. Modern Physics Letters A, 1994, 09, 2189-2195.	0.5	2
47	Bäcklund transformation, and Q operator for the Toda lattice. Inverse Problems, 2000, 16, 947-954.	1.0	2
48	Propagation of waves in a multicomponent plasma having charged dust particles. Pramana - Journal of Physics, 2001, 56, 785-796.	0.9	2
49	DISCRETE KAUP-NEWELL EQUATION, CANONICAL BÄCKLUND TRANSFORMATION AND BAXTER'S Q-OPERATOR. International Journal of Modern Physics A, 2002, 17, 515-531.	0.5	2
50	Inverse Scattering and Soliton Solutions for a New Integrable System. International Journal of Theoretical Physics, 2003, 42, 2991-2998.	0.5	2
51	Separation of Variables for a Lattice Integrable System and the Inverse Problem. International Journal of Theoretical Physics, 2006, 45, 820-834.	0.5	2
52	Wigner transform and stability of kinetic envelope soliton in an electron depleted dusty plasma with two temperature non-thermal ions. Physica Scripta, 2019, 94, 035601.	1.2	2
53	Four component strongly coupled quantum dusty plasma and generation of dark-bright solitons and double-layers. Communications in Nonlinear Science and Numerical Simulation, 2019, 75, 236-250.	1.7	2
54	Kinetic envelope soliton in non-thermal quantum pair-ion plasma and Wigner stability. Radiation Effects and Defects in Solids, 0, , 1-19.	0.4	2

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55	Slow and fast modulation instability and envelope solitons of ion-acoustic wave in electron-ion-positron plasma having ion stream and superthermal electrons. Radiation Effects and Defects in Solids, 0, , 1-27.	0.4	2
56	AI- \bar{c} couplings and channel helicity conservation. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1972, 4, 598-600.	0.4	1
57	A Different Approach to the Multiplicity Problem in Hadron Collisions. Annalen Der Physik, 1978, 490, 15-18.	0.9	1
58	A Low-Energy Direct Channel Regge-pole Approach to \hat{t} -C1Elastic Scattering .I. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1981, 36, 443-446.	0.7	1
59	Some Perturbative and Non-Perturbative Results Exposing Certain Field Aspects of Reggeon Field Theory. , 1987, 35, 733-740.		1
60	On a double Riemann-Hilbert approach to stimulated Raman scattering. Journal of Mathematical Physics, 1991, 32, 2254-2257.	0.5	1
61	Commutative differential operator and a class of solutions for the BKP equation on the singular rational curve. Journal of Mathematical Physics, 1991, 32, 3473-3475.	0.5	1
62	On a kinetic approach to the modulational stability of envelope solitons in a relativistic plasma in an external electric field. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1992, 14, 527-539.	0.4	1
63	ON THE BETHE ANSATZ FOR A FERMIONIC CHAIN WITH LONG RANGE INTERACTION. Modern Physics Letters A, 1994, 09, 3523-3531.	0.5	1
64	N-fold Backlund transformation for deformed nonlinear Schr�dinger equation. International Journal of Theoretical Physics, 1997, 36, 1021-1031.	0.5	1
65	ALTERNATIVE LAX PAIR, BI-HAMILTONIAN STRUCTURE, AND CONSTRAINED FLOWS FOR THE \hat{t} -DYNAMIC OF NLS EQUATION. International Journal of Modern Physics A, 1999, 14, 4177-4188.	0.5	1
66	On the generation of magnetic fields due to ponderomotive forces in astrophysical plasmas. Journal of Plasma Physics, 2002, 67, 129-138.	0.7	1
67	Higher order contribution to the propagation characteristics of low frequency transverse waves in a dusty plasma. Pramana - Journal of Physics, 2004, 63, 579-593.	0.9	1
68	CANONICAL B�CKLUND TRANSFORMATION \hat{c} A NEW DISCRETE INTEGRABLE SYSTEM AND BETHE ANSATZ. International Journal of Modern Physics A, 2005, 20, 4355-4361.	0.5	1
69	Robust synchronization of delay differential systems. International Journal of Modern Physics C, 2014, 25, 1350100.	0.8	1
70	Comparative Analysis of Asset Pricing Models Based on Log-Normal Distribution and Tsallis Distribution using Recurrence Plot in an Emerging Market. Research in Finance, 2016, , 35-73.	0.2	1
71	Solitary wave and modulational instability in a strongly coupled semiclassical relativistic dusty pair plasma with density gradient. Pramana - Journal of Physics, 2019, 92, 1.	0.9	1
72	Wigner Stability for the Uniaxial Incoherent Soliton in a Cold Plasma Under a Transverse Magnetic Field. IEEE Transactions on Plasma Science, 2020, 48, 2007-2016.	0.6	1

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73	On the Effect of Electron Streaming and Existence of Quasi-Solitary Mode in a Strongly Coupled Quantum Dusty Plasma—Far and Near Critical Nonlinearity. <i>Plasma</i> , 2021, 4, 408-425.	0.7	1
74	3D-Modulational Stability of Envelope Soliton in a Quantum Electron—Ion Plasma—A Generalised Nonlinear Schrödinger Equation. <i>Plasma</i> , 2022, 5, 60-73.	0.7	1
75	Determination of $ g_A $ from Veneziano Amplitude and Current Algebra Sum Rule for $\pi\pi$ -Scattering. <i>Progress of Theoretical Physics</i> , 1971, 45, 1701-1702.	2.0	0
76	Positive Width and S-Wave Scattering Length in $\pi\pi$ Scattering in Veneziano Model. <i>Progress of Theoretical Physics</i> , 1971, 46, 332-333.	2.0	0
77	Dual Amplitude and Strange Form Factors. <i>Progress of Theoretical Physics</i> , 1971, 46, 1794-1798.	2.0	0
78	Charge Distributions of Partons and Scaling in Deep Inelastic Scattering. <i>Progress of Theoretical Physics</i> , 1972, 47, 1619-1623.	2.0	0
79	Dual Amplitudes for $\pi\pi \rightarrow \pi\pi$. <i>Progress of Theoretical Physics</i> , 1972, 48, 475-489.	2.0	0
80	A Unified Treatment of Meson-Meson, Meson-Baryon and Baryon-Baryon Scattering in Veneziano Model. <i>Progress of Theoretical Physics</i> , 1972, 47, 714-715.	2.0	0
81	Degeneracy breaking in the dual-resonance model. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1972, 5, 1073-1078.	0.4	0
82	Conformal invariance, singular bilocal operators and scaling in some deep inelastic-scattering and annihilation processes. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1973, 8, 53-56.	0.4	0
83	Sum rules in SU 4 bilocal algebra for deep inelastic spin-dependent νp scattering. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1973, 7, 694-696.	0.4	0
84	Charge Distribution of Parton and Scaling in $\nu p \rightarrow \nu p + e^+e^- + \text{anything}$. <i>Progress of Theoretical Physics</i> , 1973, 50, 337-338.	2.0	0
85	Broken scale invariance in $\nu p \rightarrow \nu e^+e^- + \text{anything}$ in functional approach to quantum field theory anything in functional approach to quantum field theory. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica</i> , 1974, 11, 599-602.	0.4	0
86	Modified Duller-Walker approach to study N-N collision events at cosmic ray energies. <i>European Physical Journal D</i> , 1978, 28, 389-391.	0.4	0
87	On the complete integrability of an equation having solitons but not known to have a Lax pair. <i>International Journal of Mathematics and Mathematical Sciences</i> , 1986, 9, 541-544.	0.3	0
88	On the Recursion Operator for the Infinitesimal Symmetries for Autonomous and Non-autonomous Systems. <i>Annalen Der Physik</i> , 1986, 498, 11-16.	0.9	0
89	Infinitesimal B�cklund Transformation and Conservation Laws for Non-autonomous Systems. <i>Annalen Der Physik</i> , 1986, 498, 57-61.	0.9	0
90	On the prolongation approach in three dimensions for the conservation laws and Lax pair of the Benjamin—Ono equation. <i>Journal of Mathematical Physics</i> , 1987, 28, 1697-1699.	0.5	0

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91	On the Bethe-Ansatz for Supersymmetric Nonlinear Schrödinger Equation. Journal of the Physical Society of Japan, 1987, 56, 1955-1962.	0.7	0
92	On the Bilinearisation Approach to the Soliton Solutions of Cylindrical and Nonlocal K-P Equation. Annalen Der Physik, 1987, 499, 619-624.	0.9	0
93	Representation of supercharges over the scattering data for super-sine-Gordon system. International Journal of Theoretical Physics, 1988, 27, 667-672.	0.5	0
94	Square eigenfunction approach to the hamiltonian structure for a new hierarchy of nonlinear equations. International Journal of Theoretical Physics, 1988, 27, 433-446.	0.5	0
95	Reggeon scattering in an external field: A solitonic model. International Journal of Theoretical Physics, 1988, 27, 1001-1006.	0.5	0
96	Swinging atwood machine. Far- and near-resonance region. International Journal of Theoretical Physics, 1988, 27, 1405-1410.	0.5	0
97	Monodromy Deformation Approach to Nonlinear Equations – A Survey. , 1988, 36, 939-953.		0
98	ON A QUANTUM VERSION OF CONSERVATION LAWS FOR DERIVATIVE NONLINEAR SCHRÖDINGER EQUATION. Modern Physics Letters A, 1988, 03, 893-900.	0.5	0
99	On the envelope solitons in a relativistic ion-acoustic plasma. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1989, 11, 1093-1099.	0.4	0
100	ON THE GLOBAL SOLUTION TO THE DIFFERENTIAL EQUATION FOR THE N-POINT CONFORMAL CORRELATOR. Modern Physics Letters A, 1989, 04, 2483-2486.	0.5	0
101	On a Miura Map for Ito's Equation. Journal of the Physical Society of Japan, 1990, 59, 3791-3792.	0.7	0
102	Regge behaviour at high energy and more on boson-fermion interaction. Pramana - Journal of Physics, 1990, 35, 11-19.	0.9	0
103	An Inverse Problem for the Benney-Kaup System - Periodic and Decaying Case. Annalen Der Physik, 1990, 502, 61-67.	0.9	0
104	A Riemann-Hilbert Approach to the Inverse Problem for Three Dimensional Heisenberg Spin-Chain. Annalen Der Physik, 1990, 502, 283-288.	0.9	0
105	On the bi-Hamiltonian structure, strong and hereditary operator of symmetries for a new nonlinear system. Journal of Mathematical Physics, 1991, 32, 2039-2042.	0.5	0
106	Exact Solutions, Deformed Integrable NLS Equation and Riemann Problem. Journal of the Physical Society of Japan, 1991, 60, 3637-3639.	0.7	0
107	THE BACKLUND TRANSFORMATION, VIRASORO ALGEBRA, AND SYMMETRIES RELATED TO THE CYLINDRICALLY SYMMETRIC SELF-DUAL YANG-MILLS EQUATION. International Journal of Modern Physics A, 1992, 07, 631-638.	0.5	0
108	Adler's Kostant's Symms theorem and supersymmetric integrable systems. Journal of Mathematical Physics, 1993, 34, 1884-1891.	0.5	0

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109	On a different class of solutions for Minkowskian ĩf model on Grassmanian manifold. Journal of Mathematical Physics, 1993, 34, 3463-3470.	0.5	0
110	SU(N) LIE ALGEBRA, EXTENDED TODA LATTICE EQUATION AND THE EXACT SOLUTIONS. Modern Physics Letters A, 1994, 09, 525-534.	0.5	0
111	Two-field coset space realization of the spin-4 current algebra. International Journal of Theoretical Physics, 1995, 34, 2123-2128.	0.5	0
112	Lie-backlund symmetries and Hamiltonian structure of some new integrable systems. Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods, 1995, 110, 875-882.	0.2	0
113	ANISOTROPIC AFFINE ALGEBRA AND ANISOTROPIC WZW MODEL. Modern Physics Letters A, 1995, 10, 1441-1448.	0.5	0
114	ON THE STUDY OF NONLINEAR INTEGRABLE SYSTEMS IN (2+1) DIMENSIONS BY DRINFELD-SOKOLOV METHOD. Modern Physics Letters A, 1995, 10, 2843-2852.	0.5	0
115	Lie-backlund Symmetries of Two-Dimensional SU(2) Yang-Mills System and Nonhomogeneous Lax Pair. International Journal of Theoretical Physics, 2000, 39, 1101-1108.	0.5	0
116	Complete Integrability Prolongation Structure and Backlund Transformation for the Konno-Onno Equation. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2000, 55, 545-549.	0.7	0
117	A New Asymmetric Long-Range Model and Algebraic Bethe Ansatz. International Journal of Theoretical Physics, 2002, 41, 321-330.	0.5	0
118	CANONICAL BACKLUND TRANSFORMATION FOR A DISCRETE INTEGRABLE CHAIN AND ITS ASSOCIATED PROPERTIES. Modern Physics Letters A, 2003, 18, 1127-1139.	0.5	0
119	Response to "Comment on "Stimulated Brillouin scattering in a magnetized dusty plasma with charge fluctuation" [Phys. Plasmas 10, 2619 (2003)]. Physics of Plasmas, 2003, 10, 2622-2622.	0.7	0
120	On the Study of Chaotic Systems with Non-Horseshoe Template. World Scientific Series on Nonlinear Science, Series B, 2011, , 85-103.	0.2	0
121	Nonlinear Control of Hyperchaotic System, Lie Derivative, and State Space Linearization. Journal of Computational and Nonlinear Dynamics, 2012, 7, .	0.7	0
122	Exact Solutions and Symmetry Analysis of a Boussinesq Type Equation for Longitudinal Waves Through a Magneto-Electro-Elastic Circular Rod. International Journal of Applied and Computational Mathematics, 2021, 7, 1.	0.9	0
123	On the Multi-Soliton Solutions and Complete Integrability of New Nonlinear System in (2+1) Dimension. Journal of the Physical Society of Japan, 1989, 58, 407-411.	0.7	0
124	Modified Heisenberg's Approach for the Mean Charged Hadron Multiplicity in High Energy Collisions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1978, 33, 493-497.	0.7	0