

# Asesh Roy Chowdhury

## List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	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
2	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
3	Exact Solutions and Symmetry Analysis of a Boussinesq Type Equation for Longitudinal Waves Through a Magneto-Electro-Elastic Circular Rod. <i>International Journal of Applied and Computational Mathematics</i> , 2021, 7, 1.	0.9	0
4	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
5	Wigner Stability for the Uniaxial Incoherent Soliton in a Cold Plasma Under a Transverse Magnetic Field. <i>IEEE Transactions on Plasma Science</i> , 2020, 48, 2007-2016.	0.6	1
6	Solitary wave and modulational instability in a strongly coupled semiclassical relativistic dusty pair plasma with density gradient. <i>Pramana - Journal of Physics</i> , 2019, 92, 1.	0.9	1
7	Wigner transform and stability of kinetic envelope soliton in an electron depleted dusty plasma with two temperature non-thermal ions. <i>Physica Scripta</i> , 2019, 94, 035601.	1.2	2
8	Four component strongly coupled quantum dusty plasma and generation of dark-bright solitons and double-layers. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2019, 75, 236-250.	1.7	2
9	KBM approach to dust acoustic envelope soliton in strongly coupled plasma. <i>Chaos, Solitons and Fractals</i> , 2018, 109, 252-258.	2.5	3
10	Nonlinear Landau damping in a relativistic electron-ion plasma: non-local nonlinear Schrödinger-equation and Krylov Bogoliubov Mitropolsky method. <i>Physica Scripta</i> , 2018, 93, 075601.	1.2	7
11	Competitive mode and topological properties of nonlinear systems with hidden attractor. <i>Nonlinear Dynamics</i> , 2017, 88, 1989-2001.	2.7	4
12	Generation of amplitude death and rhythmogenesis in coupled hidden attractor system with experimental demonstration. <i>Nonlinear Dynamics</i> , 2017, 87, 1393-1404.	2.7	3
13	Modulational instability and on the existence of rogue wave in electron-ion-positron plasma with kappa distributed electrons. <i>Chaos, Solitons and Fractals</i> , 2016, 91, 406-413.	2.5	7
14	Comparative Analysis of Asset Pricing Models Based on Log-Normal Distribution and Tsallis Distribution using Recurrence Plot in an Emerging Market. <i>Research in Finance</i> , 2016, , 35-73.	0.2	1
15	On a study of optically coupled memristive Chua circuits: rhythmogenesis and amplitude death. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2015, 379, 1418-1424.	0.9	4
16	Robust synchronization of delay differential systems. <i>International Journal of Modern Physics C</i> , 2014, 25, 1350100.	0.8	1
17	Outer synchronization of networks with different node dynamics. <i>European Physical Journal: Special Topics</i> , 2014, 223, 1509-1518.	1.2	17
18	Nonlinear Control of Hyperchaotic System, Lie Derivative, and State Space Linearization. <i>Journal of Computational and Nonlinear Dynamics</i> , 2012, 7, .	0.7	0

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19	On the Study of Chaotic Systems with Non-Horseshoe Template. World Scientific Series on Nonlinear Science, Series B, 2011, , 85-103.	0.2	0
20	Heteroclinic Orbit, Forced Lorenz System, and Chaos. Journal of Computational and Nonlinear Dynamics, 2010, 5, .	0.7	3
21	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
22	Nonlinear observer-based impulsive synchronization in chaotic systems with multiple attractors. Nonlinear Dynamics, 2010, 60, 607-613.	2.7	8
23	FUNCTIONAL SYNCHRONIZATION AND ITS APPLICATION TO SECURE COMMUNICATIONS. International Journal of Modern Physics B, 2009, 23, 2285-2295.	1.0	10
24	On the Nonlinear Excitation in Self Gravitating Quantum Dusty Plasma. International Journal of Theoretical Physics, 2009, 48, 1132-1141.	0.5	3
25	Nonlinear oscillations in a magnetized dusty plasma with two-temperature trapped ions. Chaos, Solitons and Fractals, 2009, 40, 758-765.	2.5	10
26	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
27	GENERALIZED AND PHASE SYNCHRONIZATION BETWEEN TWO DIFFERENT TIME-DELAYED SYSTEMS. Modern Physics Letters B, 2008, 22, 1867-1878.	1.0	3
28	On the Bifurcation Pattern and Normal Form in a Modified Predator-Prey Nonlinear System. Journal of Computational and Nonlinear Dynamics, 2007, 2, 267-273.	0.7	8
29	Effects of obliqueness and external magnetic field on the large amplitude solitary waves in a dusty plasma. Planetary and Space Science, 2007, 55, 1380-1387.	0.9	16
30	Analytical Bethe Ansatz, Canonical Backlund Transformation and Q-Operator For A New Discrete Integrable Hierarchy. International Journal of Theoretical Physics, 2007, 46, 1389-1402.	0.5	8
31	Modulation of dust acoustic waves with a quantum correction. Physics of Plasmas, 2006, 13, 072305.	0.7	93
32	Modulational instability of dust acoustic waves in a dusty plasma with nonthermal electrons and ions. European Physical Journal D, 2006, 39, 49-57.	0.6	47
33	Separation of Variables for a Lattice Integrable System and the Inverse Problem. International Journal of Theoretical Physics, 2006, 45, 820-834.	0.5	2
34	CANONICAL BACKLUND TRANSFORMATION A NEW DISCRETE INTEGRABLE SYSTEM AND BETHE ANSATZ. International Journal of Modern Physics A, 2005, 20, 4355-4361.	0.5	1
35	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
36	Inverse Scattering and Soliton Solutions for a New Integrable System. International Journal of Theoretical Physics, 2003, 42, 2991-2998.	0.5	2

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37	CANONICAL BÄCKLUND TRANSFORMATION FOR A DISCRETE INTEGRABLE CHAIN AND ITS ASSOCIATED PROPERTIES. <i>Modern Physics Letters A</i> , 2003, 18, 1127-1139.	0.5	0
38	Response to "Comment on "Stimulated Brillouin scattering in a magnetized dusty plasma with charge fluctuation" [Phys. Plasmas 10,(2003)]. <i>Physics of Plasmas</i> , 2003, 10, 2622-2622.	0.7	0
39	DISCRETE KAUP-NEWELL EQUATION, CANONICAL BÄCKLUND TRANSFORMATION AND BAXTER'S Q-OPERATOR. <i>International Journal of Modern Physics A</i> , 2002, 17, 515-531.	0.5	2
40	On the generation of magnetic fields due to ponderomotive forces in astrophysical plasmas. <i>Journal of Plasma Physics</i> , 2002, 67, 129-138.	0.7	1
41	Stimulated Brillouin scattering in a magnetized dusty plasma with charge fluctuation. <i>Physics of Plasmas</i> , 2002, 9, 3752-3757.	0.7	6
42	A New Asymmetric Long-Range Model and Algebraic Bethe Ansatz. <i>International Journal of Theoretical Physics</i> , 2002, 41, 321-330.	0.5	0
43	Propagation of waves in a multicomponent plasma having charged dust particles. <i>Pramana - Journal of Physics</i> , 2001, 56, 785-796.	0.9	2
44	Effect of dust charge fluctuation on the Alfvén wave propagation in a magnetized dusty plasma. <i>Physics of Plasmas</i> , 2001, 8, 4318-4324.	0.7	6
45	Lie-Bäcklund Symmetries of Two-Dimensional SU(2) Yang-Mills System and Nonhomogeneous Lax Pair. <i>International Journal of Theoretical Physics</i> , 2000, 39, 1101-1108.	0.5	0
46	Complete Integrability Prolongation Structure and Backlund Transformation for the Konno-Onno Equation. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2000, 55, 545-549.	0.7	0
47	Bäcklund transformation, and Q operator for the Toda lattice. <i>Inverse Problems</i> , 2000, 16, 947-954.	1.0	2
48	ALTERNATIVE LAX PAIR, BI-HAMILTONIAN STRUCTURE, AND CONSTRAINED FLOWS FOR THE $\psi$ -DYNAMIC OF NLS EQUATION. <i>International Journal of Modern Physics A</i> , 1999, 14, 4177-4188.	0.5	1
49	REDUCTION PROBLEM FOR FOUR WAVE INTERACTION AND THE CLASSICAL $r$ MATRIX. <i>International Journal of Modern Physics A</i> , 1999, 14, 3871-3883.	0.5	3
50	Title is missing!. <i>Astrophysics and Space Science</i> , 1998, 259, 15-30.	0.5	6
51	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
52	N-fold Backlund transformation for deformed nonlinear Schrödinger equation. <i>International Journal of Theoretical Physics</i> , 1997, 36, 1021-1031.	0.5	1
53	Two-field coset space realization of the spin-4 current algebra. <i>International Journal of Theoretical Physics</i> , 1995, 34, 2123-2128.	0.5	0
54	Lie-backlund symmetries and Hamiltonian structure of some new integrable systems. <i>Societa Italiana Di Fisica Nuovo Cimento B-General Physics, Relativity Astronomy and Mathematical Physics and Methods</i> , 1995, 110, 875-882.	0.2	0

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55	ANISOTROPIC AFFINE ALGEBRA AND ANISOTROPIC WZW MODEL. Modern Physics Letters A, 1995, 10, 1441-1448.	0.5	0
56	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
57	UNSTABLE NONLINEAR SCHRÖDINGER EQUATION – A DRINFELD-SOKOLOV APPROACH AND BI-HAMILTONIAN STRUCTURE. Modern Physics Letters A, 1994, 09, 2189-2195.	0.5	2
58	SU(N) LIE ALGEBRA, EXTENDED TODA LATTICE EQUATION AND THE EXACT SOLUTIONS. Modern Physics Letters A, 1994, 09, 525-534.	0.5	0
59	ON THE BETHE ANSATZ FOR A FERMIONIC CHAIN WITH LONG RANGE INTERACTION. Modern Physics Letters A, 1994, 09, 3523-3531.	0.5	1
60	Nonlinear Landau damping in a relativistic plasma. Journal of Plasma Physics, 1994, 52, 55-74.	0.7	5
61	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
62	Adler's Kostant's Sym's theorem and supersymmetric integrable systems. Journal of Mathematical Physics, 1993, 34, 1884-1891.	0.5	0
63	On a different class of solutions for Minkowskian ĩf model on Grassmanian manifold. Journal of Mathematical Physics, 1993, 34, 3463-3470.	0.5	0
64	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
65	Ion acoustic solitons in a streaming relativistic plasma with negative ions. International Journal of Theoretical Physics, 1992, 31, 343-352.	0.5	5
66	Dissipative formation of hole-like excitation in ion-acoustic plasma. International Journal of Theoretical Physics, 1992, 31, 1335-1343.	0.5	4
67	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
68	On a double Riemann-Hilbert approach to stimulated Raman scattering. Journal of Mathematical Physics, 1991, 32, 2254-2257.	0.5	1
69	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
70	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
71	Exact Solutions, Deformed Integrable NLS Equation and Riemann Problem. Journal of the Physical Society of Japan, 1991, 60, 3637-3639.	0.7	0
72	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

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73	On a Miura Map for Ito's Equation. Journal of the Physical Society of Japan, 1990, 59, 3791-3792.	0.7	0
74	Regge behaviour at high energy and more on boson-fermion interaction. Pramana - Journal of Physics, 1990, 35, 11-19.	0.9	0
75	An Inverse Problem for the Benney-Kaup System - Periodic and Decaying Case. Annalen Der Physik, 1990, 502, 61-67.	0.9	0
76	A Riemann-Hilbert Approach to the Inverse Problem for Three Dimensional Heisenberg Spin-Chain. Annalen Der Physik, 1990, 502, 283-288.	0.9	0
77	On the higher-order corrections to the ion-acoustic cnoidal waves in a relativistic plasma with cold ions and two-temperature electrons. Journal of Plasma Physics, 1989, 41, 447-456.	0.7	11
78	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
79	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
80	A Riemann-Hilbert Approach to Discrete Heisenberg-Spin Chain. Journal of the Physical Society of Japan, 1989, 58, 817-820.	0.7	2
81	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
82	Painlevé $\frac{1}{2}$ test for long-wave, short-wave interaction equation. II. International Journal of Theoretical Physics, 1988, 27, 901-919.	0.5	8
83	Representation of supercharges over the scattering data for super-sine-Gordon system. International Journal of Theoretical Physics, 1988, 27, 667-672.	0.5	0
84	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
85	Reggeon scattering in an external field: A solitonic model. International Journal of Theoretical Physics, 1988, 27, 1001-1006.	0.5	0
86	Swinging atwood machine. Far- and near-resonance region. International Journal of Theoretical Physics, 1988, 27, 1405-1410.	0.5	0
87	Loop Algebra of Lie symmetries for a short-wave equation. International Journal of Theoretical Physics, 1988, 27, 47-55.	0.5	2
88	Monodromy Deformation Approach to Nonlinear Equations "A Survey. ", 1988, 36, 939-953.		0
89	On a Painlevé test of a coupled system of Boussinesq and Schrödinger equations. Journal of Mathematical Physics, 1988, 29, 843-850.	0.5	11
90	ON A QUANTUM VERSION OF CONSERVATION LAWS FOR DERIVATIVE NONLINEAR SCHRÖDINGER EQUATION. Modern Physics Letters A, 1988, 03, 893-900.	0.5	0

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91	Higher-order corrections to the ion-acoustic waves in a relativistic plasma (isothermal case). Journal of Plasma Physics, 1988, 40, 359-367.	0.7	17
92	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
93	On the complete integrability of the supersymmetric nonlinear Schrödinger equation. Journal of Mathematical Physics, 1987, 28, 1809-1812.	0.5	10
94	The quasiperiodic solutions to the discrete nonlinear Schrödinger equation. Journal of Mathematical Physics, 1987, 28, 134-137.	0.5	23
95	On the prolongation approach in three dimensions for the conservation laws and Lax pair of the Benjamin-Ono equation. Journal of Mathematical Physics, 1987, 28, 1697-1699.	0.5	0
96	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
97	On the Bethe-Ansatz for Supersymmetric Nonlinear Schrödinger Equation. Journal of the Physical Society of Japan, 1987, 56, 1955-1962.	0.7	0
98	Some Perturbative and Non-Perturbative Results Exposing Certain Field Aspects of Reggeon Field Theory. , 1987, 35, 733-740.		1
99	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
100	On the complete integrability of an equation having solitons but not known to have a Lax pair. International Journal of Mathematics and Mathematical Sciences, 1986, 9, 541-544.	0.3	0
101	On the Recursion Operator for the Infinitesimal Symmetries for Autonomous and Non-autonomous Systems. Annalen Der Physik, 1986, 498, 11-16.	0.9	0
102	Infinitesimal Bäcklund Transformation and Conservation Laws for Non-autonomous Systems. Annalen Der Physik, 1986, 498, 57-61.	0.9	0
103	To the complete integrability of long-wave—short-wave interaction equations. Journal of Mathematical Physics, 1986, 27, 707-709.	0.5	22
104	On the Bäcklund transformation and Hamiltonian properties of superevaluation equations. Journal of Mathematical Physics, 1986, 27, 2464-2468.	0.5	23
105	A Darboux-Bäcklund transformation associated with a discrete nonlinear Schrödinger equation. Letters in Mathematical Physics, 1983, 7, 313-317.	0.5	34
106	A Low-Energy Direct Channel Regge-pole Approach to $\pi\pi$ - $\pi$ Elastic Scattering. I. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1981, 36, 443-446.	0.7	1
107	Prolongation structure for Langmuir solitons. Journal of Mathematical Physics, 1979, 20, 1559-1561.	0.5	4
108	Modified Duller-Walker approach to study N-N collision events at cosmic ray energies. European Physical Journal D, 1978, 28, 389-391.	0.4	0

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109	A Different Approach to the Multiplicity Problem in Hadron Collisions. Annalen Der Physik, 1978, 490, 15-18.	0.9	1
110	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
111	Broken scale invariance in $\rho$ and $\omega$ anything in functional approach to quantum field theory anything in functional approach to quantum field theory. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1974, 11, 599-602.	0.4	0
112	Conformal invariance, singular bilocal operators and scaling in some deep inelastic-scattering and annihilation processes. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1973, 8, 53-56.	0.4	0
113	Sum rules in SU 4 bilocal algebra for deep inelastic spin-dependent $\nu p$ scattering. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1973, 7, 694-696.	0.4	0
114	Charge Distribution of Parton and Scaling in $p$ and $\bar{p}$ anything. Progress of Theoretical Physics, 1973, 50, 337-338.	2.0	0
115	Charge Distributions of Partons and Scaling in Deep Inelastic Scattering. Progress of Theoretical Physics, 1972, 47, 1619-1623.	2.0	0
116	Dual Amplitudes for $\pi^+ \pi^-$ . Progress of Theoretical Physics, 1972, 48, 475-489.	2.0	0
117	A Unified Treatment of Meson-Meson, Meson-Baryon and Baryon-Baryon Scattering in Veneziano Model. Progress of Theoretical Physics, 1972, 47, 714-715.	2.0	0
118	All $\pi$ couplings and t-channel helicity conservation. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1972, 4, 598-600.	0.4	1
119	Degeneracy breaking in the dual-resonance model. Lettere Al Nuovo Cimento Rivista Internazionale Della Societ� Italiana Di Fisica, 1972, 5, 1073-1078.	0.4	0
120	Determination of $ g_A $ from Veneziano Amplitude and Current Algebra Sum Rule for $\pi$ -N Scattering. Progress of Theoretical Physics, 1971, 45, 1701-1702.	2.0	0
121	Positive Width and S-Wave Scattering Length in $\pi$ Scattering in Veneziano Model. Progress of Theoretical Physics, 1971, 46, 332-333.	2.0	0
122	Dual Amplitude and Strange Form Factors. Progress of Theoretical Physics, 1971, 46, 1794-1798.	2.0	0
123	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
124	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