

Anjan Biswas

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6286732/publications.pdf>

Version: 2024-02-01

582
papers

21,141
citations

5896

81
h-index

27406

106
g-index

584
all docs

584
docs citations

584
times ranked

1989
citing authors

#	ARTICLE	IF	CITATIONS
1	Modified simple equation method for nonlinear evolution equations. Applied Mathematics and Computation, 2010, 217, 869-877.	2.2	355
2	Bright and dark solitons of the generalized nonlinear Schrödinger's equation. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1473-1484.	3.3	227
3	Optical solitons in nonlinear directional couplers by sine's cosine function method and Bernoulli's equation approach. Nonlinear Dynamics, 2015, 81, 1933-1949.	5.2	200
4	Optical soliton perturbation in a non-Kerr law media. Optics and Laser Technology, 2008, 40, 647-662.	4.6	174
5	1-soliton solution of the equation with generalized evolution. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 4601-4602.	2.1	174
6	Optical soliton cooling with polynomial law of nonlinear refractive index. Journal of Optics (India), 2020, 49, 580-583.	1.7	154
7	Soliton solutions to resonant nonlinear Schrödinger's equation with time-dependent coefficients by trial solution approach. Nonlinear Dynamics, 2015, 81, 277-282.	5.2	153
8	Optical soliton perturbation with fractional-temporal evolution by first integral method with conformable fractional derivatives. Optik, 2016, 127, 10659-10669.	2.9	147
9	Optical solitons with complex Ginzburg-Landau equation by modified simple equation method. Optik, 2017, 144, 475-480.	2.9	136
10	Optical solitons and conservation laws associated with Kudryashov's sextic power-law nonlinearity of refractive index. Ukrainian Journal of Physical Optics, 2021, 22, 38-49.	13.0	136
11	Optical solitons with complex Ginzburg-Landau equation. Nonlinear Dynamics, 2016, 85, 1979-2016.	5.2	135
12	Cubic-quartic optical solitons in Kerr and power law media. Optik, 2017, 144, 357-362.	2.9	134
13	Optical soliton solutions to Fokas-lenells equation using some different methods. Optik, 2018, 173, 21-31.	2.9	132
14	Stationary solutions for nonlinear dispersive Schrödinger's equation. Nonlinear Dynamics, 2011, 63, 623-626.	5.2	130
15	Optical soliton perturbation for Radhakrishnan-Kundu-Lakshmanan equation with a couple of integration schemes. Optik, 2018, 163, 126-136.	2.9	128
16	Conservation laws for cubic-quartic optical solitons in Kerr and power law media. Optik, 2017, 145, 650-654.	2.9	127
17	Optical solitons and conservation laws with quadratic-cubic nonlinearity. Optik, 2017, 128, 63-70.	2.9	127
18	Dromion-like soliton interactions for nonlinear Schrödinger equation with variable coefficients in inhomogeneous optical fibers. Nonlinear Dynamics, 2019, 96, 729-736.	5.2	126

#	ARTICLE	IF	CITATIONS
19	Optical solitons in (2+1)-Dimensions with Kundu-Mukherjee-Naskar equation by extended trial function scheme. Chinese Journal of Physics, 2019, 57, 72-77.	3.9	125
20	Mitigating Internet bottleneck with fractional temporal evolution of optical solitons having quadratic-cubic nonlinearity. Optik, 2018, 164, 84-92.	2.9	123
21	Optical solitons in nano-fibers with spatio-temporal dispersion by trial solution method. Optik, 2016, 127, 7250-7257.	2.9	121
22	Optical solitons with differential group delay for coupled Fokas-Lenells equation using two integration schemes. Optik, 2018, 165, 74-86.	2.9	121
23	Solitary wave solution for the generalized Kawahara equation. Applied Mathematics Letters, 2009, 22, 208-210.	2.7	120
24	Topological solitons of resonant nonlinear Schrödinger's equation with dual-power law nonlinearity by G^2/G -expansion technique. Optik, 2014, 125, 5480-5489.	2.9	120
25	Perturbation theory and optical soliton cooling with anti-cubic nonlinearity. Optik, 2017, 142, 73-76.	2.9	120
26	Analytic study on interactions between periodic solitons with controllable parameters. Nonlinear Dynamics, 2018, 94, 703-709.	5.2	120
27	Phase shift, amplification, oscillation and attenuation of solitons in nonlinear optics. Journal of Advanced Research, 2019, 15, 69-76.	9.5	120
28	Dromion-like structures and periodic wave solutions for variable-coefficients complex cubic-quintic Ginzburg-Landau equation influenced by higher-order effects and nonlinear gain. Nonlinear Dynamics, 2020, 99, 1313-1319.	5.2	120
29	Optical soliton perturbation with Fokas-Lenells equation using three exotic and efficient integration schemes. Optik, 2018, 165, 288-294.	2.9	119
30	Application of semi-inverse variational principle to cubic-quartic optical solitons with kerr and power law nonlinearity. Optik, 2018, 172, 847-850.	2.9	118
31	Phase-shift controlling of three solitons in dispersion-decreasing fibers. Nonlinear Dynamics, 2019, 98, 395-401.	5.2	118
32	Lie symmetry analysis for cubic-quartic nonlinear Schrödinger's equation. Optik, 2018, 169, 12-15.	2.9	117
33	1-soliton solution of the generalized Radhakrishnan, Kundu, Lakshmanan equation. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 2546-2548.	2.1	116
34	Bright and dark Thirring optical solitons with improved adomian decomposition method. Optik, 2017, 130, 1115-1123.	2.9	116
35	Interaction properties of solitons in inhomogeneous optical fibers. Nonlinear Dynamics, 2019, 95, 557-563.	5.2	116
36	Optical soliton perturbation in non-Kerr law media: Traveling wave solution. Optics and Laser Technology, 2012, 44, 263-268.	4.6	115

#	ARTICLE	IF	CITATIONS
37	Optical solitons for the resonant nonlinear Schrödinger's equation with time-dependent coefficients by the first integral method. <i>Optik</i> , 2014, 125, 3107-3116.	2.9	115
38	Periodic attenuating oscillation between soliton interactions for higher-order variable coefficient nonlinear Schrödinger equation. <i>Nonlinear Dynamics</i> , 2019, 96, 801-809.	5.2	115
39	1-Soliton solution of KdV6 equation. <i>Nonlinear Dynamics</i> , 2015, 80, 387-396.	5.2	114
40	Optical solitons with anti-cubic nonlinearity by extended trial equation method. <i>Optik</i> , 2017, 136, 368-373.	2.9	114
41	Optical solitons and complexitons of the Schrödinger-Hirota equation. <i>Optics and Laser Technology</i> , 2012, 44, 2265-2269.	4.6	113
42	Soliton solutions of the resonant nonlinear Schrödinger's equation in optical fibers with time-dependent coefficients by simplest equation approach. <i>Journal of Modern Optics</i> , 2013, 60, 1627-1636.	1.3	113
43	Dispersive optical solitons by Kudryashov's method. <i>Optik</i> , 2014, 125, 6874-6880.	2.9	113
44	Exact solitons to generalized resonant dispersive nonlinear Schrödinger's equation with power law nonlinearity. <i>Optik</i> , 2017, 130, 178-183.	2.9	112
45	Optical Soliton Perturbation with Improved Nonlinear Schrödinger's Equation in Nano Fibers. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2013, 8, 208-220.	0.5	111
46	Optical solitons in birefringent fibers with Kerr nonlinearity by exp-function method. <i>Optik</i> , 2017, 131, 964-976.	2.9	110
47	Quasi-stationary non-Kerr law optical solitons. <i>Optical Fiber Technology</i> , 2003, 9, 224-259.	2.7	109
48	Bright and dark optical solitons with time-dependent coefficients in a non-Kerr law media. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 3865-3873.	3.3	109
49	Optical soliton perturbation in a log-law medium with full nonlinearity by He's semi-inverse variational principle. <i>Inverse Problems in Science and Engineering</i> , 2012, 20, 227-232.	1.2	108
50	Analytical study of Thirring optical solitons with parabolic law nonlinearity and spatio-temporal dispersion. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	108
51	Optical soliton perturbation with anti-cubic nonlinearity by semi-inverse variational principle. <i>Optik</i> , 2017, 143, 131-134.	2.9	108
52	Resonant optical solitons with quadratic-cubic nonlinearity by semi-inverse variational principle. <i>Optik</i> , 2017, 145, 18-21.	2.9	107
53	Dark optical solitons in power law media with time-dependent coefficients. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 4438-4441.	2.1	106
54	Generation and control of multiple solitons under the influence of parameters. <i>Nonlinear Dynamics</i> , 2019, 95, 143-150.	5.2	106

#	ARTICLE	IF	CITATIONS
55	A Lie symmetry approach to nonlinear Schrödinger's equation with non-Kerr law nonlinearity. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 4033-4040.	3.3	105
56	Dispersive optical solitons with Schrödinger-Hirota equation. Journal of Nonlinear Optical Physics and Materials, 2014, 23, 1450014.	1.8	105
57	Singular solitons in optical metamaterials by ansatz method and simplest equation approach. Journal of Modern Optics, 2014, 61, 1550-1555.	1.3	105
58	Bright and dark solitons for the resonant nonlinear Schrödinger's equation with time-dependent coefficients. Optics and Laser Technology, 2012, 44, 2223-2231.	4.6	104
59	Cnoidal and snoidal wave solutions to coupled nonlinear wave equations by the extended Jacobi's elliptic function method. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 915-925.	3.3	104
60	Optical solitons with anti-cubic nonlinearity using three integration schemes. Superlattices and Microstructures, 2017, 105, 1-10.	3.1	103
61	Darboux transformation and analytic solutions for a generalized super-NLS-mKdV equation. Nonlinear Dynamics, 2019, 98, 1491-1500.	5.2	103
62	Optical Solitons by He's Variational Principle in a Non-Kerr Law Media. Journal of Infrared, Millimeter, and Terahertz Waves, 2009, 30, 526-537.	2.2	101
63	Optical solitons and optical rogons of generalized resonant dispersive nonlinear Schrödinger's equation with power law nonlinearity. Optik, 2014, 125, 4246-4256.	2.9	100
64	Dark solitons for a generalized nonlinear Schrödinger equation with parabolic law and dual-power law nonlinearities. Mathematical Methods in the Applied Sciences, 2011, 34, 958-962.	2.3	99
65	Thirring combo-solitons with cubic nonlinearity and spatio-temporal dispersion. Waves in Random and Complex Media, 2016, 26, 204-210.	2.7	99
66	Optical solitons in birefringent fibers with spatio-temporal dispersion. Optik, 2014, 125, 4935-4944.	2.9	98
67	Cubic-quartic optical solitons in birefringent fibers with four forms of nonlinear refractive index by exp-function expansion. Results in Physics, 2020, 16, 102913.	4.1	98
68	1-soliton solution of (ϵ)-dimensional nonlinear Schrödinger's equation in dual-power law media. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 5941-5943.	2.1	97
69	Optical solitons with non-Kerr law nonlinearity and inter-modal dispersion with time-dependent coefficients. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 2320-2330.	3.3	96
70	Bright and dark solitons in optical metamaterials. Optik, 2014, 125, 3299-3302.	2.9	95
71	Bright, dark and singular optical solitons in a cascaded system. Laser Physics, 2015, 25, 025402.	1.2	95
72	Bright, dark, and singular solitons in optical fibers with spatio-temporal dispersion and spatially dependent coefficients. Journal of Modern Optics, 2016, 63, 950-954.	1.3	95

#	ARTICLE	IF	CITATIONS
73	Optical solitons with quadratic-cubic nonlinearity by semi-inverse variational principle. <i>Optik</i> , 2017, 139, 16-19.	2.9	95
74	Perturbation of chirped localized waves in a dual-power law nonlinear medium. <i>Chaos, Solitons and Fractals</i> , 2022, 160, 112198.	5.1	93
75	TEMPORAL 1-SOLITON SOLUTION OF THE COMPLEX GINZBURG-LANDAU EQUATION WITH POWER LAW NONLINEARITY. <i>Progress in Electromagnetics Research</i> , 2009, 96, 1-7.	4.4	92
76	Adiabatic parameter dynamics of perturbed solitary waves. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 734-748.	3.3	92
77	Bright soliton solutions of the (2+1)-dimensional generalized coupled nonlinear Schrödinger equation with the four-wave mixing term. <i>Nonlinear Dynamics</i> , 2021, 104, 2613-2620.	5.2	90
78	Optical Solitons in Photonic Nano Waveguides with an Improved Nonlinear Schrödinger's Equation. <i>Journal of Computational and Theoretical Nanoscience</i> , 2013, 10, 1182-1191.	0.4	89
79	Soliton interaction control through dispersion and nonlinear effects for the fifth-order nonlinear Schrödinger equation. <i>Nonlinear Dynamics</i> , 2021, 106, 2479-2484.	5.2	89
80	Optical solitons in nonlinear directional couplers with spatio-temporal dispersion. <i>Journal of Modern Optics</i> , 2014, 61, 441-458.	1.3	87
81	Thirring optical solitons in birefringent fibers with spatio-temporal dispersion and Kerr law nonlinearity. <i>Laser Physics</i> , 2015, 25, 015402.	1.2	86
82	Solitary wave solution for KdV equation with power-law nonlinearity and time-dependent coefficients. <i>Nonlinear Dynamics</i> , 2009, 58, 345-348.	5.2	83
83	Chirped femtosecond pulses in the higher-order nonlinear Schrödinger equation with non-Kerr nonlinear terms and cubic-quintic-septic nonlinearities. <i>Optics Communications</i> , 2016, 366, 362-369.	2.1	82
84	Dispersion-managed solitons in optical fibres. <i>Journal of Optics</i> , 2002, 4, 84-97.	1.5	80
85	Optical soliton perturbation for complex Ginzburg-Landau equation with modified simple equation method. <i>Optik</i> , 2018, 158, 399-415.	2.9	80
86	Solitary waves of Boussinesq equation in a power law media. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 3738-3742.	3.3	77
87	Soliton solutions of the generalized Klein-Gordon equation by using $\left(\frac{G'}{T} \right)_{ETQ1} = 1.0784314$. <i>Optik</i> , 2018, 158, 399-415.	1.3	76
88	Sub pico-second chirped envelope solitons and conservation laws in monomode optical fibers for a new derivative nonlinear Schrödinger's model. <i>Optik</i> , 2018, 173, 235-241.	2.9	74
89	Soliton solutions to resonant nonlinear schrodinger's equation with time-dependent coefficients by modified simple equation method. <i>Optik</i> , 2016, 127, 11450-11459.	2.9	72
90	Jacobi spectral collocation approximation for multi-dimensional time-fractional Schrödinger equations. <i>Nonlinear Dynamics</i> , 2016, 84, 1553-1567.	5.2	71

#	ARTICLE	IF	CITATIONS
91	Conservation laws for optical solitons with anti-cubic and generalized anti-cubic nonlinearities. <i>Optik</i> , 2019, 176, 198-201.	2.9	71
92	Solitary waves for power-law regularized long-wave equation and $R(m,n)$ equation. <i>Nonlinear Dynamics</i> , 2010, 59, 423-426.	5.2	69
93	Some lump solutions for a generalized (3+1)-dimensional Kadomtsev-Petviashvili equation. <i>Applied Mathematics and Computation</i> , 2020, 366, 124757.	2.2	69
94	Nonlinear control of logic structure of all-optical logic devices using soliton interactions. <i>Nonlinear Dynamics</i> , 2022, 107, 1215-1222.	5.2	69
95	The method and topological soliton solution of the $K(m,n)$ equation. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011, 16, 2377-2382.	3.3	68
96	Periodic soliton interactions for higher-order nonlinear Schrödinger equation in optical fibers. <i>Nonlinear Dynamics</i> , 2020, 100, 2817-2821.	5.2	67
97	Solitons and other nonlinear waves of the Boussinesq equation. <i>Nonlinear Dynamics</i> , 2012, 70, 1213-1221.	5.2	66
98	Additional conservation laws for Rosenau-KdV-RLW equation with power law nonlinearity by Lie symmetry. <i>Nonlinear Dynamics</i> , 2015, 79, 743-748.	5.2	66
99	Solitons, Shock Waves and Conservation Laws of Rosenau-KdV-RLW Equation with Power Law Nonlinearity. <i>Applied Mathematics and Information Sciences</i> , 2014, 8, 485-491.	0.5	64
100	Soliton perturbation theory for phi-four model and nonlinear Klein-Gordon equations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 3239-3249.	3.3	63
101	1-Soliton solution of the m -KdV equation with power law nonlinearity by Lie symmetry. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 3226-3229.	3.3	63
102	Solitons and periodic solutions to a couple of fractional nonlinear evolution equations. <i>Pramana - Journal of Physics</i> , 2014, 82, 465-476.	1.8	63
103	Solitons and other solutions to quantum Zakharov-Kuznetsov equation in quantum magneto-plasmas. <i>Indian Journal of Physics</i> , 2013, 87, 455-463.	1.8	61
104	Optical solitons in DWDM system by extended trial equation method. <i>Optik</i> , 2017, 141, 157-167.	2.9	61
105	Bright optical solitons for Lakshmanan-Porsezian-Daniel model by semi-inverse variational principle. <i>Optik</i> , 2018, 154, 109-114.	2.9	60
106	Chirp-free bright optical soliton perturbation with Fokas-Lenells equation by traveling wave hypothesis and semi-inverse variational principle. <i>Optik</i> , 2018, 170, 431-435.	2.9	60
107	Perturbation of topological solitons due to sine-Gordon equation and its type. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 1227-1244.	3.3	59
108	Solitons in Optical Metamaterials by Functional Variable Method and First Integral Approach. <i>Frequenz</i> , 2014, 68, .	0.9	59

#	ARTICLE	IF	CITATIONS
109	Dispersive optical solitons with Schrödinger-Hirota equation by extended trial equation method. Optik, 2017, 136, 451-461.	2.9	56
110	Optical soliton perturbation with Fokas-Lenells equation by mapping methods. Optik, 2019, 178, 104-110.	2.9	56
111	Optical solitons with Kudryashov's equation by extended trial function. Optik, 2020, 202, 163290.	2.9	56
112	Dark and singular optical solutions with dual-mode nonlinear Schrödinger's equation and Kerr-law nonlinearity. Optik, 2018, 172, 822-825.	2.9	55
113	Optical solitons and conservation laws of Kudryashov's equation with improved modified extended tanh-function. Optik, 2021, 225, 165406.	2.9	55
114	Painlevé Analysis and a Solution to the Traveling Wave Reduction of the Radhakrishnan-Kundu-Lakshmanan Equation. Regular and Chaotic Dynamics, 2019, 24, 607-614.	0.8	54
115	Solitons and conservation laws in magneto-optic waveguides with triple-power law nonlinearity. Journal of Optics (India), 2020, 49, 584-590.	1.7	54
116	Solitary wave solution for the generalized KdV equation with time-dependent damping and dispersion. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 3503-3506.	3.3	52
117	1-Soliton solution of Benjamin-Bona-Mahoney equation with dual-power law nonlinearity. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 2744-2746.	3.3	52
118	Dispersive dark optical soliton with Schrödinger-Hirota equation by G^2/G -expansion approach in power law medium. Optik, 2014, 125, 4215-4218.	2.9	52
119	Perturbed dark and singular optical solitons in polarization preserving fibers by modified simple equation method. Superlattices and Microstructures, 2017, 111, 487-498.	3.1	52
120	Chirp-free bright optical soliton perturbation with Chen-Lee-Liu equation by traveling wave hypothesis and semi-inverse variational principle. Optik, 2018, 172, 772-776.	2.9	52
121	Optical solitons in DWDM system with spatio-temporal dispersion. Journal of Nonlinear Optical Physics and Materials, 2015, 24, 1550006.	1.8	51
122	Optical solitons in nonlinear directional couplers with trial function scheme. Nonlinear Dynamics, 2017, 88, 1891-1915.	5.2	51
123	Resonant optical solitons with parabolic and dual-power laws by semi-inverse variational principle. Journal of Modern Optics, 2018, 65, 179-184.	1.3	51
124	Propagation properties of dipole-managed solitons through an inhomogeneous cubic-quintic-septic medium. Optics Communications, 2018, 425, 64-70.	2.1	51
125	Phase shift, oscillation and collision of the anti-dark solitons for the (3+1)-dimensional coupled nonlinear Schrödinger equation in an optical fiber communication system. Nonlinear Dynamics, 2019, 97, 1253-1262.	5.2	51
126	The method and 1-soliton solution of the Davey-Stewartson equation. Mathematical and Computer Modelling, 2011, 53, 694-698.	2.0	50

#	ARTICLE	IF	CITATIONS
127	Perturbation of dispersive shallow water waves. Ocean Engineering, 2013, 63, 1-7.	4.3	50
128	Dark and singular dispersive optical solitons of Schrödinger-Hirota equation by modified simple equation method. Optik, 2017, 136, 445-450.	2.9	50
129	Solitons in optical fiber Bragg gratings with dispersive reflectivity by extended trial function method. Optik, 2019, 182, 88-94.	2.9	50
130	Topological and singular soliton solution to Kundu-Eckhaus equation with extended Kudryashov's method. Optik, 2017, 128, 57-62.	2.9	49
131	Optical solitons with Radhakrishnan-Kundu-Lakshmanan equation by extended trial function scheme. Optik, 2018, 160, 415-427.	2.9	49
132	Chirp-free bright optical solitons and conservation laws for complex Ginzburg-Landau equation with three nonlinear forms. Optik, 2018, 174, 207-215.	2.9	49
133	Chirp-free optical solitons in fiber Bragg gratings with dispersive reflectivity having polynomial law of nonlinearity. Optik, 2021, 225, 165681.	2.9	49
134	Highly dispersive optical solitons in birefringent fibers with four nonlinear forms using Kudryashov's approach. Journal of Optics (India), 2021, 50, 120-131.	1.7	49
135	Cubic-quartic optical soliton perturbation with complex Ginzburg-Landau equation by the enhanced Kudryashov's method. Chaos, Solitons and Fractals, 2022, 155, 111748.	5.1	49
136	1-Soliton solution of the generalized Camassa-Holm Kadomtsev-Petviashvili equation. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 2524-2527.	3.3	48
137	Optical solitons with log-law nonlinearity. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 3763-3767.	3.3	48
138	Topological and non-topological solitons of nonlinear Klein-Gordon equations by He's semi-inverse variational principle. Journal of the Franklin Institute, 2010, 347, 1148-1157.	3.4	48
139	Solitons for perturbed Gerdjikov-Ivanov equation in optical fibers and PCF by extended Kudryashov's method. Optical and Quantum Electronics, 2018, 50, 1.	3.3	48
140	Optical soliton perturbation with Chen-Lee-Liu equation. Optik, 2020, 220, 165177.	2.9	48
141	The similarities and differences of different plane solitons controlled by $(3\hat{A}+\hat{A}1)$ - Dimensional coupled variable coefficient system. Journal of Advanced Research, 2020, 24, 167-173.	9.5	48
142	Effects of dispersion terms on optical soliton propagation in a lossy fiber system. Nonlinear Dynamics, 2021, 104, 629-637.	5.2	48
143	Group analysis, exact solutions and conservation laws of a generalized fifth order KdV equation. Chaos, Solitons and Fractals, 2016, 86, 8-15.	5.1	47
144	Optical soliton perturbation with complex Ginzburg-Landau equation using trial solution approach. Optik, 2018, 160, 44-60.	2.9	47

#	ARTICLE	IF	CITATIONS
145	Chirped optical solitons of Chenâ€“Leeâ€“Liu equation by extended trial equation scheme. <i>Optik</i> , 2018, 156, 999-1006.	2.9	47
146	Soliton perturbation theory for the quadratic nonlinear Kleinâ€“Gordon equation. <i>Applied Mathematics and Computation</i> , 2008, 203, 153-156.	2.2	46
147	1-soliton solution of the Zakharovâ€“Kuznetsov equation with dual-power law nonlinearity. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 3574-3577.	3.3	46
148	Solitons and conservation laws of Kleinâ€“Gordon equation with power law and log law nonlinearities. <i>Nonlinear Dynamics</i> , 2013, 73, 2191-2196.	5.2	46
149	Singular solitons, shock waves, and other solutions to potential KdV equation. <i>Nonlinear Dynamics</i> , 2014, 76, 1059-1068.	5.2	46
150	Dark and singular optical solitons with spatio-temporal dispersion using modified simple equation method. <i>Optik</i> , 2017, 130, 324-331.	2.9	46
151	Optical soliton perturbation with full nonlinearity for Fokasâ€“Lenells equation. <i>Optik</i> , 2018, 165, 29-34.	2.9	46
152	Optical solitons: Quasi-stationarity versus Lie transform. <i>Optical and Quantum Electronics</i> , 2003, 35, 979-998.	3.3	45
153	1-soliton solution of the $K(2,2)$ equation with generalized evolution and time-dependent damping and dispersion. <i>Computers and Mathematics with Applications</i> , 2019, 59, 2526-2549.	2.9	45
154	OPTICAL SOLITON PERTURBATION IN NANOFIBERS WITH IMPROVED NONLINEAR SCHRÖDINGER'S EQUATION BY SEMI-INVERSE VARIATIONAL PRINCIPLE. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2012, 21, 1250054.	1.8	45
155	Quasiâ€“monochromatic dynamics of optical solitons having quadraticâ€“cubic nonlinearity. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126528.	2.1	45
156	Optical solitons in fiber Bragg gratings with cubicâ€“quartic dispersive reflectivity by enhanced Kudryashov's approach. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 422, 127797.	2.1	45
157	Chirped bright solitons for Chenâ€“Leeâ€“Liu equation in optical fibers and PCF. <i>Optik</i> , 2017, 149, 300-303.	2.9	44
158	Optical soliton perturbation with complex Ginzburg-Landau equation by semi-inverse variational principle. <i>Optik</i> , 2017, 147, 77-81.	2.9	44
159	Optical solitons with differential group delay for coupled Fokasâ€“Lenells equation by extended trial function scheme. <i>Optik</i> , 2018, 165, 102-110.	2.9	44
160	Cubic-quartic bright optical solitons with improved Adomian decomposition method. <i>Journal of Advanced Research</i> , 2020, 21, 161-167.	9.5	44
161	OPTICAL SOLITONS IN MULTI-DIMENSIONS WITH SPATIO-TEMPORAL DISPERSION AND NON-KERR LAW NONLINEARITY. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2013, 22, 1350035.	1.8	43
162	Solitons in optical metamaterials with fractional temporal evolution. <i>Optik</i> , 2016, 127, 10879-10897.	2.9	43

#	ARTICLE	IF	CITATIONS
163	Analysis of optical solitons in nonlinear negative-indexed materials with anti-cubic nonlinearity. <i>Optical and Quantum Electronics</i> , 2018, 50, 1.	3.3	43
164	Dark-singular combo optical solitons with fractional complex Ginzburg-Landau equation. <i>Optik</i> , 2018, 171, 463-467.	2.9	43
165	Optical solitons with complex Ginzburg-Landau equation for two nonlinear forms using F-expansion. <i>Chinese Journal of Physics</i> , 2019, 61, 255-261.	3.9	43
166	Topological and non-topological solitons of the generalized Klein-Gordon equations. <i>Applied Mathematics and Computation</i> , 2009, 215, 212-220.	2.2	42
167	Solitons in Optical Metamaterials with Trial Solution Approach and Backlund Transform of Riccati Equation. <i>Journal of Computational and Theoretical Nanoscience</i> , 2015, 12, 5940-5948.	0.4	42
168	Conservation laws for optical solitons with Chen-Lee-Liu equation. <i>Optik</i> , 2018, 174, 195-198.	2.9	42
169	Stable transmission characteristics of double-hump solitons for the coupled Manakov equations in fiber lasers. <i>Nonlinear Dynamics</i> , 2021, 106, 2509-2514.	5.2	42
170	Topological and non-topological solitons of the Klein-Gordon equations in 1+2 dimensions. <i>Nonlinear Dynamics</i> , 2010, 61, 23-28.	5.2	41
171	A study of shallow water waves with Gardner's equation. <i>Nonlinear Dynamics</i> , 2011, 66, 497-507.	5.2	41
172	Control of dark and anti-dark solitons in the (2+1)-dimensional coupled nonlinear Schrödinger equations with perturbed dispersion and nonlinearity in a nonlinear optical system. <i>Nonlinear Dynamics</i> , 2019, 97, 471-483.	5.2	41
173	[INVITED] Soliton propagation through nanoscale waveguides in optical metamaterials. <i>Optics and Laser Technology</i> , 2016, 77, 177-186.	4.6	40
174	Oblique resonant optical solitons with Kerr and parabolic law nonlinearities and fractional temporal evolution by generalized $\exp(\hat{a}^{\alpha} t^{\beta})$ -expansion. <i>Optik</i> , 2019, 178, 439-448.	2.9	40
175	Application of the G ² /G-expansion method for nonlinear diffusion equations with nonlinear source. <i>Journal of the Franklin Institute</i> , 2010, 347, 1391-1398.	3.4	39
176	Soliton solutions of Burgers equations and perturbed Burgers equation. <i>Applied Mathematics and Computation</i> , 2010, 216, 3370-3377.	2.2	39
177	QUASI-STATIONARY OPTICAL SOLITONS IN NON-KERR LAW MEDIA WITH FULL NONLINEARITY. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2011, 20, 309-325.	1.8	39
178	Solitons and Lie group analysis to an extended quantum Zakharov-Kuznetsov equation. <i>Astrophysics and Space Science</i> , 2014, 349, 317-327.	1.4	39
179	Soliton solutions to a few fractional nonlinear evolution equations in shallow water wave dynamics. <i>European Physical Journal Plus</i> , 2016, 131, 1.	2.6	39
180	Optical soliton perturbation in magneto-optic waveguides. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2018, 27, 1850005.	1.8	39

#	ARTICLE	IF	CITATIONS
181	Chirped singular solitons for Chen-Lee-Liu equation in optical fibers and PCF. <i>Optik</i> , 2018, 157, 156-160.	2.9	39
182	Self-similar optical solitons with continuous-wave background in a quadratic-cubic non-centrosymmetric waveguide. <i>Optics Communications</i> , 2019, 437, 392-398.	2.1	39
183	Optical solitons in fiber Bragg gratings via modified simple equation. <i>Optik</i> , 2020, 203, 163886.	2.9	39
184	Optical solitons and conservation laws of Kudryashov's equation using undetermined coefficients. <i>Optik</i> , 2020, 202, 163417.	2.9	38
185	Optical soliton perturbation with Kudryashov's equation by semi-inverse variational principle. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126830.	2.1	38
186	Cubic-quartic optical soliton perturbation with Lakshmanan-Porsezian-Daniel model by sine-Gordon equation approach. <i>Journal of Optics (India)</i> , 2021, 50, 322-329.	1.7	38
187	Perturbation of chiral solitons. <i>Nuclear Physics B</i> , 2009, 806, 457-461.	2.5	37
188	Optical Solitons with Power Law Nonlinearity and Hamiltonian Perturbations: An Exact Solution. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2010, 31, 1048-1056.	2.2	37
189	Optical soliton perturbation with quadratic-cubic nonlinearity using a couple of strategic algorithms. <i>Chinese Journal of Physics</i> , 2018, 56, 1990-1998.	3.9	37
190	Soliton solution and bifurcation analysis of the Zakharov-Kuznetsov-Benjamin-Bona-Mahoney equation with power law nonlinearity. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2013, 18, 1676-1683.	3.3	36
191	Topological solitons and cnoidal waves to a few nonlinear wave equations in theoretical physics. <i>Indian Journal of Physics</i> , 2013, 87, 1125-1131.	1.8	36
192	Nematicons in liquid crystals by modified simple equation method. <i>Nonlinear Dynamics</i> , 2017, 88, 2863-2872.	5.2	36
193	Optical soliton perturbation with full nonlinearity by trial equation method. <i>Optik</i> , 2018, 157, 1366-1375.	2.9	36
194	Optical soliton perturbation of Fokas-Lenells equation with two integration schemes. <i>Optik</i> , 2018, 165, 111-116.	2.9	36
195	W-shaped optical solitons of Chen-Lee-Liu equation by Laplace-Adomian decomposition method. <i>Optical and Quantum Electronics</i> , 2018, 50, 1.	3.3	36
196	Optical solitons with Kudryashov's equation by F-expansion. <i>Optik</i> , 2019, 199, 163338.	2.9	36
197	Chirped and chirp-free optical solitons with generalized anti-cubic nonlinearity by extended trial function scheme. <i>Optik</i> , 2019, 178, 636-644.	2.9	36
198	Soliton perturbation theory for Alfvén waves in plasmas. <i>Physics of Plasmas</i> , 2005, 12, 022306.	1.9	35

#	ARTICLE	IF	CITATIONS
199	Mathematical Theory of Dispersion-Managed Optical Solitons. <i>Nonlinear Physical Science</i> , 2010, , .	0.2	35
200	Analytical and numerical solutions to the Daveyâ€“Stewartson equation with power-law nonlinearity. <i>Waves in Random and Complex Media</i> , 2011, 21, 559-590.	2.7	35
201	Conservation laws for optical solitons in birefringent fibers and magneto-optic waveguides. <i>Optik</i> , 2016, 127, 11662-11673.	2.9	35
202	Singular optical solitons in birefringent nano-fibers. <i>Optik</i> , 2016, 127, 8995-9000.	2.9	35
203	Solitons in nonlinear directional couplers with optical metamaterials. <i>Nonlinear Dynamics</i> , 2017, 87, 427-458.	5.2	35
204	Solitons in optical metamaterials with anti-cubic nonlinearity. <i>European Physical Journal Plus</i> , 2018, 133, 1.	2.6	35
205	Solitons in optical fiber Bragg gratings with dispersive reflectivity. <i>Optik</i> , 2019, 182, 119-123.	2.9	35
206	Solitons, Shock Waves, Conservation Laws and Bifurcation Analysis of Boussinesq Equation with Power Law Nonlinearity and Dual Dispersion. <i>Applied Mathematics and Information Sciences</i> , 2014, 8, 949-957.	0.5	35
207	Bright soliton interactions in a $(2 + 1)$ -dimensional fourth-order variable-coefficient nonlinear Schrödinger equation for the Heisenberg ferromagnetic spin chain. <i>Nonlinear Dynamics</i> , 2019, 95, 983-994.	5.2	34
208	Localized waves and mixed interaction solutions with dynamical analysis to the Grossâ€“Pitaevskii equation in the Boseâ€“Einstein condensate. <i>Nonlinear Dynamics</i> , 2021, 106, 841-854.	5.2	34
209	1-Soliton Solution of the Generalized Resonant Nonlinear Dispersive Schrödinger's Equation with Time-Dependent Coefficients. <i>Advanced Science Letters</i> , 2012, 16, 309-312.	0.2	34
210	Dynamics of solitons in optical fibres. <i>Journal of Modern Optics</i> , 2001, 48, 1135-1150.	1.3	33
211	New Solutions for $(1+1)$ -Dimensional and $(2+1)$ -Dimensional Kaupâ€“Kupershmidt Equations. <i>Results in Mathematics</i> , 2013, 63, 675-686.	0.8	33
212	Symmetry reduction, exact group-invariant solutions and conservation laws of the Benjaminâ€“Bonaâ€“Mahoney equation. <i>Applied Mathematics Letters</i> , 2013, 26, 376-381.	2.7	33
213	Optical solitons and conservation laws with anti-cubic nonlinearity. <i>Optik</i> , 2016, 127, 12056-12062.	2.9	33
214	Solitary wave solutions of coupled boussinesq equation. <i>Complexity</i> , 2016, 21, 151-155.	1.6	33
215	Chirped w -shaped optical solitons of Chenâ€“Leeâ€“Liu equation. <i>Optik</i> , 2018, 155, 208-212.	2.9	33
216	Chirped dark and gray solitons for Chenâ€“Leeâ€“Liu equation in optical fibers and PCF. <i>Optik</i> , 2018, 155, 329-333.	2.9	33

#	ARTICLE	IF	CITATIONS
217	Optical solitons with anti-cubic nonlinearity by mapping methods. <i>Optik</i> , 2018, 170, 520-526.	2.9	33
218	Solitons and conservation laws in magneto-optic waveguides with generalized Kudryashov's equation. <i>Chinese Journal of Physics</i> , 2021, 69, 186-205.	3.9	33
219	Bright and dark solitons in a cascaded system. <i>Optik</i> , 2014, 125, 6162-6165.	2.9	32
220	Pure-cubic optical soliton perturbation with full nonlinearity by unified Riccati equation expansion. <i>Optik</i> , 2020, 223, 165445.	2.9	32
221	Solitons in magneto-optic waveguides with Kudryashov's law of refractive index. <i>Chaos, Solitons and Fractals</i> , 2020, 140, 110129.	5.1	32
222	A study of optical solitons with Kerr and power law nonlinearities by He's variational principle. <i>Journal of the European Optical Society-Rapid Publications</i> , 0, 4, .	1.9	31
223	Optical solitons with power law nonlinearity using Lie group analysis. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2009, 373, 2047-2049.	2.1	31
224	TOPOLOGICAL 1-SOLITON SOLUTION OF THE GENERALIZED RADHAKRISHNAN, KUNDU, LAKSHMANAN EQUATION WITH NONLINEAR DISPERSION. <i>Modern Physics Letters B</i> , 2010, 24, 1825-1831.	1.9	31
225	Resonant optical solitons with anti-cubic nonlinearity. <i>Optik</i> , 2018, 157, 525-531.	2.9	31
226	Optical solitons in fiber Bragg gratings with dispersive reflectivity for quadratic-cubic nonlinearity by extended trial function method. <i>Optik</i> , 2019, 185, 50-56.	2.9	31
227	Optical soliton polarization with Lakshmanan-Porsezian-Daniel model by unified approach. <i>Results in Physics</i> , 2021, 22, 103958.	4.1	31
228	Domain wall and bifurcation analysis of the Klein-Gordon Zakharov equation in $(1 + \alpha)$ -dimensions with power law nonlinearity. <i>Chaos</i> , 2013, 23, 033115.	2.5	30
229	Optical solitons in $(1 + 1)$ and $(2 + 1)$ dimensions. <i>Optik</i> , 2014, 125, 1537-1549.	2.9	30
230	Optical solitons in birefringent fibers with modified simple equation method. <i>Optik</i> , 2017, 130, 996-1003.	2.9	30
231	Highly dispersive optical solitons with quadratic-cubic law of refractive index by the variational iteration method. <i>Journal of Optics (India)</i> , 2022, 51, 29-36.	1.7	30
232	Stationary optical solitons with Kudryashov's quintuple power-law of refractive index having nonlinear chromatic dispersion. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 426, 127885.	2.1	30
233	An exact solution for the modified nonlinear Schrödinger equation for Davydov solitons in $\hat{\pm}$ -helix proteins. <i>Mathematical Biosciences</i> , 2010, 227, 68-71.	1.9	29
234	Solitons and other solutions to the quantum Zakharov-Kuznetsov equation. <i>Astrophysics and Space Science</i> , 2012, 341, 507-513.	1.4	29

#	ARTICLE	IF	CITATIONS
235	Dispersive optical solitons in DWDM systems. <i>Optik</i> , 2017, 132, 210-215.	2.9	29
236	Optical solitons having anti-cubic nonlinearity with a couple of exotic integration schemes. <i>Optik</i> , 2018, 172, 794-800.	2.9	29
237	Optical solitons with complex Ginzburg-Landau equation having three nonlinear forms. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2019, 383, 126026.	2.1	29
238	Optical solitons in fiber Bragg gratings with dispersive reflectivity for parabolic law nonlinearity by extended trial function method. <i>Optik</i> , 2019, 183, 595-601.	2.9	29
239	Optical solitons and bifurcation analysis in fiber Bragg gratings with Lie symmetry and Kudryashov's approach. <i>Nonlinear Dynamics</i> , 2021, 105, 735-751.	5.2	29
240	Optical Gaussons in nonlinear directional couplers. <i>Journal of Electromagnetic Waves and Applications</i> , 2013, 27, 1976-1985.	1.6	28
241	Dark optical solitons with power law nonlinearity using G^2/G -expansion. <i>Optik</i> , 2014, 125, 4603-4608.	2.9	28
242	Optical solitons in nonlinear directional couplers with G^2/G -expansion scheme. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2015, 24, 1550017.	1.8	28
243	Family of optical solitons for perturbed Fokas-Lenells equation. <i>Optik</i> , 2022, 249, 168224.	2.9	28
244	Optical soliton perturbation with spatio-temporal dispersion in parabolic and dual-power law media by semi-inverse variational principle. <i>Optik</i> , 2014, 125, 4945-4950.	2.9	27
245	Optical solitons with complex Ginzburg-Landau equation having a plethora of nonlinear forms with a couple of improved integration norms. <i>Optik</i> , 2020, 207, 163804.	2.9	27
246	Stationary optical solitons with Sasa-Satsuma equation having nonlinear chromatic dispersion. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126721.	2.1	27
247	Optical solitons with generalized anti-cubic nonlinearity by Lie symmetry. <i>Optik</i> , 2020, 206, 163638.	2.9	27
248	Quasi-stationary optical solitons with parabolic law nonlinearity. <i>Optics Communications</i> , 2003, 216, 427-437.	2.1	26
249	GABITOV-TURITSYN EQUATION FOR SOLITONS IN OPTICAL FIBERS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2003, 12, 17-37.	1.8	26
250	1-Soliton solution of 1+2 dimensional nonlinear Schrödinger equation in power law media. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 1830-1833.	3.3	26
251	1-Soliton solution of the Klein-Gordon-Zakharov equation with power law nonlinearity. <i>Applied Mathematics and Computation</i> , 2010, 217, 4186-4196.	2.2	26
252	Dipole solitons in optical metamaterials with Kerr law nonlinearity. <i>Optik</i> , 2017, 128, 71-76.	2.9	26

#	ARTICLE	IF	CITATIONS
253	Gaussian mixture model for texture characterization with application to brain DTI images. Journal of Advanced Research, 2019, 16, 15-23.	9.5	26
254	Dark three-soliton for a nonlinear Schrödinger equation in inhomogeneous optical fiber. Optik, 2020, 220, 165189.	2.9	26
255	SOLITON PERTURBATION THEORY FOR DISPERSION-MANAGED OPTICAL FIBERS. Journal of Nonlinear Optical Physics and Materials, 2009, 18, 227-270.	1.8	25
256	Travelling wave solutions of the non-linear Schrödinger's equation in non-Kerr law media. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 1993-1998.	3.3	25
257	1-Soliton solution of Kadomtsev-Petviashvili equation with power law nonlinearity. Applied Mathematics and Computation, 2009, 214, 645-647.	2.2	25
258	OPTICAL SOLITONS WITH HIGHER ORDER DISPERSION BY SEMI-INVERSE VARIATIONAL PRINCIPLE. Progress in Electromagnetics Research, 2010, 102, 337-350.	4.4	25
259	Highly dispersive optical soliton perturbation with cubic-quintic-septic refractive index by semi-inverse variational principle. Optik, 2019, 199, 163322.	2.9	25
260	Optical solitons and conservation laws with polarization mode dispersion for coupled Fokas-Lenells equation using group invariance. Chaos, Solitons and Fractals, 2019, 120, 245-249.	5.1	25
261	Cubic-quartic optical solitons and conservation laws with Kudryashov's sextic power-law of refractive index. Optik, 2021, 227, 166059.	2.9	25
262	Soliton perturbation theory for nonlinear wave equations. Applied Mathematics and Computation, 2010, 216, 2226-2231.	2.2	24
263	A study of solitary waves by He's semi-inverse variational principle. Waves in Random and Complex Media, 2011, 21, 96-104.	2.7	24
264	SOLITONS IN ALPHA-HELIX PROTEINS BY HE'S VARIATIONAL PRINCIPLE. International Journal of Biomathematics, 2011, 04, 423-429.	2.9	24
265	Dispersive optical solitons by the semi-inverse variational principle. Journal of Modern Optics, 2012, 59, 213-217.	1.3	24
266	Optical solitons and conservation laws for driven nonlinear Schrödinger's equation with linear attenuation and detuning. Optics and Laser Technology, 2013, 45, 402-405.	4.6	24
267	Soliton solutions to KdV equation with spatio-temporal dispersion. Ocean Engineering, 2016, 114, 192-203.	4.3	24
268	Optical solitons in nonlinear negative-index materials with quadratic-cubic nonlinearity. Superlattices and Microstructures, 2017, 109, 176-182.	3.1	24
269	Bright optical solitons of Chen-Lee-Liu equation with improved Adomian decomposition method. Optik, 2019, 181, 964-970.	2.9	24
270	Conservation Laws for Highly Dispersive Optical Solitons in Birefringent Fibers. Regular and Chaotic Dynamics, 2020, 25, 166-177.	0.8	24

#	ARTICLE	IF	CITATIONS
271	Solitons in magneto-optic waveguides with quadratic-cubic nonlinearity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126456.	2.1	24
272	Stochastic perturbation of dispersion-managed optical solitons. Optical and Quantum Electronics, 2005, 37, 649-659.	3.3	23
273	1-Soliton solution of the generalized Zakharov equation in plasmas by He's variational principle. Applied Mathematics and Computation, 2010, 215, 4462-4466.	2.2	23
274	Exact 1-soliton solution of the Zakharov equation in plasmas with power law nonlinearity. Applied Mathematics and Computation, 2011, 217, 7372-7375.	2.2	23
275	Optical Solitons in Magneto-optic Waveguides with Spatio-temporal Dispersion. Frequenz, 2014, 68, .	0.9	23
276	An alternate pathway to solitons in magneto-optic waveguides with triple-power law nonlinearity. Optik, 2021, 231, 166480.	2.9	23
277	Bright and dark solitons in optical fibers with parabolic law nonlinearity. Serbian Journal of Electrical Engineering, 2013, 10, 365-370.	0.4	23
278	THEORY OF DISPERSION-MANAGED OPTICAL SOLITONS. Progress in Electromagnetics Research, 2005, 50, 83-134.	4.4	22
279	Soliton solutions and conservation laws of the Gilson-Pickering equation. Waves in Random and Complex Media, 2011, 21, 378-385.	2.7	22
280	Solitons and cnoidal waves of the Klein-Gordon-Zakharov equation in plasmas. Pramana - Journal of Physics, 2012, 79, 185-198.	1.8	22
281	Bifurcation Analysis and Implicit Solution of Klein-Gordon Equation with Dual-power Law Nonlinearity in Relativistic Quantum Mechanics. International Journal of Nonlinear Sciences and Numerical Simulation, 2013, 14, 317-322.	1.0	22
282	Dispersive solitons in optical fibers and DWDM networks with Schrödinger-Hirota equation. Optik, 2019, 199, 163214.	2.9	22
283	Highly dispersive optical solitons in the nonlinear Schrödinger's equation having polynomial law of the refractive index change. Indian Journal of Physics, 2021, 95, 109-119.	1.8	22
284	Optical dromions and domain walls in (2+1)-dimensional coupled system. Optik, 2021, 227, 165669.	2.9	22
285	Stationary optical solitons with Kudryashov's laws of refractive index. Chaos, Solitons and Fractals, 2021, 151, 111226.	5.1	22
286	Soliton perturbation theory for the generalized Benjamin-Bona-Mahoney equation. Communications in Nonlinear Science and Numerical Simulation, 2008, 13, 703-706.	3.3	21
287	Optical soliton perturbation with time-dependent coefficients in a log law media. Applied Mathematics and Computation, 2010, 217, 2891-2894.	2.2	21
288	Soliton solutions for a generalized fifth-order KdV equation with κ -dependent coefficients. Waves in Random and Complex Media, 2011, 21, 151-160.	2.7	21

#	ARTICLE	IF	CITATIONS
289	Solitons and other nonlinear waves for the perturbed Boussinesq equation with power law nonlinearity. <i>Journal of King Saud University - Science</i> , 2012, 24, 237-241.	3.5	21
290	Singular soliton solution and bifurcation analysis of Klein-Gordon equation with power law nonlinearity. <i>Frontiers of Mathematics in China</i> , 2013, 8, 191-201.	0.7	21
291	Conservation laws for optical solitons with spatio-temporal dispersion. <i>Journal of Electromagnetic Waves and Applications</i> , 2014, 28, 242-252.	1.6	21
292	Bright and singular solitons in quadratic nonlinear media. <i>Journal of Electromagnetic Waves and Applications</i> , 2014, 28, 275-280.	1.6	21
293	A New Approach for Numerical Solution of Modified Korteweg-de Vries Equation. <i>Iranian Journal of Science and Technology, Transaction A: Science</i> , 2017, 41, 1109-1121.	1.5	21
294	Optical solitons in fiber Bragg gratings with dispersive reflectivity for parabolic law nonlinearity using undetermined coefficients. <i>Optik</i> , 2019, 185, 39-44.	2.9	21
295	Interactions among solitons for a fifth-order variable coefficient nonlinear Schrödinger equation. <i>Nonlinear Dynamics</i> , 2020, 100, 2797-2805.	5.2	21
296	Optical solitons in fiber Bragg gratings with generalized anti-cubic nonlinearity by extended auxiliary equation. <i>Chinese Journal of Physics</i> , 2020, 65, 613-628.	3.9	21
297	Soliton Perturbation Theory for the Compound KdV Equation. <i>International Journal of Theoretical Physics</i> , 2007, 46, 237-243.	1.2	20
298	Femtosecond Pulse Propagation in Optical Fibers Under Higher Order Effects: A Collective Variable Approach. <i>International Journal of Theoretical Physics</i> , 2008, 47, 1699-1708.	1.2	20
299	ADIABATIC DYNAMICS OF GAUSSIAN AND SUPER-GAUSSIAN SOLITONS IN DISPERSION-MANAGED OPTICAL FIBERS. <i>Progress in Electromagnetics Research</i> , 2008, 84, 27-53.	4.4	20
300	Stationary solution of the nonlinear Schrödinger's equation with log law nonlinearity by Lie symmetry analysis. <i>Waves in Random and Complex Media</i> , 2011, 21, 554-558.	2.7	20
301	Optical solitons with polarization-mode dispersion for coupled Fokas-Lenells equation with two forms of integration architecture. <i>Optical and Quantum Electronics</i> , 2018, 50, 1.	3.3	20
302	Stochastic perturbation of optical solitons having anti-cubic nonlinearity with bandpass filters and multi-photon absorption. <i>Optik</i> , 2019, 178, 1120-1124.	2.9	20
303	Cubic-quartic optical soliton perturbation and conservation laws with Kudryashov's law of refractive index. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126884.	2.1	20
304	Optical solitons and other solutions to Kudryashov's equation with three innovative integration norms. <i>Optik</i> , 2020, 211, 164431.	2.9	20
305	Highly dispersive optical soliton perturbation with Kudryashov's sextic-power law nonlinear refractive index by semi-inverse variation. <i>Results in Physics</i> , 2021, 27, 104539.	4.1	20
306	Conservation laws for pure-cubic optical solitons with complex Ginzburg-Landau equation having several refractive index structures. <i>Results in Physics</i> , 2021, 31, 104901.	4.1	20

#	ARTICLE	IF	CITATIONS
307	Highly Dispersive Optical Solitons with Complex Ginzburg-Landau Equation Having Six Nonlinear Forms. <i>Mathematics</i> , 2021, 9, 3270.	2.2	20
308	Analysis of non-linear Klein-Gordon equations using Lie symmetry. <i>Applied Mathematics Letters</i> , 2010, 23, 1397-1400.	2.7	19
309	Dipole solitons in an extended nonlinear Schrödinger's equation with higher-order even and odd terms. <i>Optik</i> , 2017, 145, 644-649.	2.9	19
310	Parallel propagation of dispersive optical solitons by extended trial equation method. <i>Optik</i> , 2017, 144, 565-572.	2.9	19
311	Optical solitons and other solutions with anti-cubic nonlinearity by Lie symmetry analysis and additional integration architectures. <i>Optik</i> , 2019, 185, 30-38.	2.9	19
312	Optical solitons for higher-order nonlinear Schrödinger's equation with three exotic integration architectures. <i>Optik</i> , 2019, 179, 861-866.	2.9	19
313	Pure-cubic optical soliton perturbation with full nonlinearity. <i>Optik</i> , 2020, 222, 165394.	2.9	19
314	Optical solitons with Sasa-Satsuma equation by Laplace-Adomian decomposition algorithm. <i>Optik</i> , 2021, 229, 166262.	2.9	19
315	Cubic-quartic optical soliton perturbation in polarization-preserving fibers with Fokas-Lenells equation. <i>Optik</i> , 2021, 234, 166543.	2.9	19
316	Stationary optical solitons with nonlinear chromatic dispersion and generalized temporal evolution by extended trial function approach. <i>Chaos, Solitons and Fractals</i> , 2021, 147, 110971.	5.1	19
317	Chiral Solitons With Time-Dependent Coefficients. <i>International Journal of Theoretical Physics</i> , 2010, 49, 79-83.	1.2	18
318	Optimization of breast lesion segmentation in texture feature space approach. <i>Medical Engineering and Physics</i> , 2014, 36, 129-135.	1.7	18
319	Super-Gaussian Solitons in Optical Metamaterials Using Collective Variables. <i>Journal of Computational and Theoretical Nanoscience</i> , 2015, 12, 5119-5124.	0.4	18
320	Bright and exotic solitons in optical metamaterials by semi-inverse variational principle. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2015, 24, 1550042.	1.8	18
321	Optical soliton perturbation with fractional temporal evolution by generalized Kudryashov's method. <i>Optik</i> , 2018, 164, 303-310.	2.9	18
322	Optical soliton perturbation of Fokas-Lenells equation by the Laplace-Adomian decomposition algorithm. <i>Journal of the European Optical Society-Rapid Publications</i> , 2019, 15, .	1.9	18
323	Cubic-quartic optical solitons with Kudryashov's law of refractive index by F-expansions schemes. <i>Results in Physics</i> , 2020, 18, 103273.	4.1	18
324	Solitons and conservation laws in magneto-optic waveguides having parabolic nonlocal law of refractive index. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126814.	2.1	18

#	ARTICLE	IF	CITATIONS
325	Highly dispersive optical solitons with non-local law of refractive index by Laplace-Adomian decomposition. <i>Optical and Quantum Electronics</i> , 2021, 53, 1.	3.3	18
326	Optical soliton perturbation with Kudryashov's generalized nonlinear refractive index. <i>Optik</i> , 2021, 240, 166620.	2.9	18
327	Localized pulses in optical fibers governed by perturbed Fokas's Lenells equation. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 421, 127782.	2.1	18
328	Quasi-stationary optical solitons with power law nonlinearity. <i>Journal of Physics A</i> , 2003, 36, 4581-4589.	1.6	17
329	DISPERSION-MANAGED SOLITONS IN MULTIPLE CHANNELS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2004, 13, 81-102.	1.8	17
330	Soliton perturbation theory for the modified nonlinear Schrödinger's equation. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2007, 12, 886-903.	3.3	17
331	1-Soliton solution and conservation laws of the generalized Dullin's-Gottwald's-Holm equation. <i>Applied Mathematics and Computation</i> , 2010, 217, 929-932.	2.2	17
332	Coherent Super Continuum Generation in Photonic Crystal Fibers at Visible and Near Infrared Wavelengths. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2014, 20, 573-581.	2.9	17
333	Solitons and conservation laws of coupled Ostrovsky equation for internal waves. <i>Applied Mathematics and Computation</i> , 2015, 258, 95-99.	2.2	17
334	Raman solitons in nanoscale optical waveguides, with metamaterials, having polynomial law non-linearity. <i>Journal of Modern Optics</i> , 2016, 63, S32-S37.	1.3	17
335	Optical solitons with higher order dispersions in parabolic law medium by trial solution approach. <i>Optik</i> , 2016, 127, 11306-11310.	2.9	17
336	Dispersive optical solitons with differential group delay by a couple of integration schemes. <i>Optik</i> , 2018, 162, 108-120.	2.9	17
337	Highly dispersive optical soliton perturbation with Kerr law by semi-inverse variational principle. <i>Optik</i> , 2019, 199, 163226.	2.9	17
338	Chirped singular and combo optical solitons for Chen's-Lee's-Liu equation with three forms of integration architecture. <i>Optik</i> , 2019, 178, 172-177.	2.9	17
339	A pen-picture of solitons and conservation laws in magneto-optic waveguides having quadratic-cubic law of nonlinear refractive index. <i>Optik</i> , 2020, 223, 165330.	2.9	17
340	Optical soliton perturbation with polynomial and triple-power laws of refractive index by semi-inverse variational principle. <i>Chaos, Solitons and Fractals</i> , 2020, 135, 109765.	5.1	17
341	Solitons and conservation laws in magneto-optic waveguides with generalized Kudryashov's equation by the unified auxiliary equation approach. <i>Optik</i> , 2021, 245, 167694.	2.9	17
342	Theory of optical couplers. <i>Optical and Quantum Electronics</i> , 2003, 35, 221-235.	3.3	16

#	ARTICLE	IF	CITATIONS
343	INFLUENCE OF EVEN ORDER DISPERSION ON SOLITON TRANSMISSION QUALITY WITH COHERENT INTERFERENCE. <i>Progress in Electromagnetics Research B</i> , 2008, 3, 63-72.	1.0	16
344	Chiral Solitons in 1+2 Dimensions. <i>International Journal of Theoretical Physics</i> , 2009, 48, 3403-3409.	1.2	16
345	1-Soliton solution of the generalized KdV equation with generalized evolution. <i>Applied Mathematics and Computation</i> , 2010, 216, 1673-1679.	2.2	16
346	Resonant optical soliton perturbation with anti-cubic nonlinearity by extended trial function method. <i>Optik</i> , 2018, 156, 784-790.	2.9	16
347	Optical solitons in birefringent fibers having anti-cubic nonlinearity with extended trial function. <i>Optik</i> , 2019, 185, 456-463.	2.9	16
348	Stationary optical solitons with nonlinear chromatic dispersion having quadratic-cubic law of refractive index. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126606.	2.1	16
349	Cubic-quartic optical soliton perturbation and conservation laws with generalized Kudryashov's form of refractive index. <i>Journal of Optics (India)</i> , 2021, 50, 354-360.	1.7	16
350	W-shaped and other solitons in optical nanofibers. <i>Results in Physics</i> , 2021, 23, 103973.	4.1	16
351	Cubic-quartic optical soliton perturbation with Lakshmanan-Porsezian-Daniel model. <i>Optik</i> , 2021, 233, 166385.	2.9	16
352	Sequel to highly dispersive optical soliton perturbation with cubic-quintic-septic refractive index by semi-inverse variational principle. <i>Optik</i> , 2020, 203, 163451.	2.9	16
353	Optical Solitons for Quadratic Law Nonlinearity with Five Integration Schemes. <i>Journal of Computational and Theoretical Nanoscience</i> , 2015, 12, 4809-4821.	0.4	16
354	Chirped optical soliton perturbation of Fokas-Lenells equation with full nonlinearity. <i>Advances in Difference Equations</i> , 2020, 2020, .	3.5	16
355	Dynamics of shallow water waves with Gardner-Kadomtsev-Petviashvili equation. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2015, 8, 1155-1164.	1.1	16
356	Singular solitons and numerical analysis of \hat{I} -four equation. <i>Mathematical Sciences</i> , 2012, 6, 42.	1.7	15
357	Dynamics of dispersive long waves in fluids. <i>Ocean Engineering</i> , 2014, 81, 77-88.	4.3	15
358	Optical solitons in birefringent fibers having anti-cubic nonlinearity with exp-function. <i>Optik</i> , 2019, 186, 363-368.	2.9	15
359	The mixed interaction of localized, breather, exploding and solitary wave for the (3+1)-dimensional Kadomtsev-Petviashvili equation in fluid dynamics. <i>Nonlinear Dynamics</i> , 2020, 100, 1611-1619.	5.2	15
360	Pure-Cubic Optical Soliton Perturbation with Complex Ginzburg-Landau Equation Having a Dozen Nonlinear Refractive Index Structures. <i>Journal of Communications Technology and Electronics</i> , 2021, 66, 481-544.	0.5	15

#	ARTICLE	IF	CITATIONS
361	Optical solitons in fiber Bragg gratings with dispersive reflectivity by sine-Gordon equation approach. <i>Optik</i> , 2021, 237, 166684.	2.9	15
362	DISPERSION-MANAGED SOLITONS IN OPTICAL COUPLERS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2003, 12, 45-74.	1.8	14
363	Solutions of Kadomtsev-Petviashvili equation with power law nonlinearity in 1+3 dimensions. <i>Mathematical Methods in the Applied Sciences</i> , 2011, 34, 532-543.	2.3	14
364	Analytical and numerical solutions of the Schrödinger-KdV equation. <i>Pramana - Journal of Physics</i> , 2012, 78, 59-90.	1.8	14
365	Dark optical solitons and conservation laws for parabolic and dual-power law nonlinearities in (2 +) Tj ETQq1 1 0.784314 rgBT /Overlook	2.9	14
366	Interaction of spatially separated oscillating solitons in biased two-photon photorefractive materials. <i>Journal of Modern Optics</i> , 2015, 62, 1-10.	1.3	14
367	Optical network topology with DWDM technology for log law medium. <i>Optik</i> , 2018, 160, 353-360.	2.9	14
368	Optical soliton perturbation with fractional temporal evolution by extended G ² /G-expansion method. <i>Optik</i> , 2018, 161, 301-320.	2.9	14
369	Stationary optical solitons with nonlinear group velocity dispersion by extended trial function scheme. <i>Optik</i> , 2018, 171, 529-542.	2.9	14
370	Chirped bright and double-kinked quasi-solitons in optical metamaterials with self-steepening nonlinearity. <i>Journal of Modern Optics</i> , 2019, 66, 192-199.	1.3	14
371	Highly dispersive optical soliton perturbation with quadratic-cubic refractive index by semi-inverse variational principle. <i>Optik</i> , 2020, 206, 163621.	2.9	14
372	Optical solitons with differential group delay for complex Ginzburg-Landau equation having Kerr and parabolic laws of refractive index. <i>Optik</i> , 2020, 202, 163737.	2.9	14
373	Chirped and chirp-free optical solitons having generalized anti-cubic nonlinearity with a few cutting-edge integration technologies. <i>Optik</i> , 2020, 206, 163745.	2.9	14
374	Algorithm for dark solitons with Radhakrishnan-Kundu-Lakshmanan model in an optical fiber. <i>Results in Physics</i> , 2021, 30, 104806.	4.1	14
375	Highly dispersive optical solitons and conservation laws in absence of self-phase modulation with new Kudryashov's approach. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 431, 128001.	2.1	14
376	SOLITON-SOLITON INTERACTION IN OPTICAL FIBERS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 1999, 08, 483-495.	1.8	13
377	Quasi-stationary optical solitons with dual-power law nonlinearity. <i>Optics Communications</i> , 2004, 235, 183-194.	2.1	13
378	1-Soliton solution of the generalized Burgers equation with generalized evolution. <i>Applied Mathematics and Computation</i> , 2011, 217, 10289-10294.	2.2	13

#	ARTICLE	IF	CITATIONS
379	Shock wave development in couple stress fluid-filled thin elastic tubes. <i>European Physical Journal Plus</i> , 2015, 130, 1.	2.6	13
380	Chirped solitons in optical metamaterials with parabolic law nonlinearity by extended trial function method. <i>Optik</i> , 2018, 160, 92-99.	2.9	13
381	Highly dispersive optical solitons in absence of self-phase modulation by exp-function. <i>Optik</i> , 2019, 186, 436-442.	2.9	13
382	Optical soliton perturbation with quadratic-cubic nonlinearity by mapping methods. <i>Chinese Journal of Physics</i> , 2019, 60, 632-637.	3.9	13
383	Dispersive solitons in optical metamaterials having parabolic form of nonlinearity. <i>Optik</i> , 2019, 179, 1009-1018.	2.9	13
384	Optical solitons in birefringent fibers having anti-cubic nonlinearity with a few prolific integration algorithms. <i>Optik</i> , 2020, 200, 163229.	2.9	13
385	Nonautonomous matter wave bright solitons in a quasi-1D Bose-Einstein condensate system with contact repulsion and dipole-dipole attraction. <i>Applied Mathematics and Computation</i> , 2020, 371, 124951.	2.2	13
386	Solitons in nonlinear directional couplers with optical metamaterials by first integral method. <i>Optik</i> , 2020, 218, 165208.	2.9	13
387	Dark, singular and straddled optical solitons in birefringent fibers with generalized anti-cubic nonlinearity. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2020, 384, 126417.	2.1	13
388	Peakon and cuspon excitations in optical fibers for eighth order nonlinear Schrödinger's model. <i>Optik</i> , 2021, 243, 167509.	2.9	13
389	Cubic-Quartic Optical Solitons with Differential Group Delay for Kudryashov's Model by Extended Trial Function. <i>Journal of Communications Technology and Electronics</i> , 2020, 65, 1384-1398.	0.5	13
390	New exact traveling wave solutions for DS-I and DS-II equations. <i>Nonlinear Analysis: Modelling and Control</i> , 2012, 17, 369-378.	1.6	13
391	Highly dispersive optical solitons in polarization-preserving fibers with Kerr law nonlinearity by Lie symmetry. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2022, 421, 127768.	2.1	13
392	Dark solitons with anti-cubic and generalized anti-cubic nonlinearities in an optical fiber. <i>Optik</i> , 2022, 255, 168641.	2.9	13
393	SOLITONS IN MULTIPLE-CORE COUPLERS. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2001, 10, 329-335.	1.8	12
394	Chirped optical pulse propagation in saturating nonlinear media. <i>Optical and Quantum Electronics</i> , 2004, 36, 905-918.	3.3	12
395	Optical solitons in a parabolic law media with fourth order dispersion. <i>Applied Mathematics and Computation</i> , 2009, 208, 299-302.	2.2	12
396	1-Soliton solution and conservation laws for nonlinear wave equation in semiconductors. <i>Applied Mathematics and Computation</i> , 2010, 217, 4289-4292.	2.2	12

#	ARTICLE	IF	CITATIONS
397	OPTICAL SOLITON PERTURBATION WITH LOG LAW NONLINEARITY BY HE'S SEMI-INVERSE VARIATIONAL PRINCIPLE. Optics and Photonics Letters, 2010, 03, 1-5.	0.8	12
398	Solitary waves and shock waves of the KdV6 equation. Ocean Engineering, 2013, 73, 119-125.	4.3	12
399	Breather Dynamics of the Sine-Gordon Equation. Communications in Theoretical Physics, 2013, 59, 664-670.	2.5	12
400	SOLITONS AND CONSERVATION LAWS IN NEUROSCIENCES. International Journal of Biomathematics, 2013, 06, 1350017.	2.9	12
401	An analysis of the Zhiber-Shabat equation including Lie point symmetries and conservation laws. Collectanea Mathematica, 2016, 67, 55-62.	0.9	12
402	Chirped optical Gausson perturbation with quadratic-cubic nonlinearity by collective variables. Optical and Quantum Electronics, 2019, 51, 1.	3.3	12
403	Optical solitons having anti-cubic nonlinearity with strategically sound integration architectures. Optik, 2019, 185, 57-70.	2.9	12
404	Optical solitons in birefringent fibers with quadratic-cubic refractive index by $\tilde{\mu}$ -model expansion. Optik, 2020, 202, 163620.	2.9	12
405	Optical solitons with differential group delay for complex Ginzburg-Landau equation. Results in Physics, 2020, 16, 102888.	4.1	12
406	Optical Dromions and Domain Walls with the Kundu Mukherjee Naskar Equation by the Laplace Adomian Decomposition Scheme. Regular and Chaotic Dynamics, 2020, 25, 338-348.	0.8	12
407	Soliton solutions of Sasa-Satsuma nonlinear Schrödinger model and construction of modulation instability analysis. Optical and Quantum Electronics, 2021, 53, 1.	3.3	12
408	Highly dispersive optical solitons with a polynomial law of refractive index by Laplace-Adomian decomposition. Journal of Computational Electronics, 2021, 20, 1216-1223.	2.5	12
409	Cubic-quartic optical solitons with Kudryashov's arbitrary form of nonlinear refractive index. Optik, 2021, 238, 166747.	2.9	12
410	Stationary optical solitons with cubic-quartic law of refractive index and nonlinear chromatic dispersion. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 410, 127541.	2.1	12
411	Optical solitons with Kudryashov's arbitrary form of refractive index and generalized non-local nonlinearity. Optik, 2021, 243, 166723.	2.9	12
412	Conservation Laws for Regularized Long Wave Equation and $\tilde{\mu}$ ($\tilde{\mu}$ and $\tilde{\mu}$) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	0.2	12
413	Nematicons in Liquid Crystals. Journal of Computational and Theoretical Nanoscience, 2015, 12, 4667-4673.	0.4	12
414	OPTICAL SOLITON PERTURBATION WITH BANDWIDTH LIMITED AMPLIFICATION AND SATURABLE AMPLIFIERS. Journal of Nonlinear Optical Physics and Materials, 1999, 08, 277-288.	1.8	11

#	ARTICLE	IF	CITATIONS
415	Optical Solitons with Time-Dependent Dispersion, Nonlinearity and Attenuation in a Kerr-Law Media. International Journal of Theoretical Physics, 2009, 48, 256-260.	1.2	11
416	1-Soliton solution of the generalized KP equation with generalized evolution. Applied Mathematics and Computation, 2010, 216, 2220-2225.	2.2	11
417	Soliton solutions of a few nonlinear wave equations. Applied Mathematics and Computation, 2010, 216, 2649-2658.	2.2	11
418	Exact solutions of KdV equation with time-dependent coefficients. Applied Mathematics and Computation, 2010, 216, 3114-3119.	2.2	11
419	Optical soliton perturbation with exotic non-Kerr law nonlinearities. Optik, 2018, 158, 1370-1379.	2.9	11
420	Multifractal analysis of ceramic pottery SEM images in Cucuteni-Tripolye culture. Optik, 2018, 164, 538-546.	2.9	11
421	Optical solitons having anti-cubic nonlinearity with two integration architectures. Chinese Journal of Physics, 2019, 60, 659-664.	3.9	11
422	Highly dispersive optical solitons in absence of self-phase modulation by F-expansion. Optik, 2019, 187, 258-271.	2.9	11
423	Numerical study on convective flow in a three-dimensional enclosure with hot solid body and discrete cooling. Numerical Heat Transfer; Part A: Applications, 2019, 76, 87-99.	2.1	11
424	Solitons in magneto-optic waveguides with dual-power law nonlinearity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126697.	2.1	11
425	Optical soliton perturbation with parabolic nonlocal combo nonlinearity: undetermined coefficients and semi-inverse variational principle. Journal of Optics (India), 2022, 51, 22-28.	1.7	11
426	Bright solitons with anti-cubic and generalized anti-cubic nonlinearities in an optical fiber. Optik, 2022, 254, 168612.	2.9	11
427	Optical soliton perturbation with nonlinear damping and saturable amplifiers. Mathematics and Computers in Simulation, 2001, 56, 521-537.	4.4	10
428	Quasi-stationary solitons for Langmuir waves in plasmas. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 69-76.	3.3	10
429	DYNAMICS OF SUPER-SECH SOLITONS IN OPTICAL FIBERS. Journal of Nonlinear Optical Physics and Materials, 2010, 19, 339-370.	1.8	10
430	Applications of Heun's principles to partial differential equations. Applied Mathematics and Computation, 2011, 217, 7039-7047.	2.2	10
431	On the invariances, conservation laws, and conserved quantities of the damped driven nonlinear Schrödinger equation. Canadian Journal of Physics, 2012, 90, 199-206.	1.1	10
432	Quasi-stationary optical Gaussons. Optik, 2013, 124, 2959-2962.	2.9	10

#	ARTICLE	IF	CITATIONS
451	Optical soliton perturbation with Kerr law nonlinearity by Adomian decomposition method. <i>Optik</i> , 2018, 168, 253-270.	2.9	9
452	Conservation laws for perturbed solitons in optical metamaterials. <i>Results in Physics</i> , 2018, 8, 898-902.	4.1	9
453	Novel singular solitons in optical metamaterials for self-steepening effect. <i>Optik</i> , 2018, 154, 545-550.	2.9	9
454	Soliton perturbation and conservation laws in magneto-optic waveguides with parabolic law nonlinearity. <i>Optik</i> , 2020, 220, 165196.	2.9	9
455	Optical solitons with Sasa's Satsuma equation. <i>Optik</i> , 2020, 219, 165183.	2.9	9
456	Cubic-quartic optical soliton perturbation with Kudryashov's law of refractive index having quadruple power law and dual form of generalized nonlocal nonlinearity by sine-Gordon equation approach. <i>Journal of Optics (India)</i> , 2021, 50, 593-599.	1.7	9
457	Gray optical dips of Kundu-Mukherjee-Naskar model. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2021, 401, 127341.	2.1	9
458	Highly Dispersive Optical Soliton Perturbation, with Maximum Intensity, for the Complex Ginzburg-Landau Equation by Semi-Inverse Variation. <i>Mathematics</i> , 2022, 10, 987.	2.2	9
459	Integro-differential perturbations of optical solitons. <i>Journal of Optics</i> , 2000, 2, 380-388.	1.5	8
460	SOLITON PARAMETER DYNAMICS IN A NON-KERR LAW MEDIA. <i>Progress in Electromagnetics Research C</i> , 2008, 1, 1-35.	0.9	8
461	Topological and Non-topological Solitons for the Generalized Zakharov-Kuznetsov Modified Equal Width Equation. <i>International Journal of Theoretical Physics</i> , 2009, 48, 2698-2703.	1.2	8
462	Optical soliton perturbation with full nonlinearity in a non-Kerr law media. <i>Journal of Optical and Fiber Communications Research</i> , 2010, 7, 43-59.	0.5	8
463	Optical Solitons with Higher Order Dispersion in a Log Law Media. <i>Journal of Infrared, Millimeter, and Terahertz Waves</i> , 2010, 31, 1057-1062.	2.2	8
464	1-Soliton solution of the Klein-Gordon-Schrodinger's equation with power law nonlinearity. <i>Applied Mathematics and Computation</i> , 2010, 217, 3869-3874.	2.2	8
465	1-Soliton solution of the D(m,n) equation with generalized evolution. <i>Applied Mathematics and Computation</i> , 2011, 217, 8482-8488.	2.2	8
466	Optical quasi-solitons by Lie symmetry analysis. <i>Journal of King Saud University - Science</i> , 2012, 24, 271-276.	3.5	8
467	Adiabatic phase variation for optical Gaussons. <i>Optics and Laser Technology</i> , 2012, 44, 1219-1222.	4.6	8
468	Optical soliton perturbation with parabolic and dual-power law nonlinearities by semi-inverse variational principle. <i>Optik</i> , 2017, 147, 82-87.	2.9	8

#	ARTICLE	IF	CITATIONS
469	Optical soliton perturbation with full nonlinearity by extended trial function method. Optical and Quantum Electronics, 2018, 50, 1.	3.3	8
470	Optical solitons for the cubic-quintic nonlinear Schrödinger equation. AIP Conference Proceedings, 2018, , .	0.4	8
471	Sequel to stationary optical solitons with nonlinear group velocity dispersion by extended trial function scheme. Optik, 2018, 172, 636-650.	2.9	8
472	Conservation laws for optical solitons with polynomial and triple-power laws of refractive index. Optik, 2020, 202, 163476.	2.9	8
473	Optical soliton perturbation and conservation law with Kudryashov's refractive index having quadrupled power-law and dual form of generalized nonlocal nonlinearity. Optik, 2021, 240, 166966.	2.9	8
474	Cubic-quartic optical soliton perturbation and conservation laws with Lakshmanan-Porsezian-Daniel model: Undetermined coefficients. Journal of Nonlinear Optical Physics and Materials, 0, , 2150007.	1.8	8
475	Conservation laws of the Bretherton Equation. Applied Mathematics and Information Sciences, 2013, 7, 877-879.	0.5	8
476	Cubic-Quartic Optical Soliton Perturbation with Differential Group Delay for the Lakshmanan-Porsezian-Daniel Model by Lie Symmetry. Symmetry, 2022, 14, 224.	2.2	8
477	Numerical Simulation of Cubic-Quartic Optical Solitons with Perturbed Fokas-Lenells Equation Using Improved Adomian Decomposition Algorithm. Mathematics, 2022, 10, 138.	2.2	8
478	Quasi-linear pulses in birefringent fibers. Optical and Quantum Electronics, 2004, 36, 1167-1186.	3.3	7
479	Higher-order Gabitov-Turitsyn equation for solitons in optical fibers. Optik, 2007, 118, 120-133.	2.9	7
480	Topological and non-topological exact soliton solution of the power law KdV equation. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 3263-3269.	3.3	7
481	Topological Soliton Solutions of 2 C 1/-dimensional KdV Equation with Power Law Nonlinearity and Time-dependent Coefficients. International Journal of Nonlinear Sciences and Numerical Simulation, 2011, 12, 35-43.	1.0	7
482	Soliton Solutions, Conservation Laws, and Reductions of Certain Classes of Nonlinear Wave Equations. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2012, 67, 613-620.	1.5	7
483	Optical solitons in birefringent fibers with quadratic-cubic nonlinearity by extended Jacobi's elliptic function expansion. Optik, 2019, 178, 117-121.	2.9	7
484	Chirped self-similar cnoidal waves and similaritons in an inhomogeneous optical medium with resonant nonlinearity. Chaos, Solitons and Fractals, 2020, 141, 110441.	5.1	7
485	Nonlinear control for soliton interactions in optical fiber systems. Nonlinear Dynamics, 2020, 101, 1215-1220.	5.2	7
486	Cubic-quartic solitons for twin-core couplers in optical metamaterials. Optik, 2021, 245, 167632.	2.9	7

#	ARTICLE	IF	CITATIONS
487	Cubic-Quartic Optical Solitons and Conservation Laws with Kudryashov's Law of Refractive Index by Extended Trial Function. Computational Mathematics and Mathematical Physics, 2021, 61, 1995-2003.	0.8	7
488	Topological Solitons of the Nonlinear Schrödinger's Equation with Fourth Order Dispersion. International Journal of Theoretical Physics, 2009, 48, 1104-1109.	1.2	6
489	Mathematical structure of topological solitons due to the Sine-Gordon Equation. Applied Mathematics and Computation, 2011, 217, 6372-6378.	2.2	6
490	Traveling wave solutions of the nonlinear dispersive Klein-Gordon equations. Journal of King Saud University - Science, 2012, 24, 339-342.	3.5	6
491	Ultra-short pulse compression at 1065 nm in nonlinear photonic crystal fiber. Optik, 2014, 125, 133-136.	2.9	6
492	Application of G ² /G-expansion method to Kuramoto-Sivashinsky equation. Acta Mathematicae Applicatae Sinica, 2016, 32, 623-630.	0.7	6
493	Dispersive optical dromions and domain walls with a few golden integration formulae. Optik, 2020, 202, 163439.	2.9	6
494	Cubic-quartic polarized optical solitons and conservation laws for perturbed Fokas-Lenells model. Journal of Nonlinear Optical Physics and Materials, 2021, 30, .	1.8	6
495	Conservation laws for solitons in magneto-optic waveguides with dual-power law nonlinearity. Physics Letters, Section A: General, Atomic and Solid State Physics, 2021, 416, 127667.	2.1	6
496	Soliton-soliton interaction and its influence on soliton amplitude and period. Results in Physics, 2021, 30, 104831.	4.1	6
497	Sequel to "cubic-quartic optical soliton perturbation with complex Ginzburg-Landau equation by the enhanced Kudryashov's method". IET Optoelectronics, 2022, 16, 149-159.	3.3	6
498	DYNAMICS OF SUPER-GAUSSIAN SOLITONS IN BIREFRINGENT OPTICAL FIBERS. Journal of Nonlinear Optical Physics and Materials, 2001, 10, 29-42.	1.8	5
499	Perturbation of Gaussian optical solitons in dispersion-managed fibers. Applied Mathematics and Computation, 2008, 199, 250-258.	2.2	5
500	Influence of Even-Order Dispersion on Super-Sech Soliton Transmission Quality under Coherent Crosstalk. Research Letters in Optics, 2008, 2008, 1-5.	0.5	5
501	Solitons in Plasmas: Lie Symmetry Approach. International Journal of Theoretical Physics, 2009, 48, 3110-3113.	1.2	5
502	1-Soliton Solution of the Nonlinear Schrödinger's Equation with Kerr Law Nonlinearity Using Lie Symmetry Analysis. International Journal of Theoretical Physics, 2009, 48, 1872-1876.	1.2	5
503	Dynamics of solitons in plasmas for the complex KdV equation with power law nonlinearity. Applied Mathematics and Computation, 2010, 217, 1491-1496.	2.2	5
504	Solitons in Relativistic Plasmas by He's Variational Principle. Applied Physics Research, 2010, 2, .	0.0	5

#	ARTICLE	IF	CITATIONS
505	Perturbation of dispersive topological solitons. <i>Physica Scripta</i> , 2011, 84, 015002.	2.5	5
506	Homotopy analysis method for solving a couple of evolution equations and comparison with Adomian's decomposition method. <i>Waves in Random and Complex Media</i> , 2011, 21, 657-667.	2.7	5
507	Mathematical theory of slow light optical solitons. <i>Waves in Random and Complex Media</i> , 2011, 21, 456-468.	2.7	5
508	Self-similar solitons in optical waveguides with dual-power law refractive index. <i>Laser Physics</i> , 2019, 29, 075401.	1.2	5
509	Optical soliton perturbation in magneto-optic waveguides by extended $G^{\prime}/G^{\prime\prime}$ expansion. <i>Optical and Quantum Electronics</i> , 2021, 53, 1.	3.3	5
510	Application of fractional sub-equation method to nonlinear evolution equations. <i>Nonlinear Analysis: Modelling and Control</i> , 2018, 23, 710-723.	1.6	5
511	Solitons in fiber Bragg gratings with cubic-quartic dispersive reflectivity having Kerr law of nonlinear refractive index. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2020, 29, 2050011.	1.8	5
512	Highly dispersive optical solitons in birefringent fibers having Kerr law of refractive index by Laplace-Adomian decomposition. <i>Optik</i> , 2022, 257, 168788.	2.9	5
513	Numerical study of highly dispersive optical solitons with differential group delay having quadratic-cubic law of refractive index by Laplace-Adomian decomposition. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2022, 31, .	1.8	5
514	Bright solitons under the influence of third-order dispersion and self-steepening effect. <i>Optical and Quantum Electronics</i> , 2022, 54, .	3.3	5
515	Highly Dispersive Optical Solitons in Birefringent Fibers with Polynomial Law of Nonlinear Refractive Index by Laplace-Adomian Decomposition. <i>Mathematics</i> , 2022, 10, 1589.	2.2	5
516	Stochastic Perturbation of Power Law Optical Solitons. <i>International Journal of Theoretical Physics</i> , 2007, 46, 1112-1123.	1.2	4
517	Optical solitons in a power law media with fourth order dispersion. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009, 14, 1834-1837.	3.3	4
518	A new conserved quantity for non-Kerr law optical solitons. <i>Optik</i> , 2009, 120, 658-667.	2.9	4
519	1-Soliton Solution of 1+2 Dimensional Nonlinear Schrödinger's Equation in Kerr Law Media. <i>International Journal of Theoretical Physics</i> , 2009, 48, 689-692.	1.2	4
520	Topological 1-soliton solution of the generalized KdV equation with generalized evolution. <i>Applied Mathematics and Computation</i> , 2010, 217, 2289-2294.	2.2	4
521	A study of Langmuir waves in plasmas. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010, 15, 2245-2248.	3.3	4
522	OPTICAL SOLITONS WITH DUAL-POWER LAW NONLINEARITY USING LIE SYMMETRIES. <i>Modern Physics Letters B</i> , 2010, 24, 1833-1838.	1.9	4

#	ARTICLE	IF	CITATIONS
523	Multiple-scale analysis for solitons due to Langmuir waves in plasmas. International Journal of Computer Mathematics, 2010, 87, 2831-2836.	1.8	4
524	On symmetries, reductions, conservation laws and conserved quantities of optical solitons with inter-modal dispersion. Optik, 2013, 124, 5116-5123.	2.9	4
525	Solitons in optical metamaterials having parabolic law nonlinearity with detuning effect and Raman scattering. Optik, 2018, 164, 606-609.	2.9	4
526	Solitons in magneto-optic waveguides with generalized anti-cubic nonlinearity. Optik, 2020, 223, 165456.	2.9	4
527	Optical solitons in birefringent fibers with quadratic-cubic nonlinearity by traveling waves and Adomian decomposition. Optical and Quantum Electronics, 2021, 53, 1.	3.3	4
528	Conservation Laws for Solitons in Magneto-optic Waveguides with Anti-cubic and Generalized Anti-cubic Nonlinearities. Regular and Chaotic Dynamics, 2021, 26, 456-461.	0.8	4
529	Time-dependent coupled complex short pulse equation: Invariant analysis and complexitons. Chaos, Solitons and Fractals, 2021, 150, 111151.	5.1	4
530	Dynamics of solitons in optical fibres. Journal of Modern Optics, 2001, 48, 1135-1150.	1.3	4
531	Cubic-quartic solitons in couplers with optical metamaterials having power law of refractive index. Journal of Nonlinear Optical Physics and Materials, 2020, 29, 2050009.	1.8	4
532	Shallow Water Waves and Conservation Laws with Dispersion Triplet. Applied Sciences (Switzerland), 2022, 12, 3647.	2.5	4
533	Sequel to "stationary optical solitons with Kudryashov's laws of refractive index-(generalized) Tj ETQq1 1,0,784314,rgBT /Ove	1.8	4
534	Optical Soliton Perturbation with Higher Order Dispersions. Fiber and Integrated Optics, 2001, 20, 171-189.	2.5	3
535	Soliton perturbation theory for the fifth order KdV-type equations with power law nonlinearity. Applied Mathematics Letters, 2007, 20, 1122-1125.	2.7	3
536	Quasi-Particle Theory of Alfvén Soliton Interaction in Plasmas. International Journal of Theoretical Physics, 2007, 46, 1370-1380.	1.2	3
537	Perturbation of Super-Second Solitons in Dispersion-Managed Optical Fibers. International Journal of Theoretical Physics, 2008, 47, 2038-2064.	1.2	3
538	1-Soliton solution of the complex KdV equation in plasmas with power law nonlinearity and time-dependent coefficients. Applied Mathematics and Computation, 2010, 217, 1785-1789.	2.2	3
539	Analytical solution of fluxons in a non-homogeneous Josephson junction. Waves in Random and Complex Media, 2012, 22, 249-259.	2.7	3
540	The maximal and minimal ranks of a quaternion matrix expression with applications. Journal of the Egyptian Mathematical Society, 2013, 21, 175-183.	1.2	3

#	ARTICLE	IF	CITATIONS
541	Wavelet based spectral analysis of optical solitons. <i>Optik</i> , 2014, 125, 4589-4594.	2.9	3
542	Singular and Topological Solitons in Optical Metamaterials by Kudryashov's Method and Expansion Scheme. <i>Journal of Computational and Theoretical Nanoscience</i> , 2015, 12, 5630-5635.	0.4	3
543	Investigation of coupled self-tapering/self-uptapering of soliton beams in nonlinear media. <i>Optik</i> , 2021, 232, 166511.	2.9	3
544	Highly dispersive optical solitons and conservation laws with Kudryashov's sextic power-law of nonlinear refractive index. <i>Optik</i> , 2021, 240, 166915.	2.9	3
545	Optical Solitons in Fiber Bragg Gratings with Polynomial Law Nonlinearity and Cubic-Quartic Dispersive Reflectivity. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2022, 130, 28-34.	0.6	3
546	Asymptotic Analysis for Dispersion-managed Solitons in Multiple Channels. <i>Optical and Quantum Electronics</i> , 2006, 38, 605-623.	3.3	2
547	Higher Order Gbitov-Turitsyn Equation for Dispersion-Managed Solitons in Birefringent Fibers. <i>International Journal of Theoretical Physics</i> , 2007, 46, 3339-3354.	1.2	2
548	Soliton perturbation theory for the generalized fifth-order KdV equation. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2008, 13, 1281-1286.	3.3	2
549	QUASI-STATIONARY SOLITONS FOR LANGMUIR WAVES IN PLASMAS WITH FULL NONLINEARITY. <i>Journal of Multiscale Modeling</i> , 2011, 03, 217-227.	1.1	2
550	Error Estimates of Nonlinear Algebraic Equations by Modified Adomain Decomposition Method. <i>Journal of Computational and Theoretical Nanoscience</i> , 2016, 13, 5408-5413.	0.4	2
551	Optical soliton perturbation with exotic forms of nonlinear refractive index. <i>Optik</i> , 2020, 223, 165329.	2.9	2
552	Solitons in magneto-optic waveguides with parabolic law nonlinearity. <i>Optik</i> , 2020, 222, 165314.	2.9	2
553	Optical soliton perturbation with Kudryashov's law of refractive index by modified sub-ODE approach. <i>Journal of Nonlinear Optical Physics and Materials</i> , 2021, 30, 2150004.	1.8	2
554	Optical Soliton Perturbation with Raman Scattering and Nonlinear Damping. <i>Fiber and Integrated Optics</i> , 2002, 21, 125-143.	2.5	1
555	Doubly Periodic Solution for Nonlinear Schrödinger Equation With Higher Order Polynomial Law Nonlinearity. <i>International Journal of Theoretical Physics</i> , 2008, 47, 3335-3340.	1.2	1
556	Dual Selection Diversity over Correlated Weibull Fading Channels in the Presence of Cochannel Interference. , 2008, , .		1
557	OPTICAL SOLITONS IN 1 + 2 DIMENSIONS WITH TIME-DEPENDENT DISPERSION, NONLINEARITY AND ATTENUATION IN A POWER LAW MEDIUM. <i>Optics and Photonics Letters</i> , 2008, 01, 9-14.	0.8	1
558	Singular Value Decomposition Solution of the Schrödinger Equation in the Presence of Exchange Terms. <i>International Journal of Theoretical Physics</i> , 2009, 48, 1583-1588.	1.2	1

#	ARTICLE	IF	CITATIONS
559	Dynamics of Relativistic Solitons Due to Pseudo Sine-Gordon Equation. International Journal of Theoretical Physics, 2010, 49, 1096-1105.	1.2	1
560	Topological exact soliton solution of the power law KdV equation. Applied Mathematics and Computation, 2010, 217, 1780-1784.	2.2	1
561	Soliton and shock wave solutions to the Degasperis-Procesi equation with power law nonlinearity. Waves in Random and Complex Media, 2011, 21, 543-553.	2.7	1
562	Application of G'/G method to Kuramoto-Sivashinsky equation. Acta Mathematicae Applicatae Sinica, 0, , 1.	0.7	1
563	Solitons and conservation laws in magneto-optic waveguides with polynomial law nonlinearity. Optik, 2020, 223, 165397.	2.9	1
564	Optical solitons in birefringent fibers having anti-cubic nonlinearity with Jacobi's elliptic function expansions. Optical and Quantum Electronics, 2021, 53, 1.	3.3	1
565	Gaussons: optical solitons with log-law nonlinearity by Laplace's Adomian decomposition method. Open Physics, 2020, 18, 182-188.	1.7	1
566	Optical solitons with generalized anti-cubic nonlinearity having multiplicative white noise by Itô Calculus. Optik, 2022, 262, 169262.	2.9	1
567	Sequel to "Quasi-monochromatic dynamical system of cubic-quartic optical solitons with Kerr law of nonlinear refractive index (Power law). Optik, 2022, 267, 169623.	2.9	1
568	Quasi-monochromatic dynamical system of cubic-quartic optical solitons with Kerr law of nonlinear refractive index. Optik, 2022, 267, 169622.	2.9	1
569	Intra-channel collision of parabolic law optical solitons. Optical and Quantum Electronics, 2004, 36, 1291-1302.	3.3	0
570	Stochastic perturbation of Kerr law optical solitons. Optical and Quantum Electronics, 2005, 37, 359-369.	3.3	0
571	Quasi-Linear Pulses in Multiple Channels. Optical and Quantum Electronics, 2005, 37, 813-834.	3.3	0
572	Asymptotic Analysis for Dispersion-managed Solitons in Birefringent Fibers. Optical and Quantum Electronics, 2005, 37, 1033-1053.	3.3	0
573	Stochastic perturbation of dual-power law optimal solitons. Proceedings in Applied Mathematics and Mechanics, 2007, 7, 2130009-2130010.	0.2	0
574	Intra-Channel Collision of Dual-Power Law Optical Solitons. International Journal of Theoretical Physics, 2007, 46, 157-169.	1.2	0
575	Chirped super-Gaussian and super-sech pulse parameter dynamics with DWDM topology by variational principle. Optik, 2020, 206, 164344.	2.9	0
576	Statistical dynamics of dual-power law optical soliton. Facta Universitatis - Series Electronics and Energetics, 2008, 21, 37-44.	0.9	0

#	ARTICLE	IF	CITATIONS
577	Higher Order Gabitov-Turitsyn Equations. Nonlinear Physical Science, 2010, , 137-155.	0.2	0
578	Birefringent Fibers. Nonlinear Physical Science, 2010, , 45-62.	0.2	0
579	Polarization Preserving Fibers. Nonlinear Physical Science, 2010, , 27-44.	0.2	0
580	Nonlinear Schrödinger's Equation. Nonlinear Physical Science, 2010, , 5-26.	0.2	0
581	Application of fractional sub-equation method to nonlinear evolution equations. Nonlinear Analysis: Modelling and Control, 2018, 23, 710-723.	1.6	0
582	Optical vortices in waveguides with spatial dependence of the nonlinear refractive index. Optical and Quantum Electronics, 2022, 54, 1.	3.3	0