Fazal M Mahomed

List of Publications by Year
in descending order

217 papers	4,172 citations	126907 33 h-index	155660 55 g-index
219 all docs	219 docs citations	219 times ranked	968 citing authors

#	Article	IF	Citations
1	Relationship between Symmetries andConservation Laws. International Journal of Theoretical Physics, 2000, 39, 23-40.	1.2	243
2	Noether-Type Symmetries and Conservation Laws Via Partial Lagrangians. Nonlinear Dynamics, 2006, 45, 367-383.	5.2	210
3	Comparison of different approaches to conservation laws for some partial differential equations in fluid mechanics. Applied Mathematics and Computation, 2008, 205, 212-230.	2.2	161
4	Symmetry Lie algebras of nth order ordinary differential equations. Journal of Mathematical Analysis and Applications, 1990, 151, 80-107.	1.0	126
5	Lieâ€"BÃ¤cklund and Noether Symmetries with Applications. Nonlinear Dynamics, 1998, 15, 115-136.	5.2	116
6	A Basis of Conservation Laws for Partial Differential Equations. Journal of Nonlinear Mathematical Physics, 2002, 9, 60.	1.3	105
7	Symmetry group classification of ordinary differential equations: Survey of some results. Mathematical Methods in the Applied Sciences, 2007, 30, 1995-2012.	2.3	93
8	Noether symmetry approach in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>f</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>R</mml:mi><mml:mo) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 457 Td (stretchy="false">)</mml:m Elementary Particle and High-Energy Physics, 2011, 702, 315-319.	1.1	93
9	Peristaltic Flow of a Magnetohydrodynamic Johnsonâ€"Segalman Fluid. Nonlinear Dynamics, 2005, 40, 375-385.	5.2	91
10	The Connection Between Isometries and Symmetries of Geodesic Equations of the Underlying Spaces. Nonlinear Dynamics, 2006, 45, 65-74.	5.2	77
11	Noether gauge symmetry approach in f(R) gravity. Astrophysics and Space Science, 2012, 337, 373-377.	1.4	71
12	Lie algebras associated with scalar secondâ€•order ordinary differential equations. Journal of Mathematical Physics, 1989, 30, 2770-2777.	1.1	69
13	THE LINEAR SYMTRIES OF A NONLINEAR DIFFERENTIAL EQUATION. Quaestiones Mathematicae, 1985, 8, 241-274.	0.6	68
14	Linearization criteria for a system of second-order ordinary differential equations. International Journal of Non-Linear Mechanics, 2001, 36, 671-677.	2.6	61
15	Lagrangian formulation of a generalized Lane-Emden equation and double reduction. Journal of Nonlinear Mathematical Physics, 2008, 15, 152.	1.3	53
16	Generalization of the double reduction theory. Nonlinear Analysis: Real World Applications, 2010, 11, 3763-3769.	1.7	53
17	THE LIE ALGEBRA sl(3, R) AND LINEARIZATION. Quaestiones Mathematicae, 1989, 12, 121-139.	0.6	50
18	Approximate Symmetries and Conservation Laws with Applications. International Journal of Theoretical Physics, 1999, 38, 2389-2399.	1.2	49

#	Article	IF	Citations
19	Symmetries of nonlinear differential equations and linearisation. Journal of Physics A, 1987, 20, 277-292.	1.6	48
20	Partial Noether operators and first integrals *via* partial Lagrangians. Mathematical Methods in the Applied Sciences, 2007, 30, 2079-2089.	2.3	47
21	Conservation laws and conserved quantities for laminar two-dimensional and radial jets. Nonlinear Analysis: Real World Applications, 2009, 10, 2641-2651.	1.7	47
22	Approximate conditional symmetries and approximate solutions of the perturbed Fitzhugh–Nagumo equation. Journal of Mathematical Physics, 2005, 46, 023503.	1.1	44
23	Symmetry Breaking for a System of Two Linear Second-Order Ordinary Differential Equations. Nonlinear Dynamics, 2000, 22, 121-133.	5.2	41
24	Singular invariant equation for the (1+1) Fokker–Planck equation. Journal of Physics A, 2001, 34, 11033-11051.	1.6	41
25	Effects of slip on the non-linear flows of a third grade fluid. Nonlinear Analysis: Real World Applications, 2010, 11, 139-146.	1.7	41
26	Approximate symmetries and conservation laws of the geodesic equations for the Schwarzschild metric. Nonlinear Dynamics, 2007, 51, 183-188.	5.2	40
27	Exact solutions for thin film flow of a third grade fluid down an inclined plane. Chaos, Solitons and Fractals, 2008, 38, 1336-1341.	5.1	40
28	Linearization criteria for a system of second-order quadratically semi-linear ordinary differential equations. Nonlinear Dynamics, 2007, 48, 417-422.	5.2	38
29	Approximate conditional symmetries for partial differential equations. Journal of Physics A, 2000, 33, 343-356.	1.6	37
30	Double reduction of a nonlinear (2+1) wave equation via conservation laws. Communications in Nonlinear Science and Numerical Simulation, 2011, 16, 1244-1253.	3.3	37
31	A partial Hamiltonian approach for current value Hamiltonian systems. Communications in Nonlinear Science and Numerical Simulation, 2014, 19, 3600-3610.	3.3	37
32	Non-local symmetries and conservation laws for one-dimensional gas dynamics equations. Applied Mathematics and Computation, 2004, 150, 379-397.	2.2	35
33	Noether symmetries of $y´´ = f(x)y^n$ with applications to non-static spherically symmetric perfect fluid solutions. Classical and Quantum Gravity, 1999, 16, 3553-3566.	4.0	34
34	Peristaltic MHD Flow of Third Grade Fluid with an Endoscope and Variable Viscosity. Journal of Nonlinear Mathematical Physics, 2008, 15, 91.	1.3	32
35	Approximate Noether symmetries of the geodesic equations for the charged-Kerr spacetime and rescaling of energy. General Relativity and Gravitation, 2009, 41, 2399-2414.	2.0	32
36	Group invariant solutions for the unsteady MHD flow of a third grade fluid in a porous medium. International Journal of Non-Linear Mechanics, 2012, 47, 792-798.	2.6	32

#	Article	IF	Citations
37	Approximate potential symmetries for partial differential equations. Journal of Physics A, 2000, 33, 6601-6613.	1.6	31
38	Fundamental Solutions for Zero-Coupon Bond Pricing Models. Nonlinear Dynamics, 2004, 36, 69-76.	5.2	31
39	Lie and Noether Counting Theorems for One-Dimensional Systems. Journal of Mathematical Analysis and Applications, 1993, 178, 116-129.	1.0	30
40	Endoscope effects on MHD peristaltic flow of a power-law fluid. Mathematical Problems in Engineering, 2006, 2006, 1-19.	1.1	29
41	Complete Invariant Characterization of Scalar Linear (1+1) Parabolic Equations. Journal of Nonlinear Mathematical Physics, 2008, 15, 112.	1.3	29
42	Solution of generalized emden-fowler equations with two symmetries. International Journal of Non-Linear Mechanics, 1994, 29, 529-538.	2.6	28
43	Non-linear diffusion of an axisymmetric thin liquid drop: group-invariant solution and conservation law. International Journal of Non-Linear Mechanics, 2001, 36, 879-885.	2.6	28
44	Complex Lie symmetries for scalar second-order ordinary differential equations. Nonlinear Analysis: Real World Applications, 2009, 10, 3335-3344.	1.7	28
45	Travelling Wave Solutions for the Unsteady Flow of a Third Grade Fluid Induced Due to Impulsive Motion of Flat Porous Plate Embedded in a Porous Medium. Journal of Mechanics, 2014, 30, 527-535.	1.4	28
46	Closed-form solutions for the Lucas–Uzawa model of economic growth via the partial Hamiltonian approach. Communications in Nonlinear Science and Numerical Simulation, 2016, 30, 299-306.	3.3	28
47	Approximate Noether-type symmetries and conservation laws via partial Lagrangians for PDEs with a small parameter. Journal of Computational and Applied Mathematics, 2009, 223, 508-518.	2.0	27
48	Exact solution of a thin film flow of an Oldroyd 6-constant fluid over a moving belt. Communications in Nonlinear Science and Numerical Simulation, 2009, 14, 133-139.	3.3	26
49	Note on an exact solution for the pipe flow of a third-grade fluid. Acta Mechanica, 2007, 190, 233-236.	2.1	25
50	Invariant Linearization Criteria for Systems of Cubically Nonlinear Second-Order Ordinary Differential Equations. Journal of Nonlinear Mathematical Physics, 2009, 16, 283.	1.3	25
51	Conservation laws for third-order variant Boussinesq system. Applied Mathematics Letters, 2010, 23, 883-886.	2.7	24
52	Closed orbits and their stable symmetries. Journal of Mathematical Physics, 1994, 35, 6525-6535.	1.1	23
53	Integration of stochastic ordinary differential equations from a symmetry standpoint. Journal of Physics A, 2001, 34, 177-192.	1.6	23
54	Integration of Ordinary Differential Equations via Nonlocal Symmetries. Nonlinear Dynamics, 2002, 30, 267-275.	5.2	23

#	Article	IF	Citations
55	Complex Lie Symmetries for Variational Problems. Journal of Nonlinear Mathematical Physics, 2008, 15, 25.	1.3	23
56	Maximal subalgebra associated with a first integral of a system possessing sl(3,R) algebra. Journal of Mathematical Physics, 1988, 29, 1807-1813.	1.1	21
57	Canonical forms for systems of two second-order ordinary differential equations. Journal of Physics A, 2001, 34, 2883-2911.	1.6	21
58	Solution of ordinary differential equations via nonlocal transformations. Journal of Physics A, 2001, 34, 1141-1152.	1.6	21
59	A basis of approximate conservation laws for PDEs with a small parameter. International Journal of Non-Linear Mechanics, 2006, 41, 830-837.	2.6	21
60	Symmetries of firstâ€order stochastic ordinary differential equations revisited. Mathematical Methods in the Applied Sciences, 2007, 30, 2013-2025.	2.3	21
61	Exact solutions for flows of an Oldroyd 8-constant fluid with nonlinear slip conditions. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 322-330.	3.3	21
62	Symmetries and integrability of a fourth-order Eulerâ€"Bernoulli beam equation. Journal of Mathematical Physics, 2010, 51, .	1.1	21
63	Dust static plane symmetric solutions and their conformal vector fields in $f(R)$ theory of gravity. Modern Physics Letters A, 2018, 33, 1850222.	1.2	21
64	A note on the solutions of the Emden-Fowler equation. International Journal of Non-Linear Mechanics, 1993, 28, 379-384.	2.6	20
65	A Formal Approach for Handling Lie Point Symmetries of Scalar First-Order Ito Stochastic Ordinary Differential Equations. Journal of Nonlinear Mathematical Physics, 2008, 15, 44.	1.3	20
66	Conservation laws via the partial Lagrangian and group invariant solutions for radial and two-dimensional free jets. Nonlinear Analysis: Real World Applications, 2009, 10, 3457-3465.	1.7	20
67	Rayleigh problem for a MHD Sisko fluid. Nonlinear Analysis: Real World Applications, 2009, 10, 3428-3434.	1.7	19
68	Proposal for determining the energy content of gravitational waves by using approximate symmetries of differential equations. Physical Review D, 2009, 79, .	4.7	19
69	Equivalent lagrangians and the solution of some classes of non-linear equations. International Journal of Non-Linear Mechanics, 1992, 27, 919-927.	2.6	18
70	On Solutions of Some Non-Linear Differential Equations Arising in Newtonian and Non-Newtonian Fluids. Nonlinear Dynamics, 2004, 35, 229-248.	5.2	18
71	Analytic solutions for MHD flow in an annulus. Communications in Nonlinear Science and Numerical Simulation, 2010, 15, 1224-1227.	3.3	18
72	Linearizability criteria for systems of two second-order differential equations by complex methods. Nonlinear Dynamics, 2011, 66, 77-88.	5.2	18

#	Article	IF	Citations
73	Gliding motion of bacterium in a non-Newtonian slime. Nonlinear Analysis: Real World Applications, 2007, 8, 853-864.	1.7	17
74	On comparison of exact and series solutions for thin film flow of a third‐grade fluid. International Journal for Numerical Methods in Fluids, 2009, 61, 987-994.	1.6	17
75	Contact symmetry algebras of scalar second‐order ordinary differential equations. Journal of Mathematical Physics, 1991, 32, 2051-2055.	1.1	15
76	A generalized Fitzhugh‐Nagumo equation. Nonlinear Analysis: Theory, Methods & Applications, 2008, 68, 1006-1015.	1.1	15
77	Contact Symmetry Algebras of Scalar Ordinary Differential Equations. Nonlinear Dynamics, 2002, 28, 213-230.	5.2	14
78	Approximate partial Noether operators and first integrals for coupled nonlinear oscillators. Nonlinear Dynamics, 2009, 57, 303-311.	5.2	14
79	Group classification of the generalized Emden‐Fowler-type equation. Nonlinear Analysis: Real World Applications, 2009, 10, 3387-3395.	1.7	14
80	Generalized Couette Flow of a Third-Grade Fluid with Slip: The Exact Solutions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2010, 65, 1071-1076.	1.5	14
81	Reductions and solutions for the unsteady flow of a fourth grade fluid on a porous plate. Applied Mathematics and Computation, 2013, 219, 9187-9195.	2.2	14
82	A partial Lagrangian method for dynamical systems. Nonlinear Dynamics, 2016, 84, 1783-1794.	5.2	14
83	Basis of Joint Invariants for (1 + 1) Linear Hyperbolic Equations. Journal of Nonlinear Mathematical Physics, 2002, 9, 49.	1.3	13
84	Reduction of Order for Systems of Ordinary Differential Equations. Journal of Nonlinear Mathematical Physics, 2004, 11, 13.	1.3	13
85	Symmetries, Conservation Laws and Multipliers via Partial Lagrangians and Noether's Theorem for Classically Non-Variational Problems. International Journal of Theoretical Physics, 2007, 46, 3022-3029.	1.2	13
86	Symmetry Solutions of a Third-Order Ordinary Differential Equation which Arises from Prandtl Boundary Layer Equations. Journal of Nonlinear Mathematical Physics, 2008, 15, 179.	1.3	13
87	A note on some solutions for the flow of a fourth grade fluid in a porous space. Nonlinear Analysis: Real World Applications, 2009, 10, 368-374.	1.7	13
88	Two-dimensional systems that arise from the Noether classification of Lagrangians on the line. Applied Mathematics and Computation, 2011, 217, 6959-6973.	2.2	13
89	Invariant boundary value problems for a fourth-order dynamic Euler-Bernoulli beam equation. Journal of Mathematical Physics, 2012, 53, .	1.1	13
90	Classification of Static Spherically Symmetric Spacetimes by Noether Symmetries. International Journal of Theoretical Physics, 2013, 52, 3534-3542.	1.2	13

#	Article	IF	Citations
91	Non-linear time-dependent flow models of third grade fluids: A conditional symmetry approach. International Journal of Non-Linear Mechanics, 2013, 54, 55-65.	2.6	13
92	A unified compatibility method for exact solutions of non-linear flow models of Newtonian and non-Newtonian fluids. International Journal of Non-Linear Mechanics, 2016, 78, 142-155.	2.6	13
93	Reduction and Solutions for Magnetohydrodynamic Flow of a Sisko Fluid in a Porous Medium. Journal of Porous Media, 2009, 12, 695-714.	1.9	13
94	The existence of contact transformations for evolution-type equations. Journal of Physics A, 1999, 32, 8721-8730.	1.6	12
95	Non-static shear-free spherically symmetric charged perfect fluid distributions: a symmetry approach. Classical and Quantum Gravity, 2000, 17, 3063-3072.	4.0	12
96	Constructing a space from the geodesic equations. Computer Physics Communications, 2008, 179, 438-442.	7.5	12
97	Symmetry Reduction and Numerical Solution of a Third-Order ODE from Thin Film Flow. Mathematical and Computational Applications, 2010, 15, 709-719.	1.3	12
98	Algebraic linearization criteria for systems of ordinary differential equations. Nonlinear Dynamics, 2012, 67, 2053-2062.	5.2	12
99	Conformal vector fields in proper non-static plane symmetric spacetimes in f(R) gravity. International Journal of Geometric Methods in Modern Physics, 2020, 17, 2050077.	2.0	11
100	Noether Equivalence Problem for Particle Lagrangians. Journal of Mathematical Analysis and Applications, 1994, 188, 867-884.	1.0	10
101	Conservation laws for equations related to soil water equations. Mathematical Problems in Engineering, 2005, 2005, 141-150.	1.1	10
102	Noether, partial Noether operators and first integrals for a linear system. Journal of Mathematical Analysis and Applications, 2008, 342, 70-82.	1.0	10
103	Unsteady Solutions in a Third-Grade Fluid Filling the Porous Space. Mathematical Problems in Engineering, 2008, 2008, 1-13.	1.1	10
104	Hamiltonian systems with three degrees of freedom, singular-point analysis, and chaotic behavior. Physical Review A, 1986, 33, 2131-2133.	2.5	9
105	The association of non-local symmetries with conservation laws: applications to the heat and Burger's equations. Applied Mathematics and Computation, 2005, 168, 1098-1108.	2.2	9
106	Exact solutions for Couette and Poiseuille flows for fourth grade fluids. Acta Mechanica, 2007, 188, 69-78.	2.1	9
107	Conditional Linearizability Criteria for Third Order Ordinary Differential Equations. Journal of Nonlinear Mathematical Physics, 2008, 15, 124.	1.3	9
108	Conditional linearizability criteria for a system of third-order ordinary differential equations. Nonlinear Analysis: Real World Applications, 2009, 10, 3404-3412.	1.7	9

#	Article	IF	Citations
109	A note on proper projective symmetry in cylindrical symmetric non-static space-times. European Physical Journal Plus, 2014, 129, 1.	2.6	9
110	Analytic approximate solutions for time-dependent flow and heat transfer of a Sisko fluid. International Journal of Numerical Methods for Heat and Fluid Flow, 2014, 24, 1005-1019.	2.8	9
111	Invariant approach to optimal investment–consumption problem: the constant elasticity of variance (CEV) model. Mathematical Methods in the Applied Sciences, 2017, 40, 1382-1395.	2.3	9
112	A note on classification of static plane symmetric perfect fluid space-times via proper conformal vector fields in f(G) theory of gravity. International Journal of Geometric Methods in Modern Physics, 2020, 17, 2050086.	2.0	9
113	Fundamental flows with nonlinear slip conditions: exact solutions. Zeitschrift Fur Angewandte Mathematik Und Physik, 2010, 61, 877-888.	1.4	8
114	A note on the Lie symmetries of complex partial differential equations and their split real systems. Pramana - Journal of Physics, 2011, 77, 483-491.	1.8	8
115	Laplace-Type Semi-Invariants for a System of Two Linear Hyperbolic Equations by Complex Methods. Mathematical Problems in Engineering, 2011, 2011, 1-15.	1.1	8
116	Closed-Form Solutions for a Nonlinear Partial Differential Equation Arising in the Study of a Fourth Grade Fluid Model. Journal of Applied Mathematics, 2012, 2012, 1-16.	0.9	8
117	A Note on the Solutions of Some Nonlinear Equations Arising in Third-Grade Fluid Flows: An Exact Approach. Scientific World Journal, The, 2014, 2014, 1-7.	2.1	8
118	Solutions for the turbulent classical wake using Lie symmetry methods. Communications in Nonlinear Science and Numerical Simulation, 2015, 23, 51-70.	3.3	8
119	Characterization of Hamiltonian symmetries and their first integrals. International Journal of Non-Linear Mechanics, 2015, 74, 84-91.	2.6	8
120	Analytical solution in parametric form for the two-dimensional free jet of a power-law fluid. International Journal of Non-Linear Mechanics, 2016, 85, 94-108.	2.6	8
121	Proper projective symmetry in LRS Bianchi type V spacetimes. Modern Physics Letters A, 2018, 33, 1850073.	1.2	8
122	Application of Symmetries to Central Force Problems. , 2000, 21, 307-315.		7
123	EFFECTS OF AN ENDOSCOPE AND AN ELECTRICALLY CONDUCTING THIRD GRADE FLUID ON PERISTALTIC MOTION. International Journal of Modern Physics B, 2008, 22, 3997-4016.	2.0	7
124	AXIAL COUETTE FLOW OF AN ELECTRICALLY CONDUCTING FLUID IN AN ANNULUS. International Journal of Modern Physics B, 2008, 22, 2489-2500.	2.0	7
125	Conditional Linearizability of Fourth-Order Semi-Linear Ordinary Differential Equations. Journal of Nonlinear Mathematical Physics, 2009, 16, 165.	1.3	7
126	Conservation laws of a nonlinear wave equation. Nonlinear Analysis: Real World Applications, 2010, 11, 2237-2242.	1.7	7

#	Article	IF	Citations
127	Classification of ordinary differential equations by conditional linearizability and symmetry. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 573-584.	3.3	7
128	A note on the integrability of a remarkable static Euler–Bernoulli beam equation. Journal of Engineering Mathematics, 2013, 82, 101-108.	1.2	7
129	Second-Order Systems of ODEs Admitting Three-Dimensional Lie Algebras and Integrability. Journal of Applied Mathematics, 2013, 2013, 1-15.	0.9	7
130	Invariant Approaches to Equations of Finance. Mathematical and Computational Applications, 2013, 18, 244-250.	1.3	7
131	On certain properties of linear iterative equations. Open Mathematics, 2014, 12, 648-657.	1.0	7
132	Self-Similar Unsteady Flow of a Sisko Fluid in a Cylindrical Tube Undergoing Translation. Mathematical Problems in Engineering, 2015, 2015, 1-14.	1.1	7
133	Symmetry vector fields and similarity solutions of a nonlinear field equation describing the relaxation to a maxwell distribution. International Journal of Theoretical Physics, 1988, 27, 717-723.	1.2	6
134	Classification of first-order Lagrangians on the line. International Journal of Theoretical Physics, 1995, 34, 2267-2274.	1.2	6
135	First integrals for a general linear system of two second-order ODEs via a partial Lagrangian. Journal of Physics A: Mathematical and Theoretical, 2008, 41, 355207.	2.1	6
136	Conservation laws of a nonlinear wave equation. Nonlinear Analysis: Real World Applications, 2010, 11, 2862-2870.	1.7	6
137	Symmetry analysis for the nonlinear model of diffusion and reaction in porous catalysts. Nonlinear Analysis: Real World Applications, 2010, 11, 3031-3036.	1.7	6
138	Conditional symmetries for ordinary differential equations and applications. International Journal of Non-Linear Mechanics, 2014, 67, 95-105.	2.6	6
139	Analytical solution in parametric form for the two-dimensional liquid jet of a power-law fluid. International Journal of Non-Linear Mechanics, 2017, 93, 53-64.	2.6	6
140	The Rayleigh Problem for a Third Grade Electrically Conducting Fluid in a Magnetic Field. Journal of Nonlinear Mathematical Physics, 2008, 15, 77.	1.3	5
141	Soil water redistribution and extraction flow models: Conservation laws. Nonlinear Analysis: Real World Applications, 2009, 10, 2021-2025.	1.7	5
142	Approximate First Integrals for a System of Two Coupled Van Der Pol Oscillators with Linear Diffusive Coupling. Mathematical and Computational Applications, 2010, 15, 720-731.	1.3	5
143	Symmetries of second-order systems of ODEs and integrability. Nonlinear Dynamics, 2013, 74, 969-989.	5.2	5
144	Group Theoretical Analysis and Invariant Solutions for Unsteady Flow of a Fourth-Grade Fluid over an Infinite Plate Undergoing Impulsive Motion in a Darcy Porous Medium. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2015, 70, 483-497.	1.5	5

#	Article	IF	Citations
145	Dynamic Euler-Bernoulli Beam Equation: Classification and Reductions. Mathematical Problems in Engineering, 2015, 2015, 1-7.	1.1	5
146	A Partial Lagrangian Approach to Mathematical Models of Epidemiology. Mathematical Problems in Engineering, 2015, 2015, 1-11.	1.1	5
147	Applications of Group Theoretical Methods to Non-Newtonian Fluid Flow Models: Survey of Results. Mathematical Problems in Engineering, 2017, 2017, 1-43.	1.1	5
148	Effect of magnetic field on the flow of a fourth order fluid. Nonlinear Analysis: Real World Applications, 2009, 10, 3413-3419.	1.7	4
149	A group classification of the general second-order coupled diffusion system. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 415203.	2.1	4
150	Linearization of systems of four second-order ordinary differential equations. Pramana - Journal of Physics, 2011, 77, 581-594.	1.8	4
151	Approximate conservation laws of nonlinear perturbed heat and wave equations. Nonlinear Analysis: Real World Applications, 2012, 13, 2823-2829.	1.7	4
152	Ibragimov-type invariants for a system of two linear parabolic equations. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 3140-3147.	3.3	4
153	Group Classification of a Generalized Lane-Emden System. Journal of Applied Mathematics, 2013, 2013, 1-12.	0.9	4
154	Remark on classical Crane's solution of viscous flow past a stretching plate. Applied Mathematics Letters, 2016, 52, 205-211.	2.7	4
155	Partial Noether Operators and First Integrals for a System with two Degrees of Freedom. Journal of Nonlinear Mathematical Physics, 2008, 15, 165.	1.3	3
156	A Group Classification of a System of Partial Differential Equations Modeling Flow in Collapsible Tubes. Journal of Nonlinear Mathematical Physics, 2009, 16, 179.	1.3	3
157	Integration of Systems of ODEs via Nonlocal Symmetry-Like Operators. Mathematical and Computational Applications, 2010, 15, 585-600.	1.3	3
158	First Integrals for Two Linearly Coupled Nonlinear Duffing Oscillators. Mathematical Problems in Engineering, 2011, 2011, 1-14.	1.1	3
159	Lie point symmetries, partial Noether operators and first integrals of the Painlevé–Gambier equations. Nonlinear Analysis: Theory, Methods & Applications, 2012, 75, 30-36.	1.1	3
160	Prandtl's Boundary Layer Equation for Two-Dimensional Flow: Exact Solutions via the Simplest Equation Method. Mathematical Problems in Engineering, 2013, 2013, 1-5.	1.1	3
161	Cotton-Type and Joint Invariants for Linear Elliptic Systems. Scientific World Journal, The, 2013, 2013, 1-6.	2.1	3
162	Fundamental Solution via Invariant Approach for a Brain Tumor Model and its Extensions. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2014, 69, 725-732.	1.5	3

#	Article	IF	Citations
163	Lie and Noether symmetries of systems of complex ordinary differential equations and their split systems. Pramana - Journal of Physics, 2014, 83, 9-20.	1.8	3
164	Higher dimensional systems of differential equations obtainable by iterative use of complex methods. International Journal of Modern Physics Conference Series, 2015, 38, 1560077.	0.7	3
165	A complex Noether approach for variational partial differential equations. Communications in Nonlinear Science and Numerical Simulation, 2015, 27, 120-135.	3.3	3
166	Invariant Solutions for the Unsteady Magnetohydrodynamics (MHD) Flow of a Fourth-Grade Fluid Induced Due to the Impulsive Motion of a Flat Porous Plate. Brazilian Journal of Physics, 2015, 45, 120-131.	1.4	3
167	Hypercomplex analysis and integration of systems of ordinary differential equations. Mathematical Methods in the Applied Sciences, 2016, 39, 4139-4157.	2.3	3
168	Noether Symmetry Analysis of the Dynamic Euler-Bernoulli Beam Equation. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2016, 71, 447-456.	1.5	3
169	Noether symmetries and exact solutions of an Euler–Bernoulli beam model. International Journal of Modern Physics B, 2016, 30, 1640011.	2.0	3
170	Conditional symmetries of nonlinear third-order ordinary differential equations. Discrete and Continuous Dynamical Systems - Series S, 2018, 11, 655-666.	1.1	3
171	On Linearization by Generalized Sundman Transformations of a Class of Liï¿½nard Type Equations and Its Generalization. Applied Mathematics and Information Sciences, 2013, 7, 2355-2359.	0.5	3
172	A Generalization of the Abel–Forsyth Formulas Via Group Methods. Nonlinear Dynamics, 2000, 23, 377-389.	5.2	2
173	Approximate Partial Noether Operators of the Schwarzschild Spacetime. Journal of Nonlinear Mathematical Physics, 2010, 17, 13.	1.3	2
174	CONSERVATION LAWS OF SOME NON-VARIATIONAL PERTURBED PDE'S VIA A PARTIAL VARIATIONAL APPROACH. International Journal of Modern Physics B, 2010, 24, 4253-4267.	2.0	2
175	Lie and Riccati Linearization of a Class of LiÃ©nard Type Equations. Journal of Applied Mathematics, 2012, 2012, 1-8.	0.9	2
176	A Note on Four-Dimensional Symmetry Algebras and Fourth-Order Ordinary Differential Equations. Journal of Applied Mathematics, 2013, 2013, 1-4.	0.9	2
177	Shock Wave Solution for a Nonlinear Partial Differential Equation Arising in the Study of a Non-Newtonian Fourth Grade Fluid Model. Mathematical Problems in Engineering, 2013, 2013, 1-5.	1.1	2
178	An alternative proof of Lie's linearization theorem using a new λ-symmetry criterion. Communications in Nonlinear Science and Numerical Simulation, 2015, 26, 45-51.	3.3	2
179	Invariants of third-order ordinary differential equations $y''' = f(x, y, y', y'')$ via point transformations. Mathematical Methods in the Applied Sciences, 2016, 39, 1043-1059.	2.5	2
180	Optimal system and classification of invariant solutions of nonlinear class of wave equations and their conservation laws. Journal of Mathematical Analysis and Applications, 2022, 505, 125615.	1.0	2

#	Article	IF	Citations
181	Characterization of partial Hamiltonian operators and related first integrals. Discrete and Continuous Dynamical Systems - Series S, 2018, 11, 723-734.	1.1	2
182	CANONICAL FORMS FOR PARTICLE LAGRANGIANS OF THE LINEAR SECOND-ORDER EQUATION. Quaestiones Mathematicae, 1994, 17, 469-477.	0.6	1
183	AN EXTENSION OF THE DIRECT METHOD VIA AN APPLICATION. Quaestiones Mathematicae, 2001, 24, 111-122.	0.6	1
184	Magnetic Field and Endoscope Influences on Peristaltic Transport: An Exact Solution. Mathematical and Computational Applications, 2010, 15, 638-657.	1.3	1
185	Conservation Laws and Conserved Quantities for Laminar Radial Jets with Swirl. Mathematical and Computational Applications, 2010, 15, 742-761.	1.3	1
186	TRANSIENT HYDROMAGNETIC FLOW OF A VISCOUS FLUID. International Journal of Modern Physics B, 2011, 25, 2533-2542.	2.0	1
187	Symmetries of th-Order Approximate Stochastic Ordinary Differential Equations. Journal of Applied Mathematics, 2012, 2012, 1-15.	0.9	1
188	Noether gauge symmetry approach in Gaussâ€"Bonnet dilatonic theory of gravity. Canadian Journal of Physics, 2012, 90, 467-471.	1.1	1
189	Symmetry classification of collapsible tube model incorporating tension. Communications in Nonlinear Science and Numerical Simulation, 2012, 17, 93-99.	3.3	1
190	Symmetry classification and joint invariants for the scalar linear (1+1) elliptic equation. Communications in Nonlinear Science and Numerical Simulation, 2015, 25, 84-93.	3.3	1
191	A point symmetry based method for transforming ODEs with three-dimensional symmetry algebras to their canonical forms. Applied Mathematics and Computation, 2016, 289, 444-463.	2.2	1
192	Unsteady magnetohydrodynamic flow of a fourth grade fluid caused by an impulsively moving plate in a Darcy porous medium ßž A group-theoretical analysis. International Journal of Modern Physics B, 2016, 30, 1640007.	2.0	1
193	Singular invariant structures for Lie algebras admitted by a system of second-order ODEs. Applied Mathematics and Computation, 2016, 281, 137-147.	2.2	1
194	Proper projective symmetry in the most general non-static spherically symmetric four-dimensional Lorentzian manifolds. International Journal of Geometric Methods in Modern Physics, 2016, 13, 1650009.	2.0	1
195	Equality of the algebraic and geometric ranks of Cartan subalgebras and applications to linearization of a system of ordinary differential equations. International Journal of Mathematics, 2017, 28, 1750080.	0.5	1
196	Invariant characterization of scalar thirdâ€order ODEs that admit the maximal point symmetry Lie algebra. Mathematical Methods in the Applied Sciences, 2018, 41, 4714-4723.	2.3	1
197	Invariant characterization of third-order ordinary differential equations ‹mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif"		

#	Article	IF	Citations
199	Approximate Hamiltonian symmetries and related first integrals. International Journal of Non-Linear Mechanics, 2020, 125, 103547.	2.6	1
200	Hamiltonian symmetry classification, integrals, and exact solutions of a generalized Ermakov system. Mathematical Methods in the Applied Sciences, 2021, 44, 4467-4478.	2.3	1
201	Integrability of systems of ordinary differential equations via Lie point symmetries. Mathematical Methods in the Applied Sciences, 2021, 44, 9373-9392.	2.3	1
202	Static perfect fluid cylinders - a new approach to Kramer's equations. Journal of Physics A, 2000, 33, 6817-6823.	1.6	0
203	On solution of non-linear differential equation arising in gliding motion of bacteria. Applied Mathematics and Computation, 2004, 148, 743-752.	2.2	0
204	Lie Infinitesimal Conserved Quantities for ItÃ´ Stochastic ODEs. Mathematical and Computational Applications, 2010, 15, 601-612.	1.3	0
205	SYMMETRY CLASSIFICATION OF COUPLED HEAT-DIFFUSION SYSTEMS VIA LOW DIMENSIONAL LIE ALGEBRAS. , 2012, , .		0
206	Shock Wave Solutions for Some Nonlinear Flow Models Arising in the Study of a Non-Newtonian Third Grade Fluid. Mathematical Problems in Engineering, 2013, 2013, 1-6.	1.1	0
207	Symmetries, Differential Equations, and Applications: Galois Bicentenary. Journal of Applied Mathematics, 2013, 2013, 1-1.	0.9	0
208	Recent Advances on Methods and Applications of Nonlinear Differential Equations. Mathematical Problems in Engineering, 2014, 2014, 1-1.	1.1	0
209	Analytical solution for time-dependent flow of a third grade fluid induced due to impulsive motion of a flat porous plate. Acta Mathematicae Applicatae Sinica, 2015, 31, 757-766.	0.7	0
210	Invariant linearization criteria for a three-dimensional dynamical system of second-order ordinary differential equations and applications. International Journal of Non-Linear Mechanics, 2016, 78, 9-16.	2.6	0
211	A Note on the Multiplier Approach for Derivation of Conservation Laws for Partial Differential Equations in the Complex Domain. Springer Proceedings in Mathematics and Statistics, 2018, , 125-136.	0.2	0
212	Linearization of thirdâ€order ordinary differential equations via point transformations. Mathematical Methods in the Applied Sciences, 2018, 41, 6955-6967.	2.3	0
213	A Note on the Integration of Scalar Fourth-Order Ordinary Differential Equations with Four-Dimensional Symmetry Algebras. Mathematical Problems in Engineering, 2021, 2021, 1-7.	1.1	0
214	Closed-form solutions via the invariant approach for one-factor commodity models. Quaestiones Mathematicae, 0, , 1-14.	0.6	0
215	SYMMETRY CLASSIFICATION AND INVARIANT CHARACTERIZATION OF TWO-DIMENSIONAL GEODESIC EQUATIONS. , 2007, , .		0
216	Classification of singular differential invariants in (1+3)-dimensional space and integrability. Science Progress, 2021, 104, 003685042110542.	1.9	0

#	Article	IF	Citations
217	Complex Methods for Lie Symmetry Analysis. Nonlinear Physical Science, 2021, , 125-151.	0.2	0