

Fazal M Mahomed

List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

214 papers	3,535 citations	31 h-index	49 g-index
219 ext. papers	3,768 ext. citations	2.1 avg, IF	5.54 L-index

#	Paper	IF	Citations
214	Relationship between Symmetries and Conservation Laws. <i>International Journal of Theoretical Physics</i> , 2000 , 39, 23-40	1.1	216
213	Noether-Type Symmetries and Conservation Laws Via Partial Lagrangians. <i>Nonlinear Dynamics</i> , 2006 , 45, 367-383	5	182
212	Comparison of different approaches to conservation laws for some partial differential equations in fluid mechanics. <i>Applied Mathematics and Computation</i> , 2008 , 205, 212-230	2.7	131
211	Symmetry Lie algebras of nth order ordinary differential equations. <i>Journal of Mathematical Analysis and Applications</i> , 1990 , 151, 80-107	1.1	112
210	A Basis of Conservation Laws for Partial Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2002 , 9, 60	0.9	92
209	Lie-Bäcklund and Noether Symmetries with Applications. <i>Nonlinear Dynamics</i> , 1998 , 15, 115-136	5	91
208	Noether symmetry approach in f(R) tachyon model. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2011 , 702, 315-319	4.2	89
207	Peristaltic Flow of a Magnetohydrodynamic Johnson-Segalman Fluid. <i>Nonlinear Dynamics</i> , 2005 , 40, 375-385	3.8	81
206	Symmetry group classification of ordinary differential equations: Survey of some results. <i>Mathematical Methods in the Applied Sciences</i> , 2007 , 30, 1995-2012	2.3	76
205	Noether gauge symmetry approach in f(R) gravity. <i>Astrophysics and Space Science</i> , 2012 , 337, 373-377	1.6	64
204	The Connection Between Isometries and Symmetries of Geodesic Equations of the Underlying Spaces. <i>Nonlinear Dynamics</i> , 2006 , 45, 65-74	5	64
203	THE LINEAR SYMTRIES OF A NONLINEAR DIFFERENTIAL EQUATION. <i>Quaestiones Mathematicae</i> , 1985 , 8, 241-274	0.6	60
202	Lie algebras associated with scalar second-order ordinary differential equations. <i>Journal of Mathematical Physics</i> , 1989 , 30, 2770-2777	1.2	55
201	Linearization criteria for a system of second-order ordinary differential equations. <i>International Journal of Non-Linear Mechanics</i> , 2001 , 36, 671-677	2.8	52
200	THE LIE ALGEBRA $sl(3, \mathbb{R})$ AND LINEARIZATION. <i>Quaestiones Mathematicae</i> , 1989 , 12, 121-139	0.6	46
199	Conservation laws and conserved quantities for laminar two-dimensional and radial jets. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 2641-2651	2.1	43
198	Generalization of the double reduction theory. <i>Nonlinear Analysis: Real World Applications</i> , 2010 , 11, 3763-3769	4.3	43

197	Lagrangian formulation of a generalized Lane-Emden equation and double reduction. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 152	0.9	43
196	Symmetries of nonlinear differential equations and linearisation. <i>Journal of Physics A</i> , 1987 , 20, 277-292		42
195	Symmetry Breaking for a System of Two Linear Second-Order Ordinary Differential Equations. <i>Nonlinear Dynamics</i> , 2000 , 22, 121-133	5	39
194	Approximate Symmetries and Conservation Laws with Applications. <i>International Journal of Theoretical Physics</i> , 1999 , 38, 2389-2399	1.1	39
193	Partial Noether operators and first integrals via partial Lagrangians. <i>Mathematical Methods in the Applied Sciences</i> , 2007 , 30, 2079-2089	2.3	38
192	Exact solutions for thin film flow of a third grade fluid down an inclined plane. <i>Chaos, Solitons and Fractals</i> , 2008 , 38, 1336-1341	9.3	37
191	Linearization criteria for a system of second-order quadratically semi-linear ordinary differential equations. <i>Nonlinear Dynamics</i> , 2007 , 48, 417-422	5	35
190	Singular invariant equation for the (1+1) Fokker-Planck equation. <i>Journal of Physics A</i> , 2001 , 34, 11033-11051		35
189	Effects of slip on the non-linear flows of a third grade fluid. <i>Nonlinear Analysis: Real World Applications</i> , 2010 , 11, 139-146	2.1	34
188	Approximate conditional symmetries and approximate solutions of the perturbed Fitzhugh-Nagumo equation. <i>Journal of Mathematical Physics</i> , 2005 , 46, 023503	1.2	34
187	Approximate conditional symmetries for partial differential equations. <i>Journal of Physics A</i> , 2000 , 33, 343-356		34
186	A partial Hamiltonian approach for current value Hamiltonian systems. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2014 , 19, 3600-3610	3.7	33
185	Approximate symmetries and conservation laws of the geodesic equations for the Schwarzschild metric. <i>Nonlinear Dynamics</i> , 2007 , 51, 183-188	5	31
184	Non-local symmetries and conservation laws for one-dimensional gas dynamics equations. <i>Applied Mathematics and Computation</i> , 2004 , 150, 379-397	2.7	31
183	Double reduction of a nonlinear (2+1) wave equation via conservation laws. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2011 , 16, 1244-1253	3.7	30
182	Noether symmetries of $y''' = f(x)y^n$ with applications to non-static spherically symmetric perfect fluid solutions. <i>Classical and Quantum Gravity</i> , 1999 , 16, 3553-3566	3.3	30
181	Group invariant solutions for the unsteady MHD flow of a third grade fluid in a porous medium. <i>International Journal of Non-Linear Mechanics</i> , 2012 , 47, 792-798	2.8	29
180	Solution of generalized emden-fowler equations with two symmetries. <i>International Journal of Non-Linear Mechanics</i> , 1994 , 29, 529-538	2.8	27

179	Lie and Noether Counting Theorems for One-Dimensional Systems. <i>Journal of Mathematical Analysis and Applications</i> , 1993 , 178, 116-129	1.1	27
178	Complex Lie symmetries for scalar second-order ordinary differential equations. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3335-3344	2.1	26
177	Peristaltic MHD Flow of Third Grade Fluid with an Endoscope and Variable Viscosity. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 91	0.9	26
176	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. <i>Journal of Mechanics</i> , 2014 , 30, 527-535	1	25
175	Endoscope effects on MHD peristaltic flow of a power-law fluid. <i>Mathematical Problems in Engineering</i> , 2006 , 2006, 1-19	1.1	25
174	Exact solution of a thin film flow of an Oldroyd 6-constant fluid over a moving belt. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2009 , 14, 133-139	3.7	24
173	Fundamental Solutions for Zero-Coupon Bond Pricing Models. <i>Nonlinear Dynamics</i> , 2004 , 36, 69-76	5	24
172	Non-linear diffusion of an axisymmetric thin liquid drop: group-invariant solution and conservation law. <i>International Journal of Non-Linear Mechanics</i> , 2001 , 36, 879-885	2.8	24
171	Closed-form solutions for the Lucas-Lizawa model of economic growth via the partial Hamiltonian approach. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2016 , 30, 299-306	3.7	23
170	Approximate Noether symmetries of the geodesic equations for the charged-Kerr spacetime and rescaling of energy. <i>General Relativity and Gravitation</i> , 2009 , 41, 2399-2414	2.3	23
169	Approximate Noether-type symmetries and conservation laws via partial Lagrangians for PDEs with a small parameter. <i>Journal of Computational and Applied Mathematics</i> , 2009 , 223, 508-518	2.4	23
168	Invariant Linearization Criteria for Systems of Cubically Nonlinear Second-Order Ordinary Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2009 , 16, 283	0.9	22
167	Conservation laws for third-order variant Boussinesq system. <i>Applied Mathematics Letters</i> , 2010 , 23, 883-886	3.9	22
166	Closed orbits and their stable symmetries. <i>Journal of Mathematical Physics</i> , 1994 , 35, 6525-6535	1.2	22
165	Complete Invariant Characterization of Scalar Linear (1+1) Parabolic Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 112	0.9	21
164	Approximate potential symmetries for partial differential equations. <i>Journal of Physics A</i> , 2000 , 33, 6601-6613		21
163	Symmetries of first-order stochastic ordinary differential equations revisited. <i>Mathematical Methods in the Applied Sciences</i> , 2007 , 30, 2013-2025	2.3	20
162	Canonical forms for systems of two second-order ordinary differential equations. <i>Journal of Physics A</i> , 2001 , 34, 2883-2911		20

161	Conservation laws via the partial Lagrangian and group invariant solutions for radial and two-dimensional free jets. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3457-3465	2.1	19
160	Complex Lie Symmetries for Variational Problems. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 25	0.9	19
159	A Formal Approach for Handling Lie Point Symmetries of Scalar First-Order Ito Stochastic Ordinary Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 44	0.9	19
158	Note on an exact solution for the pipe flow of a third-grade fluid. <i>Acta Mechanica</i> , 2007 , 190, 233-236	2.1	19
157	Integration of stochastic ordinary differential equations from a symmetry standpoint. <i>Journal of Physics A</i> , 2001 , 34, 177-192		19
156	Solution of ordinary differential equations via nonlocal transformations. <i>Journal of Physics A</i> , 2001 , 34, 1141-1152		19
155	Maximal subalgebra associated with a first integral of a system possessing $sl(3,R)$ algebra. <i>Journal of Mathematical Physics</i> , 1988 , 29, 1807-1813	1.2	19
154	Linearizability criteria for systems of two second-order differential equations by complex methods. <i>Nonlinear Dynamics</i> , 2011 , 66, 77-88	5	18
153	Rayleigh problem for a MHD Sisko fluid. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3428-3434	2.1	18
152	A note on the solutions of the Emden-Fowler equation. <i>International Journal of Non-Linear Mechanics</i> , 1993 , 28, 379-384	2.8	18
151	Exact solutions for flows of an Oldroyd 8-constant fluid with nonlinear slip conditions. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010 , 15, 322-330	3.7	17
150	Equivalent lagrangians and the solution of some classes of non-linear equations. <i>International Journal of Non-Linear Mechanics</i> , 1992 , 27, 919-927	2.8	17
149	A basis of approximate conservation laws for PDEs with a small parameter. <i>International Journal of Non-Linear Mechanics</i> , 2006 , 41, 830-837	2.8	16
148	Integration of Ordinary Differential Equations via Nonlocal Symmetries. <i>Nonlinear Dynamics</i> , 2002 , 30, 267-275	5	16
147	Dust static plane symmetric solutions and their conformal vector fields in $f(R)$ theory of gravity. <i>Modern Physics Letters A</i> , 2018 , 33, 1850222	1.3	16
146	Symmetries and integrability of a fourth-order EulerBernoulli beam equation. <i>Journal of Mathematical Physics</i> , 2010 , 51, 053517	1.2	15
145	Analytic solutions for MHD flow in an annulus. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2010 , 15, 1224-1227	3.7	14
144	Contact symmetry algebras of scalar second-order ordinary differential equations. <i>Journal of Mathematical Physics</i> , 1991 , 32, 2051-2055	1.2	14

143	A partial Lagrangian method for dynamical systems. <i>Nonlinear Dynamics</i> , 2016 , 84, 1783-1794	5	13
142	A note on some solutions for the flow of a fourth grade fluid in a porous space. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 368-374	2.1	13
141	Group classification of the generalized Emden-Bowler-type equation. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3387-3395	2.1	13
140	A unified compatibility method for exact solutions of non-linear flow models of Newtonian and non-Newtonian fluids. <i>International Journal of Non-Linear Mechanics</i> , 2016 , 78, 142-155	2.8	12
139	Reductions and solutions for the unsteady flow of a fourth grade fluid on a porous plate. <i>Applied Mathematics and Computation</i> , 2013 , 219, 9187-9195	2.7	12
138	Classification of Static Spherically Symmetric Spacetimes by Noether Symmetries. <i>International Journal of Theoretical Physics</i> , 2013 , 52, 3534-3542	1.1	12
137	Non-linear time-dependent flow models of third grade fluids: A conditional symmetry approach. <i>International Journal of Non-Linear Mechanics</i> , 2013 , 54, 55-65	2.8	12
136	On comparison of exact and series solutions for thin film flow of a third-grade fluid. <i>International Journal for Numerical Methods in Fluids</i> , 2009 , 61, 987-994	1.9	12
135	Approximate partial Noether operators and first integrals for coupled nonlinear oscillators. <i>Nonlinear Dynamics</i> , 2009 , 57, 303-311	5	12
134	Proposal for determining the energy content of gravitational waves by using approximate symmetries of differential equations. <i>Physical Review D</i> , 2009 , 79,	4.9	12
133	Reduction of Order for Systems of Ordinary Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2004 , 11, 13	0.9	12
132	Contact Symmetry Algebras of Scalar Ordinary Differential Equations. <i>Nonlinear Dynamics</i> , 2002 , 28, 213-230	5	12
131	Algebraic linearization criteria for systems of ordinary differential equations. <i>Nonlinear Dynamics</i> , 2012 , 67, 2053-2062	5	11
130	Invariant boundary value problems for a fourth-order dynamic Euler-Bernoulli beam equation. <i>Journal of Mathematical Physics</i> , 2012 , 53, 043703	1.2	11
129	Symmetry Reduction and Numerical Solution of a Third-Order ODE from Thin Film Flow. <i>Mathematical and Computational Applications</i> , 2010 , 15, 709-719	1	11
128	Generalized Couette Flow of a Third-Grade Fluid with Slip: The Exact Solutions. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2010 , 65, 1071-1076	1.4	11
127	Symmetry Solutions of a Third-Order Ordinary Differential Equation which Arises from Prandtl Boundary Layer Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 179	0.9	11
126	Basis of Joint Invariants for $(1 + 1)$ Linear Hyperbolic Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2002 , 9, 49	0.9	11

125	Non-static shear-free spherically symmetric charged perfect fluid distributions: a symmetry approach. <i>Classical and Quantum Gravity</i> , 2000 , 17, 3063-3072	3.3	11
124	Reduction and Solutions for Magnetohydrodynamic Flow of a Sisko Fluid in a Porous Medium. <i>Journal of Porous Media</i> , 2009 , 12, 695-714	2.9	11
123	A generalized Fitzhugh-Nagumo equation. <i>Nonlinear Analysis: Theory, Methods & Applications</i> , 2008 , 68, 1006-1015	1.3	10
122	On Solutions of Some Non-Linear Differential Equations Arising in Newtonian and Non-Newtonian Fluids. <i>Nonlinear Dynamics</i> , 2004 , 35, 229-248	5	10
121	Noether Equivalence Problem for Particle Lagrangians. <i>Journal of Mathematical Analysis and Applications</i> , 1994 , 188, 867-884	1.1	10
120	A note on proper projective symmetry in cylindrical symmetric non-static space-times. <i>European Physical Journal Plus</i> , 2014 , 129, 1	3.1	9
119	Two-dimensional systems that arise from the Noether classification of Lagrangians on the line. <i>Applied Mathematics and Computation</i> , 2011 , 217, 6959-6973	2.7	9
118	Conditional linearizability criteria for a system of third-order ordinary differential equations. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3404-3412	2.1	9
117	Conditional Linearizability Criteria for Third Order Ordinary Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 124	0.9	9
116	Gliding motion of bacterium in a non-Newtonian slime. <i>Nonlinear Analysis: Real World Applications</i> , 2007 , 8, 853-864	2.1	9
115	Symmetries, Conservation Laws and Multipliers via Partial Lagrangians and Noether's Theorem for Classically Non-Variational Problems. <i>International Journal of Theoretical Physics</i> , 2007 , 46, 3022-3029	1.1	9
114	Exact solutions for Couette and Poiseuille flows for fourth grade fluids. <i>Acta Mechanica</i> , 2007 , 188, 69-78	1.1	9
113	Noether, partial Noether operators and first integrals for a linear system. <i>Journal of Mathematical Analysis and Applications</i> , 2008 , 342, 70-82	1.1	9
112	Constructing a space from the geodesic equations. <i>Computer Physics Communications</i> , 2008 , 179, 438-444	4.2	9
111	Conservation laws for equations related to soil water equations. <i>Mathematical Problems in Engineering</i> , 2005 , 2005, 141-150	1.1	9
110	The existence of contact transformations for evolution-type equations. <i>Journal of Physics A</i> , 1999 , 32, 8721-8730		9
109	Conformal vector fields in proper non-static plane symmetric spacetimes in $f(R)$ gravity. <i>International Journal of Geometric Methods in Modern Physics</i> , 2020 , 17, 2050077	1.5	8
108	The association of non-local symmetries with conservation laws: applications to the heat and Burger's equations. <i>Applied Mathematics and Computation</i> , 2005 , 168, 1098-1108	2.7	8

107	Hamiltonian systems with three degrees of freedom, singular-point analysis, and chaotic behavior. <i>Physical Review A</i> , 1986 , 33, 2131-2133	2.6	8
106	Characterization of Hamiltonian symmetries and their first integrals. <i>International Journal of Non-Linear Mechanics</i> , 2015 , 74, 84-91	2.8	7
105	Proper projective symmetry in LRS Bianchi type V spacetimes. <i>Modern Physics Letters A</i> , 2018 , 33, 1850073	1.3	7
104	On certain properties of linear iterative equations. <i>Open Mathematics</i> , 2014 , 12, 648-657	0.8	7
103	Solutions for the turbulent classical wake using Lie symmetry methods. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015 , 23, 51-70	3.7	7
102	A note on the solutions of some nonlinear equations arising in third-grade fluid flows: an exact approach. <i>Scientific World Journal, The</i> , 2014 , 2014, 109128	2.2	7
101	Classification of ordinary differential equations by conditional linearizability and symmetry. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2012 , 17, 573-584	3.7	7
100	Second-Order Systems of ODEs Admitting Three-Dimensional Lie Algebras and Integrability. <i>Journal of Applied Mathematics</i> , 2013 , 2013, 1-15	1.1	7
99	Closed-Form Solutions for a Nonlinear Partial Differential Equation Arising in the Study of a Fourth Grade Fluid Model. <i>Journal of Applied Mathematics</i> , 2012 , 2012, 1-16	1.1	7
98	Conditional Linearizability of Fourth-Order Semi-Linear Ordinary Differential Equations. <i>Journal of Nonlinear Mathematical Physics</i> , 2009 , 16, 165	0.9	7
97	Conservation laws of a nonlinear wave equation. <i>Nonlinear Analysis: Real World Applications</i> , 2010 , 11, 2237-2242	2.1	7
96	EFFECTS OF AN ENDOSCOPE AND AN ELECTRICALLY CONDUCTING THIRD GRADE FLUID ON PERISTALTIC MOTION. <i>International Journal of Modern Physics B</i> , 2008 , 22, 3997-4016	1.1	7
95	AXIAL COUETTE FLOW OF AN ELECTRICALLY CONDUCTING FLUID IN AN ANNULUS. <i>International Journal of Modern Physics B</i> , 2008 , 22, 2489-2500	1.1	7
94	Unsteady Solutions in a Third-Grade Fluid Filling the Porous Space. <i>Mathematical Problems in Engineering</i> , 2008 , 2008, 1-13	1.1	7
93	Conditional symmetries for ordinary differential equations and applications. <i>International Journal of Non-Linear Mechanics</i> , 2014 , 67, 95-105	2.8	6
92	Analytic approximate solutions for time-dependent flow and heat transfer of a Sisko fluid. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2014 , 24, 1005-1019	4.5	6
91	Fundamental flows with nonlinear slip conditions: exact solutions. <i>Zeitschrift Fur Angewandte Mathematik Und Physik</i> , 2010 , 61, 877-888	1.6	6
90	Conservation laws of a nonlinear wave equation. <i>Nonlinear Analysis: Real World Applications</i> , 2010 , 11, 2862-2870	2.1	6

89	Classification of first-order Lagrangians on the line. <i>International Journal of Theoretical Physics</i> , 1995 , 34, 2267-2274	1.1	6
88	A note on classification of static plane symmetric perfect fluid space-times via proper conformal vector fields in f(G) theory of gravity. <i>International Journal of Geometric Methods in Modern Physics</i> , 2020 , 17, 2050086	1.5	6
87	Symmetries of second-order systems of ODEs and integrability. <i>Nonlinear Dynamics</i> , 2013 , 74, 969-989	5	5
86	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. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2015 , 70, 483-497	1.4	5
85	Self-Similar Unsteady Flow of a Sisko Fluid in a Cylindrical Tube Undergoing Translation. <i>Mathematical Problems in Engineering</i> , 2015 , 2015, 1-14	1.1	5
84	A note on the Lie symmetries of complex partial differential equations and their split real systems 2011 , 77, 483-491		5
83	Soil water redistribution and extraction flow models: Conservation laws. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 2021-2025	2.1	5
82	Laplace-Type Semi-Invariants for a System of Two Linear Hyperbolic Equations by Complex Methods. <i>Mathematical Problems in Engineering</i> , 2011 , 2011, 1-15	1.1	5
81	Symmetry analysis for the nonlinear model of diffusion and reaction in porous catalysts. <i>Nonlinear Analysis: Real World Applications</i> , 2010 , 11, 3031-3036	2.1	5
80	First integrals for a general linear system of two second-order ODEs via a partial Lagrangian. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2008 , 41, 355207	2	5
79	Application of Symmetries to Central Force Problems 2000 , 21, 307-315		5
78	Symmetry vector fields and similarity solutions of a nonlinear field equation describing the relaxation to a maxwell distribution. <i>International Journal of Theoretical Physics</i> , 1988 , 27, 717-723	1.1	5
77	Analytical solution in parametric form for the two-dimensional free jet of a power-law fluid. <i>International Journal of Non-Linear Mechanics</i> , 2016 , 85, 94-108	2.8	4
76	A note on the integrability of a remarkable static EulerBernoulli beam equation. <i>Journal of Engineering Mathematics</i> , 2013 , 82, 101-108	1.2	4
75	Invariant approach to optimal investmentconsumption problem: the constant elasticity of variance (CEV) model. <i>Mathematical Methods in the Applied Sciences</i> , 2017 , 40, 1382-1395	2.3	4
74	Dynamic Euler-Bernoulli Beam Equation: Classification and Reductions. <i>Mathematical Problems in Engineering</i> , 2015 , 2015, 1-7	1.1	4
73	Approximate conservation laws of nonlinear perturbed heat and wave equations. <i>Nonlinear Analysis: Real World Applications</i> , 2012 , 13, 2823-2829	2.1	4
72	Group Classification of a Generalized Lane-Emden System. <i>Journal of Applied Mathematics</i> , 2013 , 2013, 1-12	1.1	4

71	Linearization of systems of four second-order ordinary differential equations 2011 , 77, 581-594		4
70	Effect of magnetic field on the flow of a fourth order fluid. <i>Nonlinear Analysis: Real World Applications</i> , 2009 , 10, 3413-3419	2.1	4
69	The Rayleigh Problem for a Third Grade Electrically Conducting Fluid in a Magnetic Field. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 77	0.9	4
68	Remark on classical Crane's solution of viscous flow past a stretching plate. <i>Applied Mathematics Letters</i> , 2016 , 52, 205-211	3.5	3
67	A complex Noether approach for variational partial differential equations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2015 , 27, 120-135	3.7	3
66	Invariant Solutions for the Unsteady Magnetohydrodynamics (MHD) Flow of a Fourth-Grade Fluid Induced Due to the Impulsive Motion of a Flat Porous Plate. <i>Brazilian Journal of Physics</i> , 2015 , 45, 120-131 ^{1,2}		3
65	Applications of Group Theoretical Methods to Non-Newtonian Fluid Flow Models: Survey of Results. <i>Mathematical Problems in Engineering</i> , 2017 , 2017, 1-43	1.1	3
64	Lie and Noether symmetries of systems of complex ordinary differential equations and their split systems 2014 , 83, 9-20		3
63	Higher dimensional systems of differential equations obtainable by iterative use of complex methods. <i>International Journal of Modern Physics Conference Series</i> , 2015 , 38, 1560077	0.7	3
62	A Partial Lagrangian Approach to Mathematical Models of Epidemiology. <i>Mathematical Problems in Engineering</i> , 2015 , 2015, 1-11	1.1	3
61	Prandtl's Boundary Layer Equation for Two-Dimensional Flow: Exact Solutions via the Simplest Equation Method. <i>Mathematical Problems in Engineering</i> , 2013 , 2013, 1-5	1.1	3
60	Invariant Approaches to Equations of Finance. <i>Mathematical and Computational Applications</i> , 2013 , 18, 244-250	1	3
59	Approximate First Integrals for a System of Two Coupled Van Der Pol Oscillators with Linear Diffusive Coupling. <i>Mathematical and Computational Applications</i> , 2010 , 15, 720-731	1	3
58	Partial Noether Operators and First Integrals for a System with two Degrees of Freedom. <i>Journal of Nonlinear Mathematical Physics</i> , 2008 , 15, 165	0.9	3
57	Conditional symmetries of nonlinear third-order ordinary differential equations. <i>Discrete and Continuous Dynamical Systems - Series S</i> , 2018 , 11, 655-666	2.8	3
56	Hypercomplex analysis and integration of systems of ordinary differential equations. <i>Mathematical Methods in the Applied Sciences</i> , 2016 , 39, 4139-4157	2.3	3
55	Noether Symmetry Analysis of the Dynamic Euler-Bernoulli Beam Equation. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2016 , 71, 447-456	1.4	3
54	Analytical solution in parametric form for the two-dimensional liquid jet of a power-law fluid. <i>International Journal of Non-Linear Mechanics</i> , 2017 , 93, 53-64	2.8	2

53	Invariants of third-order ordinary differential equations $y'''=f(x,y,y')$ via point transformations. <i>Mathematical Methods in the Applied Sciences</i> , 2016 , 39, 1043-1059	2.3	2
52	Ibragimov-type invariants for a system of two linear parabolic equations. <i>Communications in Nonlinear Science and Numerical Simulation</i> , 2012 , 17, 3140-3147	3.7	2
51	A Note on Four-Dimensional Symmetry Algebras and Fourth-Order Ordinary Differential Equations. <i>Journal of Applied Mathematics</i> , 2013 , 2013, 1-4	1.1	2
50	Shock Wave Solution for a Nonlinear Partial Differential Equation Arising in the Study of a Non-Newtonian Fourth Grade Fluid Model. <i>Mathematical Problems in Engineering</i> , 2013 , 2013, 1-5	1.1	2
49	Integration of Systems of ODEs via Nonlocal Symmetry-Like Operators. <i>Mathematical and Computational Applications</i> , 2010 , 15, 585-600	1	2
48	Approximate Partial Noether Operators of the Schwarzschild Spacetime. <i>Journal of Nonlinear Mathematical Physics</i> , 2010 , 17, 13	0.9	2
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