

Rajan Arora

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	One-dimensional cylindrical shock waves in non-ideal gas under magnetic field. <i>Ricerche Di Matematica</i> , 2022, 71, 367-379.	0.6	3
2	Converging strong shock waves in magnetogasdynamics under isothermal condition. <i>Ricerche Di Matematica</i> , 2022, 71, 297-313.	0.6	5
3	Similarity solutions for cylindrical shock wave in self-gravitating non-ideal gas with axial magnetic field: Isothermal flow. <i>Mathematical Methods in the Applied Sciences</i> , 2022, 45, 1259-1275.	1.2	4
4	An analysis of shock wave propagation in a dusty gas. <i>Mathematical Methods in the Applied Sciences</i> , 2022, 45, 5149-5164.	1.2	1
5	Convergence of strong shock waves in an ideal gas with dust particles. <i>Physics of Fluids</i> , 2022, 34, 026106.	1.6	5
6	Lie symmetry analysis, optimal system and exact solutions of a new $(2 + 1)$ -dimensional KdV equation. <i>Modern Physics Letters B</i> , 2022, 36, .	1.0	5
7	Lie group of invariance technique for analyzing propagation of strong shock wave in a rotating non-ideal gas with azimuthal magnetic field. <i>Mathematical Methods in the Applied Sciences</i> , 2022, 45, 11889-11904.	1.2	7
8	Propagation of shock waves in a non-ideal gas under the action of magnetic field. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 1514-1528.	1.2	11
9	Lie symmetry analysis, optimal system, and new exact solutions of a $(3 + 1)$ dimensional nonlinear evolution equation. <i>Nonlinear Engineering</i> , 2021, 10, 132-145.	1.4	6
10	Invariance analysis, optimal system and conservation laws of $(2+1)$ -dimensional non-linear Vakhnenko equation. <i>Pramana - Journal of Physics</i> , 2021, 95, 1.	0.9	9
11	Lie symmetry analysis, optimal system and invariant solutions of $(3+1)$ -dimensional nonlinear wave equation in liquid with gas bubbles. <i>European Physical Journal Plus</i> , 2021, 136, 1.	1.2	18
12	Similarity solutions for cylindrical shock waves in a non-ideal gas under the action of monochromatic radiation. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2021, 54, 125701.	0.7	6
13	Kinematics of spherical shock waves in an interstellar ideal gas clouds with dust particles. <i>Mathematical Methods in the Applied Sciences</i> , 2021, 44, 6282-6300.	1.2	5
14	Propagation of one-dimensional planar and nonplanar shock waves in nonideal radiating gas. <i>Physics of Fluids</i> , 2021, 33, .	1.6	11
15	Similarity solutions for strong shock waves in non-ideal magnetogasdynamics under the effect of monochromatic radiation. <i>Physics of Fluids</i> , 2021, 33, .	1.6	17
16	Optimal system, invariance analysis of fourth-Order nonlinear ablowitz-Kaup-Newell-Segur water wave dynamical equation using lie symmetry approach. <i>Applied Mathematics and Computation</i> , 2021, 404, 126230.	1.4	17
17	Study of shocks in a nonideal dusty gas using Maslov, Guderley, and CCW methods for shock exponents. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2021, .	0.7	0
18	Ionizing blast waves in a non-ideal gas under isothermal flow condition: Power Series Method. <i>Physica Scripta</i> , 2021, 96, 015217.	1.2	4

#	ARTICLE	IF	CITATIONS
19	Piston driven converging shock waves in nonideal magnetogasdynamics of variable density. <i>Physics of Fluids</i> , 2021, 33, .	1.6	9
20	Propagation of cylindrical shock waves in rotational axisymmetric dusty gas with magnetic field: Isothermal flow. <i>Physics of Fluids</i> , 2021, 33, .	1.6	4
21	Self-similar solutions of cylindrical shock wave in a dusty gas. <i>Indian Journal of Physics</i> , 2020, 94, 665-673.	0.9	13
22	Invariance analysis, exact solutions and conservation laws of (2+1)-dimensional dispersive long wave equations. <i>Physica Scripta</i> , 2020, 95, 055207.	1.2	16
23	Blast waves in a non-ideal self-gravitating gas with magnetic field. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	4
24	Lie Symmetry Reductions and Wave Solutions of Coupled Equal Width Wave Equation. <i>International Journal of Applied and Computational Mathematics</i> , 2020, 6, 1.	0.9	3
25	Similarity solutions of converging shock waves in an ideal relaxing gas with dust particles. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	5
26	An impact of forcing terms on the delta shock front. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	0
27	Kinematics of one-dimensional spherical shock waves in interstellar van der Waals gas clouds. <i>Physics of Fluids</i> , 2020, 32, .	1.6	11
28	Similarity solutions for the strong shock waves in magnetogasdynamics with the effect of monochromatic radiation. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	6
29	Piston driven converging cylindrical shock waves in a non-ideal gas with azimuthal magnetic field. <i>Physics of Fluids</i> , 2020, 32, .	1.6	8
30	Lie symmetry analysis, optimal system, and generalized group invariant solutions of the (2+1)-dimensional Jimbo-Kashiwara-Miwa equation. <i>Mathematical Methods in the Applied Sciences</i> , 2020, 43, 8823-8840.	1.2	30
31	Similarity Solutions for Imploding Shocks in a Non-ideal Magnetogasdynamics. <i>International Journal of Applied and Computational Mathematics</i> , 2020, 6, 1.	0.9	10
32	Similarity solutions for strong shock waves in magnetogasdynamics under a gravitational field. <i>Ricerche Di Matematica</i> , 2020, , 1.	0.6	8
33	Propagation of Waves in a Nonideal Magnetogasdynamics with Dust Particles. <i>Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences</i> , 2020, 75, 193-200.	0.7	11
34	Converging shock waves in a Van der Waals gas of variable density. <i>Quarterly Journal of Mechanics and Applied Mathematics</i> , 2020, 73, 101-118.	0.5	7
35	Lie symmetry analysis and traveling wave solutions of equal width wave equation. <i>Proyecciones</i> , 2020, 39, 179-198.	0.1	6
36	Propagation of Blast waves in a Non-Ideal Magnetogasdynamics. <i>Symmetry</i> , 2019, 11, 458.	1.1	8

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37	Converging Cylindrical Symmetric Shock Waves in a Real Medium with a Magnetic Field. <i>Symmetry</i> , 2019, 11, 1177.	1.1	5
38	Propagation of strong shock waves in a non-ideal gas. <i>Acta Astronautica</i> , 2019, 159, 96-104.	1.7	13
39	Lie Symmetry Analysis and Some Exact Solutions of (2+1)-dimensional KdV-Burgers Equation. <i>International Journal of Applied and Computational Mathematics</i> , 2019, 5, 1.	0.9	10
40	Time fractional Kupershmidt equation: symmetry analysis and explicit series solution with convergence analysis. <i>Communications in Mathematics</i> , 2019, 27, 171-185.	0.3	8
41	Convergence of strong shock waves in non-ideal magnetogasdynamics. <i>Physics of Fluids</i> , 2018, 30, .	1.6	19
42	Lie Symmetry Reductions and Solitary Wave Solutions of Modified Equal Width Wave Equation. <i>International Journal of Applied and Computational Mathematics</i> , 2018, 4, 1.	0.9	4
43	Shock waves propagation under the influence of magnetic field. <i>Chaos, Solitons and Fractals</i> , 2017, 97, 66-74.	2.5	24
44	Similarity method for the study of strong shock waves in magnetogasdynamics. <i>Boundary Value Problems</i> , 2014, 2014, .	0.3	11
45	Similarity method for imploding strong shocks in a non-ideal relaxing gas. <i>International Journal of Non-Linear Mechanics</i> , 2013, 57, 1-9.	1.4	24
46	Wave Interaction and Resonance in a Non-Ideal Gas. <i>Chinese Physics Letters</i> , 2012, 29, 120202.	1.3	3
47	SIMILARITY SOLUTIONS FOR STRONG SHOCKS IN A NON-IDEAL GAS. <i>Mathematical Modelling and Analysis</i> , 2012, 17, 351-365.	0.7	22
48	Solution of the Modified Equal Width Equation, its Variant and non-homogeneous Burgers's Equation by RDT Method. <i>American Journal of Computational and Applied Mathematics</i> , 2012, 1, 53-56.	0.4	5
49	Shock waves in reactive hydrodynamics. <i>Shock Waves</i> , 2009, 19, 145-150.	1.0	4
50	Non-planar shock waves in a magnetic field. <i>Computers and Mathematics With Applications</i> , 2008, 56, 2686-2691.	1.4	8
51	Convergence of Strong Shock in a Van der Waals Gas. <i>SIAM Journal on Applied Mathematics</i> , 2006, 66, 1825-1837.	0.8	50
52	Similarity Solutions for Strong Shocks in an Ideal Gas. <i>Studies in Applied Mathematics</i> , 2005, 114, 375-394.	1.1	27
53	Interaction of an acceleration wave with a characteristic shock in Interstellar gas clouds. <i>Ricerche Di Matematica</i> , 0, , 1.	0.6	2