

Shigeru Taniguchi

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5637316/publications.pdf>

Version: 2024-02-01

30
papers

654
citations

623188

14
h-index

552369

26
g-index

30
all docs

30
docs citations

30
times ranked

90
citing authors

#	ARTICLE	IF	CITATIONS
1	Extended thermodynamics of real gases with dynamic pressure: An extension of Meixner's theory. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012, 376, 2799-2803.	0.9	87
2	Thermodynamic theory of the shock wave structure in a rarefied polyatomic gas: Beyond the Bethe-Teller theory. <i>Physical Review E</i> , 2014, 89, 013025.	0.8	71
3	Effect of the dynamic pressure on the shock wave structure in a rarefied polyatomic gas. <i>Physics of Fluids</i> , 2014, 26, .	1.6	70
4	Dispersion relation for sound in rarefied polyatomic gases based on extended thermodynamics. <i>Continuum Mechanics and Thermodynamics</i> , 2013, 25, 727-737.	1.4	58
5	Monatomic rarefied gas as a singular limit of polyatomic gas in extended thermodynamics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013, 377, 2136-2140.	0.9	49
6	Non-linear extended thermodynamics of real gases with 6 fields. <i>International Journal of Non-Linear Mechanics</i> , 2015, 72, 6-15.	1.4	48
7	Overshoot of the non-equilibrium temperature in the shock wave structure of a rarefied polyatomic gas subject to the dynamic pressure. <i>International Journal of Non-Linear Mechanics</i> , 2016, 79, 66-75.	1.4	42
8	On the six-field model of fluids based on extended thermodynamics. <i>Meccanica</i> , 2014, 49, 2181-2187.	1.2	31
9	Monatomic gas as a singular limit of polyatomic gas in molecular extended thermodynamics with many moments. <i>Annals of Physics</i> , 2016, 372, 83-109.	1.0	23
10	A Study of Linear Waves Based on Extended Thermodynamics for Rarefied Polyatomic Gases. <i>Acta Applicandae Mathematicae</i> , 2014, 132, 15-25.	0.5	21
11	On the sub-shock formation in extended thermodynamics. <i>International Journal of Non-Linear Mechanics</i> , 2018, 99, 69-78.	1.4	20
12	Shock Wave Structure in a Rarefied Polyatomic Gas Based on Extended Thermodynamics. <i>Acta Applicandae Mathematicae</i> , 2014, 132, 583-593.	0.5	18
13	Recent results on nonlinear extended thermodynamics of real gases with six fields Part I: general theory. <i>Ricerche Di Matematica</i> , 2016, 65, 263-277.	0.6	16
14	Shock-induced phase transition in systems of hard spheres with internal degrees of freedom. <i>Physical Review E</i> , 2010, 81, 066307.	0.8	14
15	Prediction and simulation of compressive shocks with lower perturbed density for increasing shock strength in real gases. <i>Physical Review E</i> , 2010, 82, 036324.	0.8	14
16	Shock wave structure in rarefied polyatomic gases with large relaxation time for the dynamic pressure. <i>Journal of Physics: Conference Series</i> , 2018, 1035, 012009.	0.3	10
17	Non-polytropic effect on shock-induced phase transitions in a hard-sphere system. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2010, 374, 3315-3318.	0.9	9
18	Shock Waves in Hyperbolic Systems of Nonequilibrium Thermodynamics. <i>Mathematics of Planet Earth</i> , 2019, , 167-186.	0.1	8

#	ARTICLE	IF	CITATIONS
19	Recent results on nonlinear extended thermodynamics of real gases with six fields Part II: shock wave structure. <i>Ricerche Di Matematica</i> , 2016, 65, 279-288.	0.6	7
20	A 2 \times 2 simple model in which the sub-shock exists when the shock velocity is slower than the maximum characteristic velocity. <i>Ricerche Di Matematica</i> , 2019, 68, 119-129.	0.6	7
21	Fluctuating hydrodynamics for a rarefied gas based on extended thermodynamics. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2011, 375, 2601-2605.	0.9	6
22	A complete classification of sub-shocks in the shock structure of a binary mixture of Eulerian gases with different degrees of freedom. <i>Physics of Fluids</i> , 2022, 34, .	1.6	6
23	Shock-Induced Phase Transitions from Gas Phase to Solid Phase. <i>Journal of the Physical Society of Japan</i> , 2011, 80, 083401.	0.7	5
24	Relationship between Maxwell Boundary Condition and Two Kinds of Stochastic Thermal Wall. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 124004.	0.7	4
25	Shock-Induced Phase Transitions in Systems of Hard Spheres with Attractive Interactions. <i>Acta Applicandae Mathematicae</i> , 2012, 122, 473.	0.5	3
26	Galilean invariance and entropy principle for a system of balance laws of mixture type. <i>Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni</i> , 2017, 28, 495-513.	0.3	3
27	Phenomenological Approach to Heat Conduction in a One-Dimensional Hard-Point Gas beyond Local Equilibrium. <i>Journal of the Physical Society of Japan</i> , 2008, 77, 014004.	0.7	2
28	Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic gas closures. <i>Ricerche Di Matematica</i> , 2017, 66, 1-13.	0.6	1
29	Similarity solution of strong spherical shock waves in a rarefied polyatomic gas based on extended thermodynamics. <i>AIP Conference Proceedings</i> , 2019, , .	0.3	1
30	Effect of the dynamic pressure on the similarity solution of cylindrical shock waves in a rarefied polyatomic gas. <i>Ricerche Di Matematica</i> , 2021, 70, 195-206.	0.6	0