

Shigeru Taniguchi

List of Publications by Citations

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29
papers

536
citations

13
h-index

23
g-index

30
ext. papers

586
ext. citations

1.9
avg, IF

3.94
L-index

| # | Paper | IF | Citations |
|----|---|-----|-----------|
| 29 | 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 | 2.3 | 72 |
| 28 | 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 | 2.4 | 63 |
| 27 | Effect of the dynamic pressure on the shock wave structure in a rarefied polyatomic gas. <i>Physics of Fluids</i> , 2014 , 26, 016103 | 4.4 | 57 |
| 26 | Dispersion relation for sound in rarefied polyatomic gases based on extended thermodynamics. <i>Continuum Mechanics and Thermodynamics</i> , 2013 , 25, 727-737 | 3.5 | 49 |
| 25 | 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 | 2.3 | 43 |
| 24 | Non-linear extended thermodynamics of real gases with 6 fields. <i>International Journal of Non-Linear Mechanics</i> , 2015 , 72, 6-15 | 2.8 | 39 |
| 23 | 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 | 2.8 | 34 |
| 22 | On the six-field model of fluids based on extended thermodynamics. <i>Meccanica</i> , 2014 , 49, 2181-2187 | 2.1 | 29 |
| 21 | 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 | 2.5 | 18 |
| 20 | A Study of Linear Waves Based on Extended Thermodynamics for Rarefied Polyatomic Gases. <i>Acta Applicandae Mathematicae</i> , 2014 , 132, 15-25 | 1.1 | 17 |
| 19 | Shock Wave Structure in a Rarefied Polyatomic Gas Based on Extended Thermodynamics. <i>Acta Applicandae Mathematicae</i> , 2014 , 132, 583-593 | 1.1 | 16 |
| 18 | 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 | 0.9 | 15 |
| 17 | Shock-induced phase transition in systems of hard spheres with internal degrees of freedom. <i>Physical Review E</i> , 2010 , 81, 066307 | 2.4 | 13 |
| 16 | On the sub-shock formation in extended thermodynamics. <i>International Journal of Non-Linear Mechanics</i> , 2018 , 99, 69-78 | 2.8 | 13 |
| 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 | 2.4 | 11 |
| 14 | 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 | 2.3 | 7 |
| 13 | 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 | 0.9 | 7 |

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| 12 | 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 | 2.3 | 6 |
| 11 | Shock Waves in Hyperbolic Systems of Nonequilibrium Thermodynamics. <i>Mathematics of Planet Earth</i> , 2019 , 167-186 | 0.4 | 6 |
| 10 | 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 | 6 |
| 9 | Shock-Induced Phase Transitions from Gas Phase to Solid Phase. <i>Journal of the Physical Society of Japan</i> , 2011 , 80, 083401 | 1.5 | 4 |
| 8 | Relationship between Maxwell Boundary Condition and Two Kinds of Stochastic Thermal Wall. <i>Journal of the Physical Society of Japan</i> , 2008 , 77, 124004 | 1.5 | 3 |
| 7 | 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 | 0.9 | 2 |
| 6 | Shock-Induced Phase Transitions in Systems of Hard Spheres with Attractive Interactions. <i>Acta Applicandae Mathematicae</i> , 2012 , 122, 473 | 1.1 | 2 |
| 5 | 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 | 1.5 | 2 |
| 4 | Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic gas closures. <i>Ricerche Di Matematica</i> , 2017 , 66, 1-13 | 0.9 | 1 |
| 3 | Similarity solution of strong spherical shock waves in a rarefied polyatomic gas based on extended thermodynamics 2019 , | | 1 |
| 2 | 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 | 0.7 | 0 |
| 1 | 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 | 0.9 | |