# Tommaso Ruggeri

## List of Publications by Citations

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184 2,943 30 49 g-index

232 3,292 1.9 5.88 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
184	Extended Thermodynamics. Springer Tracts in Natural Philosophy, 1993,		265
183	Hyperbolic Principal Subsystems: Entropy Convexity and Subcharacteristic Conditions. <i>Archive for Rational Mechanics and Analysis</i> , <b>1997</b> , 137, 305-320	2.3	119
182	Rational Extended Thermodynamics beyond the Monatomic Gas <b>2015</b> ,		109
181	Extended thermodynamics of dense gases. Continuum Mechanics and Thermodynamics, 2012, 24, 271-2	. <b>92</b> 3.5	93
180	On the evolution law of weak discontinuities for hyperbolic quasi-linear systems. <i>Wave Motion</i> , <b>1979</b> , 1, 149-152	1.8	87
179	On the shock structure problem for hyperbolic system of balance laws and convex entropy. <i>Continuum Mechanics and Thermodynamics</i> , <b>1998</b> , 10, 285-292	3.5	82
178	Maximum entropy principle for rarefied polyatomic gases. <i>Physica A: Statistical Mechanics and Its Applications</i> , <b>2013</b> , 392, 1302-1317	3.3	77
177	Moment equations in the kinetic theory of gases and wave velocities. <i>Continuum Mechanics and Thermodynamics</i> , <b>1997</b> , 9, 205-212	3.5	77
176	Entropy Principle and Recent Results in Non-Equilibrium Theories. <i>Entropy</i> , <b>2014</b> , 16, 1756-1807	2.8	74
175	Extended thermodynamics of real gases with dynamic pressure: An extension of Meixner theory. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , <b>2012</b> , 376, 2799-2803	2.3	72
174	Hyperbolicity of the 3+1 system of Einstein equations. <i>Communications in Mathematical Physics</i> , <b>1983</b> , 89, 269-275	2	69
173	Thermodynamic theory of the shock wave structure in a rarefied polyatomic gas: beyond the Bethe-Teller theory. <i>Physical Review E</i> , <b>2014</b> , 89, 013025	2.4	63
172	Admissible shock waves and shock-induced phase transitions in a van der Waals fluid. <i>Physics of Fluids</i> , <b>2011</b> , 23, 086101	4.4	61
171	Effect of the dynamic pressure on the shock wave structure in a rarefied polyatomic gas. <i>Physics of Fluids</i> , <b>2014</b> , 26, 016103	4.4	57
170	Molecular extended thermodynamics of rarefied polyatomic gases and wave velocities for increasing number of moments. <i>Annals of Physics</i> , <b>2014</b> , 345, 111-140	2.5	55
169	Stability of constant equilibrium state for dissipative balance laws system with a convex entropy. <i>Quarterly of Applied Mathematics</i> , <b>2004</b> , 62, 163-179	0.7	50
168	Dispersion relation for sound in rarefied polyatomic gases based on extended thermodynamics. <i>Continuum Mechanics and Thermodynamics</i> , <b>2013</b> , 25, 727-737	3.5	49

# (2002-2007)

1	67	On the hyperbolic system of a mixture of Eulerian fluids: a comparison between single- and multi-temperature models. <i>Mathematical Methods in the Applied Sciences</i> , <b>2007</b> , 30, 827-849	2.3	49	
1	66	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> , <b>2013</b> , 377, 2136-2140	2.3	43	
10	65	Reflection and transmission of discontinuity waves through a shock wave. General theory including also the case of characteristic shocks. <i>Proceedings of the Royal Society of Edinburgh Section A:</i> Mathematics, <b>1979</b> , 83, 17-24	1	43	
1	64	Non-linear extended thermodynamics of real gases with 6 fields. <i>International Journal of Non-Linear Mechanics</i> , <b>2015</b> , 72, 6-15	2.8	39	
10	63	Emergent Dynamics of a Thermodynamically Consistent Particle Model. <i>Archive for Rational Mechanics and Analysis</i> , <b>2017</b> , 223, 1397-1425	2.3	38	
1	62	Breakdown of shock-wave-structure solutions. <i>Physical Review E</i> , <b>1993</b> , 47, 4135-4140	2.4	38	
10	61	Interaction between a shock and an acceleration wave in a perfect gas for increasing shock strength. <i>Wave Motion</i> , <b>2008</b> , 45, 498-517	1.8	36	
1	60	Average temperature and Maxwellian iteration in multitemperature mixtures of fluids. <i>Physical Review E</i> , <b>2009</b> , 80, 026317	2.4	35	
1	59	Heat conduction in multi-temperature mixtures of fluids: the role of the average temperature. <i>Physics Letters, Section A: General, Atomic and Solid State Physics,</i> <b>2009</b> , 373, 3052-3055	2.3	34	
1	58	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> , <b>2016</b> , 79, 66-75	2.8	34	
1	57	The dynamics of spreading and immune strategies of sexually transmitted diseases on scale-free network. <i>Journal of Mathematical Analysis and Applications</i> , <b>2010</b> , 365, 210-219	1.1	32	
1	56	Dynamical pressure in a polyatomic gas: Interplay between kinetic theory and extended thermodynamics. <i>Kinetic and Related Models</i> , <b>2018</b> , 11, 71-95	2.4	32	
1	55	Relativistic extended thermodynamics of rarefied polyatomic gas. <i>Annals of Physics</i> , <b>2017</b> , 377, 414-445	2.5	30	
1	54	Interaction between a discontinuity wave and a shock wave: critical time for the fastest transmitted wave, example of the polytropic fluid. <i>Applicable Analysis</i> , <b>1980</b> , 11, 103-112	0.8	30	
1	53	Rational extended thermodynamics of a rarefied polyatomic gas with molecular relaxation processes. <i>Physical Review E</i> , <b>2017</b> , 96, 042143	2.4	29	
1	52	On the six-field model of fluids based on extended thermodynamics. <i>Meccanica</i> , <b>2014</b> , 49, 2181-2187	2.1	29	
1	51	Identification of an average temperature and a dynamical pressure in a multitemperature mixture of fluids. <i>Physical Review E</i> , <b>2008</b> , 78, 016303	2.4	28	
1	50	Entropy principle for the moment systems of degree \$alpha\$ associated to the Boltzmann equation. Critical derivatives and non controllable boundary data. <i>Continuum Mechanics and Thermodynamics</i> <b>2002</b> 14 165-189	3.5	28	

149	Can constitutive relations be represented by non-local equations?. <i>Quarterly of Applied Mathematics</i> , <b>2012</b> , 70, 597-611	0.7	26
148	Maximum wave velocity in the moments system of a relativistic gas. <i>Continuum Mechanics and Thermodynamics</i> , <b>1999</b> , 11, 107-111	3.5	26
147	Convex covariant entropy density, symmetric conservative form, and shock waves in relativistic magnetohydrodynamics. <i>Journal of Mathematical Physics</i> , <b>1981</b> , 22, 1824-1827	1.2	26
146	Extended Thermodynamics of Rarefied Polyatomic Gases: 15-Field Theory Incorporating Relaxation Processes of Molecular Rotation and Vibration. <i>Entropy</i> , <b>2018</b> , 20,	2.8	24
145	Emergent Behaviors of Thermodynamic CuckerSmale Particles. <i>SIAM Journal on Mathematical Analysis</i> , <b>2018</b> , 50, 3092-3121	1.7	24
144	Shock structure and temperature overshoot in macroscopic multi-temperature model of mixtures. <i>Physics of Fluids</i> , <b>2014</b> , 26, 106102	4.4	24
143	Entropy Production and Admissibility of Shocks. Acta Mathematicae Applicatae Sinica, 2003, 19, 1-12	0.3	22
142	Stationary heat conduction in radially, symmetric situations has application of extended thermodynamics. <i>Journal of Non-Newtonian Fluid Mechanics</i> , <b>2004</b> , 119, 139-143	2.7	21
141	Shock structure and multiple sub-shocks in binary mixtures of Eulerian fluids. <i>Ricerche Di Matematica</i> , <b>2017</b> , 66, 221-231	0.9	18
140	Monatomic gas as a singular limit of polyatomic gas in molecular extended thermodynamics with many moments. <i>Annals of Physics</i> , <b>2016</b> , 372, 83-109	2.5	18
139	A Study of Linear Waves Based on Extended Thermodynamics for Rarefied Polyatomic Gases. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 15-25	1.1	17
138	Shock Wave Structure in a Rarefied Polyatomic Gas Based on Extended Thermodynamics. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 583-593	1.1	16
137	Relativistic gas: Moment equations and maximum wave velocity. <i>Journal of Mathematical Physics</i> , <b>1999</b> , 40, 6399-6406	1.2	16
136	Recent Developments in Extended Thermodynamics of Dense and Rarefied Polyatomic Gases. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 527-548	1.1	15
135	On the Mller paradox for thermal-incompressible media. <i>Continuum Mechanics and Thermodynamics</i> , <b>2012</b> , 24, 505-513	3.5	15
134	Recent results on nonlinear extended thermodynamics of real gases with six fields Part I: general theory. <i>Ricerche Di Matematica</i> , <b>2016</b> , 65, 263-277	0.9	15
133	A New BGK Model for Relativistic Kinetic Theory of Monatomic and Polyatomic Gases. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1035, 012005	0.3	15
132	Uniform stability and mean-field limit of a thermodynamic Cucker-Smale model. <i>Quarterly of Applied Mathematics</i> , <b>2018</b> , 77, 131-176	0.7	15

# (2010-2008)

131	Phase transition induced by a shock wave in hard-sphere and hard-disk systems. <i>Journal of Chemical Physics</i> , <b>2008</b> , 129, 054506	3.9	14
130	A new method to exploit the Entropy Principle and galilean invariance in the macroscopic approach of Extended Thermodynamics. <i>Ricerche Di Matematica</i> , <b>2006</b> , 55, 159-179	0.9	14
129	Multi-temperature mixture of fluids. Theoretical and Applied Mechanics, 2009, 36, 207-238	0.4	14
128	From the Relativistic Mixture of Gases to the Relativistic CuckerBmale Flocking. <i>Archive for Rational Mechanics and Analysis</i> , <b>2020</b> , 235, 1661-1706	2.3	14
127	A consistent thermodynamical model of incompressible media as limit case of quasi-thermal-incompressible materials. <i>International Journal of Non-Linear Mechanics</i> , <b>2012</b> , 47, 688-69	<del>2</del> .8	13
126	Shock-induced phase transition in systems of hard spheres with internal degrees of freedom. <i>Physical Review E</i> , <b>2010</b> , 81, 066307	2.4	13
125	Duality principle from rarefied to dense gas and extended thermodynamics with six fields. <i>Physical Review Fluids</i> , <b>2017</b> , 2,	2.8	13
124	Second-order approximation of extended thermodynamics of a monatomic gas and hyperbolicity region. <i>Continuum Mechanics and Thermodynamics</i> , <b>2020</b> , 32, 23-39	3.5	13
123	On the sub-shock formation in extended thermodynamics. <i>International Journal of Non-Linear Mechanics</i> , <b>2018</b> , 99, 69-78	2.8	13
122	Extended thermodynamics of dense gases in the presence of dynamic pressure. <i>Ricerche Di Matematica</i> , <b>2015</b> , 64, 403-419	0.9	12
121	AN IMPULSIVE DIFFERENTIAL MODEL ON POST EXPOSURE PROPHYLAXIS TO HIV-1 EXPOSED INDIVIDUAL. <i>Journal of Biological Systems</i> , <b>2009</b> , 17, 659-683	1.6	12
120	A time delay model about AIDS-related cancer: equilibria, cycles and chaotic behavior. <i>Ricerche Di Matematica</i> , <b>2007</b> , 56, 195-208	0.9	12
119	Similarity Solutions and Strong Shocks in Extended Thermodynamics of Rarefied Gas. <i>Journal of Mathematical Analysis and Applications</i> , <b>2000</b> , 251, 395-405	1.1	12
118	Classical and Relativistic Rational Extended Thermodynamics of Gases 2021,		12
117	Production terms in relativistic extended thermodynamics of gas with internal structure via a new BGK model. <i>Annals of Physics</i> , <b>2019</b> , 405, 298-307	2.5	11
116	Classical Limit of Relativistic Moments Associated with Boltzmann Thernikov Equation: Optimal Choice of Moments in Classical Theory. <i>Journal of Statistical Physics</i> , <b>2020</b> , 179, 231-246	1.5	11
115	Dispersion relation in the limit of high frequency for a hyperbolic system with multiple eigenvalues. <i>Wave Motion</i> , <b>2014</b> , 51, 955-966	1.8	11
114	Prediction and simulation of compressive shocks with lower perturbed density for increasing shock strength in real gases. <i>Physical Review E</i> , <b>2010</b> , 82, 036324	2.4	11

113	Relativistic Eulerian rarefied gas with internal structure. <i>Journal of Mathematical Physics</i> , <b>2018</b> , 59, 043	102	11
112	Monatomic limit of relativistic extended thermodynamics of polyatomic gas. <i>Continuum Mechanics and Thermodynamics</i> , <b>2019</b> , 31, 401-412	3.5	10
111	The BBard problem for quasi-thermal-incompressible materials: A linear analysis. <i>International Journal of Non-Linear Mechanics</i> , <b>2014</b> , 67, 178-185	2.8	9
110	Temperature jumps at the boundary of a rarefied gas. <i>Continuum Mechanics and Thermodynamics</i> , <b>2000</b> , 12, 19-29	3.5	9
109	Maximum velocity for wave propagation in a relativistic rarefied gas. <i>Continuum Mechanics and Thermodynamics</i> , <b>1999</b> , 11, 331-338	3.5	9
108	Hyperbolicity and wave propagation in extended thermodynamics. <i>Meccanica</i> , <b>1989</b> , 24, 127-138	2.1	9
107	Modeling cancer in hiv-1 infected individuals: equilibria, cycles and chaotic behavior. <i>Mathematical Biosciences and Engineering</i> , <b>2006</b> , 3, 313-24	2.1	9
106	Nonlinear Hyperbolic Waves in Relativistic Gases of Massive Particles with Synge Energy. <i>Archive for Rational Mechanics and Analysis</i> , <b>2021</b> , 239, 1061-1109	2.3	9
105	A global existence of classical solutions to the hydrodynamic CuckerBmale model in presence of a temperature field. <i>Analysis and Applications</i> , <b>2018</b> , 16, 757-805	2.5	9
104	The Riemann problem for a hyperbolic model of incompressible fluids. <i>International Journal of Non-Linear Mechanics</i> , <b>2013</b> , 51, 87-96	2.8	8
103	Energy momentum, wave velocities and characteristic shocks in Euler variational equations with application to the Born Infeld theory. <i>Journal of Mathematical Physics</i> , <b>2004</b> , 45, 3468-3478	1.2	8
102	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> , <b>2010</b> , 374, 3315-3318	2.3	7
101	On the shock structure problem in non-equilibrium Thermodynamics of gases. <i>Transport Theory and Statistical Physics</i> , <b>1996</b> , 25, 567-574		7
100	Onde di discontinuitled equazioni costitutive nei corpi elastici isotropi sottoposti a deformazioni finite. <i>Annali Di Matematica Pura Ed Applicata</i> , <b>1977</b> , 112, 315-332	0.8	7
99	Recent results on nonlinear extended thermodynamics of real gases with six fields Part II: shock wave structure. <i>Ricerche Di Matematica</i> , <b>2016</b> , 65, 279-288	0.9	7
98	Rational extended thermodynamics of dense polyatomic gases incorporating molecular rotation and vibration. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2020</b> , 378, 20190176	3	6
97	The Entropy Principle from Continuum Mechanics to Hyperbolic Systems of Balance Laws: The Modern Theory of Extended Thermodynamics. <i>Entropy</i> , <b>2008</b> , 10, 319-333	2.8	6
96	Hyperbolicity, convexity and shock waves in one-dimensional crystalline solids. <i>Journal of Physics A</i> , <b>2005</b> , 38, 4337-4347		6

### (2019-1995)

95	Non existence of shock structure solutions for hyperbolic dissipative systems including characteristic shocks. <i>Applicable Analysis</i> , <b>1995</b> , 57, 23-33	0.8	6
94	Acceleration waves, shock formation and stability in a gravitating atmosphere. <i>Astrophysics and Space Science</i> , <b>1989</b> , 153, 127-142	1.6	6
93	Shock Waves in Hyperbolic Systems of Nonequilibrium Thermodynamics. <i>Mathematics of Planet Earth</i> , <b>2019</b> , 167-186	0.4	6
92	Emergent Behaviors of Thermodynamic Kuramoto Ensemble on a Regular Ring Lattice. <i>Journal of Statistical Physics</i> , <b>2020</b> , 181, 917-943	1.5	6
91	Shock wave structure in rarefied polyatomic gases with large relaxation time for the dynamic pressure. <i>Journal of Physics: Conference Series</i> , <b>2018</b> , 1035, 012009	0.3	6
90	Hyperbolicity of first and second order extended thermodynamics theory of polyatomic rarefied gases. <i>International Journal of Non-Linear Mechanics</i> , <b>2020</b> , 124, 103517	2.8	5
89	The Lagrangian View-Point Compared with the Eulerian One, in the Framework of Extended Thermodynamics. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 199-212	1.1	5
88	CYCLES AND CHAOTIC BEHAVIOR IN AN AIDS-RELATED CANCER DYNAMIC MODELIN VIVO. Journal of Biological Systems, <b>2007</b> , 15, 149-168	1.6	5
87	Entropy Principle, Symmetric Hyperbolic Systems and Shock Waves. <i>North-Holland Mathematics Studies</i> , <b>1984</b> , 97, 211-220		5
86	The Binary Mixtures of Euler Fluids: A Unified Theory of Second Sound Phenomena <b>2001</b> , 79-91		5
85	On invariance in 1+1-dimensional isentropic relativistic gasdynamics. Wave Motion, <b>2020</b> , 94, 102527	1.8	5
84	Maxwellian iteration of a causal relativistic model of polyatomic gases and evaluation of bulk, shear viscosity and heat conductivity. <i>Annals of Physics</i> , <b>2021</b> , 428, 168447	2.5	5
83	Maximum entropy principle closure for 14-moment system for a non-polytropic gas. <i>Ricerche Di Matematica</i> , <b>2021</b> , 70, 207-222	0.9	5
82	Non-equilibrium diffusion temperatures in mixture of gases via Maxwellian iteration. <i>Ricerche Di Matematica</i> , <b>2017</b> , 66, 293-312	0.9	4
81	Travelling waves near a critical point of a binary fluid mixture. <i>International Journal of Non-Linear Mechanics</i> , <b>2012</b> , 47, 77-84	2.8	4
80	Relativistic extended thermodynamics: General assumptions and mathematical procedure. <i>Lecture Notes in Mathematics</i> , <b>1989</b> , 269-277	0.4	4
79	q-Gaussian integrable Hamiltonian reductions in anisentropic gasdynamics. <i>Discrete and Continuous Dynamical Systems - Series B</i> , <b>2014</b> , 19, 2297-2312	1.3	4
	Integrability properties for relativistic extended thermodynamics of polyatomic gas. <i>Ricerche Di</i>		

77	Global existence of smooth solutions and stability of the constant state for dissipative hyperbolic systems with applications to extended thermodynamics <b>2005</b> , 215-224		3
76	GLOBAL EXISTENCE, STABILITY AND NON LINEAR WAVE PROPAGATION IN BINARY MIXTURES OF EULER FLUIDS <b>2005</b> ,		3
75	THE RIEMANN PROBLEM FOR A BINARY NON-REACTING MIXTURE OF EULER FLUIDS 2004,		3
74	On relativistic gasdynamics: invariance under a class of reciprocal-type transformations and integrable Heisenberg spin connections. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , <b>2020</b> , 476, 20200487	2.4	3
73	Extended thermodynamics of rarefied polyatomic gases and characteristic velocities. <i>Atti Della Accademia Nazionale Dei Lincei, Classe Di Scienze Fisiche, Matematiche E Naturali, Rendiconti Lincei Matematica E Applicazioni</i> , <b>2014</b> , 25, 275-291	0.7	3
72	Shock structure in extended thermodynamics with second-order maximum entropy principle closure. <i>Continuum Mechanics and Thermodynamics</i> , <b>2021</b> , 33, 125-150	3.5	3
71	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> , <b>2019</b> , 68, 119-129	0.9	2
70	Some Recent Results on Multi-temperature Mixture of Fluids <b>2010</b> , 39-57		2
69	Molecular Extended Thermodynamics of Rarefied Polyatomic Gases with a New Hierarchy of Moments. <i>Fluids</i> , <b>2021</b> , 6, 62	1.6	2
68	Fluid mixtures in nanotubes. <i>Physical Review E</i> , <b>2018</b> , 97, 062152	2.4	2
68 67	Fluid mixtures in nanotubes. <i>Physical Review E</i> , <b>2018</b> , 97, 062152  Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820	2.4	2
	Which moments are appropriate to describe gases with internal structure in Rational Extended		
67	Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820  On a Relativistic BGK Model for Polyatomic Gases Near Equilibrium. <i>SIAM Journal on Mathematical</i>	2.8	2
67 66	Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820  On a Relativistic BGK Model for Polyatomic Gases Near Equilibrium. <i>SIAM Journal on Mathematical Analysis</i> , <b>2022</b> , 54, 2906-2947  Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic	2.8	2
67 66 65	Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820  On a Relativistic BGK Model for Polyatomic Gases Near Equilibrium. <i>SIAM Journal on Mathematical Analysis</i> , <b>2022</b> , 54, 2906-2947  Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic gas closures. <i>Ricerche Di Matematica</i> , <b>2017</b> , 66, 1-13  Similarity solution of strong spherical shock waves in a rarefied polyatomic gas based on extended	2.8	2 2 1
67 66 65 64	Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820  On a Relativistic BGK Model for Polyatomic Gases Near Equilibrium. <i>SIAM Journal on Mathematical Analysis</i> , <b>2022</b> , 54, 2906-2947  Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic gas closures. <i>Ricerche Di Matematica</i> , <b>2017</b> , 66, 1-13  Similarity solution of strong spherical shock waves in a rarefied polyatomic gas based on extended thermodynamics <b>2019</b> ,  The Propagation of Shock Waves in Incompressible Fluids: The Case of Freshwater. <i>Acta</i>	2.8	2 2 1
67 66 65 64 63	Which moments are appropriate to describe gases with internal structure in Rational Extended Thermodynamics?. <i>International Journal of Non-Linear Mechanics</i> , <b>2021</b> , 103820  On a Relativistic BGK Model for Polyatomic Gases Near Equilibrium. <i>SIAM Journal on Mathematical Analysis</i> , <b>2022</b> , 54, 2906-2947  Molecular extended thermodynamics: comparison between rarefied polyatomic and monatomic gas closures. <i>Ricerche Di Matematica</i> , <b>2017</b> , 66, 1-13  Similarity solution of strong spherical shock waves in a rarefied polyatomic gas based on extended thermodynamics <b>2019</b> ,  The Propagation of Shock Waves in Incompressible Fluids: The Case of Freshwater. <i>Acta Applicandae Mathematicae</i> , <b>2014</b> , 132, 427-437  Symmetric form for the hyperbolic-parabolic system of fourth-gradient fluid model. <i>Ricerche Di</i>	2.8 1.7 0.9	2 2 1 1

59	Shock Structure and Temperature Overshoot in Macroscopic Model of Mixtures 2015, 339-349		1
58	Rational extended thermodynamics: a link between kinetic theory and continuum theory. <i>Rendiconti Lincei</i> , <b>2020</b> , 31, 33-38	1.7	1
57	RET of Rarefied Monatomic Gas <b>2015</b> , 79-106		1
56	Classical and ultrarelativistic limits of the Riemann problem for the relativistic Euler fluid with Synge energy. <i>Ricerche Di Matematica</i> , <b>2021</b> , 70, 223-233	0.9	1
55	Kinetic and hydrodynamic models for the relativistic CuckerBmale ensemble and emergent behaviors. <i>Communications in Mathematical Sciences</i> , <b>2021</b> , 19, 1945-1990	1	1
54	Relativistic Rational Extended Thermodynamics of Polyatomic Gases with a New Hierarchy of Moments <i>Entropy</i> , <b>2021</b> , 24,	2.8	1
53	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> , <b>2017</b> , 28, 495-513	0.7	0
52	Maximum Entropy Principle for Rarefied Polyatomic Gas <b>2015</b> , 139-151		Ο
51	Emergent behaviors of the continuum thermodynamic Kuramoto model in a large coupling regime. <i>Journal of Differential Equations</i> , <b>2021</b> , 300, 519-564	2.1	0
50	Molecular Non-linear ET6 for Rarefied Polyatomic Gas <b>2015</b> , 271-278		
49	WASCOM XVI <b>I</b> hternational Conference on Waves and Stability in Continuous Media. <i>Acta Applicandae Mathematicae</i> , <b>2012</b> , 122, 1	1.1	
48	Dynamical pressure for fluid mixtures with several temperatures. <i>Mecanique Et Industries</i> , <b>2009</b> , 10, 23	39-243	
47	Monatomic-Gas Limit in Molecular ET of Polyatomic Gas <b>2021</b> , 273-294		
46	Phenomenological Nonlinear RET with 6 Fields <b>2021</b> , 303-328		
45	Nonlinear Molecular ET Theory with 6 Fields <b>2021</b> , 329-336		
44	Nonlinear ET7 Theory with Molecular Rotational and Vibrational Modes <b>2021</b> , 337-352		
43	Linear Sound Wave in a Rarefied Polyatomic Gas <b>2021</b> , 361-387		
42	Shock Wave in a Polyatomic Gas Analyzed by ET14 <b>2021</b> , 389-407		

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