# David Jou

## List of Publications by Year in descending order



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|---|---|---|---|
| 367 papers | 8,964 citations | 70961 41 h-index | 85405 71 g-index |
| 377 all docs | 377 docs citations | 377 times ranked | 2659 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Non-Linear Heat Transport Effects in Systems with Defects. Journal of Non-Equilibrium Thermodynamics, 2022, 47, 179-186. | 2.4 | 3 |
| 2 | Nonlinear Thermal Transport with Inertia in Thin Wires: Thermal Fronts and Steady States. Journal of Non-Equilibrium Thermodynamics, 2022, 47, 187-194. | 2.4 | 1 |
| 3 | Electric field dependence of thermal conductivity in bulk systems and nanosystems with charged mobile defects. Journal of Mathematical Physics, 2022, 63, . | 0.5 | 2 |
| 4 | Response to â€œComment on â€˜On the relations between large-scale models of superfluid helium-4â€™â€•[Phys. Fluids 34, 069101 (2022)]. Physics of Fluids, 2022, 34, 069102. | 1.6 | 1 |
| 5 | Heat-flux dependence of the speed of nonlinear heat waves: Analogies with the Kerr effect in nonlinear optics. International Journal of Thermal Sciences, 2021, 161, 106719. | 2.6 | 7 |
| 6 | A Nonlinear Viscoelastic Model for the Yielding of Gelled Waxy Crude Oil. Energies, 2021, 14, 536. | 1.6 | 2 |
| 7 | Gradient-dependent heat rectification in thermoelastic solids. Journal of Thermal Stresses, 2021, 44, 919-934. | 1.1 | 6 |
| 8 | Thermal solitons along wires with flux-limited lateral exchange. Journal of Mathematical Physics, 2021, 62, . | 0.5 | 4 |
| 9 | When theories and experiments meet: Rarefied gases as a benchmark of non-equilibrium thermodynamic models. International Journal of Engineering Science, 2021, 169, 103574. | 2.7 | 1 |
| 10 | On the relations between large-scale models of superfluid helium-4. Physics of Fluids, 2021, 33, . | 1.6 | 6 |
| 11 | Nonlinear Propagation of Coupled First- and Second-Sound Waves in Thermoelastic Solids. Journal of Elasticity, 2020, 138, 93-109. | 0.9 | 5 |
| 12 | K-Ïµ-L model in turbulent superfluid helium. Physica A: Statistical Mechanics and Its Applications, 2020, 548, 123885. | 1.2 | 0 |
| 13 | A simple model of porous media with elastic deformations and erosion or deposition. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1. | 0.7 | 4 |
| 14 | Tunable heat rectification by applied mechanical stress. Physics Letters, Section A: General, Atomic and Solid State Physics, 2020, 384, 126905. | 0.9 | 9 |
| 15 | Nonlinear heat waves and some analogies with nonlinear optics. International Journal of Heat and Mass Transfer, 2020, 156, 119888. | 2.5 | 10 |
| 16 | Relationships between rational extended thermodynamics and extended irreversible thermodynamics. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190172. | 1.6 | 14 |
| 17 | Nonlinear thermoelastic waves in functionally graded materials: Application to Si1â^'cGec nanowires. Journal of Thermal Stresses, 2020, 43, 612-628. | 1.1 | 3 |
| 18 | Entrance, slip, and turbulent effects in heat transport in superfluid helium across a thin layer. Zeitschrift Fur Angewandte Mathematik Und Physik, 2020, 71, 1. | 0.7 | 2 |

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|---|---|---|---|
| 19 | Enhanced thermal rectification in graded Si Ge1- alloys. Mechanics Research Communications, 2020, 103, 103472. | 1.0 | 14 |
| 20 | Heat solitons and thermal transfer of information along thin wires. International Journal of Heat and Mass Transfer, 2020, 155, 119809. | 2.5 | 12 |
| 21 | Nonlocal Transport Equations for Small Systems and Fast Processes. , 2020, , 1-10. | | 0 |
| 22 | Nonlocal Transport Equations for Small Systems and Fast Processes. , 2020, , 1903-1912. | | 0 |
| 23 | Coupling of heat flux and vortex polarization in superfluid helium. Journal of Mathematical Physics, 2020, 61, 113101. | 0.5 | 0 |
| 24 | Second sound near lambda transition in presence of quantum vortices. Ricerche Di Matematica, 2019, 68, 315-331. | 0.6 | 1 |
| 25 | Thermodynamics of computation and linear stability limits of superfluid refrigeration of a model computing array. Zeitschrift Fur Angewandte Mathematik Und Physik, 2019, 70, 1. | 0.7 | 1 |
| 26 | Focalization of Heat Waves in an Inhomogeneous System. Journal of Non-Equilibrium Thermodynamics, 2019, 44, 303-313. | 2.4 | 2 |
| 27 | Rapid solidification as non-ergodic phenomenon. Physics Reports, 2019, 818, 1-70. | 10.3 | 83 |
| 28 | The bioelements, the elementome, and the biogeochemical niche. Ecology, 2019, 100, e02652. | 1.5 | 139 |
| 29 | Nonlinear Heat Transport in Superlattices with Mobile Defects. Entropy, 2019, 21, 1200. | 1.1 | 8 |
| 30 | Coarse-graining for fast dynamics of order parameters in the phase-field model. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2018, 376, 20170203. | 1.6 | 9 |
| 31 | Non-Equilibrium Temperature and Reference Equilibrium Values of Hidden and Internal Variables. Advanced Structured Materials, 2018, , 439-450. | 0.3 | 0 |
| 32 | Non-equilibrium thermodynamics, heat transport and thermal waves in laminar and turbulent superfluid helium. Physics Reports, 2018, 726, 1-71. | 10.3 | 42 |
| 33 | Nonlocal Transport Equations for Small Systems and Fast Processes. , 2018, , 1-10. | | 0 |
| 34 | Nonequilibrium thermodynamics of phonon hydrodynamic model for nanoscale heat transport. Physical Review B, 2018, 98, . | 1.1 | 23 |
| 35 | Non-Equilibrium Dislocation Dynamics in Semiconductor Crystals and Superlattices. Journal of Non-Equilibrium Thermodynamics, 2018, 43, 163-170. | 2.4 | 8 |
| 36 | Heat rectification in He II counterflow in radial geometries. Communications in Applied and Industrial Mathematics, 2018, 9, 141-148. | 0.6 | 0 |

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| 37 | Macroscopic heat transport equations and heat waves in nonequilibrium states. Physica D: Nonlinear Phenomena, 2017, 342, 24-31. | 1.3 | 12 |
| 38 | Refrigeration of an Array of Cylindrical Nanosystems by Flowing Superfluid Helium. Journal of Low Temperature Physics, 2017, 187, 602-610. | 0.6 | 3 |
| 39 | A simple model of thermoelastic heat switches and heat transistors. Journal of Applied Physics, 2017, 121, 024503. | 1.1 | 16 |
| 40 | Heat flux rectification in graded SiGe1âˆ’c: Longitudinal and radial heat flows. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 90, 149-157. | 1.3 | 14 |
| 41 | Extended Reversible and Irreversible Thermodynamics: A Hamiltonian Approach with Application to Heat Waves. Journal of Non-Equilibrium Thermodynamics, 2017, 42, 153-168. | 2.4 | 7 |
| 42 | Refrigeration of an array of cylindrical nanosystems by superfluid helium counterflow. International Journal of Heat and Mass Transfer, 2017, 104, 584-594. | 2.5 | 5 |
| 43 | Continued-Fraction Expansion of Transport Coefficients with Fractional Calculus. Mathematics, 2016, 4, 67. | 1.1 | 2 |
| 44 | Rectification of low-frequency thermal waves in graded SiGe1âˆ’. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1824-1829. | 0.9 | 19 |
| 45 | Caloric and entropic temperatures in non-equilibrium steady states. Physica A: Statistical Mechanics and Its Applications, 2016, 460, 246-253. | 1.2 | 14 |
| 46 | Thermal rectifier efficiency of various bulkâ€“nanoporous silicon devices. International Journal of Heat and Mass Transfer, 2016, 97, 603-610. | 2.5 | 22 |
| 47 | Constitutive equations for heat conduction in nanosystems and nonequilibrium processes: an overview. Communications in Applied and Industrial Mathematics, 2016, 7, 196-222. | 0.6 | 28 |
| 48 | A nonlinear viscoelastic model and non-equilibrium entropies. Journal of Non-Newtonian Fluid Mechanics, 2016, 229, 96-100. | 1.0 | 6 |
| 49 | Computational analysis of heat rectification in composition-graded systems: From macro-to-nanoscale. Physica B: Condensed Matter, 2016, 481, 244-251. | 1.3 | 15 |
| 50 | Linear and Nonlinear Heat-Transport Equations. SEMA SIMAI Springer Series, 2016, , 31-51. | 0.4 | 1 |
| 51 | Mesoscopic Theories of Heat Transport in Nanosystems. SEMA SIMAI Springer Series, 2016, , . | 0.4 | 69 |
| 52 | Nonequilibrium Thermodynamics and Heat Transport at Nanoscale. SEMA SIMAI Springer Series, 2016, , 1-30. | 0.4 | 0 |
| 53 | Understanding of flux-limited behaviors of heat transport in nonlinear regime. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 452-457. | 0.9 | 12 |
| 54 | Heat Transport with Phonons and Electrons and Efficiency of Thermoelectric Generators. SEMA SIMAI Springer Series, 2016, , 133-166. | 0.4 | 0 |

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| 55 | Weakly Nonlocal and Nonlinear Heat Transport. SEMA SIMAI Springer Series, 2016, , 109-132. | 0.4 | 0 |
| 56 | Mesoscopic Description of Boundary Effects and Effective Thermal Conductivity in Nanosystems: Phonon Hydrodynamics. SEMA SIMAI Springer Series, 2016, , 53-89. | 0.4 | 1 |
| 57 | Three Duality Symmetries between Photons and Cosmic String Loops, and Macro and Micro Black Holes. Symmetry, 2015, 7, 2134-2149. | 1.1 | 1 |
| 58 | A thermodynamic model for heat transport and thermal wave propagation in graded systems. Physica E: Low-Dimensional Systems and Nanostructures, 2015, 73, 242-249. | 1.3 | 23 |
| 59 | Early history of extended irreversible thermodynamics (1953â€“1983): An exploration beyond local equilibrium and classical transport theory. European Physical Journal H, 2015, 40, 205-240. | 0.5 | 23 |
| 60 | Contribution of the normal component to the thermal resistance of turbulent liquid helium. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 1853-1870. | 0.7 | 7 |
| 61 | Effective phonon mean-free path and slip heat flow in rarefied phonon hydrodynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2015, 379, 2652-2656. | 0.9 | 12 |
| 62 | Two-dimensional phonon hydrodynamics in narrow strips. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150376. | 1.0 | 34 |
| 63 | Thermal duality and thermodynamics of micro black holes. International Journal of Modern Physics D, 2015, 24, 1550087. | 0.9 | 1 |
| 64 | Effective thermal conductivity of helium II: from Landau to Gorterâ€“Mellink regimes. Zeitschrift Fur Angewandte Mathematik Und Physik, 2015, 66, 1835-1851. | 0.7 | 15 |
| 65 | Influence of electron and phonon temperature on the efficiency of thermoelectric conversion. International Journal of Heat and Mass Transfer, 2015, 80, 344-352. | 2.5 | 21 |
| 66 | A DUALITY-INVARIANT EINSTEINâ€“PLANCK RELATION AND ITS CONSEQUENCES ON MICRO BLACK HOLES. International Journal of Modern Physics D, 2014, 23, 1450018. | 0.9 | 3 |
| 67 | Entropy Principle and Recent Results in Non-Equilibrium Theories. Entropy, 2014, 16, 1756-1807. | 1.1 | 93 |
| 68 | A nonlinear thermodynamic model for a breakdown of the Onsager symmetry and the efficiency of thermoelectric conversion in nanowires. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2014, 470, 20140265. | 1.0 | 12 |
| 69 | Vortex diffusion and vortex-line hysteresis in radial quantum turbulence. Physica B: Condensed Matter, 2014, 440, 99-103. | 1.3 | 9 |
| 70 | Thermodynamic approach to vortex production and diffusion in inhomogeneous superfluid turbulence. Physica A: Statistical Mechanics and Its Applications, 2014, 406, 272-280. | 1.2 | 8 |
| 71 | Longitudinal counterflow in turbulent liquid helium: velocity profile of the normal component. Zeitschrift Fur Angewandte Mathematik Und Physik, 2014, 65, 531-548. | 0.7 | 18 |
| 72 | Multi-temperature mixture of phonons and electrons and nonlocal thermoelectric transport in thin layers. International Journal of Heat and Mass Transfer, 2014, 71, 459-468. | 2.5 | 23 |

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| 73 | Transition to ballistic regime for heat transport in helium II. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2471-2477. | 0.9 | 21 |
| 74 | Spectral energy distribution and generalized Wien's law for photons and cosmic string loops. Physica Scripta, 2014, 89, 075002. | 1.2 | 2 |
| 75 | Entropy flux and anomalous axial heat transport at the nanoscale. Physical Review B, 2013, 87, . | 1.1 | 32 |
| 76 | Mesoscopic hydrothermodynamics of complex-structured materials. Physical Review E, 2013, 88, 042110. | 0.8 | 1 |
| 77 | Coarse graining for the phase-field model of fast phase transitions. Physical Review E, 2013, 88, 042151. | 0.8 | 24 |
| 78 | Heat transport in bulk/nanoporous/bulk silicon devices. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 486-490. | 0.9 | 9 |
| 79 | Thermoelectric effects and size dependency of the figure-of-merit in cylindrical nanowires. International Journal of Heat and Mass Transfer, 2013, 57, 109-116. | 2.5 | 32 |
| 80 | Steady Flow cosmological model. Astrophysics and Space Science, 2013, 344, 513-520. | 0.5 | 4 |
| 81 | Phonon temperature and electron temperature in thermoelectric coupling. Journal of Non-Equilibrium Thermodynamics, 2013, 38, . | 2.4 | 20 |
| 82 | Thermal rectification in inhomogeneous nanoporous Si devices. Journal of Applied Physics, 2013, 114, . | 1.1 | 23 |
| 83 | Non-local effects in radial heat transport in silicon thin layers and graphene sheets. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2012, 468, 1217-1229. | 1.0 | 31 |
| 84 | A Phenomenological Study of Pore-Size Dependent Thermal Conductivity of Porous Silicon. Acta Applicandae Mathematicae, 2012, 122, 435. | 0.5 | 12 |
| 85 | Heat Transport Equations with Phonons and Electrons. Acta Applicandae Mathematicae, 2012, 122, 117. | 0.5 | 1 |
| 86 | Mesoscopic description of boundary effects in nanoscale heat transport. The Nanoscale Systems: Mathematical Modelingory and Applications, 2012, 1, 112-142. | 0.3 | 7 |
| 87 | Analysis of three nonlinear effects in a continuum approach to heat transport in nanosystems. Physica D: Nonlinear Phenomena, 2012, 241, 1344-1350. | 1.3 | 31 |
| 88 | Beyond the Fourier heat conduction law and the thermal no-slip boundary condition. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 2842-2846. | 0.9 | 20 |
| 89 | Nonlocal heat transport with phonons and electrons: Application to metallic nanowires. International Journal of Heat and Mass Transfer, 2012, 55, 2338-2344. | 2.5 | 46 |
| 90 | Geometrical dependence of thermal conductivity in elliptical and rectangular nanowires. International Journal of Heat and Mass Transfer, 2012, 55, 3114-3120. | 2.5 | 33 |

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| 91 | Theoretical analysis of thermal rectification in a bulk Si/nanoporous Si device. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012, 376, 1641-1644. | 0.9 | 22 |
| 92 | Thermodynamic considerations on thermostats and Maxwell relations in steady sheared fluids. Continuum Mechanics and Thermodynamics, 2012, 24, 37-48. | 1.4 | 8 |
| 93 | Duality-invariant Einstein-Planck relation and the speed of light at very short wavelengths. Physical Review D, 2011, 84, . | 1.6 | 6 |
| 94 | Heat waves and phononâ€“wall collisions in nanowires. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2011, 467, 2520-2533. | 1.0 | 46 |
| 95 | Energy of string loops and thermodynamics of dark energy. Physical Review D, 2011, 83, . | 1.6 | 5 |
| 96 | Solute trapping in rapid solidification of a binary dilute system: A phase-field study. Physical Review E, 2011, 84, 041143. | 0.8 | 73 |
| 97 | Phonon Boundary Effects and Thermal Conductivity of Rough Concentric Nanowires. Journal of Heat Transfer, 2011, 133, . | 1.2 | 30 |
| 98 | Temperature, entropy and second law beyond local equilibrium: An illustration. , 2011, , . | | 1 |
| 99 | Mesoscopic transport equations and contemporary thermodynamics: an introduction. Contemporary Physics, 2011, 52, 465-474. | 0.8 | 36 |
| 100 | Hydrodynamical Models of Superfluid Turbulence. , 2011, , . | | 0 |
| 101 | Effective temperature and scaling laws of polarized quantum vortex bundles. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3664-3667. | 0.9 | 0 |
| 102 | Hydrodynamic equations of anisotropic, polarized and inhomogeneous superfluid vortex tangles. Physica D: Nonlinear Phenomena, 2011, 240, 249-258. | 1.3 | 30 |
| 103 | Thermal conductivity of thin single-crystalline germanium-on-insulator structures. International Journal of Heat and Mass Transfer, 2011, 54, 1959-1962. | 2.5 | 16 |
| 104 | Duality relation between radiation thermodynamics and cosmic string loop thermodynamics. Physical Review D, 2011, 83, . | 1.6 | 5 |
| 105 | Phonon-wall interactions and frequency-dependent thermal conductivity in nanowires. Journal of Applied Physics, 2011, 109, . | 1.1 | 26 |
| 106 | Dynamical temperature and renormalized flux variable in extended thermodynamics of rigid heat conductors. Journal of Non-Equilibrium Thermodynamics, 2011, 36, . | 2.4 | 9 |
| 107 | Thermodynamics of Fluids Under Flow. , 2011, , . | | 37 |
| 108 | Extended Irreversible Thermodynamics. , 2010, , . | | 344 |

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| 109 | Temperature dependence of boundary conditions in phonon hydrodynamics of smooth and rough nanowires. Journal of Applied Physics, 2010, 107, . | 1.1 | 53 |
| 110 | Nonequilibrium temperatures, heat waves, and nonlinear heat transport equations. Physical Review B, 2010, 81, . | 1.1 | 80 |
| 111 | Boundary Conditions and Evolution of Ballistic Heat Transport. Journal of Heat Transfer, 2010, 132, . | 1.2 | 27 |
| 112 | Heat fluctuations and phonon hydrodynamics in nanowires. Journal of Applied Physics, 2010, 107, . | 1.1 | 25 |
| 113 | Analytical expression for thermal conductivity of superlattices. Journal of Applied Physics, 2010, 107, . | 1.1 | 46 |
| 114 | Vortex length, vortex energy and fractal dimension of superfluid turbulence at very low temperature. Journal of Physics A: Mathematical and Theoretical, 2010, 43, 205501. | 0.7 | 9 |
| 115 | Propagation of temperature waves along core-shell nanowires. Journal of Non-Equilibrium Thermodynamics, 2010, 35, . | 2.4 | 6 |
| 116 | Variational principles for thermal transport in nanosystems with heat slip flow. Physical Review E, 2010, 82, 031128. | 0.8 | 35 |
| 117 | Pore-size dependence of the thermal conductivity of porous silicon: A phonon hydrodynamic approach. Applied Physics Letters, 2010, 97, . | 1.5 | 115 |
| 118 | Second law of thermodynamics and phonon-boundary conditions in nanowires. Journal of Applied Physics, 2010, 107, . | 1.1 | 58 |
| 119 | Heat Transport in Micro- and Nano-systems. , 2010, , 233-252. | | 0 |
| 120 | Nonlinear evolution and stability of the heat flow in nanosystems: Beyond linear phonon hydrodynamics. Physical Review B, 2010, 82, . | 1.1 | 63 |
| 121 | Extended Irreversible Thermodynamics: Evolution Equations. , 2010, , 41-70. | | 54 |
| 122 | Extended Irreversible Thermodynamics: Non-equilibrium Equations of State. , 2010, , 71-89. | | 0 |
| 123 | Fluctuation Theory. , 2010, , 123-142. | | 0 |
| 124 | Hyperbolic Heat Transport in Rigid Conductors. , 2010, , 199-231. | | 0 |
| 125 | Waves in Fluids: Sound, Ultrasound, and Shock Waves. , 2010, , 253-273. | | 0 |
| 126 | Non-classical Diffusion, Thermo-diffusion and Suspensions. , 2010, , 291-325. | | 0 |

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| 127 | From Thermoelastic Solids to Rheological Materials. , 2010, , 347-381. | | 0 |
| 128 | Relativistic Formulation. , 2010, , 407-421. | | 0 |
| 129 | Viscous Cosmological Models and Cosmological Horizons. , 2010, , 423-438. | | 0 |
| 130 | Statistical physics and fluctuations in ballistic non-equilibrium systems. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 2367-2372. | 1.2 | 3 |
| 131 | Kinetic contribution to the fast spinodal decomposition controlled by diffusion. Physica A: Statistical Mechanics and Its Applications, 2009, 388, 3113-3123. | 1.2 | 44 |
| 132 | Non-equilibrium temperature of well-developed quantum turbulence. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 2306-2310. | 0.9 | 9 |
| 133 | Non-equilibrium thermodynamic potential and flux fluctuation theorem. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 3301-3303. | 0.9 | 7 |
| 134 | Nonequilibrium temperatures and second-sound propagation along nanowires and thin layers. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 373, 4386-4392. | 0.9 | 37 |
| 135 | Focusing of heat pulses along nonequilibrium nanowires. Physics Letters, Section A: General, Atomic and Solid State Physics, 2009, 374, 313-318. | 0.9 | 16 |
| 136 | Phonon hydrodynamics and phonon-boundary scattering in nanosystems. Journal of Applied Physics, 2009, 105, . | 1.1 | 125 |
| 137 | Nonlocal effects and second sound in a nonequilibrium steady state. Physical Review B, 2009, 79, . | 1.1 | 91 |
| 138 | Hydrodynamic Equations of Anisotropic, Polarized, Turbulent Superfluids. , 2009, , . | | 0 |
| 139 | Temperature in ideal gas mixtures in Couette flow: A maximum-entropy approach. Physics Letters, Section A: General, Atomic and Solid State Physics, 2008, 372, 2172-2175. | 0.9 | 5 |
| 140 | A mathematical model of counterflow superfluid turbulence describing heat waves and vortex-density waves. Mathematical and Computer Modelling, 2008, 48, 206-221. | 2.0 | 11 |
| 141 | Extended thermodynamics of polymers and superfluids. Journal of Non-Newtonian Fluid Mechanics, 2008, 152, 36-44. | 1.0 | 1 |
| 142 | Alternative Vinen equation and its extension to rotating counterflow superfluid turbulence. Physica B: Condensed Matter, 2008, 403, 2215-2224. | 1.3 | 10 |
| 143 | Understanding Non-equilibrium Thermodynamics. , 2008, , . | | 432 |
| 144 | Extended irreversible thermodynamics of heat transport. A brief introduction. Proceedings of the Estonian Academy of Sciences, 2008, 57, 118. | 0.9 | 18 |

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| 145 | Generalized Transport Equations and Extended Irreversible Thermodynamics. , 2008, , . | | 0 |
| 146 | Discussion on â€œFrontiers of the Second Lawâ€• , 2008, , . | | 0 |
| 147 | Cross-plane thermal conductivity reduction of vertically uncorrelated Geâˆ•Si quantum dot superlattices. Applied Physics Letters, 2008, 93, . | 1.5 | 24 |
| 148 | Robustness of the nonequilibrium entropy related to the Maxwell-Cattaneo heat equation. Physical Review E, 2008, 77, 031110. | 0.8 | 10 |
| 149 | Phenomenological description of sedimentation in turbulent vortex tangles. Physical Review B, 2008, 77, . | 1.1 | 0 |
| 150 | Size and frequency dependence of effective thermal conductivity in nanosystems. Journal of Applied Physics, 2008, 103, . | 1.1 | 71 |
| 151 | Vortex dynamics in rotating counterflow and plane Couette and Poiseuille turbulence in superfluid helium. Physical Review B, 2008, 78, . | 1.1 | 11 |
| 152 | Energy and temperature of superfluid turbulent vortex tangles. Physical Review B, 2007, 75, . | 1.1 | 14 |
| 153 | Thermodynamical derivation of a hydrodynamical model of inhomogeneous superfluid turbulence. Physical Review B, 2007, 75, . | 1.1 | 36 |
| 154 | Memory and nonlocal effects in heat transport: From diffusive to ballistic regimes. Applied Physics Letters, 2007, 90, 083109. | 1.5 | 163 |
| 155 | Extended entropy and irreversible thermodynamics of a Lorentz diffusive gas. Physica A: Statistical Mechanics and Its Applications, 2007, 377, 79-83. | 1.2 | 2 |
| 156 | A non-equilibrium thermodynamic instability in shear-induced diffusion in polymer solutions. European Physical Journal: Special Topics, 2007, 146, 13-20. | 1.2 | 0 |
| 157 | Vortex density waves and high-frequency second sound in superfluid turbulence hydrodynamics. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 368, 7-12. | 0.9 | 9 |
| 158 | Fluctuations and stochastic noise in systems with hyperbolic mass transport. Physica A: Statistical Mechanics and Its Applications, 2006, 366, 149-158. | 1.2 | 20 |
| 159 | Nonequilibrium kinetic temperatures in flowing gases. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 350, 339-341. | 0.9 | 36 |
| 160 | Nonequilibrium effective temperature of superfluid vortex tangle. Physics Letters, Section A: General, Atomic and Solid State Physics, 2006, 359, 183-186. | 0.9 | 8 |
| 161 | Description and evolution of anisotropy in superfluid vortex tangles with counterflow and rotation. Physical Review B, 2006, 74, . | 1.1 | 27 |
| 162 | Non-equilibrium chemical potential and polymer extraction from a porous matrix. Polymer, 2005, 46, 10372-10377. | 1.8 | 2 |

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| 163 | Nonequilibrium temperature and fluctuationâ€“dissipation temperature in flowing gases. Physica A: Statistical Mechanics and Its Applications, 2005, 358, 49-57. | 1.2 | 12 |
| 164 | A phenomenological scaling approach for heat transport in nano-systems. Applied Mathematics Letters, 2005, 18, 963-967. | 1.5 | 52 |
| 165 | Generalization of Vinenâ€™s equation including transition to superfluid turbulence. Journal of Physics Condensed Matter, 2005, 17, 4423-4440. | 0.7 | 18 |
| 166 | Nonequilibrium thermodynamics of unsteady superfluid turbulence in counterflow and rotating situations. Physical Review B, 2005, 72, . | 1.1 | 15 |
| 167 | Nonlocal effects in superfluid turbulence: Application to the low-density- to high-density-state transition and to vortex decay. Physical Review B, 2005, 71, . | 1.1 | 9 |
| 168 | Superfluid turbulence in rotating containers: Phenomenological description of the influence of the wall. Physical Review B, 2005, 72, . | 1.1 | 11 |
| 169 | Diffuse-interface model for rapid phase transformations in nonequilibrium systems. Physical Review E, 2005, 71, 046125. | 0.8 | 160 |
| 170 | Phenomenological description of counterflow superfluid turbulence in rotating containers. Physical Review B, 2004, 69, . | 1.1 | 25 |
| 171 | Highlight: 8th Joint European Thermodynamics Conference. Journal of Non-Equilibrium Thermodynamics, 2004, 29, . | 2.4 | 0 |
| 172 | Ensemble averaging in turbulence modelling. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 330, 54-64. | 0.9 | 5 |
| 173 | Entropy flux in non-equilibrium thermodynamics. Physica A: Statistical Mechanics and Its Applications, 2004, 338, 445-457. | 1.2 | 23 |
| 174 | About some current frontiers of the second law. Journal of Non-Equilibrium Thermodynamics, 2004, 29, . | 2.4 | 5 |
| 175 | Viscous pressure behaviour in shear-induced concentration banding. Polymer, 2003, 44, 6965-6971. | 1.8 | 4 |
| 176 | Temperature in non-equilibrium states: a review of open problems and current proposals. Reports on Progress in Physics, 2003, 66, 1937-2023. | 8.1 | 384 |
| 177 | Measuring nonequilibrium temperature of forced oscillators. Physical Review E, 2003, 67, 026121. | 0.8 | 27 |
| 178 | Shear-induced shift of spinodal line in entangled polymer blends. Physical Review E, 2002, 66, 061803. | 0.8 | 5 |
| 179 | Higher-order hydrodynamics: Extended Fickâ€™s Law, evolution equation, and Bobylevâ€™s instability. Journal of Chemical Physics, 2002, 116, 1571-1584. | 1.2 | 16 |
| 180 | Second sound, superfluid turbulence, and intermittent effects in liquid helium II. Physical Review B, 2002, 66, . | 1.1 | 27 |

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| 181 | Comparison of three thermodynamic descriptions of nonlocal effects in viscoelasticity. Physica A: Statistical Mechanics and Its Applications, 2002, 311, 353-360. | 1.2 | 3 |
| 182 | Non-equilibrium chemical potential and stress-induced migration of polymers in tubes. Polymer, 2002, 43, 1599-1605. | 1.8 | 13 |
| 183 | Shear-induced shift of the critical point in diluted and entangled polymer solutions. Physica A: Statistical Mechanics and Its Applications, 2002, 309, 1-14. | 1.2 | 2 |
| 184 | Legendre transforms in nonequilibrium thermodynamics: an illustration in electrical systems. Physics Letters, Section A: General, Atomic and Solid State Physics, 2001, 283, 163-167. | 0.9 | 3 |
| 185 | Extended irreversible thermodynamics and its relation with other continuum approaches. Journal of Non-Newtonian Fluid Mechanics, 2001, 96, 77-104. | 1.0 | 28 |
| 186 | Thermodynamics of dilute gases in shear flow. Physica A: Statistical Mechanics and Its Applications, 2001, 292, 75-86. | 1.2 | 8 |
| 187 | Thermodynamics of nonequilibrium radiation. (I) General theory. Physica A: Statistical Mechanics and Its Applications, 2001, 300, 386-402. | 1.2 | 5 |
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