

Altug Sisman

List of Publications by Year in descending order

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49
papers

1,120
citations

394421

19
h-index

395702

33
g-index

49
all docs

49
docs citations

49
times ranked

466
citing authors

#	ARTICLE	IF	CITATIONS
1	On the power cycles working with ideal quantum gases: I. The Ericsson cycle. Journal Physics D: Applied Physics, 1999, 32, 664-670.	2.8	83
2	The Casimir-like size effects in ideal gases. Physics Letters, Section A: General, Atomic and Solid State Physics, 2004, 320, 360-366.	2.1	74
3	Quantum degeneracy effect on the work output from a Stirling cycle. Journal of Applied Physics, 2001, 90, 3086-3089.	2.5	72
4	Brayton refrigeration cycles working under quantum degeneracy conditions. Applied Energy, 2001, 69, 77-85.	10.1	66
5	Surface dependency in thermodynamics of ideal gases. Journal of Physics A, 2004, 37, 11353-11361.	1.6	60
6	Characterization of a thermoelectric generator at low temperatures. Energy Conversion and Management, 2012, 62, 47-50.	9.2	58
7	Thermal performance analysis of multiple borehole heat exchangers. Energy Conversion and Management, 2016, 122, 544-551.	9.2	58
8	The improvement effect of quantum degeneracy on the work from a Carnot cycle. Applied Energy, 2001, 68, 367-376.	10.1	51
9	Efficiency Analysis of a Stirling Power Cycle under Quantum Degeneracy Conditions. Physica Scripta, 2001, 63, 263-267.	2.5	48
10	Quantum boundary layer: a non-uniform density distribution of an ideal gas in thermodynamic equilibrium. Physics Letters, Section A: General, Atomic and Solid State Physics, 2007, 362, 16-20.	2.1	48
11	Parametric investigation of helical ground heat exchangers for heat pump applications. Energy and Buildings, 2016, 127, 999-1007.	6.7	44
12	Re-Optimisation of Otto Power Cycles Working with Ideal Quantum Gases. Physica Scripta, 2001, 64, 108-112.	2.5	43
13	Experimental and computational investigation of multi U-tube boreholes. Applied Energy, 2015, 145, 163-171.	10.1	43
14	Two-dimensional thermal analysis of liquid hydrogen tank insulation. International Journal of Hydrogen Energy, 2009, 34, 6357-6363.	7.1	37
15	The effect of joule losses on the total efficiency of a thermoelectric power cycle. Energy, 1995, 20, 573-576.	8.8	27
16	Thermodynamics of gases in nano cavities. Energy, 2010, 35, 814-819.	8.8	24
17	Effects of arrangement geometry and number of boreholes on thermal interaction coefficient of multi-borehole heat exchangers. Applied Energy, 2019, 237, 163-170.	10.1	23
18	Universality of the quantum boundary layer for a Maxwellian gas. Physica Scripta, 2009, 79, 065002.	2.5	21

#	ARTICLE	IF	CITATIONS
19	Quantum size effects on classical thermosize effects. Continuum Mechanics and Thermodynamics, 2012, 24, 339-346.	2.2	20
20	Quantum shape effects and novel thermodynamic behaviors at nanoscale. Physics Letters, Section A: General, Atomic and Solid State Physics, 2019, 383, 655-665.	2.1	19
21	Discrete nature of thermodynamics in confined ideal Fermi gases. Physics Letters, Section A: General, Atomic and Solid State Physics, 2014, 378, 2001-2007.	2.1	18
22	Jouleâ€™Thomson coefficients of quantum ideal-gases. Applied Energy, 2001, 70, 49-57.	10.1	17
23	On the Compatibility of Electric Equivalent Circuit Models for Enhanced Flooded Lead Acid Batteries Based on Electrochemical Impedance Spectroscopy. Energies, 2018, 11, 118.	3.1	16
24	Landauerâ€™s Principle in a Quantum Szilard Engine without Maxwellâ€™s Demon. Entropy, 2020, 22, 294.	2.2	16
25	Quantum size effects on the thermal and potential conductivities of ideal gases. Physica Scripta, 2009, 80, 065402.	2.5	15
26	Thermodynamic Cycles Based on Classical Thermosize Effects. Journal of Computational and Theoretical Nanoscience, 2011, 8, 1720-1726.	0.4	12
27	Quantum forces of a gas confined in nano structures. Physica Scripta, 2013, 87, 045008.	2.5	12
28	Classical Thermosize Effects in Degenerate Quantum Gases. Journal of Computational and Theoretical Nanoscience, 2011, 8, 2331-2334.	0.4	11
29	Discrete density of states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2016, 380, 1236-1240.	2.1	10
30	Effect of layered geological structures on borehole heat transfer. Geothermics, 2021, 91, 102043.	3.4	10
31	Quantum oscillations in confined and degenerate Fermi gases. I. Half-vicinity model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1807-1812.	2.1	9
32	Dimensional transitions in thermodynamic properties of ideal Maxwellâ€™Boltzmann gases. Physica Scripta, 2015, 90, 045208.	2.5	7
33	Thermosize potentials in semiconductors. Physics Letters, Section A: General, Atomic and Solid State Physics, 2017, 381, 2704-2708.	2.1	6
34	A new method for analysis of constant-temperature thermal response tests. Geothermics, 2019, 78, 1-8.	3.4	6
35	Characterization of density oscillations in confined and degenerate Fermi gases. Modern Physics Letters B, 2018, 32, 1850393.	1.9	5
36	Quantum oscillations in confined and degenerate Fermi gases. II. The phase diagram and applications of half-vicinity model. Physics Letters, Section A: General, Atomic and Solid State Physics, 2018, 382, 1813-1817.	2.1	5

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37	Thermoshape effect for energy harvesting with nanostructures. Journal Physics D: Applied Physics, 2020, 53, 375501.	2.8	5
38	Discrete and Weyl density of states for photonic dispersion relation. Physica Scripta, 2019, 94, 105001.	2.5	4
39	Quantum shape oscillations in the thermodynamic properties of confined electrons in core-shell nanostructures. Journal of Physics Condensed Matter, 2022, 34, 025301.	1.8	4
40	Fractional integral representation in statistical thermodynamics of confined systems. Physical Review E, 2021, 104, 054110.	2.1	4
41	An analytical solution for quantum size effects on Seebeck coefficient. Physica Scripta, 2016, 91, 035803.	2.5	3
42	The contribution of thermal electron-positron pairs to the thermodynamic properties of black-body radiation. Journal of Physics A, 1995, 28, 5729-5735.	1.6	2
43	Thermosize voltage induced in a ballistic graphene nanoribbon junction. Journal of Applied Physics, 2019, 126, 104302.	2.5	2
44	Thermodeflect voltage in graphene nanoribbon junctions. Journal of Physics Condensed Matter, 2022, 34, 195304.	1.8	2
45	A comparison between the results of perturbation theory and TRIGAP for the reactivity worth calculations of fuel elements. Annals of Nuclear Energy, 1998, 25, 1133-1140.	1.8	0
46	ON THE UPPER LIMIT FOR SURFACE TEMPERATURE OF A STATIC AND SPHERICAL BODY. International Journal of Modern Physics D, 2000, 09, 215-225.	2.1	0
47	Quantum degeneracy effect on gas diffusion. AIP Conference Proceedings, 2016, , .	0.4	0
48	Effects of Particle-Wall Interactions on the Thermodynamic Behavior of Gases at the Nano Scale. International Journal of Thermodynamics, 2011, 14, .	1.0	0
49	Gas Diffusion at the Nano Scale. International Journal of Thermodynamics, 2011, 14, .	1.0	0