

# Signe Kjelstrup

## List of Publications by Year in descending order

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340  
papers

8,560  
citations

46984

47  
h-index

82499

72  
g-index

353  
all docs

353  
docs citations

353  
times ranked

5531  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ion and water transport characteristics of Nafion membranes as electrolytes. <i>Electrochimica Acta</i> , 1998, 43, 3741-3747.	2.6	243
2	On the molecular mechanism of thermal diffusion in liquids. <i>Molecular Physics</i> , 1993, 80, 1389-1412.	0.8	185
3	Transport and equilibrium properties of Nafion® membranes with H <sup>+</sup> and Na <sup>+</sup> ions. <i>Journal of Electroanalytical Chemistry</i> , 1998, 442, 137-145.	1.9	163
4	Kirkwood's Buff Integrals for Finite Volumes. <i>Journal of Physical Chemistry Letters</i> , 2013, 4, 235-238.	2.1	163
5	Mechanical properties of clathrate hydrates: status and perspectives. <i>Energy and Environmental Science</i> , 2012, 5, 6779.	15.6	161
6	Ex situ measurements of through-plane thermal conductivities in a polymer electrolyte fuel cell. <i>Journal of Power Sources</i> , 2010, 195, 249-256.	4.0	155
7	Thermal conductivities from temperature profiles in the polymer electrolyte fuel cell. <i>Electrochimica Acta</i> , 2004, 49, 1069-1077.	2.6	136
8	Exergy analysis of two cryogenic air separation processes. <i>Energy</i> , 2010, 35, 4731-4739.	4.5	105
9	Calculating Thermodynamic Properties from Fluctuations at Small Scales. <i>Journal of Physical Chemistry B</i> , 2011, 115, 10911-10918.	1.2	105
10	Diffusion Coefficients from Molecular Dynamics Simulations in Binary and Ternary Mixtures. <i>International Journal of Thermophysics</i> , 2013, 34, 1169-1196.	1.0	102
11	Criteria for local equilibrium in a system with transport of heat and mass. <i>Journal of Statistical Physics</i> , 1995, 78, 463-494.	0.5	101
12	Minimizing the entropy production in heat exchange. <i>International Journal of Heat and Mass Transfer</i> , 2002, 45, 2649-2654.	2.5	101
13	On the nature of ion leaks in energy-transducing membranes. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 1989, 976, 109-120.	0.5	100
14	Heat transfer in protein-water interfaces. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 1610.	1.3	95
15	Mechanical instability of monocrystalline and polycrystalline methane hydrates. <i>Nature Communications</i> , 2015, 6, 8743.	5.8	93
16	Water Polarization under Thermal Gradients. <i>Physical Review Letters</i> , 2008, 101, 020602.	2.9	92
17	Nonequilibrium Molecular Dynamics Simulations of Steady-State Heat and Mass Transport in Condensation. <i>Journal of Colloid and Interface Science</i> , 2000, 232, 178-185.	5.0	87
18	Through-Plane Thermal Conductivity of PEMFC Porous Transport Layers. <i>Journal of Fuel Cell Science and Technology</i> , 2011, 8, .	0.8	84

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19	Compressibility, thermal expansion coefficient and heat capacity of CH <sub>4</sub> and CO <sub>2</sub> hydrate mixtures using molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 2869-2883.	1.3	82
20	Fick Diffusion Coefficients in Ternary Liquid Systems from Equilibrium Molecular Dynamics Simulations. <i>Industrial &amp; Engineering Chemistry Research</i> , 2012, 51, 10247-10258.	1.8	79
21	The permselectivity and water transference number of ion exchange membranes in reverse electrodialysis. <i>Journal of Membrane Science</i> , 2017, 523, 402-408.	4.1	78
22	Flow Field Patterns for Proton Exchange Membrane Fuel Cells. <i>Frontiers in Energy Research</i> , 2020, 8, .	1.2	78
23	Protonic and Native Conduction in Sr-Substituted LaPO <sub>4</sub> Studied by Thermoelectric Power Measurements. <i>Journal of the Electrochemical Society</i> , 1998, 145, 3313-3319.	1.3	77
24	Improved electrode systems for reverse electro-dialysis and electro-dialysis. <i>Desalination</i> , 2012, 285, 147-152.	4.0	75
25	Thermal conductivity and internal temperature profiles of Li-ion secondary batteries. <i>Journal of Power Sources</i> , 2017, 359, 592-600.	4.0	75
26	Equipartition of Forces: A New Principle for Process Design and Optimization. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 4147-4153.	1.8	73
27	Mesoscopic Nonequilibrium Thermodynamics Gives the Same Thermodynamic Basis to Butler-Volmer and Nernst Equations. <i>Journal of Physical Chemistry B</i> , 2003, 107, 13471-13477.	1.2	72
28	Minimum entropy production rate in plug flow reactors: An optimal control problem solved for SO <sub>2</sub> oxidation. <i>Energy</i> , 2004, 29, 2403-2423.	4.5	71
29	Thermodynamics of a small system in a $\frac{1}{4}T$ reservoir. <i>Chemical Physics Letters</i> , 2011, 504, 199-201.	1.2	71
30	Fick Diffusion Coefficients of Liquid Mixtures Directly Obtained From Equilibrium Molecular Dynamics. <i>Journal of Physical Chemistry B</i> , 2011, 115, 12921-12929.	1.2	70
31	Measurements of ageing and thermal conductivity in a secondary NMC-hard carbon Li-ion battery and the impact on internal temperature profiles. <i>Electrochimica Acta</i> , 2017, 250, 228-237.	2.6	70
32	Nonequilibrium Molecular Dynamics Simulations of Steady-State Heat and Mass Transport in Condensation. II. Transfer Coefficients. <i>Journal of Colloid and Interface Science</i> , 2001, 240, 355-364.	5.0	68
33	Nature-Inspired Energy- and Material-Efficient Design of a Polymer Electrolyte Membrane Fuel Cell. <i>Energy &amp; Fuels</i> , 2010, 24, 5097-5108.	2.5	66
34	Transfer coefficients for evaporation. <i>Physica A: Statistical Mechanics and Its Applications</i> , 1999, 270, 413-426.	1.2	64
35	Thermal Flux through a Surface of n-Octane. A Non-equilibrium Molecular Dynamics Study. <i>Journal of Physical Chemistry B</i> , 2004, 108, 7186-7195.	1.2	64
36	Thermodynamics of small systems embedded in a reservoir: a detailed analysis of finite size effects. <i>Molecular Physics</i> , 2012, 110, 1069-1079.	0.8	62

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37	A highway in state space for reactors with minimum entropy production. <i>Chemical Engineering Science</i> , 2005, 60, 3347-3361.	1.9	60
38	Heat transfer in soft nanoscale interfaces: the influence of interface curvature. <i>Soft Matter</i> , 2009, 5, 2407.	1.2	59
39	Exergy analysis of the oil and gas processing on a North Sea oil platform a real production day. <i>Energy</i> , 2013, 55, 716-727.	4.5	59
40	Exergy Sustainability Indicators as a Tool in Industrial Ecology. <i>Journal of Industrial Ecology</i> , 2007, 11, 85-98.	2.8	58
41	Water transport in cation exchange membranes. <i>Journal of Membrane Science</i> , 1992, 66, 179-192.	4.1	57
42	Equipartition of forces as a lower bound on the entropy production in heat exchange. <i>International Journal of Heat and Mass Transfer</i> , 2001, 44, 2827-2833.	2.5	57
43	Energy and exergy analysis of the silicon production process. <i>Energy</i> , 2013, 58, 138-146.	4.5	57
44	Distribution of heat exchange in optimum diabatic distillation columns. <i>Energy</i> , 2004, 29, 2425-2440.	4.5	55
45	Analysis of Entropy Production Rates for Design of Distillation Columns. <i>Industrial &amp; Engineering Chemistry Research</i> , 1995, 34, 3001-3007.	1.8	52
46	Verification of Onsager's reciprocal relations for evaporation and condensation using non-equilibrium molecular dynamics. <i>Journal of Colloid and Interface Science</i> , 2006, 299, 452-463.	5.0	49
47	How to apply the Kirkwood's Buff theory to individual species in salt solutions. <i>Chemical Physics Letters</i> , 2013, 582, 154-157.	1.2	49
48	Finite-size effects of Kirkwood's Buff integrals from molecular simulations. <i>Molecular Simulation</i> , 2018, 44, 599-612.	0.9	47
49	Second law optimization of a tubular steam reformer. <i>Chemical Engineering and Processing: Process Intensification</i> , 2005, 44, 429-440.	1.8	45
50	Transfer coefficients for evaporation of a system with a Lennard-Jones long-range spline potential. <i>Physical Review E</i> , 2007, 75, 061604.	0.8	45
51	Exergy destruction and losses on four North Sea offshore platforms: A comparative study of the oil and gas processing plants. <i>Energy</i> , 2014, 74, 45-58.	4.5	44
52	On the definition of exergy efficiencies for petroleum systems: Application to offshore oil and gas processing. <i>Energy</i> , 2014, 73, 264-281.	4.5	43
53	Energy dissipation in slipping biological pumps. <i>Physical Chemistry Chemical Physics</i> , 2005, 7, 4009.	1.3	42
54	Interface Film Resistivities for Heat and Mass Transfers Integral Relations Verified by Non-equilibrium Molecular Dynamics. <i>Journal of Physical Chemistry B</i> , 2006, 110, 18528-18536.	1.2	41

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55	Exploring the potential for waste heat recovery during metal casting with thermoelectric generators: On-site experiments and mathematical modeling. <i>Energy</i> , 2017, 118, 865-875.	4.5	41
56	Minimizing the Entropy Production Rate of an Exothermic Reactor with a Constant Heat-Transfer Coefficient: The Ammonia Reaction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2003, 42, 1044-1056.	1.8	40
57	Irreversible thermodynamics—a tool to describe phase transitions far from global equilibrium. <i>Chemical Engineering Science</i> , 2004, 59, 109-118.	1.9	40
58	Local and Total Entropy Production and Heat and Water Fluxes in a One-Dimensional Polymer Electrolyte Fuel Cell. <i>Journal of Physical Chemistry B</i> , 2005, 109, 9020-9033.	1.2	40
59	Criteria for validity of thermodynamic equations from non-equilibrium molecular dynamics simulations. <i>Energy</i> , 2008, 33, 1185-1196.	4.5	38
60	A non-equilibrium thermodynamics approach to model mass and heat transport for water pervaporation through a zeolite membrane. <i>Journal of Membrane Science</i> , 2009, 330, 388-398.	4.1	37
61	Ageing and thermal conductivity of Porous Transport Layers used for PEM Fuel Cells. <i>Journal of Power Sources</i> , 2013, 221, 356-365.	4.0	37
62	The Inverted Temperature Profile Across a Vapor/Liquid Surface Analyzed by Molecular Computer Simulations. <i>Journal of Colloid and Interface Science</i> , 2002, 256, 451-461.	5.0	36
63	Entropy production in mesoscopic stochastic thermodynamics: nonequilibrium kinetic cycles driven by chemical potentials, temperatures, and mechanical forces. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 153004.	0.7	36
64	Thermo-osmosis in Membrane Systems: A Review. <i>Journal of Non-Equilibrium Thermodynamics</i> , 2017, 42, .	2.4	36
65	Drug Distribution Within Human Milk Phases. <i>Journal of Pharmaceutical Sciences</i> , 1985, 74, 1071-1074.	1.6	35
66	The second law optimal state of a diabatic binary tray distillation column. <i>Chemical Engineering Science</i> , 2005, 60, 1199-1210.	1.9	35
67	Phase Diagram of Methane and Carbon Dioxide Hydrates Computed by Monte Carlo Simulations. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7336-7350.	1.2	35
68	Comparison of Entropy Production Rate Minimization Methods for Binary Diabatic Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , 2002, 41, 5826-5834.	1.8	34
69	Low barriers for hydrogen diffusion in sII clathrate. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 13808-13812.	1.3	34
70	Good practice guide for papers on batteries for the <i>Journal of Power Sources</i> . <i>Journal of Power Sources</i> , 2020, 452, 227824.	4.0	34
71	Active transport: a kinetic description based on thermodynamic grounds. <i>Journal of Theoretical Biology</i> , 2005, 234, 7-12.	0.8	33
72	Exergy Analysis of a GTL Process Based on Low-Temperature Slurry F <sup>ast</sup> Reactor Technology with a Cobalt Catalyst. <i>Energy &amp; Fuels</i> , 2007, 21, 2317-2324.	2.5	33

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73	Improving the Heat Integration of Distillation Columns in a Cryogenic Air Separation Unit. <i>Industrial &amp; Engineering Chemistry Research</i> , 2011, 50, 9324-9338.	1.8	33
74	Evaluation of Nanoporous Polymer Membranes for Electrokinetic Energy Conversion in Power Applications. <i>Journal of Physical Chemistry C</i> , 2013, 117, 1582-1588.	1.5	33
75	Good practice guide for papers on fuel cells and electrolysis cells for the <i>Journal of Power Sources</i> . <i>Journal of Power Sources</i> , 2020, 451, 227635.	4.0	33
76	Nonequilibrium Molecular Dynamics Simulations of Steady-State Heat and Mass Transport in Distillation. <i>Industrial &amp; Engineering Chemistry Research</i> , 1996, 35, 4203-4213.	1.8	32
77	Tailored porosities of the cathode layer for improved polymer electrolyte fuel cell performance. <i>Journal of Power Sources</i> , 2015, 287, 472-477.	4.0	31
78	Thermodynamic stability of nanosized multicomponent bubbles/droplets: The square gradient theory and the capillary approach. <i>Journal of Chemical Physics</i> , 2014, 140, 024704.	1.2	30
79	Raman Spectra of Molten Mixtures Containing Aluminum Fluoride. II. Dissociation of $AlF_6(3-)$ Ion.. <i>Acta Chemica Scandinavica</i> , 1975, 29a, 565-566.	0.7	30
80	A Gerischer Phase Element in the Impedance Diagram of the Polymer Electrolyte Membrane Fuel Cell Anode. <i>Journal of Physical Chemistry B</i> , 2005, 109, 21380-21388.	1.2	29
81	Thermodynamics for Single-Molecule Stretching Experiments. <i>Journal of Physical Chemistry B</i> , 2006, 110, 12733-12737.	1.2	29
82	The second-law optimal operation of a paper drying machine. <i>Chemical Engineering Science</i> , 2006, 61, 3653-3662.	1.9	29
83	Is the $Ca^{2+}$ -ATPase from sarcoplasmic reticulum also a heat pump?. <i>European Biophysics Journal</i> , 2008, 38, 59-67.	1.2	29
84	Exergy based efficiency indicators for the silicon furnace. <i>Energy</i> , 2015, 90, 1916-1921.	4.5	29
85	Molecular dynamics simulations of a chemical reaction; conditions for local equilibrium in a temperature gradient. <i>Physical Chemistry Chemical Physics</i> , 2006, 8, 2017.	1.3	28
86	Three steps in the anode reaction of the polymer electrolyte membrane fuel cell. Effect of CO. <i>Journal of Electroanalytical Chemistry</i> , 2007, 610, 171-178.	1.9	28
87	Influence of Curvature on the Transfer Coefficients for Evaporation and Condensation of Lennard-Jones Fluid from Square-Gradient Theory and Nonequilibrium Molecular Dynamics. <i>Journal of Physical Chemistry C</i> , 2015, 119, 8160-8173.	1.5	28
88	Transported Entropy in Zirconia with 3 to 12 Mole Percent Yttria. <i>Journal of the Electrochemical Society</i> , 1993, 140, 59-66.	1.3	27
89	Energy efficient reactor design simplified by second law analysis. <i>International Journal of Hydrogen Energy</i> , 2010, 35, 13219-13231.	3.8	27
90	The Seebeck coefficient and the Peltier effect in a polymer electrolyte membrane cell with two hydrogen electrodes. <i>Electrochimica Acta</i> , 2013, 99, 166-175.	2.6	27

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91	Size and shape effects on the thermodynamic properties of nanoscale volumes of water. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 9016-9027.	1.3	27
92	Transference coefficients and transference numbers in salt mixtures relevant for the aluminium electrolysis. <i>Electrochimica Acta</i> , 1993, 38, 415-423.	2.6	26
93	The Driving Force Distribution for Minimum Lost Work in Chemical Reactors Close to and Far from Equilibrium. 1. Theory. <i>Industrial &amp; Engineering Chemistry Research</i> , 1999, 38, 3046-3050.	1.8	26
94	Adsorption and Desorption of H <sub>2</sub> on Graphite by Molecular Dynamics Simulations. <i>Journal of Physical Chemistry C</i> , 2010, 114, 10212-10220.	1.5	26
95	Local equilibrium of the Gibbs interface in two-phase systems. <i>Europhysics Letters</i> , 2012, 97, 40002.	0.7	26
96	Effective rheology of bubbles moving in a capillary tube. <i>Physical Review E</i> , 2013, 87, 025001.	0.8	26
97	Exergy efficiency and local heat production in solid oxide fuel cells. <i>Electrochimica Acta</i> , 1993, 38, 447-453.	2.6	25
98	Diabatic column optimization compared to isoforce columns. <i>Energy Conversion and Management</i> , 1997, 38, 1777-1783.	4.4	25
99	The measurable heat flux that accompanies active transport by Ca <sup>2+</sup> -ATPase. <i>Physical Chemistry Chemical Physics</i> , 2008, 10, 7304.	1.3	25
100	Heat transport through a solid–solid junction: the interface as an autonomous thermodynamic system. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 13741-13745.	1.3	25
101	Membrane distillation against a pressure difference. <i>Journal of Membrane Science</i> , 2017, 524, 151-162.	4.1	25
102	Mesoscopic non-equilibrium thermodynamics of non-isothermal reaction-diffusion. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 12780.	1.3	24
103	Toward a Possibility To Exchange CO <sub>2</sub> and CH <sub>4</sub> in sl Clathrate Hydrates. <i>Journal of Physical Chemistry B</i> , 2012, 116, 3745-3753.	1.2	24
104	Selectivity and self-diffusion of CO <sub>2</sub> and H <sub>2</sub> in a mixture on a graphite surface. <i>Frontiers in Chemistry</i> , 2013, 1, 38.	1.8	24
105	Stable and Efficient Time Integration of a Dynamic Pore Network Model for Two-Phase Flow in Porous Media. <i>Frontiers in Physics</i> , 2018, 6, .	1.0	24
106	Heat and Internal Energy Changes at Electrodes and Junctions in Thermocells. <i>Journal of the Electrochemical Society</i> , 1990, 137, 2088-2095.	1.3	23
107	Nonequilibrium translational effects in evaporation and condensation. <i>Journal of Chemical Physics</i> , 2003, 119, 9163-9170.	1.2	23
108	Is the Lung an Optimal Gas Exchanger?. , 2005, , 31-42.		23

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109	On a possible difference between the barycentric velocity and the velocity that gives translational momentum in fluids. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2006, 371, 177-187.	1.2	23
110	Quasi-elastic Neutron Scattering Investigation of the Hydrogen Surface Self-Diffusion on Polymer Electrolyte Membrane Fuel Cell Catalyst Support. <i>Journal of Physical Chemistry C</i> , 2008, 112, 3121-3125.	1.5	23
111	Efficient Conversion of Thermal Energy into Hydrogen: Comparing Two Methods to Reduce Exergy Losses in a Sulfuric Acid Decomposition Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 8500-8507.	1.8	23
112	Coherent description of transport across the water interface: From nanodroplets to climate models. <i>Physical Review E</i> , 2016, 93, 032801.	0.8	23
113	Reviewâ€”Reversible Heat Effects in Cells Relevant for Lithium-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2021, 168, 050522.	1.3	23
114	Towards a solid state reference electrode. <i>Sensors and Actuators B: Chemical</i> , 1997, 44, 381-388.	4.0	22
115	Transport properties of $2F \rightarrow F_2$ in a temperature gradient as studied by molecular dynamics simulations. <i>Physical Chemistry Chemical Physics</i> , 2007, 9, 969.	1.3	22
116	Surface Self-Diffusion and Mean Displacement of Hydrogen on Graphite and a PEM Fuel Cell Catalyst Support. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20281-20289.	1.5	22
117	Harnessing thermoelectric power from transient heat sources: Waste heat recovery from silicon production. <i>Energy Conversion and Management</i> , 2017, 138, 171-182.	4.4	22
118	Modelling the freeze concentration process by irreversible thermodynamics. <i>Journal of Food Engineering</i> , 1995, 25, 553-568.	2.7	21
119	Transport equations for distillation of ethanol and water from the entropy production rate. <i>Chemical Engineering Science</i> , 2003, 58, 1147-1161.	1.9	21
120	Thermal conductivity of carbon dioxide from non-equilibrium molecular dynamics: A systematic study of several common force fields. <i>Journal of Chemical Physics</i> , 2014, 141, 134504.	1.2	21
121	Electrode Heat Balances of Electrochemical Cells: Application to Water Electrolysis. <i>Journal of the Electrochemical Society</i> , 1984, 131, 2504-2509.	1.3	20
122	Theory of Thermocells. <i>Journal of the Electrochemical Society</i> , 1989, 136, 1698-1704.	1.3	20
123	The Dissipated Energy of Electrode Surfaces: Temperature Jumps from Coupled Transport Processes. <i>Journal of the Electrochemical Society</i> , 1996, 143, 767-779.	1.3	20
124	A calorimetric analysis of a polymer electrolyte fuel cell and the production of H <sub>2</sub> O <sub>2</sub> at the cathode. <i>Electrochimica Acta</i> , 2010, 55, 935-942.	2.6	20
125	Partial molar enthalpies and reaction enthalpies from equilibrium molecular dynamics simulation. <i>Journal of Chemical Physics</i> , 2014, 141, 144501.	1.2	20
126	Relations Between Seepage Velocities in Immiscible, Incompressible Two-Phase Flow in Porous Media. <i>Transport in Porous Media</i> , 2018, 125, 565-587.	1.2	20



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127	Transport coefficients and pressure conditions for growth of ice lens in frozen soil. <i>Acta Geotechnica</i> , 2021, 16, 2231-2239.	2.9	20
128	Membrane transference numbers from a new emf method. <i>Journal of Membrane Science</i> , 1992, 74, 1-8.	4.1	19
129	Denbigh revisited: Reducing lost work in chemical processes. <i>Chemical Engineering Science</i> , 1995, 50, 1551-1560.	1.9	19
130	A Simple Example of Control to Minimize Entropy Production. <i>Journal of Non-Equilibrium Thermodynamics</i> , 2002, 27, .	2.4	19
131	Unifying Thermodynamic and Kinetic Descriptions of Single-Molecule Processes: RNA Unfolding under Tension. <i>Journal of Physical Chemistry B</i> , 2007, 111, 9598-9602.	1.2	19
132	Transfer coefficients for the liquid-vapor interface of a two-component mixture. <i>Chemical Engineering Science</i> , 2011, 66, 4533-4548.	1.9	19
133	Thermoelectric effects in ion conducting membranes and perspectives for thermoelectric energy conversion. <i>Journal of Membrane Science</i> , 2013, 434, 10-17.	4.1	19
134	Heat and Mass Transfer across Interfaces in Complex Nanogeometries. <i>Physical Review Letters</i> , 2015, 114, 065901.	2.9	19
135	Pressures Inside a Nano-Porous Medium. The Case of a Single Phase Fluid. <i>Frontiers in Physics</i> , 2019, 7, .	1.0	19
136	Thermoelectric power relevant for the solid-polymer-electrolyte fuel cell. <i>Journal of Membrane Science</i> , 1995, 107, 219-228.	4.1	18
137	External Surface Adsorption on Silicalite-1 Zeolite Studied by Molecular Simulation. <i>Journal of Physical Chemistry C</i> , 2011, 115, 15355-15360.	1.5	18
138	Heat and mass transfer through interfaces of nanosized bubbles/droplets: the influence of interface curvature. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 10573-10586.	1.3	18
139	Non-isothermal Transport of Multi-phase Fluids in Porous Media. The Entropy Production. <i>Frontiers in Physics</i> , 2018, 6, .	1.0	18
140	Hill's nano-thermodynamics is equivalent with Gibbs' thermodynamics for surfaces of constant curvatures. <i>Chemical Physics Letters</i> , 2018, 707, 40-43.	1.2	18
141	Non-isothermal Transport of Multi-phase Fluids in Porous Media. Constitutive Equations. <i>Frontiers in Physics</i> , 2019, 6, .	1.0	18
142	Non-Equilibrium Thermodynamics for Engineers. , 2017, , .		18
143	Cyclic Peptide Inhibitors of the Î <sup>2</sup> -Sliding Clamp in <i>Staphylococcus aureus</i> . <i>PLoS ONE</i> , 2013, 8, e72273.	1.1	18
144	The Driving Force Distribution for Minimum Lost Work in a Chemical Reactor Close to and Far from Equilibrium. 2. Oxidation of SO <sub>2</sub> . <i>Industrial &amp; Engineering Chemistry Research</i> , 1999, 38, 3051-3055.	1.8	17

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145	Minimizing the entropy production in a chemical process for dehydrogenation of propane. <i>Energy</i> , 2007, 32, 335-343.	4.5	17
146	Coefficients for Active Transport and Thermogenesis of Ca <sup>2+</sup> -ATPase Isoforms. <i>Biophysical Journal</i> , 2009, 96, 4376-4386.	0.2	17
147	Calculation of reversible electrode heats in the proton exchange membrane fuel cell from calorimetric measurements. <i>Electrochimica Acta</i> , 2011, 56, 3248-3257.	2.6	17
148	The role of temperature in nucleation processes. <i>Journal of Chemical Physics</i> , 2011, 134, 054703.	1.2	17
149	Communication: Superstabilization of fluids in nanocontainers. <i>Journal of Chemical Physics</i> , 2014, 141, 071103.	1.2	17
150	Two-Phase Equilibrium Conditions in Nanopores. <i>Nanomaterials</i> , 2020, 10, 608.	1.9	17
151	Entropy production by heat, mass, charge transfer and specific chemical reactions. <i>Electrochimica Acta</i> , 1980, 25, 157-163.	2.6	16
152	Thermal Diffusion and Partial Molar Enthalpy Variations of n-Butane in Silicalite-1. <i>Journal of Physical Chemistry B</i> , 2008, 112, 14937-14951.	1.2	16
153	Coupled Heat and Mass Transfer during Crystallization of MgSO <sub>4</sub> ·7H <sub>2</sub> O on a Cooled Surface. <i>Crystal Growth and Design</i> , 2009, 9, 1318-1326.	1.4	16
154	On the Thermodynamic Efficiency of Ca <sup>2+</sup> -ATPase Molecular Machines. <i>Biophysical Journal</i> , 2012, 103, 1218-1226.	0.2	16
155	The reversible heat effects at lithium iron phosphate- and graphite electrodes. <i>Electrochimica Acta</i> , 2020, 337, 135567.	2.6	16
156	The principle of equipartition of forces in chemical reactor design: The ammonia synthesis. <i>Computers and Chemical Engineering</i> , 1999, 23, S499-S502.	2.0	15
157	Positioning heat exchangers in binary tray distillation using isoforce operation. <i>Energy Conversion and Management</i> , 2002, 43, 1571-1581.	4.4	15
158	Energy Transduction in Biological Systems: A Mesoscopic Non-Equilibrium Thermodynamics Perspective. <i>Journal of Non-Equilibrium Thermodynamics</i> , 2007, 32, .	2.4	15
159	Modelling the coupled transfer of mass and thermal energy in the vapour-liquid region of a nitrogen-oxygen mixture. <i>Chemical Engineering Science</i> , 2010, 65, 2236-2248.	1.9	15
160	Bridging scales with thermodynamics: from nano to macro. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2014, 5, 023002.	0.7	15
161	Modeling Thermodynamic Properties of Propane or Tetrahydrofuran Mixed with Carbon Dioxide or Methane in Structure-II Clathrate Hydrates. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23911-23925.	1.5	15
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