Laurent Pilon

List of Publications by Citations

Source: https://exaly.com/author-pdf/2135966/laurent-pilon-publications-by-citations.pdf

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

194 6,758 46 73 g-index

225 7,979 4.7 6.43 ext. papers ext. citations avg, IF L-index

#	Paper	IF	Citations
194	Optical constants of silica glass from extreme ultraviolet to far infrared at near room temperature. <i>Applied Optics</i> , 2007 , 46, 8118-33	1.7	596
193	Physical Interpretations of Nyquist Plots for EDLC Electrodes and Devices. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 194-206	3.8	428
192	Accurate Simulations of Electric Double Layer Capacitance of Ultramicroelectrodes. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 16711-16719	3.8	191
191	Effective optical properties of non-absorbing nanoporous thin films. <i>Thin Solid Films</i> , 2006 , 496, 505-51	42.2	141
190	Radiation transfer in photobiological carbon dioxide fixation and fuel production by microalgae. Journal of Quantitative Spectroscopy and Radiative Transfer, 2011, 112, 2639-2660	2.1	126
189	Pyroelectric energy converter using co-polymer P(VDF-TrFE) and Olsen cycle for waste heat energy harvesting. <i>Applied Thermal Engineering</i> , 2010 , 30, 2127-2137	5.8	117
188	Artificial phototropism for omnidirectional tracking and harvesting of light. <i>Nature Nanotechnology</i> , 2019 , 14, 1048-1055	28.7	114
187	The pyroelectric energy harvesting capabilities of PMN P T near the morphotropic phase boundary. <i>Smart Materials and Structures</i> , 2011 , 20, 055020	3.4	108
186	Pyroelectric energy harvesting using Olsen cycles in purified and porous poly(vinylidene fluoride-trifluoroethylene) [P(VDF-TrFE)] thin films. <i>Smart Materials and Structures</i> , 2011 , 20, 025012	3.4	107
185	Physical interpretation of cyclic voltammetry for measuring electric double layer capacitances. <i>Electrochimica Acta</i> , 2012 , 64, 130-139	6.7	101
184	Diurnal thermal analysis of microencapsulated PCM-concrete composite walls. <i>Energy Conversion and Management</i> , 2015 , 93, 215-227	10.6	95
183	Hyperspectral imaging in diabetic foot wound care. <i>Journal of Diabetes Science and Technology</i> , 2010 , 4, 1099-113	4.1	93
182	Can the compressive strength of concrete be estimated from knowledge of the mixture proportions?: New insights from statistical analysis and machine learning methods. <i>Cement and Concrete Research</i> , 2019 , 115, 379-388	10.3	93
181	Pyroelectric waste heat energy harvesting using heat conduction. <i>Applied Thermal Engineering</i> , 2012 , 37, 30-37	5.8	84
180	Effective optical properties of absorbing nanoporous and nanocomposite thin films. <i>Journal of Applied Physics</i> , 2007 , 101, 014320	2.5	84
179	Pyroelectric waste heat energy harvesting using relaxor ferroelectric 8/65/35 PLZT and the Olsen cycle. <i>Smart Materials and Structures</i> , 2012 , 21, 025021	3.4	82
178	Recent Advances in Continuum Modeling of Interfacial and Transport Phenomena in Electric Double Layer Capacitors. <i>Journal of the Electrochemical Society</i> , 2015 , 162, A5158-A5178	3.9	80

177	Radiation characteristics of Chlamydomonas reinhardtii CC125 and its truncated chlorophyll antenna transformants tla1, tlaX and tla1-CW+. <i>International Journal of Hydrogen Energy</i> , 2008 , 33, 6467	-6483	80
176	Light transfer in bubble sparged photobioreactors for H2 production and CO2 mitigation. <i>International Journal of Hydrogen Energy</i> , 2007 , 32, 2273-2285	6.7	73
175	Purified and porous poly(vinylidene fluoride-trifluoroethylene) thin films for pyroelectric infrared sensing and energy harvesting. <i>Smart Materials and Structures</i> , 2010 , 19, 055006	3.4	71
174	Simulations of Cyclic Voltammetry for Electric Double Layers in Asymmetric Electrolytes: A Generalized Modified PoissonNernstPlanck Model. <i>Journal of Physical Chemistry C</i> , 2013 , 117, 18286-182	<u>2</u> 398	69
173	Radiation and optical properties of Nannochloropsis oculata grown under different irradiances and spectra. <i>Bioresource Technology</i> , 2013 , 137, 63-73	11	68
172	Optical properties of porous silicon. Part III: Comparison of experimental and theoretical results. <i>Optical Materials</i> , 2006 , 28, 506-513	3.3	67
171	Assessing diabetic foot ulcer development risk with hyperspectral tissue oximetry. <i>Journal of Biomedical Optics</i> , 2011 , 16, 026009	3.5	65
170	Rapid and accurate estimation of blood saturation, melanin content, and epidermis thickness from spectral diffuse reflectance. <i>Applied Optics</i> , 2010 , 49, 1707-19	0.2	64
169	Waste heat energy harvesting using the Olsen cycle on 0.945Pb(Zn1/3Nb2/3)O3 0.055PbTiO3single crystals. <i>Smart Materials and Structures</i> , 2012 , 21, 035015	3.4	62
168	Effect of nutrient media on photobiological hydrogen production by Anabaena variabilis ATCC 29413. <i>International Journal of Hydrogen Energy</i> , 2008 , 33, 1172-1184	6.7	61
167	Design tool and guidelines for outdoor photobioreactors. <i>Chemical Engineering Science</i> , 2014 , 106, 18-29	94.4	60
166	First-principles thermal modeling of electric double layer capacitors under constant-current cycling. Journal of Power Sources, 2014 , 246, 887-898	8.9	60
165	Effective thermal conductivity of three-component composites containing spherical capsules. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 73, 177-185	4.9	60
164	Mesoscale modeling of electric double layer capacitors with three-dimensional ordered structures. Journal of Power Sources, 2013 , 221, 252-260	8.9	60
163	Radiation characteristics of Botryococcus braunii, Chlorococcum littorale, and Chlorella sp. used for fixation and biofuel production. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2009 , 110, 1879-1893	2.1	60
162	Simulation of electric double layer capacitors with mesoporous electrodes: Effects of morphology and electrolyte permittivity. <i>Electrochimica Acta</i> , 2011 , 56, 6189-6197	6.7	60
161	Thermal conductivity of cubic and hexagonal mesoporous silica thin films. <i>Journal of Applied Physics</i> , 2009 , 106, 034910	2.5	60
160	Intrinsic limitations of impedance measurements in determining electric double layer capacitances. <i>Electrochimica Acta</i> , 2012 , 63, 55-63	6.7	59

159	The durability of cementitious composites containing microencapsulated phase change materials. <i>Cement and Concrete Composites</i> , 2017 , 81, 66-76	8.6	58
158	Towards optimization of a pyroelectric energy converter for harvesting waste heat. <i>International Journal of Heat and Mass Transfer</i> , 2010 , 53, 4060-4070	4.9	58
157	Effective optical properties of highly ordered mesoporous thin films. <i>Thin Solid Films</i> , 2010 , 518, 2141-2	212436	58
156	Physical Interpretations of Electrochemical Impedance Spectroscopy of Redox Active Electrodes for Electrical Energy Storage. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 24499-24511	3.8	57
155	Designing Pseudocapacitance for NbO/Carbide-Derived Carbon Electrodes and Hybrid Devices. <i>Langmuir</i> , 2017 , 33, 9407-9415	4	56
154	Pyroelectric energy conversion using PLZT ceramics and the ferroelectric godic relaxor phase transition. <i>Smart Materials and Structures</i> , 2013 , 22, 025038	3.4	56
153	Molecular dynamics study of the thermal conductivity of amorphous nanoporous silica. <i>International Journal of Heat and Mass Transfer</i> , 2011 , 54, 4540-4548	4.9	54
152	Annual energy analysis of concrete containing phase change materials for building envelopes. <i>Energy Conversion and Management</i> , 2015 , 103, 374-386	10.6	53
151	Use of Mie theory to analyze experimental data to identify infrared properties of fused quartz containing bubbles. <i>Applied Optics</i> , 2005 , 44, 7021-31	1.7	53
150	Thermal conductivity of cementitious composites containing microencapsulated phase change materials. <i>International Journal of Heat and Mass Transfer</i> , 2017 , 104, 71-82	4.9	52
149	Influence of light absorption rate by Nannochloropsis oculata on triglyceride production during nitrogen starvation. <i>Bioresource Technology</i> , 2014 , 163, 308-19	11	51
148	Physical Interpretation of Cyclic Voltammetry for Hybrid Pseudocapacitors. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 11349-11361	3.8	46
147	Spectral optical properties of selected photosynthetic microalgae producing biofuels. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2013 , 114, 122-135	2.1	44
146	Glass foams: formation, transport properties, and heat, mass, and radiation transfer. <i>Journal of Non-Crystalline Solids</i> , 2002 , 311, 154-173	3.9	44
145	Steady-State Thickness of Liquid Las Foams. Journal of Colloid and Interface Science, 2001, 242, 425-436	9.3	44
144	Experimental measurements of the radiation characteristics of Anabaena variabilis ATCC 29413-U and Rhodobacter sphaeroides ATCC 49419. <i>International Journal of Hydrogen Energy</i> , 2007 , 32, 4772-47	85 ⁷	43
143	Harvesting Nanoscale Thermal Radiation Using Pyroelectric Materials. <i>Journal of Heat Transfer</i> , 2010 , 132,	1.8	41
142	Simulating Electric Double Layer Capacitance of Mesoporous Electrodes with Cylindrical Pores. Journal of the Electrochemical Society, 2011 , 158, A1106	3.9	41

141	A novel thermomechanical energy conversion cycle. <i>Applied Energy</i> , 2014 , 126, 78-89	10.7	39
140	Thermal Conductivity of Ordered Mesoporous Titania Films Made from Nanocrystalline Building Blocks and Sol © el Reagents. <i>Journal of Physical Chemistry C</i> , 2010 , 114, 12451-12458	3.8	38
139	Clinkering-free cementation by fly ash carbonation. <i>Journal of CO2 Utilization</i> , 2018 , 23, 117-127	7.6	38
138	Minimum superficial gas velocity for onset of foaming. <i>Chemical Engineering and Processing: Process Intensification</i> , 2004 , 43, 149-160	3.7	36
137	Monitoring temporal development and healing of diabetic foot ulceration using hyperspectral imaging. <i>Journal of Biophotonics</i> , 2011 , 4, 565-76	3.1	35
136	Simulations of a prototypical device using pyroelectric materials for harvesting waste heat. <i>International Journal of Heat and Mass Transfer</i> , 2008 , 51, 5052-5062	4.9	35
135	Scaling laws for thermal conductivity of crystalline nanoporous silicon based on molecular dynamics simulations. <i>Journal of Applied Physics</i> , 2011 , 110, 064305	2.5	34
134	Efficiency factors and radiation characteristics of spherical scatterers in an absorbing medium. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 2784-96	1.8	34
133	Confined Water in Layered Silicates: The Origin of Anomalous Thermal Expansion Behavior in Calcium-Silicate-Hydrates. <i>ACS Applied Materials & English Representation Section</i> 10, 100 (2016).	9.5	34
132	Early-age temperature evolutions in concrete pavements containing microencapsulated phase change materials. <i>Construction and Building Materials</i> , 2017 , 147, 466-477	6.7	33
131	Rheology of colloidal gas aphrons (microfoams). <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2008 , 322, 199-210	5.1	33
130	Improved Inverse Method for Radiative Characteristics of Closed-Cell Absorbing Porous Media. Journal of Thermophysics and Heat Transfer, 2006 , 20, 871-883	1.3	33
129	Thermal Conductivity of Ordered Mesoporous Nanocrystalline Silicon Thin Films Made from Magnesium Reduction of Polymer-Templated Silica. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 12926-12	2 3 33	32
128	Retrieving skin properties from in vivo spectral reflectance measurements. <i>Journal of Biophotonics</i> , 2011 , 4, 305-14	3.1	32
127	Maximizing the solar to H2 energy conversion efficiency of outdoor photobioreactors using mixed cultures. <i>International Journal of Hydrogen Energy</i> , 2010 , 35, 500-510	6.7	31
126	Absorption and scattering by fractal aggregates and by their equivalent coated spheres. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2015 , 151, 310-326	2.1	30
125	Thermal effects of asymmetric electrolytes in electric double layer capacitors. <i>Journal of Power Sources</i> , 2015 , 273, 196-209	8.9	30
124	Control of incident irradiance on a batch operated flat-plate photobioreactor. <i>Chemical Engineering Science</i> , 2014 , 119, 99-108	4.4	30

123	Thermal Conductivity of Highly-Ordered Mesoporous Titania Thin Films from 30 to 320 K. <i>Journal of Physical Chemistry C</i> , 2011 , 115, 14606-14614	3.8	30
122	Comparison of experimentally and theoretically determined radiation characteristics of photosynthetic microorganisms. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016 , 175, 30-45	2.1	29
121	Effect of polarization and morphology on the optical properties of absorbing nanoporous thin films. <i>Thin Solid Films</i> , 2008 , 516, 4159-4167	2.2	29
120	Simple and accurate expressions for diffuse reflectance of semi-infinite and two-layer absorbing and scattering media. <i>Applied Optics</i> , 2009 , 48, 6670-83	0.2	27
119	Figure of merit for the thermal performance of cementitious composites containing phase change materials. <i>Cement and Concrete Composites</i> , 2016 , 65, 214-226	8.6	26
118	Effective elastic moduli of core-shell-matrix composites. <i>Mechanics of Materials</i> , 2016 , 92, 94-106	3.3	26
117	Modeling radiation characteristics of semitransparent media containing bubbles or particles. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2006, 23, 1645-56	1.8	26
116	Analysis of transient thickness of pneumatic foams. Chemical Engineering Science, 2002, 57, 977-990	4.4	26
115	Physical Modeling of Slag Foaming for Various Operating Conditions and Slag Compositions. <i>ISIJ International</i> , 2005 , 45, 835-840	1.7	25
114	The influences of soft and stiff inclusions on the mechanical properties of cementitious composites. <i>Cement and Concrete Composites</i> , 2016 , 71, 153-165	8.6	25
113	Simple method for measuring the spectral absorption cross-section of microalgae. <i>Chemical Engineering Science</i> , 2016 , 146, 357-368	4.4	24
112	Gas Diffusion in Closed-Cell Foams. <i>Journal of Cellular Plastics</i> , 2000 , 36, 451-474	1.5	24
111	Simulations and Interpretation of Three-Electrode Cyclic Voltammograms of Pseudocapacitive Electrodes. <i>Electrochimica Acta</i> , 2016 , 211, 420-429	6.7	24
110	Hybrid Transparent PEDOT:PSS Molybdenum Oxide Battery-like Supercapacitors. <i>ACS Applied Energy Materials</i> , 2019 , 2, 4629-4639	6.1	23
109	Reply to comments on Intrinsic limitations of impedance measurements in determining electric double layer capacitancesIby H. Wang, L. Pilon [Electrochimica Acta 63 (2012) 55]. <i>Electrochimica Acta</i> , 2012 , 76, 529-531	6.7	23
108	Radiation Characteristics of Glass Containing Gas Bubbles. <i>Journal of the American Ceramic Society</i> , 2003 , 86, 1313-1320	3.8	23
107	Reduced-scale experiments to evaluate performance of composite building envelopes containing phase change materials. <i>Construction and Building Materials</i> , 2018 , 162, 584-595	6.7	22
106	Steady-state directional diffuse reflectance and fluorescence of human skin. <i>Applied Optics</i> , 2006 , 45, 4174-83	1.7	22

(2009-2004)

105	Modified Method of Characteristics for Simulating Microscale Energy Transport. <i>Journal of Heat Transfer</i> , 2004 , 126, 735-743	1.8	22	
104	Measurements of radiation characteristics of fused quartz containing bubbles. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2004 , 21, 149-59	1.8	22	
103	Isothermal calorimeter for measurements of time-dependent heat generation rate in individual supercapacitor electrodes. <i>Journal of Power Sources</i> , 2018 , 374, 257-268	8.9	22	
102	The effect of nanoparticles on the thermal conductivity of crystalline thin films at low temperatures. <i>Journal of Applied Physics</i> , 2008 , 103, 114308	2.5	21	
101	Enhancing Faradaic Charge Storage Contribution in Hybrid Pseudocapacitors. <i>Electrochimica Acta</i> , 2015 , 182, 639-651	6.7	20	
100	In vivo time-resolved autofluorescence measurements to test for glycation of human skin. <i>Journal of Biomedical Optics</i> , 2008 , 13, 014004	3.5	20	
99	Transmittance of transparent windows with non-absorbing cap-shaped droplets condensed on their backside. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 194, 98-107	2.1	19	
98	Phase transitions and thermal expansion in pyroelectric energy conversion. <i>Applied Physics Letters</i> , 2013 , 102, 023906	3.4	19	
97	Time-dependent radiation characteristics of Nannochloropsis oculata during batch culture. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2014 , 144, 154-163	2.1	18	
96	Reflectance of surfactant-templated mesoporous silica thin films: Simulations versus experiments. <i>Thin Solid Films</i> , 2010 , 518, 2134-2140	2.2	18	
95	Effect of furnace atmosphere on E-glass foaming. <i>Journal of Non-Crystalline Solids</i> , 2006 , 352, 5287-529	953.9	18	
94	Rheology and convective heat transfer of colloidal gas aphrons in horizontal mini-channels. <i>International Journal of Heat and Fluid Flow</i> , 2006 , 27, 298-310	2.4	18	
93	Scaling laws in steady-state aqueous foams including Ostwald ripening. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 436, 1000-1006	5.1	17	
92	Convective heat transfer in foams under laminar flow in pipes and tube bundles. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 7823-7831	4.9	17	
91	Pyroelectric energy converter for harvesting waste heat: Simulations versus experiments. <i>International Journal of Heat and Mass Transfer</i> , 2012 , 55, 4301-4311	4.9	17	
90	Growth, CO2 consumption and H2 production of Anabaena variabilis ATCC 29413-U under different irradiances and CO2 concentrations. <i>Journal of Applied Microbiology</i> , 2008 , 104, 105-21	4.7	17	
89	Absorption and scattering by long and randomly oriented linear chains of spheres. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2013 , 30, 1892-900	1.8	16	
88	Radiative heat transfer in enhanced hydrogen outgassing of glass. <i>International Journal of Hydrogen Energy</i> , 2009 , 34, 6690-6704	6.7	16	

87	Modified method of characteristics in transient radiation transfer. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2006 , 98, 220-237	2.1	16
86	Bubble transport in three-dimensional laminar gravity-driven flow Imathematical formulation. <i>Journal of Non-Crystalline Solids</i> , 2004 , 336, 71-83	3.9	16
85	Large-Scale Production of Algal Biomass: Photobioreactors. <i>Green Energy and Technology</i> , 2016 , 41-66	0.6	16
84	Comparing methods for measuring thickness, refractive index, and porosity of mesoporous thin films. <i>Microporous and Mesoporous Materials</i> , 2020 , 291, 109677	5.3	16
83	Panoramic View of Electrochemical Pseudocapacitor and Organic Solar Cell Research in Molecularly Engineered Energy Materials (MEEM). <i>Journal of Physical Chemistry C</i> , 2014 , 118, 19505-19523	3.8	15
82	Effective Thermal Conductivity of Soda-Lime Silicate Glassmelts with Different Iron Contents Between 1100°C and 1500°C. <i>Journal of the American Ceramic Society</i> , 2014 , 97, 442-450	3.8	15
81	Modeling the local excitation fluence rate and fluorescence emission in absorbing and strongly scattering multilayered media 2010 , 49, 6072		15
80	Rheology of colloidal gas aphrons (microfoams) made from different surfactants. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2009 , 348, 93-99	5.1	15
79	Can spherical eukaryotic microalgae cells be treated as optically homogeneous?. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2016 , 33, 1495-503	1.8	15
78	A general method for retrieving thermal deformation properties of microencapsulated phase change materials or other particulate inclusions in cementitious composites. <i>Materials and Design</i> , 2017 , 126, 259-267	8.1	14
77	Examining the effects of microencapsulated phase change materials on early-age temperature evolutions in realistic pavement geometries. <i>Cement and Concrete Composites</i> , 2019 , 103, 149-159	8.6	14
76	First-principles thermal modeling of hybrid pseudocapacitors under galvanostatic cycling. <i>Journal of Power Sources</i> , 2016 , 335, 172-188	8.9	14
75	First-order thermal model of commercial EDLCs. Applied Thermal Engineering, 2014, 67, 439-446	5.8	14
74	Scaling laws for carbon-based electric double layer capacitors. <i>Electrochimica Acta</i> , 2013 , 109, 316-321	6.7	14
73	A novel thermally biased mechanical energy conversion cycle. <i>Journal of Applied Physics</i> , 2013 , 114, 224	121.15	14
72	Direct thermal to electrical energy conversion using 9.5/65/35 PLZT ceramics in the ergodic relaxor phase. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control,</i> 2012 , 59, 2373-85	3.2	14
71	Simple thermal evaluation of building envelopes containing phase change materials using a modified admittance method. <i>Energy and Buildings</i> , 2017 , 145, 238-250	7	13
70	Multidimensional Cyclic Voltammetry Simulations of Pseudocapacitive Electrodes with a Conducting Nanorod Scaffold. <i>Journal of the Electrochemical Society</i> , 2017 , 164, A3237-A3252	3.9	13

(2021-2014)

69	Radiation characteristics and optical properties of filamentous cyanobacterium Anabaena cylindrica. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2014 , 31, 83	6-45	13	
68	Absorption and scattering by bispheres, quadspheres, and circular rings of spheres and their equivalent coated spheres. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 2015 , 32, 46-60	1.8	13	
67	Tuning thermal conductivity of nanoporous crystalline silicon by surface passivation: A molecular dynamics study. <i>Applied Physics Letters</i> , 2012 , 101, 011909	3.4	13	
66	Thick Transparent Nanoparticle-Based Mesoporous Silica Monolithic Slabs for Thermally Insulating Window Materials. <i>ACS Applied Nano Materials</i> , 2019 , 2, 4547-4555	5.6	12	
65	Transmittance of semitransparent windows with absorbing cap-shaped droplets condensed on their backside. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 201, 53-63	2.1	12	
64	Restrained shrinkage cracking of cementitious composites containing soft PCM inclusions: A paste (matrix) controlled response. <i>Materials and Design</i> , 2017 , 132, 367-374	8.1	12	
63	Pyroelectric waste heat energy harvesting using the Olsen cycle on Pb(Zr, Ti)O3-Pb(Ni, Nb)O3 ceramics. <i>Journal of Applied Physics</i> , 2018 , 124, 174104	2.5	12	
62	Three-Dimensional Cyclic Voltammetry Simulations of EDLC Electrodes Made of Ordered Carbon Spheres. <i>Electrochimica Acta</i> , 2017 , 255, 168-178	6.7	11	
61	Exploring the Effect of Porous Structure on Thermal Conductivity in Templated Mesoporous Silica Films. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 21721-21730	3.8	11	
60	Electrochemical Transport Phenomena in Hybrid Pseudocapacitors under Galvanostatic Cycling. Journal of the Electrochemical Society, 2016 , 163, A229-A243	3.9	11	
59	Modified method of characteristics for solving population balance equations. <i>International Journal for Numerical Methods in Fluids</i> , 2003 , 42, 1211-1236	1.9	11	
58	Effects of Constituent Materials on Heat Generation in Individual EDLC Electrodes. <i>Journal of the Electrochemical Society</i> , 2018 , 165, A1547-A1557	3.9	11	
57	Revisiting independent versus dependent scattering regimes in suspensions or aggregates of spherical particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020 , 246, 106924	2.1	10	
56	Scaling laws for heat generation and temperature oscillations in EDLCs under galvanostatic cycling. <i>International Journal of Heat and Mass Transfer</i> , 2014 , 75, 637-649	4.9	10	
55	Foams in Glass Manufacturing 2012 , 355-409		10	
54	A High-Order-Accurate GPU-Based Radiative Transfer Equation Solver for Combustion and Propulsion Applications. <i>Numerical Heat Transfer, Part B: Fundamentals</i> , 2013 , 63, 457-484	1.3	10	
53	Bubble transport in three-dimensional laminar gravity-driven flow [humerical results. <i>Journal of Non-Crystalline Solids</i> , 2004 , 336, 84-95	3.9	10	
52	Effect of dew and rain on photovoltaic solar cell performances. <i>Solar Energy Materials and Solar Cells</i> , 2021 , 222, 110908	6.4	10	

51	Heat generation in all-solid-state supercapacitors with graphene electrodes and gel electrolytes. <i>Electrochimica Acta</i> , 2019 , 303, 341-353	6.7	9
50	Light transfer through windows with external condensation. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2018 , 208, 164-171	2.1	9
49	Light transfer in agar immobilized microalgae cell cultures. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2017 , 198, 81-92	2.1	8
48	Thermal conductivity of pure silica MEL and MFI zeolite thin films. <i>Journal of Applied Physics</i> , 2010 , 108, 044902	2.5	8
47	In Operando Calorimetric Measurements for Activated Carbon Electrodes in Ionic Liquid Electrolytes under Large Potential Windows. <i>ChemSusChem</i> , 2020 , 13, 1013-1026	8.3	8
46	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. <i>Applied Physics Letters</i> , 2018 , 112, 201903	3.4	8
45	Effect of temperature on irreversible and reversible heat generation rates in ionic liquid-based electric double layer capacitors. <i>Electrochimica Acta</i> , 2020 , 338, 135802	6.7	7
44	Operando calorimetry informs the origin of rapid rate performance in microwave-prepared TiNb2O7 electrodes. <i>Journal of Power Sources</i> , 2021 , 490, 229537	8.9	7
43	Computer-generated mesoporous materials and associated structural characterization. <i>Computational Materials Science</i> , 2019 , 157, 156-167	3.2	7
42	Thermal signature of ion intercalation and surface redox reactions mechanisms in model pseudocapacitive electrodes. <i>Electrochimica Acta</i> , 2019 , 307, 512-524	6.7	6
41	Temperature dependent thermal conductivity of pure silica MEL and MFI zeolite thin films. <i>Journal of Applied Physics</i> , 2012 , 111, 054910	2.5	6
40	Maximum time-resolved hemispherical reflectance of absorbing and isotropically scattering media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2007, 104, 384-399	2.1	6
39	Feasibility analysis of an epidermal glucose sensor based on time-resolved fluorescence. <i>Applied Optics</i> , 2007 , 46, 3359-68	1.7	6
38	Engineering mesoporous silica for superior optical and thermal properties. <i>MRS Energy & Sustainability</i> , 2020 , 7, 1	2.2	6
37	PYROELECTRIC ENERGY CONVERSION. Annual Review of Heat Transfer, 2016 , 19, 279-334	2.7	6
36	Isothermal Stimulation of Mineral Dissolution Processes by Acoustic Perturbation. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 28665-28673	3.8	6
35	Controlling Thermal Conductivity in Mesoporous Silica Films Using Pore Size and Nanoscale Architecture. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 3731-3737	6.4	5
34	Bidirectional transmittance of transparent windows with external or backside condensation of nonabsorbing cap-shaped droplets. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2020 , 251, 107039	2.1	5

33	Heat generation in electric double layer capacitors with neat and diluted ionic liquid electrolytes under large potential window between 5 and 80 IC. <i>Journal of Power Sources</i> , 2021 , 488, 229368	8.9	5
32	Interaction Between Light and Photosynthetic Microorganisms. <i>Advances in Chemical Engineering</i> , 2016 , 48, 107-149	0.6	5
31	Two-layer optical model of skin for early, non-invasive detection of wound development on the diabetic foot 2010 ,		4
30	Hysteresis in electrochemical systems20210017		4
29	Radiation characteristics and effective optical properties of dumbbell-shaped cyanobacterium Synechocystis sp <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2016 , 174, 65-78	2.1	3
28	In vivo time-resolved autofluorescence measurements on human skin 2006,		3
27	Effect of colony formation on light absorption by Botryococcus braunii. Algal Research, 2020, 50, 1019	85 ₅	3
26	Light transfer through semi-transparent glass panes supporting pendant droplets. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021 , 261, 107493	2.1	3
25	Conductive and Radiative Properties of Soda-Lime Silicate Glassmelts with Different Iron Contents from 1100LC to 1500LC. <i>Journal of the American Ceramic Society</i> , 2016 , 99, 1271-1279	3.8	3
24	Impact of Dropwise Condensation on the Biomass Production Rate in Covered Raceway Ponds. <i>Energies</i> , 2021 , 14, 268	3.1	3
23	Examining the Role of Atomic Scale Heterogeneity on the Thermal Conductivity of Transparent, Thermally Insulating, Mesoporous Silicallitania Thin Films. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 27442-27452	3.8	2
22	Pyroelectric Energy Harvesting Using the Olsen Cycle on Relaxor Ferroelectric 8/65/35 PLZT 2012 ,		2
21	Ultra-Short Pulsed Laser Transport in a Multilayered Turbid Media 2004,		2
20	BACKWARD METHOD OF CHARACTERISTICS IN RADIATIVE HEAT TRANSFER 2004,		2
19	Elastic and plastic mechanical properties of nanoparticle-based silica aerogels and xerogels. <i>Microporous and Mesoporous Materials</i> , 2022 , 330, 111569	5.3	2
18	Potentiometric entropy and operando calorimetric measurements reveal fast charging mechanisms in PNb9O25. <i>Journal of Power Sources</i> , 2022 , 520, 230776	8.9	2
17	A continuum model of heat transfer in electrical double-layer capacitors with porous electrodes under constant-current cycling. <i>Journal of Power Sources</i> , 2021 , 511, 230404	8.9	2
16	Calcination-free production of calcium hydroxide at sub-boiling temperatures <i>RSC Advances</i> , 2021 , 11, 1762-1772	3.7	2

15	Theoretical validation of the step potential electrochemical spectroscopy (SPECS) and multiple potential step chronoamperometry (MUSCA) methods for pseudocapacitive electrodes. <i>Electrochimica Acta</i> , 2019 , 321, 134648	6.7	1
14	Scaling Analysis of Thermal Behavior of Electrical Double Layers 2012 ,		1
13	Improved Pyroelectric Energy Converter for Waste Heat Energy Harvesting Using Co-Polymer P(VDF-TrFE) and Olsen Cycle 2010 ,		1
12	Effective Optical Properties of Nanoporous Silicon 2005 , 463		1
11	How bubbles affect light absorption in photoelectrodes for solar water splitting?. <i>Sustainable Energy and Fuels</i> ,	5.8	1
10	Transmittance of transparent horizontal and tilted windows supporting large non-absorbing pendant droplets. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021 , 275, 107876	2.1	1
9	Transparent silica aerogel slabs synthesized from nanoparticle colloidal suspensions at near ambient conditions on omniphobic liquid substrates. <i>Journal of Colloid and Interface Science</i> , 2022 , 606, 884-897	9.3	1
8	Dependent Scattering Effects in Aggregates with Touching or Overlapping Non-Absorbing Spherical Particles. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 2021 , 278, 108018	2.1	О
7	Room temperature rectification in tapered-channel thermal diodes through nanoscale confinement-induced liquidBolid phase change. <i>Journal of Applied Physics</i> , 2021 , 129, 075103	2.5	О
6	A pilot-process for calcium hydroxide production from iron slag by low-temperature precipitation. <i>Journal of Environmental Chemical Engineering</i> , 2022 , 107792	6.8	O
5	A novel external reflecting raceway pond design for improved biomass productivity. <i>Algal Research</i> , 2022 , 65, 102742	5	О
4	Infrared radiation transfer through semitransparent windows supporting absorbing droplets. <i>International Journal of Heat and Mass Transfer</i> , 2022 , 194, 123043	4.9	O
3	Thermal Conductivity of Cubic Mesoporous Silica Thin Films 2007 , 657		
2	Optical Properties of Nanocomposite Thin-Films 2006 , 177		

Flow and Heat Transfer of Microfoams in Horizontal Minichannels **2004**, 677