## Tian-Shou Zhao

# List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/9491428/tian-shou-zhao-publications-by-year.pdf

Version: 2024-04-10

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.

24,695 85 458 127 h-index g-index citations papers 28,282 8.3 7.69 477 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
458	Microscale-decoupled charge-discharge reaction sites for an air electrode with abundant triple-phase boundary and enhanced cycle stability of Zn-Air batteries. <i>Journal of Power Sources</i> , <b>2022</b> , 525, 231108	8.9	O
457	A detachable sandwiched polybenzimidazole-based membrane for high-performance aqueous redox flow batteries. <i>Journal of Power Sources</i> , <b>2022</b> , 526, 231139	8.9	3
456	A transient model for charge and mass transfer through anion exchange membranes in vanadium redox flow batteries. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 186, 122509	4.9	1
455	IrOX Supported onto Niobium-Doped Titanium Dioxide as an Anode Reversal Tolerant Electrocatalyst for Proton Exchange Membrane Fuel Cells. <i>ACS Applied Energy Materials</i> , <b>2022</b> , 5, 3259-3	3268	1
454	Operation of liquid e-fuel cells using air as oxidant. <i>Applied Energy</i> , <b>2022</b> , 311, 118677	10.7	2
453	A Janus-faced, perovskite nanofiber framework reinforced composite electrolyte for high-voltage solid lithium-metal batteries. <i>Journal of Power Sources</i> , <b>2022</b> , 526, 231172	8.9	О
452	Artificial Bipolar Redox-Active Molecule for Symmetric Nonaqueous Redox Flow Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2022</b> , 10, 613-621	8.3	1
451	An electrochemical-thermal coupled model for aqueous redox flow batteries. <i>International Journal of Heat and Mass Transfer</i> , <b>2022</b> , 192, 122926	4.9	О
450	A High-Capacity Polyethylene Oxide-Based All-Solid-State Battery Using a Metal®rganic Framework Hosted Silicon Anode. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2022</b> , 14, 24798-24805	9.5	1
449	In-situ forming lithiophilic-lithiophobic gradient interphases for dendrite-free all-solid-state Li metal batteries. <i>Nano Energy</i> , <b>2022</b> , 99, 107395	17.1	1
448	A Passive Fuel Cell Fed with an Electrically Rechargeable Liquid Fuel. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2021</b> , 13, 48795-48800	9.5	3
447	Modeling of Vanadium Redox Flow Battery and Electrode Optimization with Different Flow Fields. <i>E-Prime</i> , <b>2021</b> , 100001		2
446	A Highly Reversible Zinc Anode for Rechargeable Aqueous Batteries. <i>ACS Applied Materials &amp; amp; Interfaces</i> , <b>2021</b> ,	9.5	3
445	A highly-efficient composite polybenzimidazole membrane for vanadium redox flow battery. Journal of Power Sources, <b>2021</b> , 489, 229502	8.9	12
444	Carboxyl-Functionalized TEMPO Catholyte Enabling High-Cycling-Stability and High-Energy-Density Aqueous Organic Redox Flow Batteries. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2021</b> , 9, 6258-6265	8.3	8
443	Advances in the design and fabrication of high-performance flow battery electrodes for renewable energy storage. <i>Advances in Applied Energy</i> , <b>2021</b> , 2, 100016		5
442	Chloride ions as an electrolyte additive for high performance vanadium redox flow batteries. <i>Applied Energy</i> , <b>2021</b> , 289, 116690	10.7	7

## (2021-2021)

441	A transient model for vanadium redox flow batteries with bipolar membranes. <i>Journal of Power Sources</i> , <b>2021</b> , 496, 229829	8.9	2
440	A High-Capacity, Long-Cycling All-Solid-State Lithium Battery Enabled by Integrated Cathode/Ultrathin Solid Electrolyte. <i>Advanced Energy Materials</i> , <b>2021</b> , 11, 2101612	21.8	13
439	A high-energy and long-cycling lithium-sulfur pouch cell via a macroporous catalytic cathode with double-end binding sites. <i>Nature Nanotechnology</i> , <b>2021</b> , 16, 166-173	28.7	153
438	A trifunctional electrolyte for high-performance zinc-iodine flow batteries. <i>Journal of Power Sources</i> , <b>2021</b> , 484, 229238	8.9	11
437	Diphenyl ditelluride as a low-potential and fast-kinetics anolyte for nonaqueous redox flow battery applications. <i>Energy Storage Materials</i> , <b>2021</b> , 35, 761-771	19.4	3
436	Holey aligned electrodes through in-situ ZIF-8-assisted-etching for high-performance aqueous redox flow batteries. <i>Science Bulletin</i> , <b>2021</b> , 66, 904-913	10.6	11
435	MetalBrganic framework-derived carbon as a positive electrode for high-performance vanadium redox flow batteries. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 5648-5656	13	8
434	A composite solid electrolyte with an asymmetric ceramic framework for dendrite-free all-solid-state Li metal batteries. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 9665-9674	13	6
433	A computational model of a liquid e-fuel cell. <i>Journal of Power Sources</i> , <b>2021</b> , 501, 230023	8.9	4
432	Polymer Electrolyte Membranes for Vanadium Redox Flow Batteries: Fundamentals and Applications. <i>Progress in Energy and Combustion Science</i> , <b>2021</b> , 85, 100926	33.6	18
431	Analyses and insights into 2D crystallite architected membrane electrode assemblies for polymer electrolyte fuel cells. <i>Chemical Engineering Journal</i> , <b>2021</b> , 417, 129280	14.7	3
430	2D Ti C T MXenes: Visible Black but Infrared White Materials. <i>Advanced Materials</i> , <b>2021</b> , 33, e2103054	24	16
429	Performance characteristics of a liquid e-fuel cell. <i>Applied Energy</i> , <b>2021</b> , 297, 117145	10.7	4
428	Single-atom catalyst for high-performance methanol oxidation. <i>Nature Communications</i> , <b>2021</b> , 12, 5235	17.4	16
427	A coupled machine learning and genetic algorithm approach to the design of porous electrodes for redox flow batteries. <i>Applied Energy</i> , <b>2021</b> , 298, 117177	10.7	5
426	A liquid e-fuel cell operating at 🛭 0 🖒 . <i>Journal of Power Sources</i> , <b>2021</b> , 506, 230198	8.9	3
425	A high-performance lithiated siliconBulfur battery with pomegranate-structured electrodes. Journal of Power Sources, <b>2021</b> , 506, 230174	8.9	4
424	An organic bifunctional redox active material for symmetric aqueous redox flow battery. <i>Nano Energy</i> , <b>2021</b> , 89, 106422	17.1	5

423	A convection-enhanced flow field for aqueous redox flow batteries. <i>International Journal of Heat and Mass Transfer</i> , <b>2021</b> , 179, 121747	4.9	О
422	Aligned microfibers interweaved with highly porous carbon nanofibers: A Novel electrode for high-power vanadium redox flow batteries. <i>Energy Storage Materials</i> , <b>2021</b> , 43, 30-41	19.4	4
421	Efficient electrocatalytic water splitting by bimetallic cobalt iron boride nanoparticles with controlled electronic structure. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 604, 650-659	9.3	5
420	A hierarchical porous tin host for dendrite-free, highly reversible zinc anodes. <i>Chemical Engineering Journal</i> , <b>2021</b> , 425, 130643	14.7	11
419	Cost-Effective, High-Energy-Density, Nonaqueous Nitrobenzene Organic Redox Flow Battery. <i>Chemistry of Materials</i> , <b>2021</b> , 33, 978-986	9.6	12
418	Enabling Solid-State Li Metal Batteries by In Situ Forming Ionogel Interlayers. <i>ACS Applied Energy Materials</i> , <b>2020</b> , 3, 5712-5721	6.1	12
417	Aligned hierarchical electrodes for high-performance aqueous redox flow battery. <i>Applied Energy</i> , <b>2020</b> , 271, 115235	10.7	14
416	A composite solid electrolyte with a framework of vertically aligned perovskite for all-solid-state Li-metal batteries. <i>Journal of Membrane Science</i> , <b>2020</b> , 610, 118265	9.6	17
415	A novel electrode formed with electrospun nano- and micro-scale carbon fibers for aqueous redox flow batteries. <i>Journal of Power Sources</i> , <b>2020</b> , 470, 228441	8.9	9
414	Bifunctional effect of laser-induced nucleation-preferable microchannels and in situ formed LiF SEI in MXenes for stable lithium-metal batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 14114-14125	13	17
413	Modeling and Simulation of Flow Batteries. Advanced Energy Materials, 2020, 10, 2000758	21.8	22
412	An in situ encapsulation approach for polysulfide retention in lithiumBulfur batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 6902-6907	13	4
411	Beyond the Polysulfide Shuttle and Lithium Dendrite Formation: Addressing the Sluggish Sulfur Redox Kinetics for Practical High-Energy Li-S Batteries. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 17634-17640	16.4	30
410	A long-life Liß battery enabled by a cathode made of well-distributed B4C nanoparticles decorated activated cotton fibers. <i>Journal of Power Sources</i> , <b>2020</b> , 451, 227751	8.9	12
409	Thermal effects in H2O and CO2 assisted direct carbon solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 12459-12475	6.7	9
408	Balancing the specific surface area and mass diffusion property of electrospun carbon fibers to enhance the cell performance of vanadium redox flow battery. <i>International Journal of Hydrogen Energy</i> , <b>2020</b> , 45, 12565-12576	6.7	17
407	Towards uniform distributions of reactants via the aligned electrode design for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2020</b> , 259, 114198	10.7	26
406	An energy-dense, flowable suspension of hollow carbon nanoshell-hosted sulfur as an electroactive material for flow batteries. <i>Journal of Power Sources</i> , <b>2020</b> , 478, 228750	8.9	2

### (2019-2020)

405	Enhanced cycle life of vanadium redox flow battery via a capacity and energy efficiency recovery method. <i>Journal of Power Sources</i> , <b>2020</b> , 478, 228725	8.9	17
404	An aqueous organic redox flow battery employing a trifunctional electroactive compound as anolyte, catholyte and supporting electrolyte. <i>Journal of Power Sources</i> , <b>2020</b> , 477, 228985	8.9	11
403	Achieving multiplexed functionality in a hierarchical MXene-based sulfur host for high-rate, high-loading lithium-sulfur batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 33, 147-157	19.4	36
402	On-Site Fluorination for Enhancing Utilization of Lithium in a Lithium-Sulfur Full Battery. <i>ACS Applied Materials &amp; Discours (Materials &amp; Discours)</i>	9.5	3
401	Tuning the Performance of Aqueous Organic Redox Flow Batteries via First-Principles Calculations. Journal of Physical Chemistry Letters, <b>2020</b> , 11, 10433-10438	6.4	2
400	An ultrathin, strong, flexible composite solid electrolyte for high-voltage lithium metal batteries. Journal of Materials Chemistry A, <b>2020</b> , 8, 18802-18809	13	25
399	A dendrite-free zinc anode for rechargeable aqueous batteries. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 20175-20184	13	33
398	Asymmetric Porous Polybenzimidazole Membranes with High Conductivity and Selectivity for Vanadium Redox Flow Batteries. <i>Energy Technology</i> , <b>2020</b> , 8, 2000592	3.5	6
397	Highly catalytic hollow Ti3C2Tx MXene spheres decorated graphite felt electrode for vanadium redox flow batteries. <i>Energy Storage Materials</i> , <b>2020</b> , 25, 885-892	19.4	41
396	A safe and efficient lithiated silicon-sulfur battery enabled by a bi-functional composite interlayer. <i>Energy Storage Materials</i> , <b>2020</b> , 25, 217-223	19.4	10
395	A high power density and long cycle life vanadium redox flow battery. <i>Energy Storage Materials</i> , <b>2020</b> , 24, 529-540	19.4	103
394	A novel energy storage system incorporating electrically rechargeable liquid fuels as the storage medium. <i>Science Bulletin</i> , <b>2019</b> , 64, 270-280	10.6	47
393	First-principle investigations of nitrogen-, boron-, phosphorus-doped graphite electrodes for vanadium redox flow batteries. <i>Electrochimica Acta</i> , <b>2019</b> , 300, 389-395	6.7	21
392	Seawater as an alternative to deionized water for electrolyte preparations in vanadium redox flow batteries. <i>Applied Energy</i> , <b>2019</b> , 251, 113344	10.7	14
391	N-doped graphene nanoplatelets as a highly active catalyst for Br2/BrIredox reactions in zinc-bromine flow batteries. <i>Electrochimica Acta</i> , <b>2019</b> , 318, 69-75	6.7	17
390	Critical Role of Anion Donicity in LiS Deposition and Sulfur Utilization in Li-S Batteries. <i>ACS Applied Materials &amp; Amp; Interfaces</i> , <b>2019</b> , 11, 25940-25948	9.5	31
389	Ultra-stable lithium plating/stripping in garnet-based lithium-metal batteries enabled by a SnO2 nanolayer. <i>Journal of Power Sources</i> , <b>2019</b> , 433, 226691	8.9	24
388	Combined methane reforming by carbon dioxide and steam in proton conducting solid oxide fuel cells for syngas/power co-generation. <i>International Journal of Hydrogen Energy</i> , <b>2019</b> , 44, 15313-15321	6.7	18

387	An aqueous manganese-copper battery for large-scale energy storage applications. <i>Journal of Power Sources</i> , <b>2019</b> , 423, 203-210	8.9	27
386	Aqueous proton-selective conduction across two-dimensional graphyne. <i>Nature Communications</i> , <b>2019</b> , 10, 1165	17.4	36
385	A uniformly distributed bismuth nanoparticle-modified carbon cloth electrode for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2019</b> , 240, 226-235	10.7	41
384	A two-dimensional model for the design of flow fields in vanadium redox flow batteries.  International Journal of Heat and Mass Transfer, 2019, 135, 460-469	4.9	33
383	A two-dimensional mathematical model for vanadium redox flow battery stacks incorporating nonuniform electrolyte distribution in the flow frame. <i>Applied Thermal Engineering</i> , <b>2019</b> , 151, 495-505	5.8	12
382	Facile Surface Modification Method To Achieve an Ultralow Interfacial Resistance in Garnet-Based Li Metal Batteries. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 6332-6340	6.1	13
381	Atomically dispersed Fellix active sites within hierarchical mesoporous carbon as efficient electrocatalysts for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 20132-201	38	25
380	Aligned Electrospun Carbon Nanofibers as Electrodes for Vanadium Redox Flow Batteries. <i>Energy Technology</i> , <b>2019</b> , 7, 1900488	3.5	10
379	Rational design of spontaneous reactions for protecting porous lithium electrodes in lithium-sulfur batteries. <i>Nature Communications</i> , <b>2019</b> , 10, 3249	17.4	62
378	Investigation of an aqueous rechargeable battery consisting of manganese tin redox chemistries for energy storage. <i>Journal of Power Sources</i> , <b>2019</b> , 437, 226918	8.9	8
377	Superior cycling life of LiB batteries with high sulfur loading enabled by a bifunctional layered-MoO3 cathode. <i>Journal of Power Sources</i> , <b>2019</b> , 436, 226840	8.9	18
376	Artificial Bifunctional Protective layer Composed of Carbon Nitride Nanosheets for High Performance Lithium Bulfur Batteries. <i>Journal of Energy Storage</i> , <b>2019</b> , 26, 101006	7.8	12
375	A gradient porous electrode with balanced transport properties and active surface areas for vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2019</b> , 440, 227159	8.9	27
374	Mesoporous carbon derived from pomelo peel as a high-performance electrode material for zinc-bromine flow batteries. <i>Journal of Power Sources</i> , <b>2019</b> , 442, 227255	8.9	24
373	Designing Effective Solvent©atalyst Interface for Catalytic Sulfur Conversion in LithiumBulfur Batteries. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 10186-10196	9.6	27
372	Polyoxyethylene (PEO) PEO-Perovskite PEO Composite Electrolyte for All-Solid-State Lithium Metal Batteries. <i>ACS Applied Materials &amp; Discrete State St</i>	9.5	53
371	A bi-porous graphite felt electrode with enhanced surface area and catalytic activity for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2019</b> , 233-234, 105-113	10.7	22
370	V2O5-NiO composite nanowires: A novel and highly efficient carbon-free electrode for non-aqueous Li-air batteries operated in ambient air. <i>Journal of Power Sources</i> , <b>2019</b> , 409, 76-85	8.9	28

### (2018-2019)

369	Mathematical modeling of the charging process of Li-S batteries by incorporating the size-dependent Li2S dissolution. <i>Electrochimica Acta</i> , <b>2019</b> , 296, 954-963	6.7	19
368	A room-temperature activated graphite felt as the cost-effective, highly active and stable electrode for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2019</b> , 233-234, 544-553	10.7	40
367	Anion exchange membranes for aqueous acid-based redox flow batteries: Current status and challenges. <i>Applied Energy</i> , <b>2019</b> , 233-234, 622-643	10.7	60
366	An improved model of ion selective adsorption in membrane and its application in vanadium redox flow batteries. <i>Applied Energy</i> , <b>2018</b> , 215, 591-601	10.7	18
365	An aqueous alkaline battery consisting of inexpensive all-iron redox chemistries for large-scale energy storage. <i>Applied Energy</i> , <b>2018</b> , 215, 98-105	10.7	26
364	Towards a uniform distribution of zinc in the negative electrode for zinc bromine flow batteries. <i>Applied Energy</i> , <b>2018</b> , 213, 366-374	10.7	56
363	Advances and challenges in alkaline anion exchange membrane fuel cells. <i>Progress in Energy and Combustion Science</i> , <b>2018</b> , 66, 141-175	33.6	281
362	Mn3O4 Nanoparticle-Decorated Carbon Cloths with Superior Catalytic Activity for the VII/VIII Redox Reaction in Vanadium Redox Flow Batteries. <i>Energy Technology</i> , <b>2018</b> , 6, 1228-1236	3.5	13
361	Borophene and defective borophene as potential anchoring materials for lithiumBulfur batteries: a first-principles study. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 2107-2114	13	87
360	Revealing the Performance Enhancement of Oxygenated Carbonaceous Materials for Vanadium Redox Flow Batteries: Functional Groups or Specific Surface Area?. <i>Advanced Sustainable Systems</i> , <b>2018</b> , 2, 1700148	5.9	18
359	Role of phosphorus in nitrogen, phosphorus dual-doped ordered mesoporous carbon electrocatalyst for oxygen reduction reaction in alkaline media. <i>International Journal of Hydrogen Energy</i> , <b>2018</b> , 43, 1470-1478	6.7	39
358	NiCo2O4 nanowires@MnOx nanoflakes supported on stainless steel mesh with superior electrocatalytic performance for anion exchange membrane water splitting. <i>Electrochemistry Communications</i> , <b>2018</b> , 87, 66-70	5.1	21
357	Mesoporous ultrafine Ta2O5 nanoparticle with abundant oxygen vacancies as a novel and efficient catalyst for non-aqueous Li-O2 batteries. <i>Electrochimica Acta</i> , <b>2018</b> , 271, 232-241	6.7	15
356	Improved electrolyte for zinc-bromine flow batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 384, 232-239	8.9	63
355	Paramecium-Like Iron Oxide Nanotubes as a Cost-Efficient Catalyst for Nonaqueous Lithium-Oxygen Batteries. <i>Energy Technology</i> , <b>2018</b> , 6, 263-272	3.5	9
354	Lattice Boltzmann simulation of shear viscosity of suspensions containing porous particles. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 116, 969-976	4.9	14
353	A Paper-Based Microfluidic Fuel Cell with Hydrogen Peroxide as Fuel and Oxidant. <i>Energy Technology</i> , <b>2018</b> , 6, 140-143	3.5	40
352	A Zinc <b>B</b> romine Flow Battery with Improved Design of Cell Structure and Electrodes. <i>Energy Technology</i> , <b>2018</b> , 6, 333-339	3.5	29

351	Carbonized tubular polypyrrole with a high activity for the Br2/BrIredox reaction in zinc-bromine flow batteries. <i>Electrochimica Acta</i> , <b>2018</b> , 284, 569-576	6.7	34
350	CoP nanoparticles enwrapped in N-doped carbon nanotubes for high performance lithium-ion battery anodes. <i>Frontiers of Materials Science</i> , <b>2018</b> , 12, 214-224	2.5	6
349	Carbon Wrapped Monodispersed FeP Nanoparticles for Lithium Storage with long Cycle Life. <i>Energy Technology</i> , <b>2018</b> , 6, 2312-2318	3.5	4
348	Three-Dimensional Carbon-Honeycomb as Nanoporous Lithium and Sodium Deposition Scaffold. Journal of Physical Chemistry C, <b>2018</b> , 122, 21262-21268	3.8	10
347	Highly efficient and ultra-stable boron-doped graphite felt electrodes for vanadium redox flow batteries. <i>Journal of Materials Chemistry A</i> , <b>2018</b> , 6, 13244-13253	13	60
346	Remedies of capacity fading in room-temperature sodium-sulfur batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 396, 304-313	8.9	31
345	Lattice Boltzmann Simulation of Mass Transfer Coefficients for Chemically Reactive Flows in Porous Media. <i>Journal of Heat Transfer</i> , <b>2018</b> , 140,	1.8	29
344	Dual function flower-like CoP/C nanosheets: High stability lithium-ion anode and excellent hydrogen evolution reaction catalyst. <i>Electrochimica Acta</i> , <b>2018</b> , 259, 822-829	6.7	44
343	The synthesis of ZnS@MoS2 hollow polyhedrons for enhanced lithium storage performance. CrystEngComm, <b>2018</b> , 20, 7266-7274	3.3	24
342	Heterostructure CoS/NC@MoS2 Hollow Spheres for High-Performance Hydrogen Evolution Reactions and Lithium-ION Batteries. <i>ChemElectroChem</i> , <b>2018</b> , 5, 3953-3960	4.3	25
341	A Li2S-Based Sacrificial Layer for Stable Operation of Lithium-Sulfur Batteries. <i>Energy Technology</i> , <b>2018</b> , 6, 2210-2219	3.5	4
340	A highly selective proton exchange membrane with highly ordered, vertically aligned, and subnanosized 1D channels for redox flow batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 406, 35-41	8.9	14
339	Formation of electrodes by self-assembling porous carbon fibers into bundles for vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2018</b> , 405, 106-113	8.9	28
338	Thermal effects on the sedimentation behavior of elliptical particles. <i>International Journal of Heat and Mass Transfer</i> , <b>2018</b> , 126, 753-764	4.9	29
337	In-situ investigation of hydrogen evolution behavior in vanadium redox flow batteries. <i>Applied Energy</i> , <b>2017</b> , 190, 1112-1118	10.7	72
336	Enhancement of Electrochemical Performance by the Oxygen Vacancies in Hematite as Anode Material for Lithium-Ion Batteries. <i>Nanoscale Research Letters</i> , <b>2017</b> , 12, 13	5	27
335	Recent advances in inorganic 2D materials and their applications in lithium and sodium batteries. Journal of Materials Chemistry A, <b>2017</b> , 5, 3735-3758	13	259
334	A novel iron-lead redox flow battery for large-scale energy storage. <i>Journal of Power Sources</i> , <b>2017</b> , 346, 97-102	8.9	19

333	A stabilized high-energy Li-polyiodide semi-liquid battery with a dually-protected Li anode. <i>Journal of Power Sources</i> , <b>2017</b> , 347, 136-144	8.9	11
332	Accelerated lattice Boltzmann simulation using GPU and OpenACC with data management.  International Journal of Heat and Mass Transfer, 2017, 109, 577-588	4.9	84
331	Ab initio prediction and characterization of phosphorene-like SiS and SiSe as anode materials for sodium-ion batteries. <i>Science Bulletin</i> , <b>2017</b> , 62, 572-578	10.6	46
330	High-performance zinc bromine flow battery via improved design of electrolyte and electrode. Journal of Power Sources, <b>2017</b> , 355, 62-68	8.9	71
329	High-performance nitrogen-doped titania nanowire decorated carbon cloth electrode for lithium-polysulfide batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 242, 137-145	6.7	20
328	Critical transport issues for improving the performance of aqueous redox flow batteries. <i>Journal of Power Sources</i> , <b>2017</b> , 339, 1-12	8.9	123
327	A hydrogen-ferric ion rebalance cell operating at low hydrogen concentrations for capacity restoration of iron-chromium redox flow batteries. <i>Journal of Power Sources</i> , <b>2017</b> , 352, 77-82	8.9	26
326	A Lithium/Polysulfide Battery with Dual-Working Mode Enabled by Liquid Fuel and Acrylate-Based Gel Polymer Electrolyte. <i>ACS Applied Materials &amp; Enabled Sciences</i> , <b>2017</b> , 9, 2526-2534	9.5	22
325	First-Principles Investigations of the Working Mechanism of 2D h-BN as an Interfacial Layer for the Anode of Lithium Metal Batteries. <i>ACS Applied Materials &amp; Description</i> , 1987-1994	9.5	69
324	Transport phenomena in alkaline direct ethanol fuel cells for sustainable energy production. Journal of Power Sources, <b>2017</b> , 341, 199-211	8.9	77
323	Modeling of an aprotic Li-O2 battery incorporating multiple-step reactions. <i>Applied Energy</i> , <b>2017</b> , 187, 706-716	10.7	15
322	An aprotic lithium/polyiodide semi-liquid battery with an ionic shield. <i>Journal of Power Sources</i> , <b>2017</b> , 342, 9-16	8.9	13
321	Highly catalytic and stabilized titanium nitride nanowire array-decorated graphite felt electrodes for all vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2017</b> , 341, 318-326	8.9	101
320	Impact of pore size of ordered mesoporous carbon FDU-15-supported platinum catalysts on oxygen reduction reaction. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 3325-3334	6.7	21
319	Ruthenium dioxide-decorated carbonized tubular polypyrrole as a bifunctional catalyst for non-aqueous lithium-oxygen batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 257, 281-289	6.7	16
318	Highly active, bi-functional and metal-free B 4 C-nanoparticle-modified graphite felt electrodes for vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2017</b> , 365, 34-42	8.9	57
317	Theoretical Understanding of Mechanisms of Proton Exchange Membranes Made of 2D Crystals with Ultrahigh Selectivity. <i>Journal of Physical Chemistry Letters</i> , <b>2017</b> , 8, 4354-4361	6.4	33
316	Fluid breakup in carbon nanotubes: An explanation of ultrafast ion transport. <i>Physics of Fluids</i> , <b>2017</b> , 29, 092003	4.4	14

315	A highly active biomass-derived electrode for all vanadium redox flow batteries. <i>Electrochimica Acta</i> , <b>2017</b> , 248, 197-205	6.7	35
314	An efficient Li2S-based lithium-ion sulfur battery realized by a bifunctional electrolyte additive. <i>Nano Energy</i> , <b>2017</b> , 40, 240-247	17.1	65
313	Advances and challenges in lithium-air batteries. <i>Applied Energy</i> , <b>2017</b> , 204, 780-806	10.7	128
312	A self-cleaning Li-S battery enabled by a bifunctional redox mediator. <i>Journal of Power Sources</i> , <b>2017</b> , 361, 203-210	8.9	40
311	Boron phosphide monolayer as a potential anode material for alkali metal-based batteries. <i>Journal of Materials Chemistry A</i> , <b>2017</b> , 5, 672-679	13	144
310	Lattice Boltzmann modeling of transport phenomena in fuel cells and flow batteries. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2017</b> , 33, 555-574	2	117
309	Transport of highly concentrated fuel in direct methanol fuel cells. <i>Applied Thermal Engineering</i> , <b>2017</b> , 126, 290-295	5.8	28
308	A highly permeable and enhanced surface area carbon-cloth electrode for vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 329, 247-254	8.9	83
307	Performance enhancement of iron-chromium redox flow batteries by employing interdigitated flow fields. <i>Journal of Power Sources</i> , <b>2016</b> , 327, 258-264	8.9	65
306	A highly-safe lithium-ion sulfur polymer battery with SnO2 anode and acrylate-based gel polymer electrolyte. <i>Nano Energy</i> , <b>2016</b> , 28, 97-105	17.1	51
305	Unraveling the Catalytic Mechanism of Rutile RuO2 for the Oxygen Reduction Reaction and Oxygen Evolution Reaction in LiD2 Batteries. <i>ACS Catalysis</i> , <b>2016</b> , 6, 6285-6293	13.1	43
304	Three-dimensional lattice Boltzmann simulation of suspensions containing both micro- and nanoparticles. <i>International Journal of Heat and Fluid Flow</i> , <b>2016</b> , 62, 560-567	2.4	17
303	Facile preparation of high-performance MnO2/KB air cathode for Zn-air batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 222, 1438-1444	6.7	24
302	The effects of design parameters on the charge-discharge performance of iron-chromium redox flow batteries. <i>Applied Energy</i> , <b>2016</b> , 182, 204-209	10.7	52
301	Computational insights into the effect of carbon structures at the atomic level for non-aqueous sodium-oxygen batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 325, 91-97	8.9	20
300	Vertically aligned carbon nanotube-ruthenium dioxide core-shell cathode for non-aqueous lithium-oxygen batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 331, 82-90	8.9	37
299	Effects of moist air on the cycling performance of non-aqueous lithium-air batteries. <i>Applied Energy</i> , <b>2016</b> , 182, 569-575	10.7	29
298	A passive anion-exchange membrane direct ethanol fuel cell stack and its applications. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 20336-20342	6.7	46

## (2016-2016)

297	Modeling of ion transport through a porous separator in vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 327, 67-76	8.9	56
296	Modeling of lithium-sulfur batteries incorporating the effect of Li2S precipitation. <i>Journal of Power Sources</i> , <b>2016</b> , 336, 115-125	8.9	65
295	A high-performance flow-field structured iron-chromium redox flow battery. <i>Journal of Power Sources</i> , <b>2016</b> , 324, 738-744	8.9	104
294	Ab initio prediction of borophene as an extraordinary anode material exhibiting ultrafast directional sodium diffusion for sodium-based batteries. <i>Science Bulletin</i> , <b>2016</b> , 61, 1138-1144	10.6	85
293	A high-performance solid-state lithium-oxygen battery with a ceramic-carbon nanostructured electrode. <i>Nano Energy</i> , <b>2016</b> , 26, 565-576	17.1	47
292	A high-performance dual-scale porous electrode for vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 325, 329-336	8.9	122
291	Borophene: A promising anode material offering high specific capacity and high rate capability for lithium-ion batteries. <i>Nano Energy</i> , <b>2016</b> , 23, 97-104	17.1	340
290	RuO2Monolayer: A Promising Bifunctional Catalytic Material for Nonaqueous Lithium <b>©</b> xygen Batteries. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 6356-6362	3.8	31
289	A direct methanolflydrogen peroxide fuel cell with a Prussian Blue cathode. <i>International Journal of Hydrogen Energy</i> , <b>2016</b> , 41, 5135-5140	6.7	29
288	Novel gel polymer electrolyte for high-performance lithiumBulfur batteries. <i>Nano Energy</i> , <b>2016</b> , 22, 278-289	17.1	289
287	A monolayer graphene INafion sandwich membrane for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2016</b> , 311, 188-194	8.9	103
286	MnO2-x nanosheets on stainless steel felt as a carbon- and binder-free cathode for non-aqueous lithium-oxygen batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 306, 724-732	8.9	48
285	First-Principles Study of Nitrogen-, Boron-Doped Graphene and Co-Doped Graphene as the Potential Catalysts in Nonaqueous LiD2 Batteries. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 6612-6618	3.8	131
284	A facile approach for preparation of highly dispersed platinum-copper/carbon nanocatalyst toward formic acid electro-oxidation. <i>Electrochimica Acta</i> , <b>2016</b> , 190, 956-963	6.7	32
283	A nano-structured RuO2/NiO cathode enables the operation of non-aqueous lithium ir batteries in ambient air. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 1783-1793	35.4	119
282	Manganese-tuned chemical etching of a platinumflopper nanocatalyst with platinum-rich surfaces. Journal of Power Sources, <b>2016</b> , 304, 74-80	8.9	13
281	An effective strategy to increase hydroxide-ion conductivity through microphase separation induced by hydrophobic-side chains. <i>Journal of Power Sources</i> , <b>2016</b> , 303, 354-362	8.9	41
280	Morphology of the Discharge Product in Non-aqueous Lithium Dxygen Batteries: Furrowed Toroid Particles Correspond to a Lower Charge Voltage. <i>Energy Technology</i> , <b>2016</b> , 4, 393-400	3.5	17

279	Ordered Mesoporous Carbon/Titanium Carbide Composites as Support Materials for Platinum Catalysts. <i>Energy Technology</i> , <b>2016</b> , 4, 1064-1070	3.5	12
278	Titanium Carbide Nanoparticle-Decorated Electrode Enables Significant Enhancement in Performance of All-Vanadium Redox Flow Batteries. <i>Energy Technology</i> , <b>2016</b> , 4, 990-996	3.5	32
277	Cost-effective carbon supported Fe2O3 nanoparticles as an efficient catalyst for non-aqueous lithium-oxygen batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 211, 545-551	6.7	25
276	A high-performance carbon nanoparticle-decorated graphite felt electrode for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2016</b> , 176, 74-79	10.7	111
275	A low-cost iron-cadmium redox flow battery for large-scale energy storage. <i>Journal of Power Sources</i> , <b>2016</b> , 330, 55-60	8.9	36
274	Highly stable pyridinium-functionalized cross-linked anion exchange membranes for all vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 331, 452-461	8.9	74
273	Ab initio prediction of a silicene and graphene heterostructure as an anode material for Li- and Na-ion batteries. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 16377-16382	13	108
272	Two-dimensional SiS as a potential anode material for lithium-based batteries: A first-principles study. <i>Journal of Power Sources</i> , <b>2016</b> , 331, 391-399	8.9	34
271	Unraveling the Positive Roles of Point Defects on Carbon Surfaces in Nonaqueous Lithium Dxygen Batteries. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 18394-18402	3.8	38
270	Polyvinylpyrrolidone-based semi-interpenetrating polymer networks as highly selective and chemically stable membranes for all vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 327, 374-383	8.9	31
269	Carbon electrode with NiO and RuO2 nanoparticles improves the cycling life of non-aqueous lithium-oxygen batteries. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 303-312	8.9	22
268	In-situ Fabrication of a Freestanding Acrylate-based Hierarchical Electrolyte for Lithium-sulfur Batteries. <i>Electrochimica Acta</i> , <b>2016</b> , 213, 871-878	6.7	60
267	Copper nanoparticle-deposited graphite felt electrodes for all vanadium redox flow batteries. <i>Applied Energy</i> , <b>2016</b> , 180, 386-391	10.7	113
266	Performance of a vanadium redox flow battery with a VANADion membrane. <i>Applied Energy</i> , <b>2016</b> , 180, 353-359	10.7	57
265	Preparations of an inorganic-framework proton exchange nanochannel membrane. <i>Journal of Power Sources</i> , <b>2016</b> , 326, 466-475	8.9	10
264	A hydrophilic-hydrophobic dual-layer microporous layer enabling the improved water management of direct methanol fuel cells operating with neat methanol. <i>Journal of Power Sources</i> , <b>2015</b> , 294, 232-2	38 <sup>8.9</sup>	24
263	A novel solid-state LiD2 battery with an integrated electrolyte and cathode structure. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2782-2790	35.4	90
262	Screen printed cathode for non-aqueous lithiumBxygen batteries. <i>Journal of Power Sources</i> , <b>2015</b> , 297, 174-180	8.9	18

### (2015-2015)

261	A high-performance sandwiched-porous polybenzimidazole membrane with enhanced alkaline retention for anion exchange membrane fuel cells. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 2768-27	7 <i>4</i> <sup>35.4</sup>	44
260	Effects of operating temperature on the performance of vanadium redox flow batteries. <i>Applied Energy</i> , <b>2015</b> , 155, 349-353	10.7	92
259	Physicochemical properties of alkaline doped polybenzimidazole membranes for anion exchange membrane fuel cells. <i>Journal of Membrane Science</i> , <b>2015</b> , 493, 340-348	9.6	55
258	Carbon-neutral sustainable energy technology: Direct ethanol fuel cells. <i>Renewable and Sustainable Energy Reviews</i> , <b>2015</b> , 50, 1462-1468	16.2	175
257	Effects of the electric field on ion crossover in vanadium redox flow batteries. <i>Applied Energy</i> , <b>2015</b> , 145, 306-319	10.7	79
256	What is the ideal distribution of electrolyte inside cathode pores of non-aqueous lithium-air batteries?. <i>Science Bulletin</i> , <b>2015</b> , 60, 975-976	10.6	10
255	Fundamental models for flow batteries. <i>Progress in Energy and Combustion Science</i> , <b>2015</b> , 49, 40-58	33.6	96
254	Formation of Li3O4 nano particles in the discharge products of non-aqueous lithium-oxygen batteries leads to lower charge overvoltage. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 29859-66	3.6	21
253	A high-rate and long cycle life solid-state lithium ir battery. <i>Energy and Environmental Science</i> , <b>2015</b> , 8, 3745-3754	35.4	100
252	A three-dimensional pseudo-potential-based lattice Boltzmann model for multiphase flows with large density ratio and variable surface tension. <i>International Journal of Heat and Fluid Flow</i> , <b>2015</b> , 56, 261-271	2.4	81
251	A comparative study of all-vanadium and iron-chromium redox flow batteries for large-scale energy storage. <i>Journal of Power Sources</i> , <b>2015</b> , 300, 438-443	8.9	162
250	A RuO2 nanoparticle-decorated buckypaper cathode for non-aqueous lithiumBxygen batteries. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 19042-19049	13	37
249	A transient electrochemical model incorporating the Donnan effect for all-vanadium redox flow batteries. <i>Journal of Power Sources</i> , <b>2015</b> , 299, 202-211	8.9	36
248	A vanadium redox flow battery model incorporating the effect of ion concentrations on ion mobility. <i>Applied Energy</i> , <b>2015</b> , 158, 157-166	10.7	82
247	Discharge product morphology versus operating temperature in non-aqueous lithium-air batteries. Journal of Power Sources, <b>2015</b> , 278, 133-140	8.9	29
246	The use of polybenzimidazole membranes in vanadium redox flow batteries leading to increased coulombic efficiency and cycling performance. <i>Electrochimica Acta</i> , <b>2015</b> , 153, 492-498	6.7	147
245	A low-cost, high-performance zincflydrogen peroxide fuel cell. <i>Journal of Power Sources</i> , <b>2015</b> , 275, 831-834	8.9	34
244	Integrated inorganic membrane electrode assembly with layered double hydroxides as ionic conductors for anion exchange membrane water electrolysis. <i>Nano Energy</i> , <b>2015</b> , 11, 110-118	17.1	45

243	Graphene-supported platinum catalyst prepared with ionomer as surfactant for anion exchange membrane fuel cells. <i>Journal of Power Sources</i> , <b>2015</b> , 275, 506-515	8.9	21
242	A crack-free and super-hydrophobic cathode micro-porous layer for direct methanol fuel cells. <i>Applied Energy</i> , <b>2015</b> , 138, 331-336	10.7	43
241	Modeling of lithiumBxygen batteries with the discharge product treated as a discontinuous deposit layer. <i>Journal of Power Sources</i> , <b>2015</b> , 273, 440-447	8.9	31
240	Controlling flow direction in nanochannels by electric field strength. <i>Physical Review E</i> , <b>2015</b> , 92, 02301	72.4	14
239	Integrated Porous Cathode made of Pure Perovskite Lanthanum Nickel Oxide for Nonaqueous Lithium Dxygen Batteries. <i>Energy Technology</i> , <b>2015</b> , 3, 1093-1100	3.5	14
238	A High Catalyst-Utilization Electrode for Direct Methanol Fuel Cells. <i>Electrochimica Acta</i> , <b>2015</b> , 164, 337	- <b>B</b> .4 <del>/</del> 3	10
237	A novel cathode architecture with a thin reaction layer alleviates mixed potentials and catalyst poisoning in direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2015</b> , 40, 16540-16546	6.7	8
236	The dual role of hydrogen peroxide in fuel cells. Science Bulletin, 2015, 60, 55-64	10.6	70
235	Why the charge overpotential in non-aqueous LiD 2 batteries is so high and exhibits different rising trends?. <i>Science Bulletin</i> , <b>2015</b> , 60, 281-282	10.6	7
234	A high-performance supportless silver nanowire catalyst for anion exchange membrane fuel cells. Journal of Materials Chemistry A, 2015, 3, 1410-1416	13	60
233	Electrochemical characteristics and transport properties of Fe(II)/Fe(III) redox couple in a non-aqueous reline deep eutectic solvent. <i>Electrochimica Acta</i> , <b>2015</b> , 154, 462-467	6.7	34
232	Effects of design parameters on the performance of passive direct methanol fuel cells fed with concentrated fuel. <i>Electrochimica Acta</i> , <b>2014</b> , 133, 8-15	6.7	28
231	Mathematical modeling of an anion-exchange membrane water electrolyzer for hydrogen production. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 19869-19876	6.7	47
230	A novel high-energy-density positive electrolyte with multiple redox couples for redox flow batteries. <i>Applied Energy</i> , <b>2014</b> , 136, 576-581	10.7	33
229	Performance of a vanadium redox flow battery with and without flow fields. <i>Electrochimica Acta</i> , <b>2014</b> , 142, 61-67	6.7	99
228	A micro-porous current collector enabling passive direct methanol fuel cells to operate with highly concentrated fuel. <i>Electrochimica Acta</i> , <b>2014</b> , 139, 7-12	6.7	28
227	Nonequilibrium scheme for computing the flux of the convection-diffusion equation in the framework of the lattice Boltzmann method. <i>Physical Review E</i> , <b>2014</b> , 90, 013305	2.4	45
226	A gradient porous cathode for non-aqueous lithium-air batteries leading to a high capacity. <i>Electrochemistry Communications</i> , <b>2014</b> , 46, 111-114	5.1	48

## (2013-2014)

225	A carbon powder-nanotube composite cathode for non-aqueous lithium-air batteries. <i>Electrochimica Acta</i> , <b>2014</b> , 147, 1-8	6.7	36
224	Performance of an alkaline direct ethanol fuel cell with hydrogen peroxide as oxidant. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 2320-2324	6.7	61
223	A non-carbon cathode electrode for lithiumBxygen batteries. <i>Applied Energy</i> , <b>2014</b> , 130, 134-138	10.7	27
222	Effects of SOC-dependent electrolyte viscosity on performance of vanadium redox flow batteries. <i>Applied Energy</i> , <b>2014</b> , 130, 139-147	10.7	69
221	A high-performance ethanolflydrogen peroxide fuel cell. <i>RSC Advances</i> , <b>2014</b> , 4, 65031-65034	3.7	28
220	Effects of ions on the diffusion coefficient of water in carbon nanotubes. <i>Journal of Applied Physics</i> , <b>2014</b> , 116, 054311	2.5	15
219	Modeling of the mixed potential in hydrogen peroxide-based fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2014</b> , 39, 7407-7416	6.7	30
218	A high-performance alkaline exchange membrane direct formate fuel cell. <i>Applied Energy</i> , <b>2014</b> , 115, 405-410	10.7	48
217	An alkaline direct ethylene glycol fuel cell with an alkali-doped polybenzimidazole membrane. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 10602-10606	6.7	68
216	Lattice Boltzmann model for the convection-diffusion equation. <i>Physical Review E</i> , <b>2013</b> , 87, 063309	2.4	129
215	Mathematical modeling of alkaline direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 14067-14075	6.7	53
214	One-step polyol synthesis of Rh-on-Pd bimetallic nanodendrites and their electrocatalytic properties for ethanol oxidation in alkaline media. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 906-912	13	36
213	Determination of the mass-transport properties of vanadium ions through the porous electrodes of vanadium redox flow batteries. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 10841-8	3.6	43
212	Graphene sheets fabricated from disposable paper cups as a catalyst support material for fuel cells. Journal of Materials Chemistry A, <b>2013</b> , 1, 183-187	13	33
211	Numerical investigations of flow field designs for vanadium redox flow batteries. <i>Applied Energy</i> , <b>2013</b> , 105, 47-56	10.7	211
210	A sandwich structured membrane for direct methanol fuel cells operating with neat methanol. <i>Applied Energy</i> , <b>2013</b> , 106, 301-306	10.7	49
209	Agar chemical hydrogel electrode binder for fuel-electrolyte-fed fuel cells. <i>Applied Energy</i> , <b>2013</b> , 109, 67-71	10.7	47
208	Preparation of silica nanocomposite anion-exchange membranes with low vanadium-ion crossover for vanadium redox flow batteries. <i>Electrochimica Acta</i> , <b>2013</b> , 105, 584-592	6.7	98

207	High-performance alkaline ionomer for alkaline exchange membrane fuel cells. <i>Electrochemistry Communications</i> , <b>2013</b> , 34, 278-281	5.1	41
206	Mesoporous carbon with uniquely combined electrochemical and mass transport characteristics for polymer electrolyte membrane fuel cells. <i>RSC Advances</i> , <b>2013</b> , 3, 16-24	3.7	53
205	Highly active carbon nanotube-supported Pd electrocatalyst for oxidation of formic acid prepared by etching copper template method. <i>International Journal of Hydrogen Energy</i> , <b>2013</b> , 38, 1391-1396	6.7	12
204	Prediction of the theoretical capacity of non-aqueous lithium-air batteries. <i>Applied Energy</i> , <b>2013</b> , 109, 275-282	10.7	37
203	Fabrication of small-sized silver NPs/graphene sheets for high-quality surface-enhanced Raman scattering. <i>Journal of Colloid and Interface Science</i> , <b>2012</b> , 375, 30-4	9.3	59
202	A pseudopotential-based multiple-relaxation-time lattice Boltzmann model for multicomponent/multiphase flows. <i>Acta Mechanica Sinica/Lixue Xuebao</i> , <b>2012</b> , 28, 983-992	2	30
201	Non-precious Co3O4 nano-rod electrocatalyst for oxygen reduction reaction in anion-exchange membrane fuel cells. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 5333-5339	35.4	450
200	Comparison of different types of membrane in alkaline direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 14536-14542	6.7	63
199	Ultra-low catalyst loading cathode electrode for anion-exchange membrane fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 15334-15338	6.7	35
198	Covalent hybrid of hemin and mesoporous carbon as a high performance electrocatalyst for oxygen reduction. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 15976-15982	6.7	22
197	Synthesis and characterization of crosslinked poly (vinyl alcohol)/layered double hydroxide composite polymer membranes for alkaline direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 18425-18432	6.7	65
196	Effect of anode micro-porous layer on species crossover through the membrane of the liquid-feed direct methanol fuel cells. <i>Applied Thermal Engineering</i> , <b>2012</b> , 48, 392-401	5.8	27
195	High-potential zinclead dioxide rechargeable cells. Electrochimica Acta, 2012, 79, 117-125	6.7	26
194	Charge carriers in alkaline direct oxidation fuel cells. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 7536	35.4	55
193	Product analysis of the ethanol oxidation reaction on palladium-based catalysts in an anion-exchange membrane fuel cell environment. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 575-582	6.7	69
192	Understanding the performance degradation of anion-exchange membrane direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 4413-4421	6.7	53
191	Numerical study of the effect of the GDL structure on water crossover in a direct methanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 4422-4438	6.7	22
190	Effect of water concentration in the anode catalyst layer on the performance of direct methanol fuel cells operating with neat methanol. <i>International Journal of Hydrogen Energy</i> , <b>2012</b> , 37, 5958-5968	6.7	21

## (2010-2012)

189	Effect of the forcing term in the multiple-relaxation-time lattice Boltzmann equation on the shear stress or the strain rate tensor. <i>Physical Review E</i> , <b>2012</b> , 86, 016705	2.4	58	
188	Performance of an alkaline-acid direct ethanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 9994-9999	6.7	82	
187	A bi-functional cathode structure for alkaline-acid direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 13089-13095	6.7	56	
186	Alkaline direct oxidation fuel cell with non-platinum catalysts capable of converting glucose to electricity at high power output. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 186-190	8.9	110	
185	Effect of cathode micro-porous layer on performance of anion-exchange membrane direct ethanol fuel cells. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 1802-1807	8.9	38	
184	Recent progress in understanding of coupled heat/mass transport and electrochemical reactions in fuel cells. <i>International Journal of Energy Research</i> , <b>2011</b> , 35, 15-23	4.5	9	
183	Continuous micro liquid delivery by evaporation on a gradient-capillary microstructure surface. <i>Journal of Micromechanics and Microengineering</i> , <b>2011</b> , 21, 095004	2	1	
182	An alkaline direct ethanol fuel cell with a cation exchange membrane. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 2213	35.4	72	
181	High performance of a carbon supported ternary PdIrNi catalyst for ethanol electro-oxidation in anion-exchange membrane direct ethanol fuel cells. <i>Energy and Environmental Science</i> , <b>2011</b> , 4, 1428	35.4	89	
180	Effect of the cathode gas diffusion layer on the water transport behavior and the performance of passive direct methanol fuel cells operating with neat methanol. <i>International Journal of Heat and Mass Transfer</i> , <b>2011</b> , 54, 1132-1143	4.9	33	
179	A flow field enabling operating direct methanol fuel cells with highly concentrated methanol. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 830-838	6.7	24	
178	Characteristics of water transport through the membrane in direct methanol fuel cells operating with neat methanol. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 5644-5654	6.7	28	
177	Modeling of a passive DMFC operating with neat methanol. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 6899-6913	6.7	25	
176	A high-performance integrated electrode for anion-exchange membrane direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2011</b> , 36, 7707-7713	6.7	77	
175	Cathode flooding behaviour in alkaline direct ethanol fuel cells. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 133-139	8.9	48	
174	A novel direct ethanol fuel cell with high power density. <i>Journal of Power Sources</i> , <b>2011</b> , 196, 6219-622	28.9	87	
173	NUMERICAL INVESTIGATION OF HEAT TRANSPORT IN A DIRECT METHANOL FUEL CELL WITH ANISOTROPIC GAS DIFFUSION LAYERS. <i>Frontiers in Heat and Mass Transfer</i> , <b>2011</b> , 2,		6	
172	Density Functional Theory Studies of the Structure Sensitivity of Ethanol Oxidation on Palladium Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 10489-10497	3.8	82	

171	A microfluidic-structured flow field for passive direct methanol fuel cells operating with highly concentrated fuels. <i>Journal of Micromechanics and Microengineering</i> , <b>2010</b> , 20, 045014	2	25
170	Anion-exchange membrane direct ethanol fuel cells: Status and perspective. <i>Frontiers of Energy and Power Engineering in China</i> , <b>2010</b> , 4, 443-458		75
169	Synthesis of PdNi catalysts for the oxidation of ethanol in alkaline direct ethanol fuel cells. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 1001-1006	8.9	362
168	Synthesis of well-dispersed Pt/carbon nanotubes catalyst using dimethylformamide as a cross-link. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 1071-1075	8.9	16
167	Towards operating direct methanol fuel cells with highly concentrated fuel. <i>Journal of Power Sources</i> , <b>2010</b> , 195, 3451-3462	8.9	86
166	Poly (vinyl alcohol)/3-(trimethylammonium) propyl-functionalized silica hybrid membranes for alkaline direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 2183-2189	6.7	80
165	Performance of a direct ethylene glycol fuel cell with an Indianion-exchange membrane. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 4329-4335	6.7	120
164	Measurements of water uptake and transport properties in anion-exchange membranes.  International Journal of Hydrogen Energy, 2010, 35, 5656-5665	6.7	144
163	Stabilization of the palladium electrocatalyst with alloyed gold for ethanol oxidation. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 6490-6500	6.7	120
162	Effect of surface composition of Pt-Au alloy cathode catalyst on the performance of direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 8699-8706	6.7	75
161	Synthesis and characterization of the Au-modified Pd cathode catalyst for alkaline direct ethanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 9693-9700	6.7	103
160	Enhancement of water retention in the membrane electrode assembly for direct methanol fuel cells operating with neat methanol. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 10547-10555	6.7	46
159	Carbon supported PtRh catalysts for ethanol oxidation in alkaline direct ethanol fuel cell. <i>International Journal of Hydrogen Energy</i> , <b>2010</b> , 35, 12911-12917	6.7	79
158	Carbon-supported bimetallic PdIr catalysts for ethanol oxidation in alkaline media. <i>Electrochimica Acta</i> , <b>2010</b> , 55, 9179-9184	6.7	85
157	Mass transport phenomena in direct methanol fuel cells. <i>Progress in Energy and Combustion Science</i> , <b>2009</b> , 35, 275-292	33.6	177
156	Mechanism study of the ethanol oxidation reaction on palladium in alkaline media. <i>Electrochimica Acta</i> , <b>2009</b> , 54, 2203-2208	6.7	650
155	Numerical analysis of the electrochemical impedance spectra of the cathode of direct methanol fuel cells. <i>International Journal of Hydrogen Energy</i> , <b>2009</b> , 34, 1522-1530	6.7	12
154	Preparation and characterization of carbon-supported sub-monolayer palladium decorated gold nanoparticles for the electro-oxidation of ethanol in alkaline media. <i>Journal of Power Sources</i> , <b>2009</b> , 187, 80-84	8.9	151

### (2008-2009)

153	Performance of alkaline electrolyte-membrane-based direct ethanol fuel cells. <i>Journal of Power Sources</i> , <b>2009</b> , 187, 387-392	8.9	171
152	Numerical investigations of effect of membrane electrode assembly structure on water crossover in a liquid-feed direct methanol fuel cell. <i>Journal of Power Sources</i> , <b>2009</b> , 188, 433-446	8.9	40
151	Effect of polymer binders in anode catalyst layer on performance of alkaline direct ethanol fuel cells. <i>Journal of Power Sources</i> , <b>2009</b> , 190, 223-229	8.9	85
150	An approach for determining the liquid water distribution in a liquid-feed direct methanol fuel cell. <i>Journal of Power Sources</i> , <b>2009</b> , 190, 216-222	8.9	10
149	Effects of anode microporous layers made of carbon powder and nanotubes on water transport in direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2009</b> , 191, 304-311	8.9	53
148	Small direct methanol fuel cells with passive supply of reactants. <i>Journal of Power Sources</i> , <b>2009</b> , 191, 185-202	8.9	196
147	FUEL CELLS (DIRECT ALCOHOL FUEL CELLS   Modeling <b>2009</b> , 436-445		1
146	FUEL CELLS IDIRECT ALCOHOL FUEL CELLS   Direct Methanol Fuel Cell: Overview Performance and Operational Conditions <b>2009</b> , 381-389		6
145	FUEL CELLS IDIRECT ALCOHOL FUEL CELLS   Experimental Systems <b>2009</b> , 428-435		2
144	Facile Preparation of AuPt Alloy Nanoparticles from Organometallic Complex Precursor. <i>Chemistry of Materials</i> , <b>2008</b> , 20, 1688-1690	9.6	112
143	Synthesis of Active PlatinumBilver Alloy Electrocatalyst toward the Formic Acid Oxidation Reaction. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 17362-17367	3.8	92
142	Lattice Boltzmann Simulation of Thermal Electro-Osmotic Flows in Micro/Nanochannels. <i>Journal of Computational and Theoretical Nanoscience</i> , <b>2008</b> , 5, 236-246	0.3	9
141	A self-regulated passive fuel-feed system for passive direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2008</b> , 176, 183-190	8.9	44
140	A small mono-polar direct methanol fuel cell stack with passive operation. <i>Journal of Power Sources</i> , <b>2008</b> , 178, 118-124	8.9	78
139	A transient two-phase mass transport model for liquid feed direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2008</b> , 185, 1131-1140	8.9	36
138	Two-dimensional two-phase thermal model for passive direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2008</b> , 175, 276-287	8.9	79
137	Sulfonation of carbon-nanotube supported platinum catalysts for polymer electrolyte fuel cells. Journal of Power Sources, <b>2008</b> , 176, 9-15	8.9	89
136	Modeling of water transport through the membrane electrode assembly for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2008</b> , 178, 291-308	8.9	88

135	Stabilization of the platinum uthenium electrocatalyst against the dissolution of ruthenium with the incorporation of gold. <i>Journal of Power Sources</i> , <b>2008</b> , 185, 166-170	8.9	57
134	Modelling of coupled electron and mass transport in anisotropic proton-exchange membrane fuel cell electrodes. <i>Journal of Power Sources</i> , <b>2008</b> , 185, 765-775	8.9	26
133	Carbon supported platinumgold alloy catalyst for direct formic acid fuel cells. <i>Journal of Power Sources</i> , <b>2008</b> , 185, 857-861	8.9	88
132	Simplified model and lattice Boltzmann algorithm for microscale electro-osmotic flows and heat transfer. <i>International Journal of Heat and Mass Transfer</i> , <b>2008</b> , 51, 586-596	4.9	12
131	New DMFC Anode Structure Consisting of Platinum Nanowires Deposited into a Nafion Membrane. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 8128-8134	3.8	66
130	Discrete effects on boundary conditions for the lattice Boltzmann equation in simulating microscale gas flows. <i>Physical Review E</i> , <b>2007</b> , 76, 056704	2.4	100
129	A new flow field design for polymer electrolyte-based fuel cells. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 497-503	5.1	140
128	A novel electrode architecture for passive direct methanol fuel cells. <i>Electrochemistry Communications</i> , <b>2007</b> , 9, 718-724	5.1	92
127	A simple method for the synthesis of PtRu nanoparticles on the multi-walled carbon nanotube for the anode of a DMFC. <i>Electrochimica Acta</i> , <b>2007</b> , 52, 2649-2656	6.7	117
126	Porous current collectors for passive direct methanol fuel cells. <i>Electrochimica Acta</i> , <b>2007</b> , 52, 4317-43	3246. <sub>7</sub>	74
125	Effect of methanol crossover on the cathode behavior of a DMFC: A half-cell investigation. <i>Electrochimica Acta</i> , <b>2007</b> , 52, 5266-5271	6.7	105
124	A two-dimensional, two-phase mass transport model for liquid-feed DMFCs. <i>Electrochimica Acta</i> , <b>2007</b> , 52, 6125-6140	6.7	130
123	Microscopic characterizations of membrane electrode assemblies prepared under different hot-pressing conditions. <i>Electrochimica Acta</i> , <b>2007</b> , 53, 894-902	6.7	41
122	Simultaneous oxygen-reduction and methanol-oxidation reactions at the cathode of a DMFC: A model-based electrochemical impedance spectroscopy study. <i>Journal of Power Sources</i> , <b>2007</b> , 167, 26	5-2 <sup>8</sup> 79	32
121	Performance characterization of passive direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2007</b> , 167, 455-460	8.9	52
120	In situ measurements of water crossover through the membrane for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2007</b> , 168, 143-153	8.9	83
119	Effect of cathode gas diffusion layer on water transport and cell performance in direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2007</b> , 171, 268-274	8.9	64

## (2006-2007)

117	Two-phase, mass-transport model for direct methanol fuel cells with effect of non-equilibrium evaporation and condensation. <i>Journal of Power Sources</i> , <b>2007</b> , 174, 136-147	8.9	63
116	IMPLICIT-EXPLICIT FINITE-DIFFERENCE LATTICE BOLTZMANN METHOD FOR COMPRESSIBLE FLOWS. <i>International Journal of Modern Physics C</i> , <b>2007</b> , 18, 1961-1983	1.1	55
115	Thermal lattice Boltzmann equation for low Mach number flows: decoupling model. <i>Physical Review E</i> , <b>2007</b> , 75, 036704	2.4	184
114	Lattice Boltzmann simulation of dense gas flows in microchannels. <i>Physical Review E</i> , <b>2007</b> , 76, 016707	2.4	17
113	Diphenylsilicate-incorporated Nafion membranes for reduction of methanol crossover in direct methanol fuel cells. <i>Journal of Membrane Science</i> , <b>2006</b> , 283, 219-224	9.6	59
112	Simulation of fluid flows in the nanometer: kinetic approach and molecular dynamic simulation. <i>International Journal of Computational Fluid Dynamics</i> , <b>2006</b> , 20, 361-367	1.2	14
111	Response to Comment on Electrochemical Reactions in a DMFC under Open-Circuit Conditions [Electrochem. Solid-State Lett., 8, A52 (2005)]. <i>Electrochemical and Solid-State Letters</i> , <b>2006</b> , 9, L8		
110	Analysis of Mass Transport of Methanol at the Anode of a Direct Methanol Fuel Cell. <i>Journal of the Electrochemical Society</i> , <b>2006</b> , 153, A1358	3.9	64
109	Physical symmetry, spatial accuracy, and relaxation time of the lattice Boltzmann equation for microgas flows. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 074903	2.5	140
108	Lattice Boltzmann method for incompressible flows with large pressure gradients. <i>Physical Review E</i> , <b>2006</b> , 73, 026704	2.4	21
107	Multiwalled carbon nanotube supported PtRu for the anode of direct methanol fuel cells. <i>Journal of Physical Chemistry B</i> , <b>2006</b> , 110, 5245-52	3.4	259
106	Generalized hydrodynamic model for fluid flows: From nanoscale to macroscale. <i>Physics of Fluids</i> , <b>2006</b> , 18, 067107	4.4	28
105	Cerebral amyloid angiopathy presenting with vasculitic pathology. <i>Journal of Clinical Neuroscience</i> , <b>2006</b> , 13, 291-4	2.2	19
104	Porous Current Collectors for Passive Direct Methanol Fuel Cells <b>2006</b> , 1155		
103	Effect of anode backing layer on the cell performance of a direct methanol fuel cell. <i>Electrochimica Acta</i> , <b>2006</b> , 51, 5524-5531	6.7	52
102	A glue method for fabricating membrane electrode assemblies for direct methanol fuel cells. <i>Electrochimica Acta</i> , <b>2006</b> , 51, 6412-6418	6.7	42
101	Finite difference-based lattice Boltzmann simulation of natural convection heat transfer in a horizontal concentric annulus. <i>Computers and Fluids</i> , <b>2006</b> , 35, 1-15	2.8	41
100	The role of under-rib convection in mass transport of methanol through the serpentine flow field and its neighboring porous layer in a DMFC. <i>Electrochimica Acta</i> , <b>2006</b> , 51, 5420-5429	6.7	52

99	Effect of membrane thickness on the performance and efficiency of passive direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2006</b> , 153, 61-67	8.9	159
98	Experimental investigations of the anode flow field of a micro direct methanol fuel cell. <i>Journal of Power Sources</i> , <b>2006</b> , 155, 291-296	8.9	66
97	Development of PtRu-CeO2/C anode electrocatalyst for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2006</b> , 156, 345-354	8.9	99
96	Effect of cell orientation on the performance of passive direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2006</b> , 157, 351-357	8.9	72
95	A LATTICE BOLTZMANN MODEL FOR CONVECTION HEAT TRANSFER IN POROUS MEDIA. <i>Numerical Heat Transfer, Part B: Fundamentals,</i> <b>2005</b> , 47, 157-177	1.3	192
94	Transient Capillary Blocking in the Flow Field of a Micro-DMFC and Its Effect on Cell Performance. Journal of the Electrochemical Society, <b>2005</b> , 152, A1600	3.9	59
93	A lattice Boltzmann algorithm for electro-osmotic flows in microfluidic devices. <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 144907	3.9	66
92	Lattice Boltzmann simulation of natural convection with temperature-dependent viscosity in a porous cavity. <i>Progress in Computational Fluid Dynamics</i> , <b>2005</b> , 5, 110	0.7	49
91	In situ visualization study of CO2 gas bubble behavior in DMFC anode flow fields. <i>Journal of Power Sources</i> , <b>2005</b> , 139, 79-90	8.9	234
90	Pressure drop behavior in the anode flow field of liquid feed direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2005</b> , 142, 117-124	8.9	51
89	A natural-circulation fuel delivery system for direct methanol fuel cells. <i>Journal of Power Sources</i> , <b>2005</b> , 147, 196-202	8.9	39
88	Mathematical modeling of a passive-feed DMFC with heat transfer effect. <i>Journal of Power Sources</i> , <b>2005</b> , 152, 122-130	8.9	132
87	Methanol adsorbates on the DMFC cathode and their effect on the cell performance. <i>Journal of Electroanalytical Chemistry</i> , <b>2005</b> , 578, 105-112	4.1	41
86	The effect of methanol concentration on the performance of a passive DMFC. <i>Electrochemistry Communications</i> , <b>2005</b> , 7, 288-294	5.1	249
85	Preparation and the physical/electrochemical properties of a Pt/C nanocatalyst stabilized by citric acid for polymer electrolyte fuel cells. <i>Electrochimica Acta</i> , <b>2005</b> , 50, 1973-1983	6.7	118
84	Effect of anode flow field design on the performance of liquid feed direct methanol fuel cells. <i>Electrochimica Acta</i> , <b>2005</b> , 50, 3243-3252	6.7	137
83	Preparation and characterization of a PtRu/C nanocatalyst for direct methanol fuel cells. <i>Electrochimica Acta</i> , <b>2005</b> , 51, 754-763	6.7	209
82	An experimental study of flow and heat transfer of supercritical carbon dioxide in multi-port mini channels under cooling conditions. <i>Chemical Engineering Science</i> , <b>2005</b> , 60, 3337-3345	4.4	92

81	Effect of methanol concentration on passive DMFC performance. Fuel Cells Bulletin, 2005, 2005, 12-17	1.6	12
80	Effect of Transient Hydrogen Evolution Dxidation Reactions on the OCV of Direct Methanol Fuel Cells. <i>Electrochemical and Solid-State Letters</i> , <b>2005</b> , 8, A549		19
79	Electrolytic Hydrogen Evolution in DMFCs Induced by Oxygen Interruptions and Its Effect on Cell Performance. <i>Electrochemical and Solid-State Letters</i> , <b>2005</b> , 8, A211		32
78	Pd and Pd-Cu Alloy Deposited Nafion Membranes for Reduction of Methanol Crossover in Direct Methanol Fuel Cells. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A1390	3.9	57
77	Finite-difference-based lattice Boltzmann model for dense binary mixtures. <i>Physical Review E</i> , <b>2005</b> , 71, 026701	2.4	47
76	Simple kinetic model for fluid flows in the nanometer scale. <i>Physical Review E</i> , <b>2005</b> , 71, 035301	2.4	28
75	Temperature dependence of the velocity boundary condition for nanoscale fluid flows. <i>Physical Review E</i> , <b>2005</b> , 72, 036301	2.4	15
74	Abrupt Decline in the Open-Circuit Voltage of Direct Methanol Fuel Cells at Critical Oxygen Feed Rate. <i>Journal of the Electrochemical Society</i> , <b>2005</b> , 152, A2238	3.9	32
73	Electrochemical Reactions in a DMFC under Open-Circuit Conditions. <i>Electrochemical and Solid-State Letters</i> , <b>2005</b> , 8, A52		64
72	Thermal lattice Bhatnagar-Gross-Krook model for flows with viscous heat dissipation in the incompressible limit. <i>Physical Review E</i> , <b>2004</b> , 70, 066310	2.4	92
71	Preconditioned lattice-Boltzmann method for steady flows. <i>Physical Review E</i> , <b>2004</b> , 70, 066706	2.4	51
70	An analytical study of pulsating laminar heat convection in a circular tube with constant heat flux. <i>International Journal of Heat and Mass Transfer</i> , <b>2004</b> , 47, 5297-5301	4.9	64
69	An experimental study of flow boiling characteristics of carbon dioxide in multiport mini channels. <i>Applied Thermal Engineering</i> , <b>2004</b> , 24, 1443-1463	5.8	30
68	Addition of non-reacting gases to the anode flow field of DMFCs leading to improved performance. <i>Electrochemistry Communications</i> , <b>2004</b> , 6, 1098-1103	5.1	34
67	Gasllquid two-phase flow patterns in a miniature square channel with a gas permeable sidewall. <i>International Journal of Heat and Mass Transfer</i> , <b>2004</b> , 47, 5725-5739	4.9	25
66	Synthesis and physical/electrochemical characterization of Pt/C nanocatalyst for polymer electrolyte fuel cells. <i>Journal of Power Sources</i> , <b>2004</b> , 134, 1-6	8.9	103
65	A palladium-alloy deposited Nafion membrane for direct methanol fuel cells. <i>Journal of Membrane Science</i> , <b>2003</b> , 215, 327-336	9.6	104
64	Modeling of Taylor bubble rising in a vertical mini noncircular channel filled with a stagnant liquid.  International Journal of Multiphase Flow, <b>2003</b> , 29, 411-434	3.6	29

63	Analysis of film condensation heat transfer inside a vertical micro tube with consideration of the meniscus draining effect. <i>International Journal of Heat and Mass Transfer</i> , <b>2003</b> , 46, 4669-4679	4.9	17
62	STEADY NATURAL CONVECTION IN A TILTED LONG CYLINDRICAL ENVELOPE WITH LATERAL ADIABATIC SURFACE, PART 2: HEAT TRANSFER RATE, FLOW PATTERNS AND TEMPERATURE DISTRIBUTIONS. <i>Numerical Heat Transfer; Part A: Applications</i> , <b>2003</b> , 44, 399-431	2.3	12
61	STEADY NATURAL CONVECTION IN A TILTED LONG CYLINDRICAL ENVELOPE WITH LATERAL ADIABATIC SURFACE, PART 1: THEORETICAL MODELING AND NUMERICAL TREATMENTS.  Numerical Heat Transfer; Part A: Applications, 2003, 44, 375-397	2.3	10
60	Explicit finite-difference lattice Boltzmann method for curvilinear coordinates. <i>Physical Review E</i> , <b>2003</b> , 67, 066709	2.4	124
59	Discrete velocity and lattice Boltzmann models for binary mixtures of nonideal fluids. <i>Physical Review E</i> , <b>2003</b> , 68, 035302	2.4	39
58	Experimental investigations on boiling heat transfer inside miniature circular tubes immersed in FC-72. <i>Journal of Thermal Science</i> , <b>2002</b> , 11, 303-307	1.9	1
57	Theoretical analysis of film condensation heat transfer inside vertical mini triangular channels. <i>International Journal of Heat and Mass Transfer</i> , <b>2002</b> , 45, 2829-2842	4.9	82
56	An experimental investigation of convection heat transfer to supercritical carbon dioxide in miniature tubes. <i>International Journal of Heat and Mass Transfer</i> , <b>2002</b> , 45, 5025-5034	4.9	213
55	Rapid vaporization of subcooled liquid in a capillary structure. <i>International Journal of Heat and Mass Transfer</i> , <b>2002</b> , 45, 165-172	4.9	9
54	Measurements of Heat Transfer Coefficients From Supercritical Carbon Dioxide Flowing in Horizontal Mini/Micro Channels. <i>Journal of Heat Transfer</i> , <b>2002</b> , 124, 413-420	1.8	188
53	Thermal effects on electro-osmotic pumping of liquids in microchannels. <i>Journal of Micromechanics and Microengineering</i> , <b>2002</b> , 12, 962-970	2	36
52	A numerical investigation of laminar convection of supercritical carbon dioxide in vertical mini/micro tubes. <i>Progress in Computational Fluid Dynamics</i> , <b>2002</b> , 2, 144	0.7	29
51	Experimental Study of Evaporative Heat Transfer in Sintered Copper Bidispersed Wick Structures. Journal of Thermophysics and Heat Transfer, <b>2002</b> , 16, 547-552	1.3	54
50	Lattice Boltzmann model for incompressible flows through porous media. <i>Physical Review E</i> , <b>2002</b> , 66, 036304	2.4	431
49	Characteristics of Gas-Liquid Two-Phase Flow Patterns in Miniature Channel Having a Gas Permeable Sidewall <b>2002</b> ,		2
48	Taylor bubbles in miniaturized circular and noncircular channels. <i>International Journal of Multiphase Flow</i> , <b>2001</b> , 27, 561-570	3.6	32
47	Co-current airWater two-phase flow patterns in vertical triangular microchannels. <i>International Journal of Multiphase Flow</i> , <b>2001</b> , 27, 765-782	3.6	179
46	Forced convection in a porous medium heated by a permeable wall perpendicular to flow direction: analyses and measurements. <i>International Journal of Heat and Mass Transfer</i> , <b>2001</b> , 44, 1031-1037	4.9	29

45	A Lattice BGK Scheme with General Propagation. <i>Journal of Scientific Computing</i> , <b>2001</b> , 16, 569-585	2.3	44
44	Pressure drop characteristics of gasIlquid two-phase flow in vertical miniature triangular channels.  International Journal of Heat and Mass Transfer, 2001, 44, 2523-2534	4.9	74
43	Modelling and test of a thermally-driven phase-change nonmechanical micropump. <i>Journal of Micromechanics and Microengineering</i> , <b>2001</b> , 11, 713-719	2	37
42	Buoyancy-induced flows and phase-change heat transfer in a vertical capillary structure with symmetric heating. <i>Chemical Engineering Science</i> , <b>2000</b> , 55, 2653-2661	4-4	24
41	An extension of Darcy's law to non-Stokes flow in porous media. <i>Chemical Engineering Science</i> , <b>2000</b> , 55, 2727-2735	4.4	76
40	On capillary-driven flow and phase-change heat transfer in a porous structure heated by a finned surface: measurements and modeling. <i>International Journal of Heat and Mass Transfer</i> , <b>2000</b> , 43, 1141-1	148	86
39	A visual study of phase-change heat transfer in a two-dimensional porous structure with a partial heating boundary. <i>International Journal of Heat and Mass Transfer</i> , <b>2000</b> , 43, 1089-1102	4.9	47
38	Dynamic performance analysis of six-legged walking machines. <i>Mechanism and Machine Theory</i> , <b>2000</b> , 35, 155-163	4	12
37	A correlation of optimal heat rejection pressures in transcritical carbon dioxide cycles. <i>Applied Thermal Engineering</i> , <b>2000</b> , 20, 831-841	5.8	217
36	An experimental study of two phase flow and boiling heat transfer in bi-dispersed porous channels. <i>International Communications in Heat and Mass Transfer</i> , <b>2000</b> , 27, 293-302	5.8	70
35	Magnetic properties and microstructure of NdFeB sintered magnets by the addition of Ag powder. <i>IEEE Transactions on Magnetics</i> , <b>2000</b> , 36, 3318-3320	2	1
34	Mixed-Convection Heat Transfer in Vertical Packed Channels. <i>Journal of Thermophysics and Heat Transfer</i> , <b>1999</b> , 13, 517-521	1.3	15
33	Mixed Convective Boiling Heat Transfer in a Vertical Capillary Structure Heated Asymmetrically. Journal of Thermophysics and Heat Transfer, <b>1999</b> , 13, 302-307	1.3	19
32	Evaporative Heat Transfer in a Capillary Structure Heated by a Grooved Block. <i>Journal of Thermophysics and Heat Transfer</i> , <b>1999</b> , 13, 126-133	1.3	38
31	Influence of interfacial mass transfer and chemical reaction on breakup of low-solubility fluid jets in water. <i>International Communications in Heat and Mass Transfer</i> , <b>1999</b> , 26, 177-185	5.8	
30	GasIlquid two-phase flow regimes in rectangular channels with mini/micro gaps. <i>International Journal of Multiphase Flow</i> , <b>1999</b> , 25, 411-432	3.6	133
29	Coupled heat and mass transfer of a stagnation point flow in a heated porous bed with liquid film evaporation. <i>International Journal of Heat and Mass Transfer</i> , <b>1999</b> , 42, 861-872	4.9	12
28	Instability of condensate film and capillary blocking in small-diameter-thermosyphon condensers.  International Journal of Heat and Mass Transfer, 1999, 42, 3071-3083	4.9	36

27	Effect of FeGa/sub 3/ powder addition on the magnetic properties of NdFeB sintered magnets. <i>IEEE Transactions on Magnetics</i> , <b>1999</b> , 35, 3301-3303	2	2
26	Variations of Buoyancy-Induced Mass Flux From Single-Phase to Two-Phase Flow in a Vertical Porous Tube With Constant Heat Flux. <i>Journal of Heat Transfer</i> , <b>1999</b> , 121, 646-652	1.8	10
25	A parametric study of an indirect evaporative air cooler. <i>International Communications in Heat and Mass Transfer</i> , <b>1998</b> , 25, 217-226	5.8	41
24	A Numerical Study of Laminar Reciprocating Flow in a Pipe of Finite Length. <i>Flow, Turbulence and Combustion</i> , <b>1997</b> , 59, 11-25		8
23	Oscillatory Heat Transfer in a Pipe Subjected to a Laminar Reciprocating Flow. <i>Journal of Heat Transfer</i> , <b>1996</b> , 118, 592-597	1.8	50
22	Oscillatory pressure drops through a woven-screen packed column subjected to a cyclic flow. <i>Cryogenics</i> , <b>1996</b> , 36, 333-341	1.8	67
21	Experimental studies on the onset of turbulence and frictional losses in an oscillatory turbulent pipe flow. <i>International Journal of Heat and Fluid Flow</i> , <b>1996</b> , 17, 356-362	2.4	46
20	The friction coefficient of a fully developed laminar reciprocating flow in a circular pipe. <i>International Journal of Heat and Fluid Flow</i> , <b>1996</b> , 17, 167-172	2.4	46
19	Exchange and crystalline electric fields in Sm2Fe17N. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1995</b> , 140-144, 989-990	2.8	1
18	High-field magnetization processes in Tb2Fe17 and Er2Fe17. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1995</b> , 140-144, 1009-1010	2.8	12
17	A numerical solution of laminar forced convection in a heated pipe subjected to a reciprocating flow. <i>International Journal of Heat and Mass Transfer</i> , <b>1995</b> , 38, 3011-3022	4.9	62
16	Exchange and crystalline electric fields at R sites in R2Fe14B (R=Tb, Dy, Ho, Er, and Tm). <i>Journal of Applied Physics</i> , <b>1994</b> , 75, 3008-3012	2.5	7
15	Electronic structure of Ni-based superconducting quaternary compounds: YNi2B2X (X=B, C, N, and O). <i>Physical Review B</i> , <b>1994</b> , 50, 4030-4033	3.3	107
14	Magnetic phase transitions, magnetocrystalline anisotropy, and crystal-field interactions in the RFe11Ti series (where R=Y, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, or Tm). <i>Physical Review B</i> , <b>1993</b> , 47, 3231-3242	<u>3</u> .3	123
13	Spin reorientation and crystal field in Tm2Fe17Cx. Journal of Applied Physics, 1993, 73, 6041-6043	2.5	3
12	Anomalous anisotropy in the RCo4B compounds. <i>Journal of Applied Physics</i> , <b>1993</b> , 73, 5917-5919	2.5	22
11	Magnetocrystalline anisotropy of R2Fe14BNx (R=Pr,Nd). <i>Physical Review B</i> , <b>1992</b> , 46, 11204-11207	3.3	7
10	ac-susceptibility anomaly and magnetic anisotropy of R2Co17 compounds, with R=Y, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, Er, Tm, and Lu. <i>Physical Review B</i> , <b>1992</b> , 46, 6225-6235	3.3	45

#### LIST OF PUBLICATIONS

9	Magnetic anisotropy and crystal field in Nd2Fe14C. <i>Journal of Magnetism and Magnetic Materials</i> , <b>1992</b> , 104-107, 1347-1348	2.8	4	
8	Crystal-field effects of Sm3+ ions in Sm2Fe17Nx. <i>Physical Review B</i> , <b>1991</b> , 44, 2846-2849	3.3	11	
7	Magnetic anisotropy and exchange interaction in Gd2Fe14C and Gd2Fe14B compounds. <i>Solid State Communications</i> , <b>1990</b> , 73, 87-89	1.6	14	
6	Exchange interaction and magnetocrystalline anisotropy in R2Fe12Co2B compounds (R?Y, Gd, Nd). <i>Journal of the Less Common Metals</i> , <b>1990</b> , 160, 109-115		4	
5	Exchange interaction and magnetic anisotropy in Nd2(Fe13M)B compounds (M = Ga, Si, Al). <i>Journal of Magnetism and Magnetic Materials</i> , <b>1989</b> , 82, 327-334	2.8	15	
4	Anisotropy Energy of Nd Ion in Nd2Fe12⊠Co2 AlxB Compounds. <i>Physica Status Solidi A</i> , <b>1989</b> , 112, 175-	180	6	
3	A high-performance lithiated siliconBulfur battery enabled by fluorinated ether electrolytes. <i>Journal of Materials Chemistry A</i> ,	13	2	
2	Protonated Emeraldine Polyaniline Threaded MIL-101 as a Conductive High Surface Area Nanoporous Electrode. <i>ACS Energy Letters</i> ,3769-3779	20.1	4	
1	Honeycomb-like hierarchical porous silicon composites with dual protection for ultrastable Li-ion[battery anodes. SmartMat.	22.8	6	