Le Liu

List of Publications by Year
in descending order

92	3,182	159358 30	155451 55
papers	citations	h-index	g-index

93	93	93	2337
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electrochemical activation of graphite felt electrode for VO2+/VO2+ redox couple application. Electrochimica Acta, 2013, 89, 429-435.	2.6	300
2	Effect of degree of sulfonation and casting solvent on sulfonated poly(ether ether ketone) membrane for vanadium redox flow battery. Journal of Power Sources, 2015, 285, 195-204.	4.0	167
3	Insights into the Impact of the Nafion Membrane Pretreatment Process on Vanadium Flow Battery Performance. ACS Applied Materials & Interfaces, 2016, 8, 12228-12238.	4.0	166
4	Properties Investigation of Sulfonated Poly(ether ether ketone)/Polyacrylonitrile Acidâ€“Base Blend Membrane for Vanadium Redox Flow Battery Application. ACS Applied Materials & Interfaces, 2014, 6, 18885-18893.	4.0	162
5	CeO₂decorated graphite felt as a high-performance electrode for vanadium redox flow batteries. RSC Advances, 2014, 4, 61912-61918.	1.7	128
6	Broad temperature adaptability of vanadium redox flow batteryâ€”Part 1: Electrolyte research. Electrochimica Acta, 2016, 187, 525-534.	2.6	127
7	Holey-engineered electrodes for advanced vanadium flow batteries. Nano Energy, 2018, 43, 55-62.	8.2	127
8	Exceptional Performance of Hierarchical Niâ€“Fe (hydr)oxide@NiCu Electrocatalysts for Water Splitting. Advanced Materials, 2019, 31, e1806769.	11.1	124
9	Sulfonated Poly(Ether Ether Ketone)/Graphene composite membrane for vanadium redox flow battery. Electrochimica Acta, 2014, 132, 200-207.	2.6	120
10	Preparation and characterization of sulfonated poly(ether ether ketone)/poly(vinylidene fluoride) blend membrane for vanadium redox flow battery application. Journal of Power Sources, 2013, 237, 132-140.	4.0	94
11	Membrane evaluation for vanadium flow batteries in a temperature range of â˜’20â€“50 Â°C. Journal of Membrane Science, 2017, 522, 45-55.	4.1	90
12	Broad temperature adaptability of vanadium redox flow batteryâ€”Part 2: Cell research. Electrochimica Acta, 2016, 191, 695-704.	2.6	84
13	The benefits and limitations of electrolyte mixing in vanadium flow batteries. Applied Energy, 2017, 204, 373-381.	5.1	76
14	Reduction of capacity decay in vanadium flow batteries by an electrolyte-reflow method. Journal of Power Sources, 2017, 338, 17-25.	4.0	73
15	Characterization of sulfonated poly(ether ether ketone)/poly(vinylidene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (fluoride) Journal of Power Sources, 2014, 272, 427-435.	4.0	63
16	MiRNAâ€26b regulates the expression of cyclooxygenaseâ€2 in desferrioxamineâ€treated CNE cells. FEBS Letters, 2010, 584, 961-967.	1.3	56
17	Broad temperature adaptability of vanadium redox flow battery-Part 3: The effects of total vanadium concentration and sulfuric acid concentration. Electrochimica Acta, 2018, 259, 11-19.	2.6	56
18	State of charge monitoring for vanadium redox flow batteries by the transmission spectra of V(IV)/V(V) electrolytes. Journal of Applied Electrochemistry, 2012, 42, 1025-1031.	1.5	55

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19	Tailoring the vanadium/proton ratio of electrolytes to boost efficiency and stability of vanadium flow batteries over a wide temperature range. Applied Energy, 2021, 301, 117454.	5.1	54
20	Quantum-dots-encoded-microbeads based molecularly imprinted polymer. Biosensors and Bioelectronics, 2016, 77, 886-893.	5.3	48
21	A symmetrical optical waveguide based surface plasmon resonance biosensing system. Sensors and Actuators B: Chemical, 2013, 185, 91-96.	4.0	47
22	Carbon dots promoted vanadium flow batteries for all-climate energy storage. Chemical Communications, 2017, 53, 7565-7568.	2.2	46
23	In situ mapping of activity distribution and oxygen evolution reaction in vanadium flow batteries. Nature Communications, 2019, 10, 5286.	5.8	45
24	Electrochemical evaluation methods of vanadium flow battery electrodes. Physical Chemistry Chemical Physics, 2017, 19, 14708-14717.	1.3	43
25	Broad temperature adaptability of vanadium redox flow batteryâ€“part 4: Unraveling wide temperature promotion mechanism of bismuth for V2+/V3+ couple. Journal of Energy Chemistry, 2018, 27, 1333-1340.	7.1	41
26	Rice Paper Reinforced Sulfonated Poly(ether ether ketone) as Low-Cost Membrane for Vanadium Flow Batteries. ACS Sustainable Chemistry and Engineering, 2017, 5, 2437-2444.	3.2	39
27	Parallel scan spectral surface plasmon resonance imaging. Applied Optics, 2008, 47, 5616.	2.1	36
28	Rational use and reuse of Nafion 212 membrane in vanadium flow batteries. RSC Advances, 2017, 7, 19425-19433.	1.7	35
29	An on-line spectroscopic monitoring system for the electrolytes in vanadium redox flow batteries. RSC Advances, 2015, 5, 100235-100243.	1.7	34
30	A two-dimensional polarization interferometry based parallel scan angular surface plasmon resonance biosensor. Review of Scientific Instruments, 2011, 82, 023109.	0.6	33
31	MoS2â€“CoS2 heteronanosheet arrays coated on porous carbon microtube textile for overall water splitting. Journal of Power Sources, 2021, 514, 230580.	4.0	32
32	Bifunctional effects of halloysite nanotubes in vanadium flow battery membrane. Journal of Membrane Science, 2018, 564, 237-246.	4.1	31
33	The indefinite cycle life via a method of mixing and online electrolysis for vanadium redox flow batteries. Journal of Power Sources, 2019, 438, 226990.	4.0	31
34	Revealing sulfuric acid concentration impact on comprehensive performance of vanadium electrolytes and flow batteries. Electrochimica Acta, 2019, 303, 21-31.	2.6	30
35	Decoding of Quantum Dots Encoded Microbeads Using a Hyperspectral Fluorescence Imaging Method. Analytical Chemistry, 2015, 87, 5286-5293.	3.2	25
36	Plasmon waveguide resonance sensor using an Auâ€“MgF₂ structure. Applied Optics, 2014, 53, 6344.	0.9	23

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37	Rapid detection of the positive side reactions in vanadium flow batteries. Applied Energy, 2017, 185, 452-462.	5.1	23
38	Asymmetric vanadium flow batteries: long lifespan via an anolyte overhang strategy. Physical Chemistry Chemical Physics, 2017, 19, 29195-29203.	1.3	21
39	Quasi-Confocal, Multichannel Parallel Scan Hyperspectral Fluorescence Imaging Method Optimized for Analysis of Multicolor Microarrays. Analytical Chemistry, 2010, 82, 7752-7757.	3.2	19
40	ZIF-derived holey electrode with enhanced mass transfer and N-rich catalytic sites for high-power and long-life vanadium flow batteries. Journal of Energy Chemistry, 2022, 72, 545-553.	7.1	19
41	Line-scanning Raman imaging spectroscopy for detection of fingerprints. Applied Optics, 2012, 51, 3701.	0.9	17
42	Resolution enhancement of surface plasmon resonance sensors with spectral interrogation: resonant wavelength considerations. Applied Optics, 2016, 55, 884.	2.1	17
43	Composite layer based plasmon waveguide resonance for label-free biosensing with high figure of merit. Sensors and Actuators B: Chemical, 2018, 272, 69-78.	4.0	17
44	Optimization of angle-pixel resolution for angular plasmonic biosensors. Sensors and Actuators B: Chemical, 2019, 283, 188-197.	4.0	17
45	Real-Time Study of the Disequilibrium Transfer in Vanadium Flow Batteries at Different States of Charge via Refractive Index Detection. Journal of Physical Chemistry C, 2018, 122, 28550-28555.	1.5	15
46	Detect the Hybridization of Single-Stranded DNA by Parallel Scan Spectral Surface Plasmon Resonance Imaging. Plasmonics, 2013, 8, 1185-1191.	1.8	14
47	One-dimensional angular surface plasmon resonance imaging based array thermometer. Sensors and Actuators B: Chemical, 2015, 207, 254-261.	4.0	14
48	Temperature-Regulated Surface Plasmon Resonance Imaging System for Bioaffinity Sensing. Plasmonics, 2016, 11, 771-779.	1.8	14
49	Method of Reflow and Online Electrolysis in the Vanadium Redox Battery: Benefits and Limitations. ACS Sustainable Chemistry and Engineering, 2020, 8, 10275-10283.	3.2	13
50	Parallel Structural Join Algorithm on Shared-Memory Multi-Core Systems. , 2008, , .		12
51	Non-scan and real-time multichannel angular surface plasmon resonance imaging method. Applied Optics, 2014, 53, 6037.	0.9	12
52	A Waveguide-Coupled Surface Plasmon Resonance Sensor Using an Au-MgF2-Au Structure. Plasmonics, 2019, 14, 187-195.	1.8	12
53	Temperature-Insensitive Label-Free Sensors for Human IgG Based on S-Tapered Optical Fiber Sensors. IEEE Access, 2021, 9, 116286-116293.	2.6	12
54	Online Spectroscopic Study on the Positive and the Negative Electrolytes in Vanadium Redox Flow Batteries. Journal of Spectroscopy, 2013, 2013, 1-8.	0.6	11

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55	Parallel-scan based microarray imager capable of simultaneous surface plasmon resonance and hyperspectral fluorescence imaging. Biosensors and Bioelectronics, 2011, 30, 180-187.	5.3	10
56	Polarization interference interrogation of angular surface plasmon resonance sensors with wide metal film thickness tolerance. Sensors and Actuators B: Chemical, 2012, 173, 218-224.	4.0	10
57	The detection method for small molecules coupled with a molecularly imprinted polymer/quantum dot chip using a home-built optical system. Analytical and Bioanalytical Chemistry, 2016, 408, 5261-5268.	1.9	10
58	Self-Referenced Plasmon Waveguide Resonance Sensor Using Different Waveguide Modes. Journal of Sensors, 2015, 2015, 1-10.	0.6	9
59	Boosting the thermal stability of electrolytes in vanadium redox flow batteries via 1-hydroxyethane-1,1-diphosphonic acid. Journal of Applied Electrochemistry, 2020, 50, 255-264.	1.5	9
60	An Efficient Parallel PathStack Algorithm for Processing XML Twig Queries on Multi-core Systems. Lecture Notes in Computer Science, 2010, , 277-291.	1.0	9
61	Two-channel, quasi-confocal parallel scan fluorescence imaging for detection of biochips. Optics and Lasers in Engineering, 2010, 48, 849-855.	2.0	7
62	Study on the Despeckle Methods in Angular Surface Plasmon Resonance Imaging Sensors. Plasmonics, 2015, 10, 729-737.	1.8	7
63	A low-cost average valence detector for mixed electrolytes in vanadium flow batteries. RSC Advances, 2018, 8, 20773-20780.	1.7	7
64	An Optimized Angular Total Internal Reflection Sensor With High Resolution in Vanadium Flow Batteries. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3170-3178.	2.4	7
65	Imaging Sensor for the Detection of the Flow Battery Via Weak Value Amplification. Analytical Chemistry, 2021, 93, 12914-12920.	3.2	7
66	Detection of methane by a surface plasmon resonance sensor based on polarization interferometry and angle modulation. Optics and Lasers in Engineering, 2010, 48, 1182-1185.	2.0	6
67	MgF2â€“Auâ€“MgF2-polydopamine based surface plasmon resonance sensor and its application in biomedical systems. Analytical Methods, 2013, 5, 6306.	1.3	6
68	Noninvasive and Real-Time Plasmon Waveguide Resonance Thermometry. Sensors, 2015, 15, 8481-8498.	2.1	6
69	Characterizing the Onset Potential Distribution of Pt/C Catalyst Deposition by a Total Internal Reflection Imaging Method. Small, 2021, 17, e2102407.	5.2	6
70	Line-Monitoring, Hyperspectral Fluorescence Setup for Simultaneous Multi-Analyte Biosensing

. Sensors, 2011, 11, 10038-10047. | 2.1 | 5 |
| 71 | Polarization-interferometry-based wavelength-interrogation surface plasmon resonance imager for analysis of microarrays. Journal of Biomedical Optics, 2012, 17, 036002. | 1.4 | 5 |
| 72 | Multi-Channel Hyperspectral Fluorescence Detection Excited by Coupled Plasmon-Waveguide Resonance. Sensors, 2013, 13, 13892-13902. | 2.1 | 5 |

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73	An amplitude modulation fluorometric method for phytoplankton classified measure. Optik, 2014, 125, 2661-2664.	1.4	5
74	Study on Trace Sample of Chronic Skin Ulcer with a Symmetrical Optical Waveguide-Based Surface Plasmon Resonance Biosensor. Plasmonics, 2015, 10, 1631-1637.	1.8	5
75	Parallel scan hyperspectral fluorescence imaging system and biomedical application for microarrays. Journal of Physics: Conference Series, 2011, 277, 012023.	0.3	3
76	Specific detection of glucose by an optical weak measurement sensor. Biomedical Optics Express, 2021, 12, 5128.	1.5	3
77	In situ detection of electrochemical reaction by weak measurement. Optics Express, 2021, 29, 19292.	1.7	3
78	Efficient and Durable Cu₃P-FeP for Hydrogen Evolution from Seawater with Current Density Exceeding 1 A cm^{â€“2}. ACS Applied Energy Materials, 2022, 5, 2909-2917.	2.5	3
79	Study on the SPR responses of various DNA probe concentrations by parallel scan spectral SPR imaging. , 2008, , .		2
80	Experimental study of the optimal metal film for surface plasmon resonance. , 2009, , .		2
81	Experimental study on the influence of the metal film thickness on surface plasmon resonance biosensors. Proceedings of SPIE, 2009, , .	0.8	2
82	A BIOSENSOR USING COUPLED PLASMON WAVEGUIDE RESONANCE COMBINED WITH HYPERSPECTRAL FLUORESCENCE ANALYSIS. Journal of Innovative Optical Health Sciences, 2014, 07, 1450017.	0.5	1
83	A saccharides sensor developed by symmetrical optical waveguide-based surface plasmon resonance. Journal of Innovative Optical Health Sciences, 2015, 08, 1550003.	0.5	1
84	High-Throughput Chiral Molecule Determination Based on Multi-Channel Weak Measurement. IEEE Photonics Journal, 2021, 13, 1-12.	1.0	1
85	SPR sensor based on phase modulation and polarization interferometry. , 2006, , .		0
86	Study on conditions of DNA immobilization by surface plasmon resonance imaging. Proceedings of SPIE, 2009, , .	0.8	0
87	A comparison study of microarrays by fluorescence imaging and surface plasmon resonance imaging. Proceedings of SPIE, 2009, , .	0.8	0
88	A new parallel scan spectral SPR 2D sensing system. Proceedings of SPIE, 2009, , .	0.8	0
89	Immobilization of human papillomavirus DNA probe for surface plasmon resonance imaging. Proceedings of SPIE, 2009, , .	0.8	0
90	A fiber-based fluorometric system for in situ algal classification. Optics and Laser Technology, 2016, 76, 121-126.	2.2	0

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91	Optimization of the Weak Measurement System by Determining the Optimal Total Phase Difference. IEEE Photonics Journal, 2021, 13, 1-8.	1.0	0
92	Demonstration of a New Characterization Method for Weak Measurement. Frontiers in Chemistry, 2022, 10, .	1.8	0