## Weicong Xu

## List of Publications by Year in descending order

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Version: 2024-02-01

130	4,471	33	62
papers	citations	h-index	g-index
131	131	131	3805
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	MoS2@Ti3C2 nanohybrid-based photoelectrochemical biosensor: A platform for ultrasensitive detection of cancer biomarker exosomal miRNA. Talanta, 2022, 238, 123077.	5.5	22
2	Treadmill Exercise Prevents Decline in Spatial Learning and Memory in 3×Tg-AD Mice through Enhancement of Structural Synaptic Plasticity of the Hippocampus and Prefrontal Cortex. Cells, 2022, 11, 244.	4.1	30
3	Nonlinear Dynamic Characteristics of Rod Fastening Rotor with Preload Relaxation. Energies, 2022, 15, 1052.	3.1	3
4	Review on Applications of Zeotropic Mixtures. Journal of Thermal Science, 2022, 31, 285-307.	1.9	17
5	The response surface optimization of $\langle i \rangle \hat{l}^2 \langle j \rangle$ -mannanase produced by $\langle i \rangle$ Weissella cibaria $\langle j \rangle$ F1 and its potential in juice clarification. Preparative Biochemistry and Biotechnology, 2022, 52, 1151-1159.	1.9	2
6	Numerical simulation on constituent separation and mass transfer of binary zeotropic mixtures in a branching T-junction. International Journal of Refrigeration, 2022, 135, 198-207.	3.4	5
7	Energy quality and energy grade: concepts, applications and prospects. , 2022, 1, .		1
8	Nonlinear Dynamic Characteristics of Multidisk Rod Fastening Rotor with Axial Unbalance Mass Distribution. Shock and Vibration, 2022, 2022, 1-14.	0.6	2
9	Diamond in the rough: Polishing waste polyethylene terephthalate into activated carbon for CO2 capture. Science of the Total Environment, 2022, 834, 155262.	8.0	4
10	Direct investigations of the electrical conductivity of normal and cancer breast cells by conductive atomic force microscopy. Ultramicroscopy, 2022, 237, 113531.	1.9	7
11	Synthesis of waste heat recovery using solar organic Rankine cycle in the separation of benzene/toluene/p-xylene process. Energy, 2022, 255, 124443.	8.8	5
12	Progress and prospect of flow phenomena and simulation on two-phase separation in branching T-junctions: A review. Renewable and Sustainable Energy Reviews, 2022, 167, 112742.	16.4	7
13	Thermodynamic carbon pump 2.0: Elucidating energy efficiency through the thermodynamic cycle. Energy, 2021, 215, 119155.	8.8	4
14	Molecular dynamics investigation on the composition separation of binary organic mixture in a double-walled T-shaped carbon nanotube separator. Journal of Molecular Liquids, 2021, 321, 114498.	4.9	1
15	The Thermodynamicsâ€Based Benchmarking Analysis on Energyâ€Efficiency Performance of CO <sub>2</sub> Capture Technology: Temperature Swing Adsorption as Case Study. Energy Technology, 2021, 9, 2170013.	3 <b>.</b> 8	1
16	Discussion on the Mechanism of Source Integration between Solar Energy and Biomass Energy with Similar Grades. Journal of Thermal Science, 2021, 30, 1607-1613.	1.9	0
17	<i>Bifidobacterium dentium</i> N8 with potential probiotic characteristics prevents LPS-induced intestinal barrier injury by alleviating the inflammatory response and regulating the tight junction in Caco-2 cell monolayers. Food and Function, 2021, 12, 7171-7184.	4.6	31
18	Urolithin A ameliorates experimental autoimmune encephalomyelitis by targeting aryl hydrocarbon receptor. EBioMedicine, 2021, 64, 103227.	6.1	39

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19	Prevalence and influencing factors of depression of caregivers in children with epilepsy in southwestern China: a cross-sectional study. Medicine (United States), 2021, 100, e23571.	1.0	6
20	Twist-angle-dependent thermal conduction in single-crystalline bilayer graphene. Applied Physics Letters, 2021, $118,\ldots$	3.3	24
21	Simulation study on phase separation and pressure distribution of refrigerant in horizontal double T-junctions. International Journal of Refrigeration, 2021, 126, 88-98.	3.4	4
22	A cycle research methodology for thermo-chemical engines: From ideal cycle to case study. Energy, 2021, 228, 120599.	8.8	9
23	Is zeotropic working fluid a promising option for organic Rankine cycle: A quantitative evaluation based on literature data. Renewable and Sustainable Energy Reviews, 2021, 148, 111267.	16.4	37
24	The flexible programming of thermodynamic cycles: Application of supercritical carbon dioxide Brayton cycles. Energy Conversion and Management, 2021, 245, 114624.	9.2	4
25	A review on biomass-derived CO2 adsorption capture: Adsorbent, adsorber, adsorption, and advice. Renewable and Sustainable Energy Reviews, 2021, 152, 111708.	16.4	47
26	A high-throughput computational screening of potential adsorbents for a thermal compression CO <sub>2</sub> Brayton cycle. Sustainable Energy and Fuels, 2021, 5, 1415-1428.	4.9	3
27	Identification, Characterization, and Antioxidant Potential of Bifidobacterium longum subsp. longum Strains Isolated From Feces of Healthy Infants. Frontiers in Microbiology, 2021, 12, 756519.	3.5	11
28	Ratiometric Fluorescent Biosensor Based on Forster Resonance Energy Transfer between Carbon Dots and Acridine Orange for miRNA Analysis. ACS Omega, 2021, 6, 34150-34159.	3.5	16
29	A graphic analysis method of electrochemical systems for low-grade heat harvesting from a perspective of thermodynamic cycles. Energy, 2020, 191, 116547.	8.8	22
30	Vapor–Liquid Equilibrium Prediction of Refrigerant Mixtures with Peng–Robinson Equation of State and Binary Interaction Parameters Calculated Through Group Contribution Model. International Journal of Thermophysics, 2020, 41, 1.	2.1	7
31	How to express the adsorbed CO2 with the Gibbs' thermodynamic graphical method: A preliminary study. Energy, 2020, 193, 116753.	8.8	4
32	State-of-art of impacting T-junction: Phase separation, constituent separation and applications. International Journal of Heat and Mass Transfer, 2020, 148, 119067.	4.8	17
33	Understanding the 3D construction method of thermodynamic cycle: Insights from limiting performance of pure working fluid. Energy Conversion and Management, 2020, 224, 113364.	9.2	9
34	A new electrochemical method for simultaneous removal of Mn2+and NH4+-N in wastewater with Cu plate as cathode. Ecotoxicology and Environmental Safety, 2020, 206, 111341.	6.0	8
35	Understanding the effect of H <sub>2</sub> 0 on CO <sub>2</sub> adsorption capture: mechanism explanation, quantitative approach and application. Sustainable Energy and Fuels, 2020, 4, 5970-5986.	4.9	20
36	Performance analysis of solar-assisted CO2 adsorption capture system based on dynamic simulation. Solar Energy, 2020, 209, 628-645.	6.1	13

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37	Exploring a potential application of hydrate separation for composition adjustable combined cooling and power system. Applied Energy, 2020, 268, 115064.	10.1	13
38	Non-equilibrium thermodynamic analysis of adsorption carbon capture: Contributors, mechanisms and verification of entropy generation. Energy, 2020, 208, 118348.	8.8	8
39	From 1 to N: A computer-aided case study of thermodynamic cycle construction based on thermodynamic process combination. Energy, 2020, 210, 118553.	8.8	5
40	Distinct Effects of Milks From Various Animal Types on Infant Fecal Microbiota Through in vitro Fermentations. Frontiers in Microbiology, 2020, 11, 580931.	3.5	4
41	Transcritical carbon dioxide power cycle for waste heat recovery: A roadmap analysis from ideal cycle to real cycle with case implementation. Energy Conversion and Management, 2020, 226, 113578.	9.2	22
42	Valorization of waste polyethylene terephthalate plastic into N-doped microporous carbon for CO2 capture through a one-pot synthesis. Journal of Hazardous Materials, 2020, 399, 123010.	12.4	85
43	Separation of binary organic mixture in T-shaped carbon nanotube separator: Insights from molecular dynamics simulation. Journal of Molecular Liquids, 2020, 312, 113371.	4.9	7
44	Understanding transport and separation of organic mixed working fluids in T-junction from multi-scale insights: Literature review and case study. International Journal of Heat and Mass Transfer, 2020, 154, 119702.	4.8	12
45	Intelligent collaborative attainment of structure configuration and fluid selection for the Organic Rankine cycle. Applied Energy, 2020, 264, 114743.	10.1	19
46	Application of machine learning into organic Rankine cycle for prediction and optimization of thermal and exergy efficiency. Energy Conversion and Management, 2020, 210, 112700.	9.2	47
47	Towards novel low temperature thermodynamic cycle: A critical review originated from organic Rankine cycle. Applied Energy, 2020, 270, 115186.	10.1	40
48	State-of-art of branching T-junction: Experiments, modeling, developing prospects and applications. Experimental Thermal and Fluid Science, 2019, 109, 109895.	2.7	26
49	Application of the Thermodynamic Cycle to Assess the Energy Efficiency of Amine-Based Absorption of Carbon Capture. Energies, 2019, 12, 2504.	3.1	10
50	Effect of Nanobubble Evolution on Hydrate Process: A Review. Journal of Thermal Science, 2019, 28, 948-961.	1.9	34
51	A comprehensive performance evaluation of temperature swing adsorption for post-combustion carbon dioxide capture. Renewable and Sustainable Energy Reviews, 2019, 114, 109285.	16.4	57
52	Performance Analysis on a Power and Ejector-Refrigeration System and the Involved Ejector. Frontiers in Energy Research, 2019, 7, .	2.3	3
53	Ultrasensitive Detection of Exosomes by Target-Triggered Three-Dimensional DNA Walking Machine and Exonuclease III-Assisted Electrochemical Ratiometric Biosensing. Analytical Chemistry, 2019, 91, 14773-14779.	6.5	133
54	Molecular Simulation Studies on Vapor-Liquid Equilibria and Thermal Decomposition of Working Fluids – A Review. Energy Procedia, 2019, 158, 5263-5268.	1.8	1

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55	Identification of key affecting parameters of zeotropic working fluid on subcritical organic Rankine cycle according limiting thermodynamic cycle. Energy Conversion and Management, 2019, 197, 111884.	9.2	15
56	How to give a full play to the advantages of zeotropic working fluids in organic Rankine cycle (ORC). Energy Procedia, 2019, 158, 1591-1597.	1.8	11
57	Thermodynamic exploration of temperature vacuum swing adsorption for direct air capture of carbon dioxide in buildings. Energy Conversion and Management, 2019, 183, 418-426.	9.2	44
58	Performance evaluation on solar box cooker with reflector tracking at optimal angle under Bahir Dar climate. Solar Energy, 2019, 180, 664-677.	6.1	39
59	Molecular dynamics study on transport properties of supercritical working fluids: Literature review and case study. Applied Energy, 2019, 250, 63-80.	10.1	29
60	Performance analysis on novel thermodynamic cycle under the guidance of 3D construction method. Applied Energy, 2019, 250, 478-492.	10.1	22
61	Entropy analysis on energy-consumption process and improvement method of temperature/vacuum swing adsorption (TVSA) cycle. Energy, 2019, 179, 876-889.	8.8	18
62	Dynamic test and verification of model-guided ORC system. Energy Conversion and Management, 2019, 186, 349-367.	9.2	25
63	Entropy Analysis of Temperature Swing Adsorption for CO2 Capture Using the Computational Fluid Dynamics (CFD) Method. Entropy, 2019, 21, 285.	2.2	5
64	Aerobic exercise regulates synaptic transmission and reactive oxygen species production in the paraventricular nucleus of spontaneously hypertensive rats. Brain Research, 2019, 1712, 82-92.	2.2	11
65	Comparative analysis of thermodynamic theoretical models for energy consumption of CO2 capture. Journal of Zhejiang University: Science A, 2019, 20, 882-892.	2.4	4
66	Energy dissipation evaluation of temperature swing adsorption (TSA) cycle based on thermodynamic entropy insights. Scientific Reports, 2019, 9, 16599.	3.3	2
67	Error analysis of ORC performance calculation based on the Helmholtz equation with different binary interaction parameters of mixture. Energy, 2019, 166, 414-425.	8.8	6
68	Screening for Potential Novel Probiotics With Dipeptidyl Peptidase IV-Inhibiting Activity for Type 2 Diabetes Attenuation in vitro and in vivo. Frontiers in Microbiology, 2019, 10, 2855.	3.5	41
69	A preliminary approach to the 3D construction of thermodynamic cycle based on zeotropic working fluids. Chinese Science Bulletin, 2019, 64, 206-214.	0.7	1
70	Mathematical modeling and numerical investigation of carbon capture by adsorption: Literature review and case study. Applied Energy, 2018, 221, 437-449.	10.1	56
71	How to approach Carnot cycle via zeotropic working fluid: Research methodology and case study. Energy, 2018, 144, 576-586.	8.8	49
72	Optimization and multi-time scale modeling of pilot solar driven polygeneration system based on organic Rankine cycle. Applied Energy, 2018, 222, 396-409.	10.1	18

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73	Thermodynamic performance comparison of Organic Rankine Cycle between zeotropic mixtures and pure fluids under open heat source. Energy Conversion and Management, 2018, 165, 720-737.	9.2	48
74	Thermodynamic research of adsorbent materials on energy efficiency of vacuum-pressure swing adsorption cycle for CO2 capture. Applied Thermal Engineering, 2018, 128, 818-829.	6.0	50
75	Solar driven ORC-based CCHP: Comparative performance analysis between sequential and parallel system configurations. Applied Thermal Engineering, 2018, 131, 696-706.	6.0	59
76	A limiting efficiency of subcritical Organic Rankine cycle under the constraint of working fluids. Energy, 2018, 143, 458-466.	8.8	26
77	Analysis of pressure drop in T-junction and its effect on thermodynamic cycle efficiency. Applied Energy, 2018, 231, 468-480.	10.1	12
78	ADMM-Based Optimal Power Control for Cognitive Satellite Terrestrial Uplink Networks. IEEE Access, 2018, 6, 64757-64765.	4.2	15
79	Evaluating the Safety of Potential Probiotic Enterococcus durans KLDS6.0930 Using Whole Genome Sequencing and Oral Toxicity Study. Frontiers in Microbiology, 2018, 9, 1943.	3.5	48
80	Methodology for determining the design radiation for a PTC heating system based on non-guaranteed days. Solar Energy, 2018, 174, 97-107.	6.1	4
81	A review of molecular simulation applied in vapor-liquid equilibria (VLE) estimation of thermodynamic cycles. Journal of Molecular Liquids, 2018, 264, 652-674.	4.9	17
82	How to quantitatively describe the role of the pure working fluids in subcritical organic Rankine cycle: A limitation on efficiency. Energy Conversion and Management, 2018, 172, 316-327.	9.2	24
83	E platinum, a newly synthesized platinum compound, induces apoptosis through ROS-triggered ER stress in gastric carcinoma cells. Molecular Carcinogenesis, 2017, 56, 218-231.	2.7	20
84	Novel experimental research on the compression process in organic Rankine cycle (ORC). Energy Conversion and Management, 2017, 137, 1-11.	9.2	35
85	Hierarchical porous NiCo <sub>2</sub> O <sub>4</sub> nanosheet arrays directly grown on carbon cloth with superior lithium storage performance. Dalton Transactions, 2017, 46, 4717-4723.	3.3	32
86	A comparative study on CO2 capture performance of vacuum-pressure swing adsorption and pressure-temperature swing adsorption based on carbon pump cycle. Energy, 2017, 137, 495-509.	8.8	63
87	Super-stable non-woven fabric-based membrane as a high-efficiency oil/water separator in full pH range. RSC Advances, 2017, 7, 19764-19770.	3.6	25
88	Performance analysis of temperature swing adsorption for CO 2 capture using thermodynamic properties of adsorbed phase. Applied Thermal Engineering, 2017, 123, 205-215.	6.0	28
89	Group contribution methods in thermodynamic cycles: Physical properties estimation of pure working fluids. Renewable and Sustainable Energy Reviews, 2017, 79, 984-1001.	16.4	31
90	A literature research on feasible application of mixed working fluid in flexible distributed energy system. Energy, 2017, 137, 377-390.	8.8	24

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91	New knowledge on the temperature-entropy saturation boundary slope of working fluids. Energy, 2017, 119, 211-217.	8.8	12
92	Experimental study and energy-efficiency evaluation of a 4-step pressure-vacuum swing adsorption (PVSA) for CO 2 capture. Energy Conversion and Management, 2017, 151, 179-189.	9.2	30
93	Evolution of bubbles in decomposition and replacement process of methane hydrate. Molecular Simulation, 2017, 43, 1061-1073.	2.0	17
94	Simultaneous working fluids design and cycle optimization for Organic Rankine cycle using group contribution model. Applied Energy, 2017, 202, 618-627.	10.1	54
95	A critical review of the models used to estimate solar radiation. Renewable and Sustainable Energy Reviews, 2017, 70, 314-329.	16.4	192
96	Carbon pump: Fundamental theory and applications. Energy, 2017, 119, 1131-1143.	8.8	73
97	Safety Assessment of Lactobacillus helveticus KLDS1.8701 Based on Whole Genome Sequencing and Oral Toxicity Studies. Toxins, 2017, 9, 301.	3.4	26
98	Oroxylin A inhibits invasion and migration through suppressing ERK/GSKâ€3β signaling in snailâ€expressing nonâ€smallâ€eell lung cancer cells. Molecular Carcinogenesis, 2016, 55, 2121-2134.	2.7	32
99	Experimental research on the influence of system parameters on the composition shift for zeotropic mixture (isobutane/pentane) in a system occurring phase change. Energy Conversion and Management, 2016, 113, 1-15.	9.2	27
100	Experimental study on two-phase separation performance of impacting T-junction. International Journal of Multiphase Flow, 2016, 83, 172-182.	3.4	31
101	Graphene-like nanocomposites anchored by Ni <sub>3</sub> S <sub>2</sub> slices for Li-ion storage. RSC Advances, 2016, 6, 48083-48088.	3.6	23
102	Spontaneous Speech Emotion Recognition via Multiple Kernel Learning. , 2016, , .		3
103	An Overview of 200 kW Solar Power Plant Based on Organic Rankine Cycle. Energy Procedia, 2016, 88, 356-362.	1.8	10
104	Experimental study on the distribution of constituents of binary zeotropic mixtures in vertical impacting T-junction. International Journal of Heat and Mass Transfer, 2016, 97, 242-252.	4.8	21
105	Oroxyloside prevents dextran sulfate sodium-induced experimental colitis in mice by inhibiting NF-κB pathway through PPARγ activation. Biochemical Pharmacology, 2016, 106, 70-81.	4.4	59
106	Analysis of a novel combined power and ejector-refrigeration cycle. Energy Conversion and Management, 2016, 108, 266-274.	9.2	79
107	Role of TERRA in the Regulation of Telomere Length. International Journal of Biological Sciences, 2015, 11, 316-323.	6.4	70
108	The feasibility of using vapor expander to recover the expansion work in two-stage heat pumps with a large temperature lift. International Journal of Refrigeration, 2015, 56, 15-27.	3.4	22

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109	The overexpression and nuclear translocation of Trx-1 during hypoxia confers on HepG2 cells resistance to DDP, and GL-V9 reverses the resistance by suppressing the Trx-1/Ref-1 axis. Free Radical Biology and Medicine, 2015, 82, 29-41.	2.9	35
110	Theoretical analysis of a combined power and ejector refrigeration cycle using zeotropic mixture. Applied Energy, 2015, 160, 912-919.	10.1	57
111	Trends in patents for solar thermal utilization in China. Renewable and Sustainable Energy Reviews, 2015, 52, 852-862.	16.4	24
112	Selection of bisphenol A – single-chain antibodies from a non-immunized mouse library by ribosome display. Analytical Biochemistry, 2015, 488, 59-64.	2.4	7
113	LFG-500 Inhibits the Invasion of Cancer Cells via Down-Regulation of PI3K/AKT/NF-κB Signaling Pathway. PLoS ONE, 2014, 9, e91332.	2.5	27
114	The influence of composition shift on organic Rankine cycle (ORC) with zeotropic mixtures. Energy Conversion and Management, 2014, 83, 203-211.	9.2	64
115	Thermodynamic analysis of organic Rankine cycle using zeotropic mixtures. Applied Energy, 2014, 130, 748-756.	10.1	110
116	Experimental investigation on heat loss of semi-spherical cavity receiver. Energy Conversion and Management, 2014, 87, 576-583.	9.2	40
117	A thermodynamic analysis of an auto-cascade heat pump cycle for heating application in cold regions. Energy and Buildings, 2014, 82, 621-631.	6.7	63
118	Inhibition of Notch1 increases paclitaxel sensitivity to human breast cancer. Chinese Medical Journal, 2014, 127, 442-7.	2.3	3
119	Theoretical and experimental investigations on the changing regularity of the extreme point of the temperature difference between zeotropic mixtures and heat transfer fluid. Energy, 2013, 55, 541-552.	8.8	21
120	A review of working fluid and expander selections for organic Rankine cycle. Renewable and Sustainable Energy Reviews, 2013, 24, 325-342.	16.4	1,061
121	Hydrogenation of Dimethyl Oxalate Using Extruded Cu/SiO <sub>2</sub> Catalysts: Mechanical Strength and Catalytic Performance. Industrial & Engineering Chemistry Research, 2012, 51, 13935-13943.	3.7	39
122	The role of filler network in nonlinear viscoelastic behavior of vapor grown carbon nanofiber filled polystyrene: A strain dependent rheological behavior and electrical conductivity study. Polymer Engineering and Science, 2012, 52, 643-648.	3.1	5
123	Hydrogenation of dimethyl oxalate to ethylene glycol on a Cu/SiO <sub>2</sub> /cordierite monolithic catalyst: Enhanced internal mass transfer and stability. AICHE Journal, 2012, 58, 2798-2809.	3.6	125
124	Evolution and expression analysis of the $\hat{l}^2$ -glucosidase (GLU) encoding gene subfamily in maize. Genes and Genomics, 2012, 34, 179-187.	1.4	12
125	An efficient edge-based bilateral filter for restoring real noisy image. IEEE Transactions on Consumer Electronics, 2011, 57, 682-686.	3.6	12
126	Automatic recognition of speech emotion using Shuffled Frog Leaping Algorithm. , 2010, , .		0

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127	Nitrogen Distribution and Potential Mobility in Sediments of Three Typical Shallow Urban Lakes in China. Environmental Engineering Science, 2009, 26, 1511-1521.	1.6	16
128	From Good to Bad Ones: Making Spam Detection Easier., 2008,,.		5
129	Formation of β-iPP in isotactic polypropylene/ethylene–propylene rubber blends: Effects of preparation method, composition, and thermal condition. Journal of Polymer Science, Part B: Polymer Physics, 2007, 45, 1704-1712.	2.1	8
130	Expression and homology modeling of sterol 14α-demethylase from <i>Penicillium digitatum</i> Microbiology Letters, 2007, 277, 37-43.	1.8	31