2019 年度代表性文章

序号	论文名称	发表刊物	影响因子	所属学部	第一作者/通讯作者
1	Using wavelet transform to analyse on-road mobile measurements of air pollutants: a case study to evaluate vehicle emission control policies during the 2014 APEC summit	Atmospheric Chemistry And Physics	5.668	环境技术部	Yingruo Li/ Tong Zhu
2	Enhanced aqueous-phase formation of secondary organic aerosols due to the regional biomass burning over North China Plain	Environmental Pollution	5.714	环境技术部	Jiayuan Wang/ Gehui Wang
3	Relative humidity and O-3 concentration as two prerequisites for sulfate formation	Atmospheric Chemistry And Physics	5.668	环境技术部	Yanhua Fang/Tong Zhu
4	Characterising low-cost sensors in highly portable platforms to quantify personal exposure in diverse environments	Atmospheric Measurement Techniques	3.4	环境技术部	Lia Chatzidiakou /Tong Zhu
5	Molecular characteristics and diurnal variations of organic aerosols at a rural site in the North China Plain with implications for the influence of regional biomass burning	Atmospheric Chemistry And Physics	5.668	环境技术部	Jianjun Li,/ Gehui Wang
6	Change in the number of $PM_{2.5}$-attributed deaths in China from 2000 to 2010: Comparison between estimations from census-based epidemiology and pre-established exposure-response functions	Environment International	7.943	环境技术部	Tao Xue/Tong Zhu
7	Susceptibility of prediabetes to the health effect of air pollution: a community-based panel study with a nested case-control design	Environmental Health	4.43	环境技术部	Yiqun Han/Tong Zhu
8	Declines in mental health associated with air pollution and temperature variability in China	Nature Communications	11.878	环境技术部	Tao Xue/ Zhu, Tong
9	Association between pregnancy loss and ambient $PM2_{.5}$ using survey data in Africa: a longitudinal case-control study, 1998-2016	The Lancet. Planetary health		环境技术部	Tao Xue/ Tong Zhu
10	Ammonia emission control in China would mitigate haze pollution and nitrogen deposition, but worsen acid rain	Proceedings of the National Academy of Sciences	9.58	环境技术部	Mingxu Liu/Tong Zhu
11	Different metrics (number, surface area, and volume concentration) of urban particles with varying sizes in relation to fractional exhaled	Journal of Thoracic Disease	2.027	环境技术部	Jicheng Gong/ Tong Zhu

	nitric oxide (FeNO)				
12	Health effects of air pollution: what we need to know and to do in the next decade	Journal of Thoracic Disease	2.027	环境技术部	Junfeng Zhang/ Tong Zhu
13	Modifications of autophagy influenced the Alzheimer-like changes in SH-SYSY cells promoted by ultrafine black carbon	Environmental Pollution	5.714	环境技术部	Shang Yu /Tong Zhu
14	Acute and chronic effects of ambient fine particulate matter on preterm births in Beijing, China: A time-series model	Science of The Total Environment	5.589	环境技术部	Tianjia Guan/Tong Zhu
15	Characterization of saccharides and associated usage in determining biogenic and biomass burning aerosols in atmospheric fine particulate matter in the North China Plain	Science of The Total Environment	5.589	环境技术部	Caiqing Yan/Tong Zhu
16	Potentially Important Contribution of Gas-Phase Oxidation of Naphthalene and Methylnaphthalene to Secondary Organic Aerosol during Haze Events in Beijing	Environmental Science & Technology	7.149	环境技术部	Guancong Huang/ Tong Zhu
17	Spatiotemporal continuous estimates of $PM_{2.5}$ concentrations in China, 2000-2016: A machine learning method with inputs from satellites, chemical transport model, and ground observations	Environment International	7.943	环境技术部	Tao Xue/ Tong Zhu
18	Oxidative Potential by $PM_{2.5}$ in the North China Plain: Generation of Hydroxyl Radical	Environmental Science & Technology	7.149	环境技术部	Xiaoying Li /Tong Zhu
19	A coupled thermo - chemo - mechanical reduced - order multiscale model for predicting process - induced distortions, residual stresses and strength	International Journal for Numerical Methods in Engineering	2.746	先进制造部	Zifeng Yuan/Jacob Fish
20	Non-uniform ignition behind a reflected shock and its influence on ignition delay measured in a shock tube	Shock Waves	1.424	软件仿真部	C. Huang/Zheng Chen
21	Effects of endothermic chain-branching reaction on spherical flame initiation and propagation	Combustion Theory and Modelling	1.654	软件仿真部	Huayue Li/Zheng Chen
22	Autoignition and detonation development induced by a hot spot in fuel-lean and CO2 diluted n-heptane/air mixtures	Combustion and Flame	4.12	软件仿真部	Peng Dai
23	Effects of hydrogen addition on non-premixed ignition of iso-octane by hot air in a diffusion layer	Combustion and Flame	4.12	软件仿真部	Zisen Li /Zheng Chen
24	On the measurement of laminar flame speed	Proceedings	3.299	软件仿真部	Mahdi

	from low-pressure and super-adiabatic propagating spherical flames	of the Combustion Institute			Faghih/Zheng Chen
25	Fully resolved simulations of thermal convective suspensions of elliptic particles using a multigrid fictitious boundary method	International Journal of Heat and Mass Transfer	4.346	先进制造部	Walayat, Khuram/Moubin Liu
26	A kernel gradient-free SPH method with iterative particle shifting technology for modeling low-Reynolds flows around airfoils	Engineering Analysis with Boundary Elements	2.243	先进制造部	Chao Huang /Moubin Liu
27	Coupling finite difference method with finite particle method for modeling viscous incompressible flows	International Journal for Numerical Methods in Fluids	1.631	先进制造部	Chao Huang /Moubin Liu
28	Underwater explosion of slender explosives: Directional effects of shock waves and structure responses	International Journal of Impact Engineering	3.173	先进制造部	Chao Huang /Moubin Liu
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31	Smoothed particle hydrodynamics (SPH) for complex fluid flows: Recent developments in methodology and applications	Physics of Fluids	2.627	先进制造部	Ting Ye / Moubin Liu
32	MHD natural convection and thermal control inside a cavity with obstacles under the radiation effects	Physica A: Statistical Mechanics and its Applications	2.5	先进制造部	Usman, M/ Moubin Liu
33	Powder-scale multi-physics modeling of multi-layer multi-track selective laser melting with sharp interface capturing method	Computational Mechanics	3.159	先进制造部	Zekun Wang/ Moubin Liu
34	A semi-resolved CFD-	Journal of	2.845	先进制造部	Zekun Wang/

	DEM approach for particulate flows with kernel based approximation and Hilbertcurve based searching strategy	Computational Physics			Moubin Liu
35	Dimensionless analysis on selective laser melting to predict porosity and track morphology	Journal of Materials Processing Technology	4.178	先进制造部	Zekun Wang/ Moubin Liu
36	Asymptotics of a catenoid liquid bridge between two spherical particles with different radii and contact angles	Physics of Fluids	2.627	先进制造部	Zekun Wang/ Moubin Liu
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39	A finite particle method with particle shifting technique for modeling particulate flows with thermal convection	International Journal of Heat and Mass Transfer	4.346	先进制造部	Zhilang Zhang/ Moubin Liu
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42	Observing How Fischer-Tropsch Synthesis Catalysts Work at the Nanoscale via Operando STXM	Chem	18	能源技术部	Siyu Yao/Ding Ma
43	A highly CO-tolerant atomically dispersed Pt catalyst for chemoselective hydrogenation.	Nature Nanotechnology	35	能源技术部	Lili Lin/Ding Ma
44	Highly efficient K-Fe/C catalysts derived from metal-organic frameworks towards ammonia synthesis	Nano Research	9	能源技术部	Pengqi Yan/Ding Ma
45	Solar- versus Thermal-Driven Catalysis for Energy Conversion	Journal of the American	15	能源技术部	Yufei Zhao/ Ding Ma

		Chemical Society			
46	Lattice Strained Ni-Co alloy as a High-Performance Catalyst for Catalytic Dry Reforming of Methane	ACS Catalysis	12	能源技术部	Zhaoxuan Wu/Ding Ma
47	Tin-Assisted Fully Exposed Platinum Clusters Stabilized on Defect-Rich Graphene for Dehydrogenation Reaction	ACS Catalysis	12	能源技术部	Jiayun Zhang/Ding Ma
48	Direct conversion of CO and H2O into liquid fuels under mild conditions	Nature Communication	12	能源技术部	Yao Xu/Ding Ma
49	Sublimation-Induced Sulfur Vacancies in MoS2 Catalyst for One-Pot Synthesis of Secondary Amines.	ACS Catalysis	12	能源技术部	Yunrui Zhang/Ding Ma
50	Iron Carbides: Control Synthesis and Catalytic Applications in COx Hydrogenation and Electrochemical HER	Advanced Materials	26	能源技术部	Siwei Li/Ding Ma
51	Molybdenum Carbide: Controlling the Geometric and Electronic Structure of Noble Metals for the Activation of O–H and C–H Bonds	Accounts of Chemical Research	22	能源技术部	Yuchen Deng/Ding Ma
52	A versatile route to fabricate single atom catalysts with high chemoselectivity and regioselectivity in hydrogenation	Nature Communication	12	能源技术部	Xiaohui He/Ding Ma
53	Anchoring Cu1 species over nanodiamond-graphene for semi-hydrogenation of acetylene	Nature Communication	12	能源技术部	Fei Huang/ Ding Ma
54	Construction of a sp3/sp2 Carbon Interface in 3D N‐Doped Nanocarbons for the Oxygen Reduction Reaction	Angewandte Chemie	13	能源技术部	Jian Gao/Ding Ma
55	Low Temperature Oxidation of Ethane to Oxygenates by Oxygen over Iridium-Cluster Catalysts	Journal of the American Chemical Society	15	能源技术部	Renxi Jin/ Ding Ma
56	Potentially Important Contribution of Gas-Phase Oxidation of Naphthalene and Methylnaphthalene to Secondary Organic Aerosol during Haze Events in Beijing	Environmental Science & Technology	7.149	环境技术部	Guancong Huang/ Tong Zhu
57	Relative humidity and O3 concentration as two prerequisites for sulfate formation	Atmospheric Chemistry and Physics	6.2	环境技术部	Yanhua Fang/ Tong Zhu
58	Matrix effect on surface-catalyzed	Scientific	4.1	环境技术部	Chunxian Ye/

	photolysis of nitric acid	Reports			Xianliang Zhou
59	Comparison of fatty acid composition and positional distribution of microalgae triacylglycerols for human milk fat substitutes	Algal Research	3.723	能源技术部	Yongjin He/Feng Chen
60	Cost-effective wastewater treatment in a continuous manner by a novel biophotoelectrolysis cell (BPE) system	Bioresource Technology	6.669	能源技术部	Han Sun/ Feng Chen
61	Light induces carotenoids accumulation in a heterotrophic docosahexaenoic acid producing microalga, Crypthecodinium sp. SUN	Biotechnology for Biofuels	6.669	能源技术部	Dongzhe Sun/Feng Chen
62	Enzymatic ethanolysis subjected to Schizochytrium biomass: Sequential processing for DHA enrichment and biodiesel production	Energy Conversion and Management	7.181	能源技术部	Yongjin He/ Feng Chen
63	A novel strategy for isolation and purification of fucoxanthinol and fucoxanthin from the diatom Nitzschia laevis	Food Chemistry	5.399	能源技术部	Peipei Sun/ Feng Chen
64	Direct enzymatic ethanolysis of potential Nannochloropsis biomass for co-production of sustainable biodiesel and nutraceutical eicosapentaenoic acid	Biotechnology for Biofuels	5.452	能源技术部	Yongjin He /Feng Chen
65	Characterization of exopolysaccharides produced by microalgae with antitumor activity on human colon cancer cells	International Journal of Biological Macromolecules	4.784	能源技术部	Jianzhi Zhang/Feng Chen
66	Glucose triggers cell structure changes and regulates astaxanthin biosynthesis in Chromochloris zofingiensis	Algal Research	3.723	能源技术部	Zhao Zhang/Feng Chen
67	Storage carbon metabolism of Isochrysis zhangjiangensis under different light intensities and its application for co-production of fucoxanthin and stearidonic acid	Bioresource Technology	6.669	能源技术部	Yuelian Li/Feng Chen
68	Characterization of Microalgal Acetyl-CoA Synthetases with High Catalytic Efficiency Reveals Their Regulatory Mechanism and Lipid Engineering Potential	Journal of Agricultural and Food Chemistry	3.571	能源技术部	Tao Wu/ Feng Chen
69	Production and characterization of exopolysaccharides from Chlorella zofingiensis and Chlorella vulgaris with anti-	International Journal of Biological	4.784	能源技术部	Jianzhi Zhang/ Feng Chen

	colorectal cancer activity	Macromolecules			
70	Novel insights into mixotrophic cultivation of Nitzschia laevis for co-production of fucoxanthin and eicosapentaenoic acid	Bioresource Technology	6.669	能源技术部	Xue Lu/Feng Chen
71	Designing 3D Digital Metamaterial for Elastic Waves: From Elastic Wave Polarizer to Vibration Control	Advanced Science	15.804	先进制造部	Huan Liu/HuiLing Duan
72	Four-dimensional direct laser writing of reconfigurable compound micromachines	Materials Today	24.372	先进制造部	Dongdong Jin/ HuiLing Duan
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76	Three-Dimensional Printed Devices in Droplet Microfluidics	Micromachines	2.426	先进制造部	Jiaming Zhang/ Huiling Duan
77	Failure of fracture toughness criterion at small scales	Physical Review Materials	2.926	先进制造部	Yangyang Cheng/ HuiLing Duan
78	Probabilistic and constitutive models for ductile-to-brittle transition in steels: A competition between cleavage and ductile fracture	Journal of the Mechanics and Physics of Solids	4.087	先进制造部	Lirong Chen/Huiling Duan
79	The synthesis strategies and photocatalytic performances of TiO2/MOFs composites: A state-of-the-art review	Chemical Engineering Journal	8.355	环境技术部	ChongChen Wang/ Wen Liu
80	2D/1D graphitic carbon nitride/titanate nanotubes heterostructure for efficient photocatalysis of sulfamethazine under solar light: Catalytic “hot spots” at the rutile–anatase–titanate interfaces	Applied Catalysis B: Environmental	14.229	环境技术部	Haodong Ji/ Wen Liu
81	Co-adsorption of ciprofloxacin and Cu(II) onto titanate nanotubes: Speciation variation and metal-organic complexation	Journal of Molecular Liquids	4.561	环境技术部	Xuming Xu/ Wen Liu
82	Highly active WO3@anatase-SiO2 aerogel for solar-light-driven phenanthrene degradation: Mechanism insight and toxicity	Water Research	7.913	环境技术部	Zhengqing Ca/Wen Liu

	assessment				
83	Efficient activation of peroxymonosulfate by hollow cobalt hydroxide for degradation of ibuprofen and theoretical study	Chinese Chemical Letters	3.839	环境技术部	Mingfeng Ma/Wen Liu
84	Reductive immobilization and long-term remobilization of radioactive pertechnetate using bio-macromolecules stabilized zero valent iron nanoparticles	Chinese Chemical Letters	3.839	环境技术部	Haodong Ji/Wen Liu
85	Fabrication of niobium doped titanate nanoflakes with enhanced visible-light-driven photocatalytic activity for efficient ibuprofen degradation	Chinese Chemical Letters	3.839	环境技术部	Wen Liu/Yunyi Li
86	Graphene modified anatase/titanate nanosheets with enhanced photocatalytic activity for efficient degradation of sulfamethazine under simulated solar light	Chemosphere	5.108	环境技术部	Xiaona Liu/ Wen Liu
87	Visible-light-driven photocatalytic degradation of diclofenac by carbon quantum dots modified porous g-C3N4: Mechanisms, degradation pathway and DFT calculation	Water Research	7.913	环境技术部	Wen Liu/ Jialiang Liang
88	Influences of isolated fractions of natural organic matter on adsorption of Cu(II) by titanate nanotubes	Science of The Total Environment	5.589	环境技术部	Tong Zheng/ Ting Wang
89	Photocatalytic degradation of amoxicillin by carbon quantum dots modified K2Ti6O13 nanotubes: Effect of light wavelength	Chinese Chemical Letters	3.839	环境技术部	Long Chen/ Wen Liu
90	Characterizing sources and emissions of volatile organic compounds in a northern California residence using space- and time-resolved measurements	Indoor Air	4.71	环境技术部	Yingjun Liu
91	Effects of nozzle and fluid properties on the drop formation dynamics in a drop-on-demand inkjet printing	Applied Mathematics and Mechanics	1.699	先进制造部	Anas B. Aqeel/Huiling Duan
92	Morphology evolution of liquid–gas interface on submerged solid structured surfaces	Extreme Mechanics Letters	4.075	先进制造部	Senglin Huang/ Huiling Duan
93	Solving the mystery of vanishing rivers in China	National Science Review	13.222	环境技术部	Yichu Wang/ Jinren Ni
94	Actinia-like multifunctional nanocoagulant for single-step removal of water contaminants	Nature Nanotechnology	33.407	环境技术部	Jinwei Liu/Jinren Ni
95	Photocatalytic degradation of amoxicillin by	Chinese	3.839	环境技术部	Long Chen/ Wen

	carbon quantum dots modified K2Ti6O13 nanotubes: Effect of light wavelength	Chemical Letters			Liu
96	Structural characteristics of river networks and their relations to basin factors in the Yangtze and Yellow River basins	Science China Technological Sciences	2.18	环境技术部	XiaBin Chen/Jinren Ni
97	Image-based modelling of the skin-friction coefficient in compressible boundary-layer transition	Journal of Fluid Mechanics	3.317	软件仿真部	Wenjie Zheng / Yue Yang
98	Identifying the tangle of vortex tubes in homogeneous isotropic turbulence	Journal of Fluid Mechanics	3.317	软件仿真部	Shiying Xiong /Yue Yang
99	Tracking vortex surfaces frozen in the virtual velocity in non-ideal flows	Journal of Fluid Mechanics	3.317	软件仿真部	Jinhua Hao/Yue Yang
100	Construction of knotted vortex tubes with the writhe-dependent helicity	Physics of Fluids	2.627	软件仿真部	Shiying Xiong/Yue Yang
101	Interactions between the premixed flame front and the three-dimensional Taylor-Green vortex	Proceedings of the Combustion Institute	3.299	软件仿真部	Hao Zhou/Yue Yang
102	Towards a gliding robotic dolphin: Design, modeling, and experiments	IEEE/ASME Transactions on Mechatronics	4.943	先进制造部	Zhengxing Wu/Junzhi Yu
103	Control and optimization of a bionic robotic fish through a combination of CPG model and PSO	Neurocomputing	4.072	先进制造部	Ming Wang/ Junzhi Yu
104	Motion control strategies for a repetitive leaping robotic dolphin	IEEE/ASME Transactions on Mechatronics	4.943	先进制造部	Junzhi Yu/ Suwen Qi
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	system	on Instrumentation and Measurement			
108	Gliding motion regulation of a robotic dolphin based on a controllable fluke	IEEE Transactions on Industrial Electronics	7.503	先进制造部	Zhengxing Wu /Junzhi Yu
109	A visual leader-following approach with a T-D-R framework for quadruped robots	IEEE Transactions on Systems, Man, and Cybernetics: Systems	7.351	先进制造部	Lei Pang/ Zhiqiang Cao
110	3-D path planning with multiple motions for a gliding robotic dolphin	IEEE Transactions on Systems, Man, and Cybernetics: Systems	7.351	先进制造部	Jian Wang/Junzhi Yu
111	Distributed energy management strategy for reaching cost-driven optimal operation integrated with wind forecasting in multi-microgrids system	IEEE Transactions on Systems, Man, and Cybernetics: Systems	7.351	先进制造部	Xing He
112	Design of a miniature underwater angle of attack sensor and its application to a self-propelled robotic fish	IEEE Journal of Oceanic Engineering	2.567	先进制造部	Junzhi Yu
113	A robust visual person-following approach for mobile robots in disturbing environments	IEEE Systems Journal	4.463	先进制造部	Lei Pang/ Zhiqiang Cao
114	Design and control of a two-motor-actuated tuna-inspired robot system	IEEE Transactions on Systems, Man, and Cybernetics: Systems	7.351	先进制造部	Sheng Du/Junzhi Yu
115	Cooperative target tracking in aquatic environment using dual robotic dolphins	IEEE Transactions on Systems, Man, and	7.351	先进制造部	Jincun Liu/Junzhi Yu

		Cybernetics: Systems			
116	A flexible neural network mixed online sequential Elm	Applied Sciences	2.217	先进制造部	Xiali Li/ Junzhi Yu
117	Design and analysis of a Chinese medicine based humanoid robotic arm massage system	Applied Sciences	2.217	先进制造部	Zaixiang Pang/ Junzhi Yu
118	Laboratory characterisation of fracture compressibility for coal and shale gas reservoir rocks: A review	International Journal of Coal Geology	4.13	能源技术部	Yuling Tan/Dongxiao Zhang
119	Coupled thermo-hydro-mechanical analysis of stimulation and production for fractured geothermal reservoirs	Applied Energy	7.9	能源技术部	Sanbai Li/ Dongxiao Zhang
120	Analytical solution for upscaling hydraulic conductivity in anisotropic heterogeneous formations	Advances in Water Resources	3.512	能源技术部	Qinzhuo Liao/ Dongxiao Zhang
121	Identification of physical processes via combined data-driven and data-assimilation methods	Journal of Computational Physics	2.864	能源技术部	Haibin Chang/Dongxiao Zhang
122	A new analytical model for flow in acidized fractured-vuggy porous media	Scientific Reports	4.122	能源技术部	Gang Lei/ Dongxiao Zhang
123	Machine learning subsurface flow equations from data	Computational Geosciences	2.726	能源技术部	Haibin Chang/ Dongxiao Zhang
124	DL-PDE: Deep-learning based data-driven discovery of partial differential equations from discrete and noisy data	Arxiv preprint Arxiv		能源技术部	Hao Xu/ Dongxiao Zhang
125	Observations of OH Radical Reactivity in Field Studies	Acta Chimica Sinica	2.463	环境技术部	XinpingYang/ Yuanhang Zhang
126	Daytime atmospheric oxidation capacity in four Chinese megacities during the photochemically polluted season: a case study based on box model simulation	Atmospheric Chemistry and Physics	5.668	环境技术部	Zhaofeng Tan/ Zhang Yuanhang
127	Experimental budgets of OH, HO2, and RO2 radicals and implications for ozone formation in the Pearl River Delta in China 2014	Atmospheric Chemistry and Physics	5.668	环境技术部	Tan Zhaofeng/ Yuanhang Zhang
128	Large-Eddy Simulations of Inclined Jets in Crossflow with Different Holes	Journal of Propulsion and Power	1.8	软件仿真部	Lingxu Zhong/ Chao Zhou
129	Heat transfer mechanisms of inclined jets in cross flow with different	International Journal of Heat and Mass	4.35	软件仿真部	Lingxu Zhong/ Chao Zhou

		Transfer			
130	渤海湾盆地沾化凹陷页岩微观孔隙特征实验研究	《石油实验地质》	1.843	能源技术部	Haiyang Ma/ Zhiqing Wen
131	纳米材料和技术在石油勘探开发领域的应用研究进展	《油田化学》	0.776	能源技术部	Shaoyan Mu/ Zhiqing Wen
132	A novel targeted-plugging and fracture-adaptable gel used as a diverting agent in fracturing	Energy Science & Engineering.	4	能源技术部	Yuyuan Zhang/ Zhiqing Wen
133	Different Metrics (Number, Surface Area, and Volume Concentration) of Urban Particles with Varying Sizes in Relation to Fractional Exhaled Nitric Oxide (FeNO)	Journal of Thoracic Disease	2.027	环境技术部	Jicheng Gong
134	Monitoring DNA adducts in human blood samples using magnetic Fe3O4@graphene oxide as a nano-adsorbent and mass spectrometry	Talanta	4.916	环境技术部	Liang Qi / Jicheng Gong
135	Facile in-situ polymerization of polyaniline-functionalized melamine sponge preparation for mass spectrometric monitoring of perfluorooctanoic acid and perfluorooctane sulfonate from biological samples	Journal of Chromatography A	3.858	软件仿真部	Liang Qi/ Jicheng Gong
136	Effects of personal air pollutant exposure on oxidative stress: Potential confounding by natural variation in melatonin levels	International Journal of Hygiene and Environmental Health	4.848	环境技术部	He Linchen/Gong Jicheng
137	Mitochondrial ROS and NLRP3 inflammasome in acute ozone-induced murine model of airway inflammation and bronchial hypterresponsiveness	Free Radical Research	2.825	环境技术部	Xu Mengmeng/Gong Jicheng
138	Health effects of air pollution: what we need to know and to do in the next decade	Editorial of Air Pollution Section	2.027	环境技术部	Junfeng Zhang / Jicheng Gong
139	Association of solid fuel use with risk of stunting in children living in China	Indoor Air	4.71	环境技术部	Weigang Liang / Jicheng Gong
140	The Spacer Cations Interplay for Efficient and Stable Layered 2D Perovskite Solar Cells	Wiley-Vch	24.884	能源技术部	Ning Zhou/ Huanping Zhou
141	Mechanical characterization of single cells based on microfluidic techniques	Trends in Analytical Chemistry	8.428	先进制造部	Jianyong Huang
142	Four-dimensional direct laser writing of reconfigurable compound micromachines	Materials Today	24.371	先进制造部	Dongdong Jin/ Huiling Duan
143	Curvature-mediated cooperative wrapping of	Nanoscale	6.970	先进制造部	Zengshuai Yan/

	multiple nanoparticles at the same and opposite membrane sides				Xin Yi
144	Force barrier for lipid sorting in the formation of membrane nanotubes	Journal of Applied Mechanics	2.772	先进制造部	Xin Yi
145	Chain-length- and saturation-tuned mechanics of fluid nanovesicles direct tumor delivery	ACS Nano	13.903	先进制造部	Zhuo Dai / Xin Yi
146	Role of nanoparticle mechanical properties in cancer drug delivery	ACS Nano	13.903	先进制造部	Hui Yue/ Xin Yi
147	Model of nanoindentation size effect incorporating the role of elastic deformation	Journal of the Mechanics and Physics of Solids	4.087	先进制造部	Wenbin Liu/ Huiling Duan
148	Mechanics of the formation, interaction and evolution of membrane tubular structures	Biophysical Journal	3.665	先进制造部	Shixin Li/Xin Yi
149	Membrane wrapping efficiency of elastic nanoparticles during endocytosis: Size and shape matter	ACS Nano	13.903	先进制造部	Zhiqiang Shen/ Xin Yi
150	Finite indentation of pressurized elastic fluid nanovesicles by a rigid cylindrical indenter	Acta Mechanica Solida Sinica	1.508	先进制造部	Xingyi Tang/Xin Yi
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153	Magnetic Reactive Oxygen Species Nanoreactor for Switchable Magnetic Resonance Imaging Guided Cancer Therapy Based on pH-Sensitive Fe5C2@Fe3O4 Nanoparticles	ACS Nano	13.903	能源技术部	Jing Yu/Yanglong Hou
154	General Approach to Produce Nanostructured Binary Transition Metal Selenides as High-Performance Sodium Ion Battery Anodes	Small Methods	10.856	能源技术部	Ali Zeeshan/Yanglong Hou
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156	Rechargeable metal batteries based on selenium cathodes: progress, challenges and perspectives	Journal of Materials Chemistry A	10.733	能源技术部	Xingxing Gu/ Yanglong Hou
157	3D Porous Cu Current Collectors Derived by Hydrogen Bubble Dynamic Template for Enhanced Li Metal Anode Performance	Advanced Functional Materials	15.621	能源技术部	Hailong Qiu/Yanglong Hou
158	Mesoporous N-doped graphene prepared by a soft-template method with high performance in Li–S batteries	Nanoscale	6.97	能源技术部	Tianyu Tang/ Yanglong Hou
159	Light-weight Gadolinium Hydroxide@ polypyrrole Rare-Earth Nanocomposites with Tunable and Broadband Electromagnetic Wave Absorption	Applied Materials & Interfaces	8.456	能源技术部	Wei Wei/Yanglong Hou
160	A general strategy for facile synthesis of ultrathin transition metal hydroxide nanosheets	Nanoscale	6.97	能源技术部	Bing Dong/Yanglong Hou
161	Manipulation of Edge-Site-Fe-N-2 Moiety on Holey Fe, N Codoped Graphene to Promote the Cycle Stability and Rate Capacity of Li–S Batteries	Advanced Functional Materials	15.621	能源技术部	Yazhou Wang/Yanglong Hou
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163	Achieving High-Energy Full-Cell Lithium-Storage Performance by Coupling High-Capacity V2O3 with Low-Potential Ni2P Anode	Applied Materials & Interfaces	8.456	能源技术部	Yang Yu/ Yanglong Hou
164	面向锂硫电池的高负载量碳硫复合正极材料研究进展	材料导报	0.931	能源技术部	Teng Zhang/ Yanglong Hou
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169	Atomically ordered non-precious Co3Ta intermetallic nanoparticles as high-performance catalysts for hydrazine electrooxidation	Nature communication	12.19	能源技术部	Guang Feng / Dingguo Xia
170	Voltage Decay in Layered Li-Rich Mn-Based Cathode Materials	Electrochem. Energ Rev.	1.43	能源技术部	Dingguo Xia
171	Surface thermodynamic stability of Li-rich Li2MnO3: Effect of defective graphene	Energy Storage Materials	13.1	能源技术部	Fanghua Ning / Dingguo Xia
172	Mitigating Voltage Decay of Li-Rich Layered Oxide by Incorporation of 5d Metal Rhenium	The Journal of Physical Chemistry C	4.45	能源技术部	Yu Zhen Ning/ Dingguo Xia
173	Silk-Derived Highly Active Oxygen Electrocatalysts for Flexible and Rechargeable Zn–Air Batteries	Chemistry of Materials	10.159	能源技术部	Chunya Wang/ Shaojun Guo
174	Multimetal Borides Nanochains as Efficient Electrocatalysts for Overall Water Splitting	Small	10.856	能源技术部	Yingjie Li/ Shaojun Guo
175	Strongly Coupled Nickel–Cobalt Nitrides/Carbon Hybrid Nanocages with Pt-Like Activity for Hydrogen Evolution Catalysis	Advanced Materials	25.809	能源技术部	Jianping Lai/ Shaojun Guo
176	Rh-doped PdAg nanoparticles as efficient methanol tolerance electrocatalytic materials for oxygen reduction	Science Bulletin	6.277	能源技术部	Yingjun Sun/Shaojun Guo
177	Multimetallic Electrocatalyst Stabilized by Atomic Ordering	Joule		能源技术部	Mingchuan Luo/ Shaojun Guo
178	MXene/Si@SiOx@C Layer-by-Layer Superstructure with Autoadjustable Function for Superior Stable Lithium Storage	ACS nano	13.903	能源技术部	Yelong Zhang/ Shaojun Guo
179	Strengthening reactive metal-support interaction to stabilize high-density Pt single atoms on electron-deficient g-C3N4 for boosting photocatalytic H2 production	Nano Energy	15.548	能源技术部	Peng Zhou/ Shaojun Guo
180	Core-Shell Architecture Advances Oxygen Electrocatalysis	Chem	18.205	能源技术部	Mingchuan Luo/Shaojun Guo
181	Efficient Bifunctional Polyalcohol Oxidation and Oxygen Reduction Electrocatalysts Enabled by Ultrathin PtPdM (M = Ni, Fe, Co) Nanosheets	Advanced Energy Materials	24.884	能源技术部	Jianping Lai/ Shaojun Guo
182	Ethanol - Precipitable, Silica - Passivated Perovskite Nanocrystals Incorporated into Polystyrene Microspheres for Long - Term	Angewandte Chemie	12.257	能源技术部	Xiao Liang/Shaojun Guo

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183	Face-to-face engineering of ultrathin Pd nanosheets on amorphous carbon nitride for efficient photocatalytic hydrogen production	Science China Materials	5.636	能源技术部	Yonghua Tang/ Shaojun Guo
184	Ultrathin two-dimensional metallic nanocrystals for renewable energy electrocatalysis	Materials Today	24.372	能源技术部	Mingchuan Luo/ Shaojun Guo
185	Freestanding film made by necklace-like N-doped hollow carbon with hierarchical pores for high-performance potassium-ion storage	Energy & Environmental Science	33.25	能源技术部	Wenxiu Yang/Shaojun Guo
186	Lattice -Mismatch-Induced Ultrastable 1T-Phase MoS2–Pd/Au for Plasmon-Enhanced Hydrogen Evolution	Nano Letters	12.279	能源技术部	Bo Shang/ Shaojun Guo
187	Ultrathin PtNiM (M= Rh, Os, and Ir) nanowires as efficient fuel oxidation electrocatalytic materials	Advanced Materials	25.809	能源技术部	Weiyu Zhang/ Shaojun Guo
188	Ir‐Based Alloy Nanoflowers with Optimized Hydrogen Binding Energy as Bifunctional Electrocatalysts for Overall Water Splitting	Small Methods		能源技术部	Fan Lv/ Shaojun Guo
189	Synergetic interaction between neighboring platinum and ruthenium monomers boosts CO oxidation	Chemical Science	9.556	能源技术部	Peng Zhou/Shaojun Guo
190	Electronic-structure tuning of water-splitting nanocatalysts	Trends in Chemistry		能源技术部	Wenxiu Yang/ Shaojun Guo
191	Strain engineering of metal-based nanomaterials for energy electrocatalysis	Chemical Society Reviews	40.443	能源技术部	Zhonghong Xia/ Shaojun Guo
192	Long-life lithium-O2 battery achieved by integrating quasi-solid electrolyte and highly active Pt3Co nanowires catalyst	Energy Storage Materials		能源技术部	Yi Xing/Shaojun Guo
193	Advanced Multifunctional Electrocatalysts for Energy Conversion	ACS Energy Letters	16.331	能源技术部	Yelong Zhan/ Shaojun Guo
194	Recent advances in confining metal-based nanoparticles into carbon nanotubes for electrochemical energy conversion and storage devices	Energy & Environmental Science	33.25	能源技术部	Hassina Tabassum/ Shaojun Guo
195	Recent Advances on Black Phosphorus for Biomedicine and Biosensing	Advanced Functional Materials	15.621	能源技术部	Xiaoxiao Ge/Shaojun Guo
196	Modulating the surface segregation of PdCuRu nanocrystals for enhanced all-pH hydrogen evolution electrocatalysis	Journal of Materials Chemistry A	10.733	能源技术部	Menggang Li/ Shaojun Guo
197	Co-doped 1T-MoS2 nanosheets embedded in N, S-doped carbon nanobowls for high-rate	Nano Research	8.515	能源技术部	Peihao Li/ Shaojun Guo

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198	Recent progress on synthesis, structure and electrocatalytic applications of MXenes	FlatChem		能源技术部	Zhonghong Xi/Shaojun Guo
199	Trifunctional Fishbone-like PtCo/Ir Enables High-Performance Zinc–Air Batteries to Drive the Water-Splitting Catalysis	Chemistry of Materials	10.159	能源技术部	Yingjun Su/ Shaojun Guo
200	PdMo bimetallene for oxygen reduction catalysis	Nature	43.07	能源技术部	Mingchuan Luo/ Shaojun Guo
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202	Noble metal-based 1D and 2D electrocatalytic nanomaterials: Recent progress, challenges and perspectives	Nano Today	16.582	能源技术部	Yiju Li/Shaojun Guo
203	Enhanced Cathode and Anode Compatibility for Boosting Both Energy and Power Densities of Na/K-Ion Hybrid Capacitors	Soft Matter	3.4	能源技术部	Yiju Li/ Shaojun Guo
204	Palladium Single Atoms on TiO2 as a Photocatalytic Sensing Platform for Analyzing Organophosphorus Pesticide Chlorpyrifos	Angewandte Chemie	12.257	能源技术部	Xiaoxiao Ge/Shaojun Guo
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206	An Efficient Ultrathin PtFeNi Nanowire/Ionic Liquid Conjugate Electrocatalyst	Applied Catalysis B: Environmental	14.229	能源技术部	Chunji Li/ Shaojun Guo
207	A new dual-ion battery based on amorphous carbon	Science Bulletin	6.277	能源技术部	Wei Alex Wang,/Shaojun Guo
208	High-index faceted noble metal nanostructures drive renewable energy electrocatalysis	Nano Materials Science		能源技术部	Chunji Li/ Shaojun Guo
209	Single-atom cobalt array bound to distorted 1T MoS 2 with ensemble effect for hydrogen evolution catalysis	Nature communications	11.878	能源技术部	Kun Qi/ Shaojun Guo
210	Coupled and decoupled hierarchical carbon nanomaterials toward high-energy-density quasi-solid-state Na-Ion hybrid energy storage devices	Energy Storage Materials		能源技术部	Yiju Li/Shaojun Guo
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216	High-time-resolution source apportionment of PM2.5 in Beijing with multiple models	Atmospheric Chemistry and Physics	5.668	环境技术部	Yue Liu/ Mei Zheng
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221	Nonlinear relationships between air pollutant emissions and PM2.5-related health impacts in the Beijing-Tianjin-Hebei region	Science of the Total Environment	5.589	环境技术部	Bin Zhao/ Mei Zheng
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223	Significant impact of heterogeneous reactions of reactive chlorine species on summertime atmospheric ozone and free-radical formation in north China	Science of the Total Environment	5.589	环境技术部	Xionghui Qiu/ Mei Zheng
224	Deposition of organic and black carbon: direct measurements at three remote stations	Journal of Geophysical	3.633	环境技术部	Fangping Yan/ Mei Zheng

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225	Introduction to the special issue "In-depth study of air pollution sources and processes within Beijing and its surrounding region (APHH-Beijing)	Atmospheric Chemistry and Physics	5.668	环境技术部	Zongbo Shi/ Mei Zheng
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227	Molecular characterization of polar organic matters in off-road engine emissions using fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS): new direction to find biomarkers	Atmospheric Chemistry and Physics	5.668	环境技术部	Min Cui / Mei Zheng
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229	Enhancement in Particulate Organic Nitrogen and Light Absorption of Humic-Like Substances over Tibetan Plateau Due to Long-Range Transported Biomass Burning Emissions	Environ. Sci. Technol	7.38	环境技术部	Yujue Wang/ Min Hu
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231	Winter photochemistry in Beijing: Observation and model simulation of OH and HO2 radicals at an urban site	Science of the Total Environment	5.92	环境技术部	Xuefei Ma/ Yuanhang Zhang
232	Pro-oxidative and Pro-inflammatory Effects After Traveling from Los Angeles to Beijing: a Biomarker-Based Natural Experiment	Circulation	9.17	环境技术部	Yan Lin/Tong Zhu