

固体表面物理化学国家重点实验室

2022 年报论文目录

A 类 专著章节与代表性研究论文

专著章节

1. 同步辐射中的振动散射能谱学-原理及其在生物化学研究中的应用
周朝晖, 王红欣
科学出版社, ISBN: 978-7-03-072432-8, 347-379 (2022)

代表性研究论文

1. Tailoring Electrolyte Dehydrogenation with Trace Additives: Stabilizing the LiCoO₂ Cathode beyond 4.6 V
Yan YW, Weng ST, Fu A, Zhang HT, Chen JK, Zheng QZ, Zhang BD, Zhou SY, Yan H, Wang CW, Tang YL, Luo HY, Mao BW, Zheng JM, Wang XF, Qiao Y, Yang Y, Sun SG
ACS ENERGY LETTERS 7(8)(2022)2677-2684..... 129
2. Bulk/Interfacial Synergetic Approaches Enable the Stable Anode for High Energy Density All-Solid-State Lithium-Sulfur Batteries
Chen ZR, Liang ZT, Zhong HY, Su Y, Wang KJ, Yang Y
ACS ENERGY LETTERS 7(8)(2022)2761-2770..... 130
3. Quantitatively Deciphering Electronic Properties of Defects at Atomically Thin Transition-Metal Dichalcogenides
Wu SS, Huang TX, Xu XL, Bao YF, Pei XD, Yao X, Cao MF, Lin KQ, Wang X, Wang DD, Ren B
ACS NANO 16(3)(2022)4786-4794..... 131
4. Quantitatively Revealing the Anomalous Enhancement in Shell-Isolated Nanoparticle- Enhanced Raman Spectroscopy Using Single- Nanoparticle Spectroscopy
Hu S, Wang JY, Zhang YJ, Wen BY, Wu SS, Radjenovic PM, Yang ZL, Ren B, Li JF
ACS NANO 16(12)(2022)21388-21396..... 132
5. Investigation and Suppression of Oxygen Release by LiNi_{0.8}Co_{0.1}Mn_{0.1}O₂ Cathode under Overcharge Conditions
Shi CG, Peng XX, Dai P, Xiao PH, Zheng WC, Li HY, Li H, Indris S, Mangold S, Hong YH, Luo CX, Shen CH, Wei YM, Huang L, Sun SG

- ADVANCED ENERGY MATERIALS 12(20)(2022)2200569..... 133
6. Anti-Aggregation of Nanosized CoS₂ for Stable K-Ion Storage: Insights into Aggregation-Induced Electrode Failures
Zhang HH, Cheng Y, Sun JJ, Ye WB, Ke CZ, Cai MT, Gao HW, Wei P, Zhang QB, Wang MS
ADVANCED ENERGY MATERIALS 12(29)(2022)2201259..... 134
 7. Eight-Electron Redox Cyclohexanehexone Anode for High-Rate High-Capacity Lithium Storage
Li S, Lin JD, Zhang YM, Zhang SL, Jiang T, Hu ZL, Liu JJ, Wu DY, Zhang L, Tian ZQ
ADVANCED ENERGY MATERIALS 12(30)(2022)2201347..... 135
 8. Ru/In Dual-Single Atoms Modulated Charge Separation for Significantly Accelerated Photocatalytic H₂ Evolution in Pure Water
Peng HP, Yang T, Lin HP, Xu Y, Wang ZH, Zhang QH,
Liu SH, Geng HB, Gu L, Wang C, Fan X, Chen WX, Huang XQ
ADVANCED ENERGY MATERIALS 12(43)(2022)2201688..... 136
 9. Phosphorus Vacancies and Heterojunction Interface as Effective Lithium-Peroxide Promoter for Long-Cycle Life Lithium-Oxygen Batteries
Yang TL, Xia YJ, Mao TL, Ding QW, Wang ZJ, Hong ZY, Han JJ, Peng DL, Yue GH
ADVANCED FUNCTIONAL MATERIALS 32(49)(2022)2209876..... 137
 10. Liquid Gating Meniscus-Shaped Deformable Magnetoelastic Membranes with Self-Driven Regulation of Gas/Liquid Release
Liu J, Xu X, Lei Y, Zhang MC, Sheng ZZ, Wang HM, Cao M, Zhang J, Hou X
ADVANCED MATERIALS 34(3)(2022)2107327..... 138
 11. POM Anolyte for All-Anion Redox Flow Batteries with High Capacity Retention and Coulombic Efficiency at Mild pH
Yang L, Hao YH, Lin JD, Li K, Luo SH, Lei J, Han YH, Yuan RM, Liu GK, Ren B, Chen JJ
ADVANCED MATERIALS 34(7)(2022)2107425..... 139
 12. An Encapsulation-Based Sodium Storage via Zn-Single-Atom Implanted Carbon Nanotubes
Li X, Ye WB, Xu P, Huang HH, Fan JM, Yuan RM, Zheng MS, Wang MS, Dong QF
ADVANCED MATERIALS 34(31)(2022)2202898..... 140
 13. Visualizing Dynamic Mechanical Actions with High Sensitivity and High Resolution by Near-Distance Mechanoluminescence Imaging
Zhuang YX, Li XY, Lin FY, Chen CJ, Wu ZS, Luo HD, Jin LB, Xie RJ
ADVANCED MATERIALS 34(36)(2022)2202864..... 141
 14. Modulation of the Bi³⁺ 6s² Lone Pair State in Perovskites for High-Mobility p-Type Oxide Semiconductors
Shi JL, Rubinstein EA, Li WW, Zhang JY, Yang Y, Lee TL,
Qin CD, Yan PF, MacManus-Driscoll JL, Scanlon DO, Zhang KHL

- ADVANCED SCIENCE 9(6)(2022)2104141..... 142
15. Synchronous Manipulation of Ion and Electron Transfer in Wadsley-Roth Phase Ti-Nb Oxides for Fast-Charging Lithium-Ion Batteries
Yang Y, Huang JX, Cao ZM, Lv ZH, Wu DZ, Wen ZP, Meng WW, Zeng J, Li CC, Zhao JB
ADVANCED SCIENCE 9(6)(2022)2104530..... 143
 16. Nanographene with Multiple Embedded Heptagons: Cascade Radical Photocyclization
Qiu ZL, Chen XW, Huang YD, Wei RJ, Chu KS, Zhao XJ, Tan YZ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(18)(2022)e202116955..... 144
 17. Fano Resonance in Single-Molecule Junctions
Zheng Y, Duan P, Zhou Y, Li CA, Zhou DH, Wang YP, Chen LCA, Zhu ZY,
Li XH, Bai J, Qu K, Gao TY, Shi J, Liu JY, Zhang QC, Chen ZN, Hong WJ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(40)(2022)e202210097..... 145
 18. Enantioselective Copper-Catalyzed Formal [2+1] and [4+1] Annulations of Diynes with Ketones via Carbonyl Ylides
Qi LJ, Li CT, Huang ZQ, Jiang JT, Zhu XQ, Lu X, Ye LW
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(43)(2022)e202210637..... 146
 19. Fast Screening for Copper-Based Bimetallic Electrocatalysts: Efficient Electrocatalytic Reduction of CO₂ to C²⁺ Products on Magnesium-Modified Copper
Xie MC, Shen Y, Ma WC, Wei DY, Zhang B, Wang ZH, Wang YH, Zhang QH, Xie SJ, Wang C, Wang Y
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(51)(2022)e202213423..... 147
 20. Efficient CO₂ Reduction MOFs Derivatives Transformation Mechanism Revealed by In-Situ Liquid Phase TEM
Xiao LP, Wang GH, Huang XC, Zhou SY, Zhou RS,
Jiang YH, Liu SG, Li G, Zheng HM, Sun SG, Liao HG
APPLIED CATALYSIS B-ENVIRONMENTAL 307(2022)121164..... 148
 21. Light-Driven Proton Transport Across Liposomal Membranes Enabled by Janus Metal-Organic Layers
Hu HH, Zhu JY, Cao LY, Wang ZY, Gao Y, Yang LL, Lin WB, Wang C
CHEM 8(2)(2022)450-464..... 149
 22. Vapor-Phase Self-Assembly for Generating Thermally Stable Single-Atom Catalysts
Li HY, Wan Q, Du CC, Liu QN, Qi JM, Ding XY, Wang S, Wan SL,
Lin JD, Tian C, Li LN, Peng T, Zhao W, Zhang KHL, Huang JY,
Zhang XB, Gu QQ, Yang B, Guo H, Lin S, Datye AK, Wang Y, Xiong HF
CHEM 8(3)(2022)731-748..... 150
 23. Iridium Boosts the Selectivity and Stability of Cobalt Catalysts for Syngas to Liquid Fuels
Kang JC, Fan QY, Zhou W, Zhang QH, He S, Yue LX, Tang Y, Nguyen L,
Yu X, You Y, Chang HH, Liu X, Chen LW, Liu YF, Tao F, Cheng J, Wang Y

	CHEM	8(4)(2022)1050-1066	151
24.	Exceptionally Active and Stable RuO ₂ with Interstitial Carbon for Water Oxidation in Acid		
	Wang J, Cheng C, Yuan Q, Yang H, Meng FQ, Zhang QH, Gu L, Cao JL, Li LG, Haw SC, Shao Q, Zhang L, Cheng T, Jiao F, Huang XQ		
	CHEM	8(6)(2022)1673-1687	152
25.	Regioselective Hydrogenation of Alkenes over Atomically Dispersed Pd Sites on NHC-Stabilized Bimetallic Nanoclusters		
	Shen H, Wu QY, Hazer MSA, Tang XK, Han YZ, Qin RX, Ma CX, Malola S, Teo BK, Hakkinen H, Zheng NF		
	CHEM	8(9)(2022)2380-2392	153
26.	Efficient Diffusion of Superdense Lithium via Atomic Channels for Dendrite-Free Lithium-Metal Batteries		
	Zhou SY, Chen WX, Shi J, Li G, Pei F, Liu SG, Ye WB, Xiao LP, Wang MS, Wang D, Qiao Y, Huang L, Xu GL, Liao HG, Chen JF, Amine K, Sun SG		
	ENERGY & ENVIRONMENTAL SCIENCE	15(1)(2022)196-205	154
27.	Ultrathin Perovskite Derived Ir-Based Nanosheets for High-Performance Electrocatalytic Water Splitting		
	Liu SH, Zhang YT, Mao XN, Li L, Zhang Y, Li LG, Pan Y, Li XG, Wang L, Shao Q, Xu Y, Huang XQ		
	ENERGY & ENVIRONMENTAL SCIENCE	15(4)(2022)1672-1681	155
28.	Three-Dimensional Porous Platinum-Tellurium-Rhodium Surface/Interface Achieve Remarkable Practical Fuel Cell Catalysis		
	Bu LZ, Ning FD, Zhou J, Zhan CH, Sun MZ, Li LG, Zhu YM, Hu ZW, Shao Q, Zhou XC, Huang BL, Huang XQ		
	ENERGY & ENVIRONMENTAL SCIENCE	15(9)(2022)3877-3890	156
29.	Elucidating Electrochemical CO ₂ Reduction Reaction Processes on Cu(hkl) Single-Crystal Surfaces by In Situ Raman Spectroscopy		
	Zhao Y, Zhang XG, Bodappa N, Yang WM, Liang Q, Radjenovica PM, Wang YH, Zhang YJ, Dong JC, Tian ZQ, Li JF		
	ENERGY & ENVIRONMENTAL SCIENCE	15(9)(2022)3968-3977	157
30.	Sustained Releasing Superoxo Scavenger for Tailoring the Electrode-Electrolyte Interface on Li-Rich Cathode		
	Zhang BD, Wang LL, Wang XT, Zhou SY, Fu A, Yan YW, Wang QS, Xie QS, Peng DL, Qiao Y, Sun SG		
	ENERGY STORAGE MATERIALS	53(2022)492-504	158
31.	Reliable Prediction of the Protein-Ligand Binding Affinity Using a Charge Penetration Corrected AMOEBA Force Field: A Case Study of Drug Resistance Mutations in Abl Kinase		
	Qu XY, Dong LN, Si YB, Zhao Y, Wang QT, Su PF, Wang BJ		

- JOURNAL OF CHEMICAL THEORY AND COMPUTATION 18(3)(2022)1692-1700· 159
32. Amplitude Reordering Accelerates the Adaptive Variational Quantum Eigensolver Algorithms
Lan ZH, Liang WZ
JOURNAL OF CHEMICAL THEORY AND COMPUTATION 18(9)(2022)5267-5275· 160
33. Introducing Oxophilic Metal and Interstitial Hydrogen into the Pd Lattice to Boost Electrochemical Performance for Alkaline Ethanol Oxidation
Shen C, Chen HM, Qiu MY, Shi YQ, Yan W, Jiang QR, Jiang YQ, Xie ZX
JOURNAL OF MATERIALS CHEMISTRY A 10(4)(2022)1735-1741· 161
34. Modular Access to Chiral α -(Hetero)aryl Amines via Ni/Photoredox-Catalyzed Enantioselective Cross-Coupling
Shu XM, Zhong D, Lin YM, Qin X, Huo HH
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(19)(2022)8797-8806· 162
35. Cu-Electrocatalytic Diazidation of Alkenes at ppm Catalyst Loading
Cai CY, Zheng YT, Li JF, Xu HC
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(27)(2022)11980-11985· 163
36. How Do Preorganized Electric Fields Function in Catalytic Cycles? The Case of the Enzyme Tyrosine Hydroxylase
Peng W, Yan SH, Zhang X, Liao LX, Zhang JY, Shaik S, Wang BJ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(44)(2022)20484-20494· 164
37. Continuous Air Purification by Aqueous Interface Filtration and Absorption
Zhang YM, Han YH, Ji XL, Zang DY, Qiao L, Sheng ZZ, Wang CY, Wang SL, Wang M, Hou YQ, Chen XY, Hou X
NATURE 610(7930)(2022)74-+· 165
38. Photoelectrochemical Asymmetric Catalysis Enables Site- and Enantioselective Cyanation of Benzylic C-H Bonds
Cai CY, Lai XL, Wang Y, Hu HH, Song JS, Yang Y, Wang C, Xu HC
NATURE CATALYSIS 5(10)(2022)943-951· 166
39. σ - σ Stacked Supramolecular Junctions
Feng AN, Zhou Y, Al-Shebami MAY, Chen LC, Pan ZC, Xu W, Zhao SQ, Zeng BF, Xiao ZY, Yang Y, Hong WJ
NATURE CHEMISTRY 14(10)(2022)1158-+· 167
40. Single-Dispersed Polyoxometalate Clusters Embedded on Multilayer Graphene as a Bifunctional Electrocatalyst for Efficient Li-S Batteries
Lei J, Fan XX, Liu T, Xu P, Hou Q, Li K, Yuan RM, Zheng MS, Dong QF, Chen JJ
NATURE COMMUNICATIONS 13(1)(2022)202· 168

41. Hydrogen Spillover Assisted by Oxygenate Molecules over Nonreducible Oxides
Tan MW, Yang YL, Yang Y, Chen JL, Zhang ZX, Fu G, Lin JD, Wan SL, Wang S, Wang Y
NATURE COMMUNICATIONS 13(1)(2022)1457..... 169
42. Stereoselective Intermolecular Radical Cascade Reactions of Tryptophans or γ -Alkenyl- α -Amino Acids with Acrylamides via Photoredox Catalysis
Li JT, Luo JN, Wang JL, Wang DK, Yu YZ, Zhuo CX
NATURE COMMUNICATIONS 13(1)(2022)1778..... 170
43. Predicting the Future Of Excitation Energy Transfer in Light-Harvesting Complex with Artificial Intelligence-Based Quantum Dynamics
Ullah A, Dral PO
NATURE COMMUNICATIONS 13(1)(2022)1930..... 171
44. Atomic Overlayer of Permeable Microporous Cuprous Oxide on Palladium Promotes Hydrogenation Catalysis
Liu KL, Jiang LZ, Huang WG, Zhu GZ, Zhang YJ, Xu CF, Qin RX, Liu PX, Hu CY, Wang JJ, Li JF, Yang F, Fu G, Zheng NF
NATURE COMMUNICATIONS 13(1)(2022)2597..... 172
45. Gas Permeation Through Graphdiyne-Based Nanoporous Membranes
Zhou ZH, Tan YT, Yang Q, Bera A, Xiong ZC, Yagmurcukardes M, Kim M, Zou YC, Wang G, Mishchenko A, Timokhin I, Wang CB, Wang H, Yang CY, Lu YZ, Boya R, Liao HG, Haigh S, Liu HB, Peeters FM, Li YL, Geim AK, Hu S
NATURE COMMUNICATIONS 13(1)(2022)4031..... 173
46. Layered Pd Oxide on PdSn Nanowires for Boosting Direct H₂O₂ Synthesis
Li HC, Wan Q, Du CC, Zhao JF, Li FM, Zhang Y, Zheng YP, Chen MS, Zhang KHL, Huang JY, Fu G, Lin S, Huang XQ, Xiong HF
NATURE COMMUNICATIONS 13(1)(2022)6072..... 174
47. Room-Temperature Logic-in-Memory Operations in Single-Metallofullerene Devices
Li J, Hou SJ, Yao YR, Zhang CY, Wu QQ, Wang HC, Zhang HW, Liu XY, Tang C, Wei MX, Xu W, Wang YP, Zheng JT, Pan ZC, Kang LX, Liu JY, Shi J, Yang Y, Lambert CJ, Xie SY, Hong WJ
NATURE MATERIALS 21(8)(2022)917-+..... 175
48. A General Method for Rapid Synthesis of Refractory Carbides by Low-Pressure Carbothermal Shock Reduction
Han YC, Liu ML, Sun L, Li SX, Li G, Song WS, Wang YJ, Nan ZA, Ding SY, Liao HG, Yao YG, Stucky GD, Fan FR, Tian ZQ
PNAS 119(37)(2022)e2121848119..... 176
49. Ambient-Pressure Synthesis of Ethylene Glycol Catalyzed by C₆₀-Buffered Cu/SiO₂
Zheng JW, Huang LL, Cui CH, Chen ZC, Liu XF, Duan XP, Cao XY, Yang TZ, Zhu HP, Shi K, Du P, Ying SW, Zhu CF, Yao YG, Guo GC, Yuan YZ, Xie SY, Zheng LS

SCIENCE 376(6590)(2022)288-+..... 177

50. Identification of the Active Triple-Phase Boundary of a Non-Pt Catalyst Layer in Fuel Cells
Wang YC, Huang W, Wan LY, Yang J, Xie RJ, Zheng YP, Tan YZ,
Wang YS, Zaghbi K, Zheng LR, Sun SH, Zhou ZY, Sun SG
SCIENCE ADVANCES 8(44)(2022)eadd8873..... 178

B类 其它研究论文

1. How Do Metalloproteins Tame the Fenton Reaction and Utilize center dot OH Radicals in Constructive Manners?
Wang BJ, Zhang X, Fang WH, Rovira C, Shaik S
ACCOUNTS OF CHEMICAL RESEARCH 55(16)(2022)2280-2290
2. Recent Advances in Aptamer-Based Liquid Biopsy
ACS APPLIED BIO MATERIALS 5(5)(2022)1954-1979
3. Reducing Safety Hazards by Optimizing the Morphology of the $\text{LiNi}_{0.5}\text{Co}_{0.25}\text{Mn}_{0.25}\text{O}_2$ Cathode Material under Abuse Conditions
Shi CG, Dai P, Zheng WC, Li HY, Luo CX, Shen CH,
Zhou SY, Hong YH, Wang YH, Wei YM, Huang L, Sun SG
ACS APPLIED ENERGY MATERIALS 5(4)(2022)5256-5266
4. Interstitial Hydrogen Atom Modified PdPt Nanosheets for Efficient Ethanol Electro-oxidation with High C-C Bond Cleavage Selectivity
Sun YC, Huang LQ, Shan QH, Li G, Zheng ZP, Jiang QR, Jiang YQ, Xie ZX
ACS APPLIED ENERGY MATERIALS 5(9)(2022)10907-10914
5. Rational Design of Main Group Metal-Embedded Nitrogen-Doped Carbon Materials as Frustrated Lewis Pair Catalysts for CO_2 Hydrogenation to Formic Acid
Zhang Y, Mo YR, Cao ZX
ACS APPLIED MATERIALS & INTERFACES 14(1)(2022)1002-1014
6. Zwitterion-Coated Ultrasmall MnO Nanoparticles Enable Highly Sensitive T-1-Weighted Contrast-Enhanced Brain Imaging
Wei RX, Liu K, Zhang K, Fan YF, Lin HY, Gao JH
ACS APPLIED MATERIALS & INTERFACES 14(3)(2022)3784-3791
7. Stabilized and Almost Dendrite-Free Li Metal Anodes by In Situ Construction of a Composite Protective Layer for Li Metal Batteries
You JH, Deng HT, Zheng XM, Yan H, Deng L, Zhou Y,
Li JT, Chen MG, Wu Q, Zhang PY, Sun H, Xu J
ACS APPLIED MATERIALS & INTERFACES 14(4)(2022)5298-5307

8. Cobalt-Catalyzed Carbonization Incorporating Disordered Defects in Ordered Graphitic Domains for Fast and Ultrastable Potassium-Ion Battery
He HN, Zhang HH, Luan JY, He J, Zeng L, Li XL, Liu XG, Zhang CH
ACS APPLIED MATERIALS & INTERFACES 14(4)(2022)5487-5496
9. Achieving Stable Zinc-Ion Storage Performance of Manganese Oxides by Synergistic Engineering of the Interlayer Structure and Interface
Cheng X, Xiao JF, Ye MH, Zhang YF, Yang Y, Li CC
ACS APPLIED MATERIALS & INTERFACES 14(8)(2022)10489-10497
10. Passivation Layer of Potassium Iodide Yielding High Efficiency and Stable Deep Red Perovskite Light-Emitting Diodes
Chen C, Xuan TT, Yang Y, Huang F, Zhou TL, Wang L, Xie RJ
ACS APPLIED MATERIALS & INTERFACES 14(14)(2022)16404-16412
11. Preparation of Two-Dimensional Pd@Ir Nanosheets and Application in Bacterial Infection Treatment by the Generation of Reactive Oxygen Species
Ye ZC, Fan YY, Zhu TB, Cao DX, Hu XY, Xiang SJ, Li JC, Guo ZD, Chen XL, Tan K, Zheng NF
ACS APPLIED MATERIALS & INTERFACES 14(20)(2022)23194-23205
12. Time-Gated Imaging of Latent Fingerprints with Level 3 Details Achieved by Persistent Luminescent Fluoride Nanoparticles
Chen WJ, Song YF, Zhang WX, Deng RR, Zhuang YX, Xie RJ
ACS APPLIED MATERIALS & INTERFACES 14(24)(2022)28230-28238
13. Copper Substitution in P2-Type Sodium Layered Oxide To Mitigate Phase Transition and Enhance Cyclability of Sodium-Ion Batteries
Wen YF, Huang Z, Le JB, Dai P, Shi CG, Li G, Zhou SY, Fan JJ, Zhuang SX, Lu M, Huang L, Sun SG
ACS APPLIED MATERIALS & INTERFACES 14(26)(2022)29813-29821
14. In Situ Construction of a LiF-Enriched Interfacial Modification Layer for Stable All-Solid-State Batteries
Jiao TP, Xia M, Chen ZR, Zou Y, Liu GP, Fu A, Chen LB, Gong ZL, Yang Y, Zheng JM
ACS APPLIED MATERIALS & INTERFACES 14(26)(2022)29878-29885
15. Mitigating the Surface Reconstruction of Ni-Rich Cathode via P2-Type Mn-Rich Oxide Coating for Durable Lithium Ion Batteries
Liu XS, Hao JL, Zhang MJ, Zheng BZ, Zhao DH, Cheng Y, He ZN,
Su MT, Xie CP, Luo MZ, Shan PZ, Tao MM, Liang ZT, Xiang YX, Yang Y
ACS APPLIED MATERIALS & INTERFACES 14(26)(2022)30398-30409
16. Keys Unlocking Redispersion of Reactive PdOx Nanoclusters on Ce-Functionalized Perovskite Oxides for Methane Activation
Yang YL, Zhang L, Guo HQ, Ding ZF, Wang WT, Li JH, Zhou LJ, Tu X, Qiu YF, Chen G, Sun YF

- ACS APPLIED MATERIALS & INTERFACES 14(27)(2022)30704-30713
17. General Carbon-Supporting Strategy to Boost the Oxygen Reduction Activity of Zeolitic-Imidazolate-Framework-Derived Fe/N/Carbon Catalysts in Proton Exchange Membrane Fuel Cells
Zhang PY, Yang XH, Jiang QR, Cui PX, Zhou ZY, Sun SH, Wang YC, Sun SG
ACS APPLIED MATERIALS & INTERFACES 14(27)(2022)30724-30734
 18. Defect Passivation by a Multifunctional Phosphate Additive toward Improvements of Efficiency and Stability of Perovskite Solar Cells
Zhang WH, Chen L, Zou ZP, Nan ZA, Shi JL, Luo QP, Hui Y, Li KX, Wang YJ, Zhou JZ, Yan JW, Mao BW
ACS APPLIED MATERIALS & INTERFACES 14(28)(2022)31911-31919
 19. Unraveling the Catalytic Performance of the Nonprecious Metal Single-Atom-Embedded Graphitic s-Triazine-Based C₃N₄ for CO₂ Hydrogenation
Zhang Y, Cao XR, Cao ZX
ACS APPLIED MATERIALS & INTERFACES 14(31)(2022)35844-35853
 20. Insights into Electrochemical Processes of Hollow Octahedral Co₃Se₄@rGO for High-Rate Sodium Ion Storage
Huang Z, Zhou SY, Dai P, Zeng Y, Huang L, Liao HG, Sun SG
ACS APPLIED MATERIALS & INTERFACES 14(33)(2022)37689-37698
 21. Strengthening the Interfacial Stability of the Silicon-Based Electrode via an Electrolyte Additive-Allyl Phenyl Sulfone
Liu GP, Gao J, Xia M, Cheng Y, Wang MS, Hong WJ, Yang Y, Zheng JM
ACS APPLIED MATERIALS & INTERFACES 14(33)(2022)38281-38290
 22. Insights into the Reaction Mechanisms of Nongraphitic High-Surface Porous Carbons for Application in Na- and Mg-Ion Batteries
Rubio S, Ruiz R, Zuo WH, Li YX, Liang ZT, Cosano D, Gao J, Yang Y, Ortiz GF, Ortiz GF
ACS APPLIED MATERIALS & INTERFACES 14(38)(2022)43127-43140
 23. Robust Underwater Oil-Repellent Biomimetic Ceramic Surfaces: Combining the Stability and Reproducibility of Functional Structures
Li M, Zhou ST, Guan QW, Li WJ, Li C, Bouville F, Bai H, Saiz E
ACS APPLIED MATERIALS & INTERFACES 14(40)(2022)46077-46085
 24. Li₂Se: A High Ionic Conductivity Interface to Inhibit the Growth of Lithium Dendrites in Garnet Solid Electrolytes
Yang W, Tang SJ, Yang XR, Zheng XF, Wu YQ, Zheng CX, Chen GW, Gong ZL, Yang Y
ACS APPLIED MATERIALS & INTERFACES 14(45)(2022)50710-50717
 25. Ion Flux Self-Regulation Strategy with a Volume-Responsive Separator for Lithium Metal Batteries

- Shi C, Zhang L, Wang XT, Sun T, Jiang Z, Zhao JB
ACS APPLIED MATERIALS & INTERFACES 14(46)(2022)51931-51940
26. In Situ Constructing a Catalytic Shell for Sulfur Cathode via Electrochemical Oxidative Polymerization
Liu GQ, Hou Q, Fan XX, Zheng QY, Chang JK, Fan JM, Yuan RM, Zheng MS, Dong QF
ACS APPLIED MATERIALS & INTERFACES 14(49)(2022)54830-54839
27. Activating the Stepwise Intercalation-Conversion Reaction of Layered Copper Sulfide toward Extremely High Capacity Zinc-Metal-Free Anodes for Rocking-Chair Zinc-Ion Batteries
Lv ZH, Wang B, Ye MH, Zhang YF, Yang Y, Li CC
ACS APPLIED MATERIALS & INTERFACES 14(1)(2022)1126-1137
28. Modification of a Cu Mesh with Nanowires and Magnesiophilic Ag Sites to Induce Uniform Magnesium Deposition
Wang F, Wu DZ, Zhuang YC, Li JL, Nie XZ, Zeng J, Zhao JB
ACS APPLIED MATERIALS & INTERFACES 14(27)(2022)31148-31159
29. Thin Nano Cages with Limited Hollow Space for Ultrahigh Sulfur Loading Lithium-Sulfur Batteries
Deng DR, Li C, Weng JC, Fan XH, Chen ZJ, Yang G, Li Y, Wu QH, Zheng MS, Dong QF
ACS APPLIED MATERIALS & INTERFACES 14(40)(2022)45414-45422
30. Tailoring a Hybrid Functional Layer for Mg Metal Anodes in Conventional Electrolytes with a Low Overpotential
Zhuang Y, Wu D, Wang F, Xu Y, Zeng J, Zhao J
ACS APPLIED MATERIALS & INTERFACES 14(42)(2022)47605-47615
31. Redox-Responsive Functional Iron Oxide Nanocrystals for Magnetic Resonance Imaging-Guided Tumor Hyperthermia Therapy and Heat-Mediated Immune Activation
Li Y, Ma XT, Liu XL, Yue YL, Cheng KM, Zhang Q, Nie GJ, Zhao X, Ren L
ACS APPLIED NANO MATERIALS 5(3)(2022)4537-4549
32. Discovery of a P450-Catalyzed Oxidative Defluorination Mechanism toward Chiral Organofluorines: Uncovering a Hidden Pathway
Huang Q, Zhang X, Chen QQ, Tian SX, Tong W, Zhang W, Chen YZ, Ma M, Chen B, Wang BJ, Wang JB
ACS CATALYSIS 12(1)(2022)265-272
33. Emergence of Function from Nonheme Diiron Oxygenases: A Quantum Mechanical/Molecular Mechanical Study of Oxygen Activation and Organophosphonate Catabolism Mechanisms by PhnZ
Song XT, Liu J, Wang BJ
ACS CATALYSIS 12(3)(2022)2009-2022
34. Deciphering the Reaction Pathway of Mononuclear Iron Enzyme-Catalyzed N C Triple Bond

- Formation in Isocyanide Lipopeptide and Polyketide Biosynthesis
Chen TY, Zheng ZY, Zhang X, Chen JF, Cha LD,
Tang YJ, Guo YS, Zhou JH, Wang BJ, Liu HW, Chang WC
ACS CATALYSIS 12(4)(2022)2270-2279
35. Two-Dimensionally Assembled Pd-Pt-Ir Superanosheets with Subnanometer Interlayer Spacings toward High-Efficiency and Durable Water Splitting
Lyu ZX, Zhang X, Liao XY, Liu K, Huang HP, Cai JL, Kuang Q, Xie ZX, Xie SF
ACS CATALYSIS 12(9)(2022)5305-5315
36. Water-In-Salt Environment Reduces the Overpotential for Reduction of CO₂ to CO₂-in Ionic Liquid/Water Mixtures
Yang XH, Papasizza M, Cuesta A, Cheng J
ACS CATALYSIS 12(11)(2022)6770-6780
37. Discovering Surface Structure and the Mechanism of Graphene Oxide-Triggered CeO₂-WO₃/TiO₂ Catalysts for NO Abatement with NH₃
Wang Y, Shi T, Fan QY, Liu Y, Zhang AA, Li ZQ, Hao YH, Chen L, Liu FR, Gu XJ, Zeng SH
ACS CATALYSIS 12(14)(2022)8386-8403
38. Selective Transformation of Methanol to Ethanol in the Presence of Syngas over Composite Catalysts
Zhang FY, Chen K, Jiang QM, He S, Chen QJ, Liu ZM, Kang JC, Zhang QH, Wang Y
ACS CATALYSIS 12(14)(2022)8451-8461
39. Distance for Communication between Metal and Acid Sites for Syngas Conversion
Li YB, Wang MH, Liu SH, Wu FW, Zhang QH, Zhang SH, Cheng K, Wang Y
ACS CATALYSIS 12(15)(2022)8793-8801
40. Molecular Degradation of Iron Phthalocyanine during the Oxygen Reduction Reaction in Acidic Media
Wan LY, Zhao KM, Wang YC, Wei NA, Zhang PY, Yuan JY, Zhou ZY, Sun SG
ACS CATALYSIS 12(18)(2022)11097-11107
41. Molybdenum-Catalyzed Intermolecular Deoxygenative Cross-Coupling Reactions of 1,2-Diketones with α -Ketoamides
Dong YQ, Wang K, Zhuo CX
ACS CATALYSIS 12(18)(2022)11428-11435
42. Nature and Dynamic Evolution of Rh Single Atoms Trapped by CeO₂ in CO Hydrogenation
Wu DF, Liu SX, Zhong MQ, Zhao JF, Yang YL, Sun YF,
Lin JD, Wan SL, Wang S, Huang JY, Yao YL, Li Z, Xiong HF
ACS CATALYSIS 12(19)(2022)12253-12267
43. Preorganized Internal Electric Field Powers Catalysis in the Active Site of Uracil-DNA Glycosylase

- Diao WW, Yan SH, Farrell JD, Wang BJ, Ye FF, Wang ZF
ACS CATALYSIS 12(20)(2022)12488-12499
44. Aligning Electronic Energy Levels in Pyridine-Assisted CO₂ Activation at the GaP(110)/Water Interface Using Ab Initio Molecular Dynamics
Fan XT, Wen XJ, Cheng J
ACS CATALYSIS 12(20)(2022)12521-12529
45. Hydrogenation of CO₂ to Methane over a Ru/RuTiO₂ Surface: A DFT Investigation into the Significant Role of the RuO₂ Overlayer
Yu J, Zeng YB, Jin QR, Lin W, Lu X
ACS CATALYSIS 12(23)(2022)14654-14666
46. Solvent Gaming Chemistry to Control the Quality of Halide Perovskite Thin Films for Photovoltaics
Huang X, Deng G, Zhan S, Cao F, Cheng F, Yin J, Li J, Wu B, Zheng N
ACS Central Science 8(7)(2022)1008-1016
47. Preferred Orientation of TiN Coatings Enables Stable Zinc Anodes
Zheng JX, Cao Z, Ming FW, Liang HF, Qi ZB, Liu WQ,
Xia CA, Chen CX, Cavallo L, Wang ZC, Alshareef HN
ACS ENERGY LETTERS 7(1)(2022)197-203
48. Synergistical Stabilization of Li Metal Anodes and LiCoO₂ Cathodes in High-Voltage Li Parallel to LiCoO₂ Batteries by Potassium Selenocyanate (KSeCN) Additive
Fu A, Lin JD, Zhang ZF, Xu CJ, Zou Y, Liu CY, Yan PF, Wu DY, Yang Y, Zheng JM
ACS ENERGY LETTERS 7(4)(2022)1364-1373
49. Simultaneous Dangling Bond and Zincophilic Site Engineering of SiNX Protective Coatings toward Stable Zinc Anodes
Zheng JX, Zhu GY, Liu X, Xie HX, Lin YD, Zeng Y,
Zhang YZ, Gandi AN, Qi ZB, Wang ZC, Liang HF
ACS ENERGY LETTERS 7(12)(2022)4443-4450
50. Reversible Regulating the Substrate Specificity of Enzymes in Microgels by a Phase Transition in Polymer Networks
Wang QW, Wu QS, Ye T, Wang XF, Qiu HJ, Xie JD, Wang YS, Zhou SM, Wu WT
ACS MACRO LETTERS 11(1)(2022)26-32
51. Regulating the Architecture of a Solid Electrolyte Interface on a Li-Metal Anode of a Li-O₂ Battery by a Dithiobiuret Additive
Wu XH, Li ZG, Song C, Chen LB, Dai P, Zhang PF, Qiao Y, Huang L, Sun SG
ACS MATERIALS LETTERS 4(4)(2022)682-691
52. Guidelines for Air-Stable Lithium/Sodium Layered Oxide Cathodes

Zuo WH, Xiao ZM, Zarrabeitia M, Xue XL, Yang Y, Passerini S
ACS MATERIALS LETTERS 4(6)(2022)1074-1086

53. Ultrafast Response and Programmable Locomotion of Liquid/Vapor/Light-Driven Soft Multifunctional Actuators
Wang M, Zhou L, Deng WY, Hou YQ, He W, Yu LJ, Sun H, Ren L, Hou X
ACS NANO 16(2)(2022)2672-2681
54. Stepwise Assembly of Ag₄₂ Nanocalices Based on a Mo^{VI}-Anchored Thiacalix[4]arene Metalloligand
Wang Z, Su HF, Zhang LP, Dou JM, Tung CH, Sun D, Zheng LS
ACS NANO 16(3)(2022)4500-4507
55. A Porous Bimetallic Au@Pt Core-Shell Oxygen Generator to Enhance Hypoxia-Dampened Tumor Chemotherapy Synergized with NIR-II Photothermal Therapy
Sun JY, Wang JP, Hu W, Wang YH, Zhang Q, Hu XT, Chou T, Zhang BL, Gallaro C, Halloran M, Liang L, Ren L, Wang HJ
ACS NANO 16(7)(2022)10711-10728
56. Adjustable Mixed Conductive Interphase for Dendrite-Free Lithium Metal Batteries
Lin L, Liu F, Zhang YG, Ke CZ, Zheng HF, Ye FJ, Yan XL, Lin J, Sa BS, Wang LS, Peng DL, Xie QS
ACS NANO 16(8)(2022)13101-13110
57. Phase Engineering of a Ruthenium Nanostructure toward High-Performance Bifunctional Hydrogen Catalysis
Li LG, Liu C, Liu SH, Wang J, Han JJ, Chan TS, Li YY, Hu ZW, Shao Q, Zhang QB, Huang XQ
ACS NANO 16(9)(2022)14885-14894
58. A One-Stone-Two-Birds Strategy to Functionalized Carbon Nanocages
Wang KC, Liu SH, Zhang JT, Hu ZW, Kong QY, Xu Y, Huang XQ
ACS NANO 16(9)(2022)15008-15015
59. Spatial- and Valence-Matched Neutralizing DNA Nanostructure Blocks Wild-Type SARS-CoV-2 and Omicron Variant Infection
Wan S, Liu SW, Sun M, Zhang JL, Wei XY, Song T, Li YH, Liu XY, Chen HL, Yang CY, Song YL
ACS NANO 16(9)(2022)15310-15317
60. Insights into a Low-Rank Naomaohu Coal Structural Information by Multistage Fractions Coupled with LIAD-VUVPI-TOFMS
Yu JX, Liu FG, Deng ZF, Shi ZF, Zhang JL, Wang QL, Yang J, Hu HQ, Qin ZB, Tang ZC
ACS OMEGA 7(8)(2022)6935-6943
61. High Uniformity and Enhancement Au@AgNS 3D Substrates for the Diagnosis of Breast Cancer
Yang ZX, Su HS, You EM, Liu SY, Li ZH, Zhang Y
ACS OMEGA 7(17)(2022)15223-15230

62. One-Pot Synthesis of Hexamethylenetetramine Coupled with H₂ Evolution from Methanol and Ammonia by a Pt/TiO₂ Nanophotocatalyst
Chen WK, Liu XY, Zheng H, Fu X, Yuan YZ
ACS OMEGA 7(23)(2022)19614-19621
63. XLPFE: A Simple and Effective Machine Learning Scoring Function for Protein-Ligand Scoring and Ranking
Dong LN, Qu XY, Wang BJ
ACS OMEGA 7(25)(2022)21727-21735
64. Molecular Tweezer Based on Perylene and Crown Ether for Selective Recognition of Fullerenes
Luan K, Lin QF, Xie FF, Wang Y, Li YF, Wang L, Xie SY, Zheng LS, Deng LL
ACS OMEGA 7(35)(2022)31442-31447
65. N, P Dual-Doped Porous Carbon Nanosheets for High-Efficiency CO₂ Electroreduction
Liang XD, Tian N, Zhou ZY, Sun SG
ACS SUSTAINABLE CHEMISTRY & ENGINEERING 10(5)(2022)1880-1887
66. Substantially Promoted Energy Density of Li parallel to CF_x Primary Battery Enabled by Li⁺-DMP Coordinated Structure
Xiao YK, Jian JH, Fu A, Tang C, Zou Y, Chen XX, Wang JZ, Yang Y, Zheng JM
ACS SUSTAINABLE CHEMISTRY & ENGINEERING 10(19)(2022)6217-6229
67. Liquid-Phase Amination of Phenol to Aniline over the Pd/MgO Catalyst without External Hydrogen Addition
Liu XY, Chen WK, Zou JL, Ye LM, Yuan YZ
ACS SUSTAINABLE CHEMISTRY & ENGINEERING 10(21)(2022)6988-6998
68. Novel, Simple, and Green Citrate-Based Copper Electronic Electroplating Bath in Microvia Void-Free Filling for Printed Circuit Board Application
Jin L, Li WQ, Wang ZY, Yang JQ, Zheng AN, Yang FZ, Zhan DP, Wu DY, Tian ZQ
ACS SUSTAINABLE CHEMISTRY & ENGINEERING 10(43)(2022)14204-14211
69. Single-Crystal Ni-Rich Layered LiNi_{0.9}Mn_{0.1}O₂ Enables Superior Performance of Co-Free Cathodes for Lithium-Ion Batteries
Dai PP, Kong XB, Yang HY, Li JY, Zeng J, Zhao JB
ACS SUSTAINABLE CHEMISTRY AND ENGINEERING 10(14)(2022)4381-4390
70. Synthesizing Bright CsPbBr₃ Perovskite Nanocrystals with High Purification Yields and Their Composites with in Situ-Polymerized Styrene for Light-Emitting Diode Applications
Cai Y, Zhang P, Bai W, Lu L, Wang L, Chen X, Xie RJ
ACS SUSTAINABLE CHEMISTRY AND ENGINEERING 10(22)(2022)7385-7393
71. Reducing Limitations of Aggregation-Induced Photocarrier Trapping for Photovoltaic Stability via

- Tailoring Intermolecular Electron-Phonon Coupling in Highly Efficient Quaternary Polymer Solar Cells
Zhang KN, Du XY, Chen ZH, Wang T, Yang ZQ, Yin H, Yang Y, Qin W, Hao XT
ADVANCED ENERGY MATERIALS 12(6)(2022)2103371
72. Insight into the Mechanism of Axial Ligands Regulating the Catalytic Activity of Fe-N₄ Sites for Oxygen Reduction Reaction
Zhao KM, Liu SQ, Li YY, Wei XL, Ye GY, Zhu WW, Su YK, Wang J, Liu HT, He Z, Zhou ZY, Sun SG
ADVANCED ENERGY MATERIALS 12(11)(2022)2103588
73. Redox Mediator with the Function of Intramolecularly Disproportionating Superoxide Intermediate Enabled High-Performance Li-O₂ Batteries
Sun ZQ, Lin XD, Dou WJ, Tan YY, Hu AJ, Hou Q, Yuan RM, Zheng MS, Dong QF
ADVANCED ENERGY MATERIALS 12(12)(2022)2102764
74. Single-Atom Molybdenum Engineered Platinum Nanocatalyst for Boosted Alkaline Hydrogen Oxidation
Ma M, Li G, Yan W, Wu ZZ, Zheng ZP, Zhang XB, Wang QX, Du GF, Liu DY, Xie ZX, Kuang Q, Zheng LS
ADVANCED ENERGY MATERIALS 12(14)(2022)2103336
75. Tuning Acceptor Composition in Ternary Organic Photovoltaics-Impact of Domain Purity on Non-Radiative Voltage Losses
Bi ZZ, Naveed HB, Wu HB, Zhang CK, Zhou XB, Wang J, Wang M, Wu XH, Zhu QL, Zhou K, Chen K, Wang C, Tang Z, Ma W
ADVANCED ENERGY MATERIALS 12(18)(2022)2103735
76. Pushing Lithium Cobalt Oxides to 4.7 V by Lattice-Matched Interfacial Engineering
Yang XR, Wang CW, Yan PF, Jiao TP, Hao JL, Jiang YY, Ren FC, Zhang WG, Zheng JM, Cheng Y, Wang XS, Yang W, Zhu JP, Pan SY, Lin M, Zeng LY, Gong ZL, Li JT, Yang Y
ADVANCED ENERGY MATERIALS 12(23)(2022)2200197
77. A Solution-Processable High-Modulus Crystalline Artificial Solid Electrolyte Interphase for Practical Lithium Metal Batteries
Yu ZA, Seo S, Song JC, Zhang ZW, Oyakhire ST, Wang Y, Xu R, Gong HX, Zhang S, Zheng Y, Tsao Y, Mondonico L, Lomeli EG, Wang XC, Kim W, Ryu K, Bao ZN
ADVANCED ENERGY MATERIALS 12(30)(2022)2201025
78. Surface Reconstruction of Water Splitting Electrocatalysts
Zeng Y, Zhao MT, Huang ZH, Zhu WJ, Zheng JX, Jiang Q, Wang ZC, Liang HF
ADVANCED ENERGY MATERIALS 12(33)(2022)2201713
79. Structural and Interfacial Effects on Drug Release Kinetics of Liquid-Based Fibrous Catheter
Wang CY, Hou YQ, Wang XY, Li WJ, Zhang YM, Wang SL, Zheng J, Hou X

80. Advanced Electron Energy Loss Spectroscopy for Battery Studies
Yin ZW, Zhao WG, Li JY, Peng XX, Lin C, Zhang MJ, Zeng ZY, Liao HG, Chen HB, Lin H, Pan F
ADVANCED FUNCTIONAL MATERIALS 32(1)(2022)2107190
81. Dense Crystalline-Amorphous Interfacial Sites for Enhanced Electrocatalytic Oxygen Evolution
Li D, Qin YY, Liu J, Zhao HY, Sun ZJ, Chen GB, Wu DY, Su YQ, Ding SJ, Xiao CH
ADVANCED FUNCTIONAL MATERIALS 32(7)(2022)2107056
82. Unveiling the Interplay among End Group, Molecular Packing, Doping Level, and Charge Transport in N-Doped Small-Molecule Organic Semiconductors
Ge GY, Li JT, Wang JR, Xiong M, Dong X, Li ZJ, Li JL, Cao XY, Lei T, Wang JL
ADVANCED FUNCTIONAL MATERIALS 32(7)(2022)2108289
83. Boron-Tethering and Regulative Electronic States Around Iridium Species for Hydrogen Evolution
Xue DP, Cheng JQ, Yuan PF, Lu BA, Xia HC, Yang CC, Dong CL, Zhang HZ, Shi FY, Mu SC, Hu JS, Sun SG, Zhang JN
ADVANCED FUNCTIONAL MATERIALS 32(21)(2022)2113191
84. High Configuration Entropy Activated Lattice Oxygen for O₂ Formation on Perovskite Electrocatalyst
Tang LN, Yang YL, Guo HQ, Wang Y, Wang MJ, Liu ZQ, Yang GM, Fu XZ, Luo Y, Jiang CX, Zhao YR, Shao ZP, Sun YF
ADVANCED FUNCTIONAL MATERIALS 32(28)(2022)2112157
85. Reconstruction of Ultrahigh-Aspect-Ratio Crystalline Bismuth-Organic Hybrid Nanobelts for Selective Electrocatalytic CO₂ Reduction to Formate
Zeng G, He YC, Ma DD, Luo SW, Zhou SH, Cao CS, Li XF, Wu XT, Liao HG, Zhu QL
ADVANCED FUNCTIONAL MATERIALS 32(30)(2022)2201125
86. Synergistic Effect between NiO_x and P3HT Enabling Efficient and Stable Hole Transport Pathways for Regular Perovskite Photovoltaics
Cao F, Cheng FW, Huang XF, Dai XF, Tang ZH, Nie SQ, Yin J, Li J, Zheng NF, Wu BH
ADVANCED FUNCTIONAL MATERIALS 32(31)(2022)2201423
87. Dimensional-Transformation of Ternary-Alloy through the Manipulation of Reduction Kinetics
Mahmood A, He DQ, Zhao BL, Talib SH, Cheong WC, Nan ZA, He Y, Han DX, Wang X, Niu L
ADVANCED FUNCTIONAL MATERIALS 32(36)(2022)2202639
88. Boosting the Rate Performance and Capacity of Sb₂S₃ Nanorods Cathode by Carbon Coating in All-Solid-State Lithium Batteries
Ye HJ, Wang ZF, Yan JT, Wang ZY, Chen JZ, Dai QS, Su Y, Guo BY, Li H, Geng L, Du CC, Wang J, Tang YF, Zhang LQ, Zhu LY, Huang JY
ADVANCED FUNCTIONAL MATERIALS 32(39)(2022)2204231

89. Controlling Interfacial Structural Evolution in Aqueous Electrolyte via Anti-Electrolytic Zwitterionic Waterproofing
Bo Z, Zhou MQ, Zhou SY, Song YJ, Liu Z, Liao HG,
Yang HC, Yan JH, Cen KF, Fan XL, Yu Q, Ostrikov K, Li J
ADVANCED FUNCTIONAL MATERIALS 32(45)(2022)2207140

90. Molecular Bridge Assisted Bifacial Defect Healing Enables Low Energy Loss for Efficient and Stable Perovskite Solar Cells
Deng JD, Zhang HF, Wei K, Xiao YH, Zhang CP, Yang L, Zhang XL, Wu DY, Yang Y, Zhang JB
ADVANCED FUNCTIONAL MATERIALS 32(52)(2022)2209516

91. d-Amino Acid-Based Metabolic Labeling Enables a Fast Antibiotic Susceptibility Test of Both Isolated Bacteria and Bronchoalveolar Lavage Fluid
Gao J, Guo J, Chen J, Ding C, Wang J, Huang Q, Jian Y, Zhao X, Li M, Gao Y, Yang C, Wang W
ADVANCED HEALTHCARE MATERIALS 11(6)(2022)2101736

92. Fluorinated Ionic Liquid Based Multicolor ¹⁹F MRI Nanoprobes for In Vivo Sensing of Multiple Biological Targets
Zhu XL, Xiong HH, Wang ST, Li YY, Chi JX, Wang XF, Li TT, Zhou QJ, Gao JH, Shi SG
ADVANCED HEALTHCARE MATERIALS 11(8)(2022)2102079

93. Enabling Fast Na⁺ Transfer Kinetics in the Whole-Voltage-Region of Hard-Carbon Anodes for Ultrahigh-Rate Sodium Storage
Yin XP, Lu ZX, Wang J, Feng XC, Roy S, Liu XS, Yang Y, Zhao YF, Zhang JJ
ADVANCED MATERIALS 34(13)(2022)2109282

94. Folding and Fracture of Single-Crystal Graphene Grown on a Cu(111) Foil
Luo D, Choe M, Bizao RA, Wang MH, Su HS, Huang M,
Jin S, Li YQ, Kim M, Pugno NM, Ren B, Lee Z, Ruoff RS
ADVANCED MATERIALS 34(15)(2022)2110509

95. Harnessing Plasma-Assisted Doping Engineering to Stabilize Metallic Phase MoSe₂ for Fast and Durable Sodium-Ion Storage
He HN, Zhang HH, Huang D, Kuang W, Li XL, Hao JN, Guo ZP, Zhang CH
ADVANCED MATERIALS 34(15)(2022)2200397

96. Polyiodide Confinement by Starch Enables Shuttle-Free Zn-Iodine Batteries
Zhang SJ, Hao JN, Li H, Zhang PF, Yin ZW, Li YY, Zhang BK, Lin Z, Qiao SZ
ADVANCED MATERIALS 34(23)(2022)2201716

97. Elastic Lattice Enabling Reversible Tetrahedral Li Storage Sites in a High-Capacity Manganese Oxide Cathode
Huang WY, Yang LY, Chen ZF, Liu TC, Ren GX, Shan PZ, Zhang BW, Chen SM,
Li SN, Li JY, Lin C, Zhao WG, Qiu JM, Fang JJ, Zhang MJ, Dong C, Li F, Yang Y,

- Sun CJ, Ren Y, Huang QZ, Hou GJ, Dou SX, Lu J, Amine K, Pan F
ADVANCED MATERIALS 34(30)(2022)2202745
98. Rhombohedral Pd-Sb Nanoplates with Pd-Terminated Surface: An Efficient Bifunctional Fuel-Cell Catalyst
Zhang Y, Liu XZ, Liu TY, Ma XY, Feng YG, Xu BY, Cai WB, Li YF, Su D, Shao Q, Huang XQ
ADVANCED MATERIALS 34(31)(2022)2202333
99. Vacancy-Rich MXene-Immobilized Ni Single Atoms as a High-Performance Electrocatalyst for the Hydrazine Oxidation Reaction
Zhou SQ, Zhao YX, Shi R, Wang YC, Ashok A, Heraly F, Zhang TR, Yuan JY
ADVANCED MATERIALS 34(36)(2022)2204388
100. Enabling High-Voltage "Superconcentrated Ionogel-in-Ceramic" Hybrid Electrolyte with Ultrahigh Ionic Conductivity and Single Li⁺-Ion Transference Number
Zhai YF, Hou WS, Tao MM, Wang ZT, Chen ZY,
Zeng Z, Liang X, Paoprasert P, Yang Y, Hu N, Song SF
ADVANCED MATERIALS 34(39)(2022)2205560
101. Pd-Sb Rhombohedra with an Unconventional Rhombohedral Phase as a Trifunctional Electrocatalyst
Xu BY, Liu TY, Liang XC, Dou WJ, Geng HB, Yu ZY, Li YF, Zhang Y, Shao Q, Fan JM, Huang XQ
ADVANCED MATERIALS 34(50)(2022)2206528
102. (In_xGa_{1-x})₂O₃ Thin Film Based Solar-Blind Deep UV Photodetectors with Ultra-High Detectivity and On/Off Current Ratio
Chen WS, Xu XY, Zhang JY, Shi JL, Zhang JW, Chen WC, Cheng Q, Guo YZ, Zhang KHL
ADVANCED OPTICAL MATERIALS 10(7)(2022)2102138
103. Microscale Perovskite Quantum Dot Light-Emitting Diodes (Micro-PeLEDs) for Full-Color Displays
Bai WH, Xuan TT, Zhao HY, Shi SC, Zhang XY, Zhou TL, Wang L, Xie RJ
ADVANCED OPTICAL MATERIALS 10(12)(2022)2200087
104. Laser-Driven High-Brightness Green Light for Underwater Wireless Optical Communication
Chen HX, Lin T, Huang F, Li SX, Tang XY, Xie RJ
ADVANCED OPTICAL MATERIALS 10(17)(2022)2200836
105. Natural <3 nm Interbedded Gaps to Trap Target Molecules and Provide an Enhanced Raman Spectroscopy Method
Qin M, Ge MH, Li P, Chen SY, Huang GY, Tong XH, Han W, Ren DL, He Y, Lin DY, Yang LB, Tian ZQ
ADVANCED OPTICAL MATERIALS 10(19)(2022)2200551
106. Submicron Cu@glass Core-Shell Powders for the Preparation of Conductive Thick Films on Ceramic Substrates

Yuan YH, Liu MJ, Chen YZ, Xu WJ, Peng DL
ADVANCED POWDER TECHNOLOGY 33(9)(2022)103718

107. Regulating Interfacial Li-Ion Transport via an Integrated Corrugated 3D Skeleton in Solid Composite Electrolyte for All-Solid-State Lithium Metal Batteries
Fan R, Liao WC, Fan SX, Chen DZ, Tang JN, Yang Y, Liu C
ADVANCED SCIENCE 9(8)(2022)2104506
108. Ionically Conductive Tunnels in h-WO₃ Enable High-Rate NH₄⁺ Storage
Zhang YZ, Liang J, Huang ZH, Wang Q, Zhu GY, Dong SY, Liang HF, Dong XC
ADVANCED SCIENCE 9(10)(2022)2105158
109. Recent Advances and Strategies toward Polysulfides Shuttle Inhibition for High-Performance Li-S Batteries
Huang YZ, Lin L, Zhang CK, Liu L, Li YK, Qiao ZS, Lin J, Wei QL, Wang LS, Xie QS, Peng DL
ADVANCED SCIENCE 9(12)(2022)2106004
110. Uncovering a Vital Band Gap Mechanism of Pnictides
Chen JD, Wu QC, Tian HT, Jiang XT, Xu F, Zhao X, Lin ZS, Luo M, Ye N
ADVANCED SCIENCE 9(14)(2022)2105787
111. Dual Modulation of Single Molecule Conductance via Tuning Side Chains and Electric Field with Conjugated Molecules Entailing Intramolecular O...S Interactions
Zhang H, Xu W, Song K, Lu TG, Zhang GX, Zang YP, Hong WJ, Zhang DQ
ADVANCED SCIENCE 9(17)(2022)2105667
112. Composite NiCo₂O₄@CeO₂ Microsphere as Cathode Catalyst for High-Performance Lithium-Oxygen Battery
Wu YH, Ding HR, Yang TL, Xia YJ, Zheng HF, Wei QL, Han JJ, Peng DL, Yue GH
ADVANCED SCIENCE 9(17)(2022)2200523
113. Atomically Precise Water-Soluble Graphene Quantum Dot for Cancer Sonodynamic Therapy
Ju YY, Shi XX, Xu SY, Ma XH, Wei RJ, Hou H, Chu CC, Sun D, Liu G, Tan YZ
ADVANCED SCIENCE 9(19)(2022)2105034
114. 85 °C/85%-Stable n-i-p Perovskite Photovoltaics with NiO_x Hole Transport Layers Promoted By Perovskite Quantum Dots
Cheng F, Cao F, Chen B, Dai X, Tang Z, Sun Y, Yin J, Li J, Zheng N, Wu B
ADVANCED SCIENCE 9(26)(2022)2201573
115. Dynamic Locking of Interfacial Side Reaction Sites Promotes Aluminum-Air Batteries Close to Theoretical Capacity
Huang YL, Fang L, Gu Y, Wang PS, Yan H, Wang YJ, Cao ZX, Tian ZW, Mao BW, Zhang L
ADVANCED SUSTAINABLE SYSTEMS 6(3)(2022)2100420

116. Auxiliary-Free Remote Dearomatizative Nitrenoid Transfer for Enantioselective Construction of Spirolactams
Zhu BH, Guo WT, Sun Q, Qian PC, Ye LW, Li L
ADVANCED SYNTHESIS & CATALYSIS 364(2)(2022)314-318
117. Predicting and Designing Thermally Activated Delayed Fluorescence Molecules with Balanced Delta E-ST and Transition Dipole Moment
Wei ZZ, Jiang SS, Qi FF, Lv X, Song JH, Gu JJ, Meng LY, Lu CZ
ADVANCED THEORY AND SIMULATIONS 5(11)(2022)2200494
118. A Polypyrrole-Mediated Photothermal Biosensor with A Temperature and Pressure Dual Readout for the Detection of Protein Biomarkers
Song EY, Tao YZ, Shen HC, Yang CY, Tian T, Yang L, Zhu Z
ANALYST 147(12)(2022)2671-2677
119. High-Resolution Diffusion-Order NMR Spectroscopy in Inhomogeneous Magnetic Fields via Intermolecular Zero-Quantum Coherences
Lin XQ, Du SJ, Huang CD, Ni ZK, Lin EP, Chen B, Chen YL, Huang YQ, Chen Z
ANALYTICA CHIMICA ACTA 1197(2022)339508
120. Ultrafast and Field-Based Detection of Methamphetamine in Hair with Au Nanocake-Enhanced Raman Spectroscopy
Peng W, Zong XQ, Xie TT, Zhou JW, Yue MF, Wen BY, Wang YH, Chen J, Zhang YJ, Li JF
ANALYTICA CHIMICA ACTA 1235(2022)340531
121. In Situ Raman Enhancement Strategy for Highly Sensitive and Quantitative Lateral Flow Assay
Shen H, Song E, Wang Y, Meng L, Dong J, Lin B, Huang D, Guan Z, Yang C, Zhu Z
ANALYTICAL AND BIOANALYTICAL CHEMISTRY 414(1)(2022)507-513
122. Single-Cell Digital Microfluidic Mass Spectrometry Platform for Efficient and Multiplex Genotyping of Circulating Tumor Cells
Ruan QY, Yang J, Zou FX, Chen XF, Zhang QQ, Zhao KF,
Lin XY, Zeng X, Yu XY, Wu LL, Lin SC, Zhu Z, Yang CY
ANALYTICAL CHEMISTRY 94(2)(2022)1108-1117
123. Neural Network Method for Diffusion-Ordered NMR Spectroscopy
Lin EP, Zou NN, Huang YQ, Chen Z, Yang Y
ANALYTICAL CHEMISTRY 94(6)(2022)2699-2705
124. Adaptable Singlet-Filtered Nuclear Magnetic Resonance Spectroscopy for Chemical and Biological Applications
Huang CD, Peng Y, Lin EP, Ni ZK, Lin XQ, Zhan HL, Huang YQ, Chen Z
ANALYTICAL CHEMISTRY 94(10)(2022)4201-4208
125. Exploring the Effect of Pd on the Oxygen Reduction Performance of Pt by In Situ Raman

Spectroscopy

Sun YL, Yao-Lin A, Yue MF, Chen HQ, Ze HJ, Wang YH, Dong JC, Tian ZQ, Fang PP, Li JF
ANALYTICAL CHEMISTRY 94(11)(2022)4779-4786

126. Decoding Expression Dynamics of Protein and Transcriptome at the Single-Cell Level in Paired Picoliter Chambers
Xu X, Zhang MX, Zhang XB, Liu YL, Cai LF, Zhang QQ, Chen Q, Lin L, Lin SC, Song YL, Zhu Z, Yang CY
ANALYTICAL CHEMISTRY 94(23)(2022)8164-8173
127. Magnetofluid-Integrated Multicolor Immunochip for Visual Analysis of Neutralizing Antibodies to SARS-CoV-2 Variants
Shen HC, Chen XY, Zeng LQ, Xu X, Tao YZ, Kang SY, Lu YZ, Lian MJ, Yang CY, Zhu Z
ANALYTICAL CHEMISTRY 94(23)(2022)8458-8465
128. DNA-Programmed Orientation-Ordered Multivalent Microfluidic Interface for Liquid Biopsy
Peng J, Liu YL, Su R, Zeng LQ, Huo ZX, Peng RX, Yu XY, Zhang HM, Yang CY, Yang L, Zhu Z
ANALYTICAL CHEMISTRY 94(24)(2022)8766-8773
129. Reversible and Highly Ordered Biointerfaces for Efficient Capture and Nondestructive Release of Circulating Tumor Cells
Wang SY, Cui JS, Fan Q, Gan JX, Liu CR, Wang YH, Yang T, Wang JH, Yang CY
ANALYTICAL CHEMISTRY 94(26)(2022)9450-9458
130. Biocapture-Directed Chemical Labeling for Discerning Stressed States of Organelles
Gao L, Shi YL, Zhang EK, You JX, Han JH, Su XH, Han SF
ANALYTICAL CHEMISTRY 94(27)(2022)9903-9910
131. Visualization of a Machine Learning Framework toward Highly Sensitive Qualitative Analysis by SERS
Luo SH, Wang WL, Zhou ZF, Xie Y, Ren B, Liu GK, Tian ZQ
ANALYTICAL CHEMISTRY 94(28)(2022)10151-10158
132. Single-Molecule Tunneling Sensors for Nitrobenzene Explosives
Yu PK, Chen LC, Zhang YX, Zhao SQ, Chen ZX, Hu Y, Liu JY, Yang Y, Shi J, Yao ZY, Hong WJ
ANALYTICAL CHEMISTRY 94(35)(2022)12042-12050
133. Deep Learning-Enabled Raman Spectroscopic Identification of Pathogen-Derived Extracellular Vesicles and the Biogenesis Process
Qin YF, Lu XY, Shi Z, Huang QS, Wang X, Ren B, Cui L
ANALYTICAL CHEMISTRY 94(36)(2022)12416-12426
134. Real-Time Sniffing Mass Spectrometry Aided by Venturi Self-Pumping Applicable to Gaseous and Solid Surface Analysis
Li X, Chen MM, Su HF, Zhang ML, Xie SY, Zheng LS

ANALYTICAL CHEMISTRY 94(40)(2022)13719-13727

135. Portable and Label-Free Sensor Array for Discriminating Multiple Analytes via a Handheld Gas Pressure Meter

Shi L, Tang QR, Yang B, Liu W, Li BX, Yang CY, Jin Y

ANALYTICAL CHEMISTRY 94(41)(2022)14453-14459

136. Rapid Point-of-Care Assay by SERS Detection of SARS-CoV-2 Virus and Its Variants

Guan PC, Zhang H, Li ZY, Xu SS, Sun M, Tian XM, Lin JS, Wen H, Zhang FL,

Zhang YJ, Ma Z, Yu GJ, Yang CY, Wang ZX, Song YL, Li JF, Gu MM

ANALYTICAL CHEMISTRY 94(51)(2022)17795-17802

137. Direct and Simultaneous Identification of Multiple Mitochondrial Reactive Oxygen Species in Living Cells Using a SERS Borrowing Strategy

Lin S, Ze H, Zhang XG, Zhang YJ, Song J, Zhang H, Zhong HL, Yang ZL, Yang C, Li JF, Zhu Z

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(25)(2022)e202203511

138. Electrochemical Migratory Cyclization of N-Acylsulfonamides

Shi Z, Li Y, Li N, Wang WZ, Lu HK, Yan H, Yuan Y, Zhu J, Ye KY

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(30)(2022)e202206058

139. Redox-Regulated Conformational Change of Disulfide-Rich Assembling Peptides

Dong HL, Wang MS, Fan SH, Wu CL, Zhang CH, Wu X, Xue B, Cao Y, Deng JJ, Yuan D, Shi JF

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(44)(2022)e202212829

140. A Genuine Stannylone with a Monoatomic Two-Coordinate Tin(0) Atom Supported by a Bis(silylene) Ligand

Xu J, Dai CS, Yao SL, Zhu J, Driess M

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(3)(2022)e202114073

141. In Situ Raman Probing of Hot-Electron Transfer at Gold-Graphene Interfaces with Atomic Layer Accuracy

Yang JL, Wang HJ, Zhu ZW, Yue MF, Yang WM, Zhang XG, Ruan XY, Guan ZQ,

Yang ZL, Cai WW, Wu YF, Fan FR, Dong JC, Zhang H, Xu HX, Tian ZQ, Li JF

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(5)(2022)e202112749

142. A Conjugated Figure-of-Eight Oligoparaphenylene Nanohoop with Adaptive Cavities Derived from Cyclooctatetrathiophene Core

Zhan LJ, Dai CS, Zhang GH, Zhu J, Zhang SG, Wang H, Zeng Y, Tung CH, Wu LZ, Cong H

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(5)(2022)e202113334

143. Copper-Catalyzed Asymmetric Diyne Cyclization via [1,2]-Stevens-Type Rearrangement for the Synthesis of Chiral Chromeno[3,4-c]pyrroles

Hong FL, Shi CY, Hong P, Zhai TY, Zhu XQ, Lu X, Ye LW

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(7)(2022)e202115554

144. Modification of Multi-Component Building Blocks for Assembling Giant Chiral Lanthanide-Titanium Molecular Rings
Du MH, Xu SH, Li GJ, Xu H, Lin Y, Liu WD, Long LS, Zheng LS, Kong XJ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(8)(2022)e202116296
145. Structural Insight into the Catalytic Mechanism of the Endoperoxide Synthase FtmOx1
Wu L, Wang ZF, Cen YX, Wang BJ, Zhou JH
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(12)(2022)e202112063
146. p-d Orbital Hybridization Induced by a Monodispersed Ga Site on a Pt₃Mn Nanocatalyst Boosts Ethanol Electrooxidation
Wang Y, Zheng M, Li YR, Ye CL, Chen J, Ye JY, Zhang QH, Li J, Zhou ZY, Fu XZ, Wang J, Sun SG, Wang DS
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(12)(2022)e202115735
147. Electrocatalytic Allylic C-H Alkylation Enabled by a Dual-Function Cobalt Catalyst
Chen M, Wu ZJ, Song JS, Xu HC
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(14)(2022)e202115954
148. Superlattice in a Ru Superstructure for Enhancing Hydrogen Evolution
Zhang JT, Mao XN, Wang SL, Liang LL, Cao MF, Wang L, Li G, Xu Y, Huang XQ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(14)(2022)e202116867
149. Unmasking the Critical Role of the Ordering Degree of Bimetallic Nanocatalysts on Oxygen Reduction Reaction by In Situ Raman Spectroscopy
Chen HQ, Ze HJ, Yue MF, Wei DY, Yao-Lin A, Wu YF, Dong JC, Zhang YJ, Zhang H, Tian ZQ, Li JF
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(16)(2022)e202117834
150. Hierarchical Assembly of Coordination Macromolecules with Atypical Geometries: Gd₄₄Co₂₈ Crown and Gd₉₅Co₆₀ Cage
Du MH, Wang DH, Wu LW, Jiang LP, Li JP, Long LS, Zheng LS, Kong XJ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(16)(2022)e202200537
151. Extraordinary p-d Hybridization Interaction in Heterostructural Pd-PdSe Nanosheets Boosts C-C Bond Cleavage of Ethylene Glycol Electrooxidation
Qin YC, Zhang WL, Wang FQ, Li JJ, Ye JY, Sheng X, Li CX, Liang XY, Liu P, Wang XP, Zheng X, Ren YL, Xu CL, Zhang ZC
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(16)(2022)e202200899
152. Carbon Dioxide Chemically Responsive Switchable Gas Valves with Protonation-Induced Liquid Gating Self-Adaptive Systems
Lei JM, Hou YQ, Wang HM, Fan Y, Zhang YM, Chen BY, Yu SJ, Hou X
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(17)(2022)e202201109

153. Solvent-Controlled Condensation of $[\text{Mo}_2\text{O}_5(\text{PTC4A})_2]^{6-}$ Metalloligand in Stepwise Assembly of Hexagonal and Rectangular Ag_{18} Nanoclusters
Wang Z, Li L, Feng L, Gao ZY, Tung CH, Zheng LS, Sun D
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(20)(2022)e202200823
154. Synthesis of Axially Chiral N-Arylindoles via Atroposelective Cyclization of Ynamides Catalyzed by Chiral Bronsted Acids
Wang ZS, Zhu LJ, Li CT, Liu BY, Hong X, Ye LW
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(20)(2022)e202201436
155. Strain of Supramolecular Interactions in Single-Stacking Junctions
Li RH, Zhou Y, Ge WH, Zheng JT, Zhu YX, Bai J, Li XH,
Lin LC, Duan HC, Shi J, Yang Y, Liu JY, Liu ZT, Hong WJ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(27)(2022)e202200191
156. Catalyst-Dependent Stereospecific [3,3]-Sigmatropic Rearrangement of Sulfoxide-Ynamides: Divergent Synthesis of Chiral Medium-Sized N,S-Heterocycles
Zhu GY, Zhou JJ, Liu LG, Li X, Zhu XQ, Lu X, Zhou JM, Ye LW
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(28)(2022)e202204603
157. Unexpected White Phosphorus (P-4) Activation Modes with Silylene-Substituted o-Carboranes and Access to an Isolable 1,3-Diphospha-2,4-disilabutadiene
Xiong Y, Dong SC, Yao SL, Zhu J, Driess M
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(28)(2022)e202205358
158. Sulfur-Doped Quintuple [9]Helicene with Azacorannulene as Core
Wu YF, Ying SW, Liao SD, Zhang L, Du JJ, Chen BW,
Tian HR, Xie FF, Xu H, Deng SL, Zhang QY, Xie SY, Zheng LS
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(33)(2022)e202204334
159. An Isolable 2,5-Disila-3,4-Diphosphapyrrole and a Conjugated Si=P-Si=P-Si=N Chain Through Degradation of White Phosphorus with a N,N-Bis(Silylenyl)Aniline
Xiong Y, Dong SC, Yao SL, Dai CS, Zhu J, Kemper S, Driess M
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(37)(2022)e202209250
160. Organic Sulfonium-Stabilized High-Efficiency Cesium or Methylammonium Lead Bromide Perovskite Nanocrystals
Cai YT, Li WB, Tian DJ, Shi SC, Chen X, Gao P, Xie RJ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(37)(2022)e202209880
161. Nanographene Metallaprisms: Structure, Stimulated Transformation, and Emission Enhancement
Chai L, Ju YY, Xing JF, Ma XH, Zhao XJ, Tan YZ
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(38)(2022)e202210268
162. From a Metal-Organic Square to a Robust and Regenerable Supramolecular Self-Assembly for

Methane Purification

Cao ZM, Li GL, Di ZY, Chen C, Meng LY, Wu MY, Wang W, Zhuo Z, Kong XJ, Hong MC, Huang YG
ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(48)(2022)e202210012

163. Coordination Switch Drives Selective C-S Bond Formation by the Non-Heme Sulfoxide Synthases

Wu P, Gu Y, Liao LX, Wu YF, Jin JY, Wang ZF, Zhou JH, Shaik S, Wang BJ

ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 61(50)(2022)e202214235

164. Prediction of Long-Term Service Life of an Organic Coating Based on Short-Term Exposure Results

Xu YQ, Song GL, Zheng DJ

ANTI-CORROSION METHODS AND MATERIALS 69(3)(2022)269-278

165. (Oxy)Nitride Heterojunction-Strengthened Separation of Photogenerated Carriers in g-C₃N₄ Towards Enhanced Photocatalytic H₂ Evolution

Zhang YZ, Liu DJ, Shi JW, Chen PF, Zong SC, Cheng C, Chen KL, Chen YB, Ma LJ

APPLIED CATALYSIS A-GENERAL 643(2022)118746

166. Hexagonal Boron Nitride for Selective Oxidative Dehydrogenation of n-Hexane to Olefins

Liang RX, Li JW, Wang YW, Zhang ZX, Luan B, Liu JJ,

Qian SY, Wan SL, Zhao DM, Xiong HF, Wang S, Lin JD, Wang Y

APPLIED CATALYSIS A-GENERAL 643(2022)118763

167. Unveiling the Reaction Pathway on Cu/CeO₂ Catalyst for Electrocatalytic CO₂ Reduction to CH₄

Xue L, Zhang CJ, Wu JF, Fan QY, Liu Y, Wu YX, Li JX, Zhang H, Liu FR, Zeng SH

APPLIED CATALYSIS B-ENVIRONMENTAL 304(2022)120951

168. Co-Promotion of Two-Type Active Sites: PtCu_x Single-Atom Alloy and Copper-Ceria Interface for Preferential Oxidation of CO

Wang Q, Gong JH, Zhang H, Fan QY, Xue L, Wu JF, Li JX, Wang Y, Liu Z, Gao R, Zeng SH

APPLIED CATALYSIS B-ENVIRONMENTAL 306(2022)121117

169. A Dynamic Ni(OH)₂-NiOOH/NiFeP Heterojunction Enabling High-Performance E-Upgrading of Hydroxymethylfurfural

Luo RP, Li YY, Xing LX, Zhong RY, Qian ZY, Yin GP, Wang YC, Du L

APPLIED CATALYSIS B-ENVIRONMENTAL 311(2022)121357

170. Evolutionary Face-to-Face 2D/2D Bismuth-Based Heterojunction: the Quest for Sustainable Photocatalytic Applications

Chong DS, Foo JJ, Tan XQ, Ling GZS, Tan LL, Chen XZ, Ong WJ

APPLIED MATERIALS TODAY 29(2022)101636

171. Preparation of Highly Branched Polyolefins by Controlled Chain-Walking Olefin Polymerization

Lei T, Ma ZS, Liu HJ, Wang XY, Li P, Wang FF, Wu WT, Zhang SJ, Xu GY, Wang FZ

APPLIED ORGANOMETALLIC CHEMISTRY 36(8)(2022)e6788

172. Recent Progress in Advanced Flexible Zinc Ion Battery Design
Zeng Y, Liang J, Zheng JX, Huang ZH, Zhang XY, Zhu GY, Wang ZC, Liang HF, Zhang YZ
APPLIED PHYSICS REVIEWS 9(2)(2022)021304
173. Significant Influence of Controllable Surface Oxygen Vacancies of CuO for Enhancing Sensitivity of Glucose Detection
Wang SB, Yang HJ, Yi XY, Sari HMK, Zhang X, Wang T,
Zhou ZY, Cao B, Qin J, Wang JJ, Li WB, Li XF
APPLIED SURFACE SCIENCE 574(2022)151649
174. High-Efficiency and Selective Capture of Nitric Oxide by Fluorine-Modified Carbon Nitride: A DFT Investigation
Liu Y, Cao XR, Zhang S, Cao JY, Zhang AR, Zhang S, Su PF, Ai YJ
APPLIED SURFACE SCIENCE 593(2022)153353
175. The Effect of Grain Boundary in Hexagonal Boron Nitride on Catalytic Activity of Nitrogen Reduction Reaction
Qin YY, Wu DY, Su YQ
APPLIED SURFACE SCIENCE 593(2022)153468
176. Enhanced Photo-Carrier Transportation at Semiconductor/Electrolyte Interface of TiO₂ Photoanode by Oxygen Vacancy Engineering
Liang X, He Q, Zhang JY, Ding XY, Gao Y, Chen WS, Zhang KHL, Haw CY
APPLIED SURFACE SCIENCE 597(2022)153744
177. Evolution of Pd Chemical States and Effects of C₃H₆ and H₂O on the CO Oxidation over Pd/CeO₂ Catalyst
Wang MZ, Ma PJ, Wu ZZ, Chu SS, Zheng YP, Zhou ZH, Weng WZ
APPLIED SURFACE SCIENCE 599(2022)153897
178. Growth and Structures of MnO_x Thin Films on Ni(111)
Xu J, Duan Y, Mu CL, Zhang QY, Xie XW, Chen MS
APPLIED SURFACE SCIENCE 603(2022)154427
179. Improved Capacity Retention for a Disordered Rocksalt Cathode via Solvate Ionic Liquid Electrolytes
Wichmann L, Brinkmann JP, Luo MZ, Yang Y, Winter M, Schmich R, Placke T, Gomez-Martin A
BATTERIES & SUPERCAPS 5(7)(2022)e202200075
180. Solid Electrolyte Interphase Layer Formation on the Si-Based Electrodes with and without Binder Studied by XPS and ToF-SIMS Analysis
Wu ZY, Deng L, Li JT, Zanna S, Seyeux A, Huang L, Sun SG, Marcus P, Swiatowska J
BATTERIES-BASEL 8(12)(2022)271
181. Recent Advances in Engineering Iron Oxide Nanoparticles for Effective Magnetic Resonance Imaging
Zhao ZH, Li MY, Zeng J, Huo LL, Liu K, Wei RX, Ni KY, Gao JH

- BIOACTIVE MATERIALS 12(2022)214-245
182. Arsenite-Loaded Albumin Nanoparticles for Targeted Synergistic Chemo-Photothermal Therapy of HCC
Zhang K, Li D, Zhou B, Liu J, Luo X, Wei R, Wang L, Hu X, Su Z, Lin H, Gao J, Shan H
BIOMATERIALS SCIENCE 10(1)(2022)243-257
183. Bioinspired Photo-Responsive Liquid Gating Membrane
Zhang RR, Lei JM, Xu JD, Fu HX, Jing Y, Chen BY, Hou X
BIOMIMETICS 7(2)(2022)47
184. Metabolic Installation of Macrophage-Recruiting Glycan Ligand on Tumor Cell Surface for In Vivo
Tumor Suppression
Xie YZ, Li YB, Han SF
BIOORGANIC & MEDICINAL CHEMISTRY LETTERS 57(2022)128500
185. Progress of Advanced Nanomaterials in Diagnosis of Neurodegenerative Diseases
Chen J, Zhou ZF, Luo SH, Liu GK, Xiang J, Tian ZQ
BIOSENSORS & BIOELECTRONICS 217(2022)114717
186. Electrochemically Reduced Graphene Oxide: Preparation, Composites, and Applications
Zhou AA, Bai J, Hong WJ, Bai H
CARBON 191(2022)301-332
187. Point-to-Face Contact Heterojunctions: Interfacial Design of 0D Nanomaterials on 2D g-C₃N₄
Towards Photocatalytic Energy Applications
Tan XQ, Ng SF, Mohamed AR, Ong WJ
CARBON ENERGY 4(5)(2022)665-730
188. Zero Valent Iron Nanoparticles as Sustainable Nanocatalysts for Reduction Reactions
Farooqi ZH, Begum R, Naseem K, Wu WT, Irfan A
CATALYSIS REVIEWS-SCIENCE AND ENGINEERING 64(2)(2022)286-355
189. Synthesis of Durene by Methylation of 1,2,4-Trimethylbenzene with Syngas over Bifunctional
CuZnZrO_x-HZSM-5 Catalysts
Wen DL, Zuo JC, Han XQ, Liu J, Ye LM, Yuan YZ
CATALYSIS SCIENCE & TECHNOLOGY 12(8)(2022)2555-2565
190. Boosting Propane Dehydroaromatization by Confining PtZn Alloy Nanoparticles within H-ZSM-5
Crystals
Chen H, Li W, Zhang MC, Wang WY, Zhang XH, Lu F, Cheng K, Zhang QH, Wang Y
CATALYSIS SCIENCE & TECHNOLOGY 12(24)(2022)7281-7292
191. Construction of SrTiO₃-LaCrO₃ Solid Solutions with Consecutive Band Structures for
Photocatalytic H₂ Evolution under Visible Light Irradiation
Guan XJ, Zong SC, Tian L, Zhang YZ, Shi JW

192. Unraveling Molecular Structures and Ion Effects of Electric Double Layers at Metal Water Interfaces
Li L, Liu YP, Le JB, Cheng J
CELL REPORTS PHYSICAL SCIENCE 3(2)(2022)100759
193. Hybrid Covalent Organic-Framework-Based Electrolytes for Optimizing Interface Resistance in Solid-State Lithium-Ion Batteries
Cheng DM, Sun C, Lang ZL, Zhang JH, Hu AJ, Duan JN,
Chen XY, Zang HY, Chen JJ, Zheng MS, Dong QF
CELL REPORTS PHYSICAL SCIENCE 3(3)(2022)100731
194. Deep UV Transparent Conductive Oxide Thin Films Realized Through Degenerately Doped Wide-Bandgap Gallium Oxide
Zhang JY, Willis J, Yang ZN, Lian X, Chen W, Wang LS,
Xu XY, Lee TL, Chen L, Scanlon DO, Zhang KHL
CELL REPORTS PHYSICAL SCIENCE 3(3)(2022)100801
195. Monolayer Nanoarchitecture of Crystalline Metallopolymers by Electrochemical Iterative Growth
Wang JX, Wei C, Li SM, Hao Q, Shi J, Liu JA, Li L,
Wang YF, Li YF, Shen LY, Zhang XB, Hong WJ, Li M
CELL REPORTS PHYSICAL SCIENCE 3(4)(2022)100852
196. Single Photovoltaic Material Solar Cells with Enhanced Exciton Dissociation and Extended Electron Diffusion
Zhang ZZ, Li L, Xu CY, Jin PF, Huang MF, Li YW, Wang H, Yi YP, Zhang C, Yang Y, Xu WG, Lin YZ
CELL REPORTS PHYSICAL SCIENCE 3(6)(2022)100895
197. Multinuclear Mn(II) United-DOTA Complexes with Enhanced Inertness and High MRI Contrast Ability
Sun CJ, Yang ZX, Wu P, Luo XJ, Liu K, Wang BJ, Lin HY, Gao JH
CELL REPORTS PHYSICAL SCIENCE 3(6)(2022)100920
198. In Situ Generation of Active •OH on Co-SrTiO₃ Tandem Catalyst for Conversion of Methane to Methanol
Luo ZB, Peng YK, Xiong HF
CHEM 8(6)(2022)1539-1553
199. Oxidation of Methane to Methanol by Water Over Cu/SSZ-13: Impact of Cu Loading and Formation of Active Sites
Zhang HL, Lv JH, Zhang Z, Du CC, Wang S, Lin JD, Wan SL, Wang Y, Xiong HF
CHEMCATCHEM 14(5)(2022)e202101609
200. Investigation on the Reaction Mechanism of Methane Oxidation over MgAl₂O₄-Supported Single-Atom Catalyst Prepared at High Temperature

- Wan Q, Li HY, Liu SX, Zhang Z, Xiong HF, Lin S
CHEMCATCHEM 14(22)(2022)e202200919
201. Copper Deposition on Au(111) in a Deep Eutectic Solvent: An In Situ STM Study
Tan Z, Liu S, Wu JD, Nan Z, Yang FZ, Zhan DP, Yan JW, Mao BW
CHEMELECTROCHEM 9(4)(2022)e202101412
202. Electrochemical Reduction of Nitrogen to Ammonia by Pd-S-Mo Nanosheets on a Hydrophobic Hierarchical Graphene Support
Zhang WY, Lin WJ, Ren J, Zheng NF, Wu BH
CHEMELECTROCHEM 9(5)(2022)e202100052
203. Toward Preeminent Throwing Power from a Novel Alkaline Copper Electronic Electroplating Bath with Composite Coordination Agents
Li WQ, Jin L, Yang JQ, Wang ZY, Zhan D, Yang FZ, Tian ZQ
CHEMELECTROCHEM 9(11)(2022)e202200423
204. Constructing Ion-Selective Coating Layer with Lithium Ion Conductor LLZO and Binder Li-Nafion for Separator Used in Lithium-Sulfur Batteries
Huang BY, Hua HM, Lai PB, Shen X, Li RY, He Z, Zhang P, Zhao JB
CHEMELECTROCHEM 9(14)(2022)e202200416
205. Kinetic Regulation Engineering and In-Situ Spectroscopy Studies on Transition-Metal-Based Electrocatalysts for Water Splitting
Xu GD, Feng MY, Wang SY, Cheng Y, Chen JJ
CHEMELECTROCHEM 9(15)(2022)e202200549
206. Evolution of Cu Single Atom Catalysts to Nanoclusters During CO₂ Reduction to CO
Yan L, Liang XD, Sun Y, Xiao LP, Lu BA, Li G, Li YY,
Hong YH, Wan LY, Chen C, Yang J, Zhou ZY, Tian N, Sun SG
CHEMICAL COMMUNICATIONS 58(15)(2022)2488-2491
207. Revealing Protein Binding Affinity on Metal Surfaces: An Electrochemical Approach
Lyu DY, Wang PS, Zhang S, Liu GK, Ren B
CHEMICAL COMMUNICATIONS 58(21)(2022)3537-3540
208. Revealing the Synergistic Effect of Capillary Force and Electrostatic Attraction for D-SERS Sensitivity
Wang WL, Pu SH, Hu WY, Gu JL, Ren B, Tian ZQ, Liu GK
CHEMICAL COMMUNICATIONS 58(24)(2022)3953-3956
209. Enabling Alcohol as a Hydrogen Carrier Using Metal-Organic Framework-Stabilized Ir-Sc Bifunctional Catalytic Sites
Wang J, Liu HC, Chen JW, Cao LY, Wang C
CHEMICAL COMMUNICATIONS 58(39)(2022)5857-5860

210. $\text{Cu}_{28}\text{H}_{20}$: A Peculiar Chiral Nanocluster with an Exposed Cu Atom and 13 Surface Hydrides
Liu XH, Shen H, Gao Y, Deng GC, Deng HW, Han YZ, Teo BK, Zheng NF
CHEMICAL COMMUNICATIONS 58(55)(2022)7670-7673
211. Identification of a Pyrone-Type Species as the Active Site for the Oxygen Reduction Reaction
Sun ZH, Zhang X, Yang XD, Shi WN, Huang YQ, Men YL, Yang J, Zhou ZY
CHEMICAL COMMUNICATIONS 58(64)(2022)8998-9001
212. Capturing Nonclassical C_{70} with Double Heptagons in Low-Pressure Combustion
Xie FF, Chen ZC, Zhang M, Xie XM, Chen LF, Tian HR, Deng SL, Xie SY, Zheng LS
CHEMICAL COMMUNICATIONS 58(70)(2022)9814-9817
213. Porous Carbon with Uniformly Distributed Cobalt Nanoparticles Derived from ZIF-67 for Efficient Removal of Vapor Elemental Mercury: A Combined Experimental and DFT Study
Yang J, Chen HQ, Shi N, Wang T, Liu J, Pan WP
CHEMICAL ENGINEERING JOURNAL 428(2022)132095
214. Fire-Resistant Plant Fiber Sponge Enabled by Highly Thermo-Conductive Hexagonal Boron Nitride Ink
Chen TJ, Liu ZY, Hu XK, Zhao G, Qin ZP, Tosin Aladejana J, Peng XF, Xie YQ, Wu BH
CHEMICAL ENGINEERING JOURNAL 429(2022)132135
215. Sulfur Encapsulation into Yolk-Shell $\text{Fe}_2\text{N}@$ Nitrogen Doped Carbon for Ambient-Temperature Sodium-Sulfur Battery Cathode
Aslam MK, Hussain T, Tabassum H, Wei Z, Tang WW, Li S, Bao SJ, Zhao XS, Xu MW
CHEMICAL ENGINEERING JOURNAL 429(2022)132389
216. In-Situ Repair of Marine Coatings by a Fe_3O_4 Nanoparticle-Modified Epoxy Resin under Seawater
Feng ZL, Wan RJ, Chen SM, Tang X, Ju H, Li Y, Song GL
CHEMICAL ENGINEERING JOURNAL 430(2022)132827
217. Construct Efficient Substrate Transport and Catalytic Sub-Nanochannels in Metal-Organic Framework-Based Nanozymes for Boosting Peroxidase-Like Catalytic Activity
Cheng XQ, Zhou XR, Zheng ZP, Kuang Q
CHEMICAL ENGINEERING JOURNAL 430(2022)133079
218. Core-Shell Zeolite Imidazole Framework-Derived $\text{ZnSe}@$ CoSe_2/C Heterostructure Enabling Robust Polysulfide Adsorption and rapid Li^+ Diffusion in High-Rate and High-Loading Lithium-Sulfur Batteries
Liu JB, Lin CJ, Xie QS, Peng DL, Xie RJ
CHEMICAL ENGINEERING JOURNAL 430(2022)133099
219. Multi-Strategy Synergistic Li-Rich Layered Oxides with Fluorine-Doping and Surface Coating of Oxygen Vacancy Bearing CeO_2 to Achieve Excellent Cycling Stability
Mei J, Chen YZ, Xu WJ, He W, Wang LS, Xie QS, Peng DL
CHEMICAL ENGINEERING JOURNAL 431(2022)133799

220. A Highly Reversible Glass-Fiber-Based Flexible Lithium Anode via Embedding Lithophilic Cobalt Quantum Dots
Xu P, Yan MY, Yu SS, Liu XY, Fan JM, Yuan RM, Zheng MS, Dong QF
CHEMICAL ENGINEERING JOURNAL 431(2022)133906
221. Synergistic Effect of Nitrogen Vacancy on Ultrathin Graphitic Carbon Nitride Porous Nanosheets for Highly Efficient Photocatalytic H₂ Evolution
Zhang YZ, Huang ZX, Dong CL, Shi JW, Cheng C, Guan XJ,
Zong SC, Luo B, Cheng ZN, Wei DX, Huang YC, Shen SH, Guo LJ
CHEMICAL ENGINEERING JOURNAL 431(2022)134101
222. Single-Crystal Structure Helps Enhance the Thermal Performance of Ni-Rich Layered Cathode Materials for Lithium-Ion Batteries
Kong XB, Zhang YG, Li JY, Yang HY, Dai PP, Zeng J, Zhao JB
CHEMICAL ENGINEERING JOURNAL 434(2022)134638
223. Anti-Defect Engineering Toward High Luminescent Efficiency in Whitlockite Phosphors
Pan X, Mei LF, Zhuang YX, Seto T, Wang YH, Plyaskin M, Xi W, Li C, Guo QF, Liao LB
CHEMICAL ENGINEERING JOURNAL 434(2022)134652
224. Intrinsic and Extrinsic Doping to Construct Hematite Nanorod p-n Homojunctions for Highly Efficient PEC Water Splitting
Wang HP, Hu YL, Song GL, Zheng DJ
CHEMICAL ENGINEERING JOURNAL 435(2022)135016
225. High Safety Lithium-Ion Battery Enabled by A Thermal-Induced Shutdown Separator
Xiao YK, Fu A, Zou Y, Huang L, Wang HQ, Su YS, Zheng JM
CHEMICAL ENGINEERING JOURNAL 438(2022)135550
226. Understanding the Anchoring Effect on Li Plating with Indium Tin Oxide Layer Functionalized Hosts for Li Metal Anodes
Yan XL, Ye FJ, Zhang YG, Lin L, Sa BS, Liu F, Li JJ, Wang LS, Lin J, Xie QS, Peng DL
CHEMICAL ENGINEERING JOURNAL 440(2022)135827
227. Constructing Highly Utilizable Fe-N₄ Single-Atom Sites by One-Step Gradient Pyrolysis for Electroreduction of O₂ and CO₂
Yang HJ, Zhang PY, Yi XY, Yan C, Pang DW, Chen LN,
Wang SB, Wang CR, Liu BH, Zhang GN, Zhou ZY, Li XF
CHEMICAL ENGINEERING JOURNAL 440(2022)135749
228. The Metal/Oxide Heterointerface Delivered by Solid-Based Exsolution Strategy: A Review
Yang YL, Li JH, Sun YF
CHEMICAL ENGINEERING JOURNAL 440(2022)135868

229. Robust Zn Anode Enabled by A Hydrophilic Adhesive Coating for Long-Life Zinc-Ion Hybrid Supercapacitors
Niu B, Li ZA, Cai SW, Luo D, Qiao Y, Zhou SY, Li HF, He XR, Wang X
CHEMICAL ENGINEERING JOURNAL 442(2022)136217
230. Stable Cycling and Fast Charging of High-Voltage Lithium Metal Batteries Enabled by Functional Solvation Chemistry
Xia M, Lin M, Liu GP, Cheng Y, Jiao TP, Fu A, Yang Y, Wang MS, Zheng JM
CHEMICAL ENGINEERING JOURNAL 442(2022)136351
231. Hot-Electron-Induced CO₂ Hydrogenation on Au@AuRu/g-C₃N₄ Plasmonic Bimetal-Semiconductor Heterostructure
Zhang XB, Liu HJ, Wang YQ, Chen Q, Zhao ZY, Yang Y, Kuang Q, Xie ZX
CHEMICAL ENGINEERING JOURNAL 443(2022)136482
232. Bi-Color Phosphor-in-Glass Films Achieve Superior Color Quality Laser-Driven Stage Spotlights
Lin T, Chen HX, Li SX, Wang L, Huang F, Xie RJ
CHEMICAL ENGINEERING JOURNAL 444(2022)136591
233. MOF-Derived Single Site Catalysts with Electron-Rich Fe-N₄ Sites for Efficient Elimination of Trichloroacetamide DBP
Lou YY, Yin SH, Yang J, Ji LF, Fang JY, Zhang SQ, Feng MB, Yu X, Jiang YX, Sun SG
CHEMICAL ENGINEERING JOURNAL 446(2022)137060
234. Activators Lattice Migration Strategy Customized for Tunable Luminescence of Ce³⁺ doped β-Ca₃(PO₄)₂
Pan X, Mei LF, Wang YH, Seto T, Zhuang YX, Guo QF, Plyaskin M, Xi W, Li C, Guo YS, Liao LB
CHEMICAL ENGINEERING JOURNAL 446(2022)137271
235. Li-CO₂/O₂ Battery Operating at Ultra-Low Overpotential and Low O₂ Content on Pt/CNT Catalyst
Zhang PF, Sheng T, Zhou Y, Wu YJ, Xiang CC, Lin JX, Li YY, Li JT, Huang L, Sun SG
CHEMICAL ENGINEERING JOURNAL 448(2022)137541
236. Redox Dynamics of Platinum Species on CeO₂ during CO Oxidation Reaction
Wang MZ, Zhang YG, Wu ZZ, Zheng YP, Zhou ZH, Weng WZ
CHEMICAL ENGINEERING JOURNAL 450(2022)138171
237. Simultaneous Electrocatalytic Hydrogen Production and Hydrazine Removal from Acidic Waste Water
Zhu WJ, Gandi Naidu A, Wu QF, Yan H, Zhao MT, Wang ZC, Liang HF
CHEMICAL ENGINEERING SCIENCE 258(2022)117769
238. Phenylene Segments of Zigzag Carbon Nanotubes Synthesized by Metal-Mediated Dimerization
Chen XW, Chu KS, Wei RJ, Qiu ZL, Tang C, Tan YZ
CHEMICAL SCIENCE 13(6)(2022)1636-1640
239. A Novel High-Energy-Density Lithium-Free Anode Dual-Ion Battery and In Situ Revealing the

Interface Structure Evolution

Wu LN, Wang ZR, Dai P, Xie YX, Hou C, Zheng WC, Han FM, Huang L, Chen W, Sun SG
CHEMICAL SCIENCE 13(14)(2022)4058-4069

240. In Situ Raman Spectroscopy Reveals the Structure Evolution and Lattice Oxygen Reaction Pathway Induced by the Crystalline-Amorphous Heterojunction for Water Oxidation

Dong JN, Qian ZX, Xu P, Yue MF, Zhou RY, Wang YJ,
Nan ZA, Huang SY, Dong QF, Li JF, Fan FR, Tian ZQ
CHEMICAL SCIENCE 13(19)(2022)5639-5649

241. Charge Transport Through Single-Molecule Bilayer-Graphene Junctions with Atomic Thickness

Zhao SQ, Deng ZY, Albalawi S, Wu QQ, Chen LJ, Zhang HW, Zhao XJ,
Hou H, Hou SJ, Dong G, Yang Y, Shi J, Lambert CJ, Tan YZ, Hong WJ
CHEMICAL SCIENCE 13(20)(2022)5854-5859

242. In Situ Lattice Tuning of Quasi-Single-Crystal Surfaces for Continuous Electrochemical Modulation

Zeng BF, Wei JY, Zhang XG, Liang QM, Hu S, Wang G,
Lei ZC, Zhao SQ, Zhang HW, Shi J, Hong WJ, Tian ZQ, Yang Y
CHEMICAL SCIENCE 13(26)(2022)7765-7772

243. Structure-Guided Design of CPPC-Paired Disulfide-Rich Peptide Libraries for Ligand and Drug Discovery

Wu YP, Fan SH, Dong M, Li JJ, Kong CL, Zhuang J, Meng XT, Lu SM, Zhao YB, Wu CL
CHEMICAL SCIENCE 13(26)(2022)7780-7789

244. Supramolecular Copolymerization Through Self-Correction of Non-Polymerizable Transient Intermediates

Chen GY, Shi PC, Zeng LH, Feng LB, Wang XX, Lin XJ,
Sun YB, Fang HX, Cao XY, Wang XC, Yang LL, Tian ZQ
CHEMICAL SCIENCE 13(26)(2022)7796-7804

245. A Machine Learning Protocol for Revealing Ion Transport Mechanisms from Dynamic NMR Shifts in Paramagnetic Battery Materials

Lin M, Xiong JF, Su MT, Wang F, Liu XS, Hou YF, Fu RQ, Yang Y, Cheng J
CHEMICAL SCIENCE 13(26)(2022)7863-7872

246. A Bis(Silylene)Pyridine Pincer Ligand Can Stabilize Mononuclear Manganese(0) Complexes: Facile Access to Isolable Analogues of the Elusive d^7 -Mn(CO)₅ Radical

Kalra S, Pividori D, Fehn D, Dai CS, Dong SC, Yao SL, Zhu J, Meyer K, Driess M
CHEMICAL SCIENCE 13(29)(2022)8634-8641

247. Hydrogen-Bond-Induced Quantum Interference in Single-Molecule Junctions of Regioisomers

Ge LB, Hou SJ, Chen YR, Wu QQ, Long LX, Yang XZ, Ji Y,
Lin LC, Xue GD, Liu JY, Liu XD, Lambert CJ, Hong WJ, Zheng YH
CHEMICAL SCIENCE 13(33)(2022)9552-9559

248. Accelerated Interfacial Proton Transfer for Promoting Electrocatalytic Activity
Deng KC, Lu ZX, Sun JJ, Ye JY, Dong F, Su HS, Yang K, Sartin MM, Yan S, Cheng J, Zhou ZY, Ren B
CHEMICAL SCIENCE 13(36)(2022)10884-10890
249. Unraveling the Origin of Reductive Stability of Super-Concentrated Electrolytes from First Principles and Unsupervised Machine Learning
Wang F, Cheng J
CHEMICAL SCIENCE 13(39)(2022)11570-11576
250. Correlation Coefficient-Directed Label-Free Characterization of Native Proteins by Surface-Enhanced Raman Spectroscopy
Wang PS, Ma H, Yan S, Lu XY, Tang H, Xi XH, Peng XH, Huang YJ, Bao YF, Cao MF, Wang HM, Huang JL, Liu GK, Wang X, Ren B
CHEMICAL SCIENCE 13(46)(2022)13829-13835
251. Construction of Transient Supramolecular Polymers Controlled by Mass Transfer in Biphasic Systems
Zhang SL, Zhang YL, Wu HT, Li ZH, Shi PC, Qu H, Sun YB, Wang XC, Cao XY, Yang LL, Tian ZQ
CHEMICAL SCIENCE 13(46)(2022)13930-13937
252. Advanced Plasmonic Technologies for Multi-Scale Biomedical Imaging
Lin JS, Tian XD, Li G, Zhang FL, Wang Y, Li JF
CHEMICAL SOCIETY REVIEWS 51(23)(2022)9445-9468
253. Gold-Based Double Perovskite-Related Polymorphs: Low Dimensional with an Ultranarrow Bandgap
Fan YQ, Liu Q, Zhang ZL, Lien SY, Xie Y, Liang WZ, Gao P
CHEMISTRY OF MATERIALS 34(4)(2022)1544-1553
254. Modeling Polyhedron Distortion for Mechanoluminescence in Mixed-Anion Compounds $\text{RE}_2\text{O}_2\text{S}:\text{Ln}^{3+}$
Lin FY, Li XY, Chen CJ, Pan X, Peng DF, Luo HD, Jin LB, Zhuang YX, Xie RJ
CHEMISTRY OF MATERIALS 34(11)(2022)5311-5319
255. Aluminum-Doped Mesoporous Copper Oxide Nanofibers Enabling High-Efficiency CO_2 Electroreduction to Multicarbon Products
Fang MM, Ji YJ, Pi YC, Wang PT, Hu ZW, Lee JF, Pang H, Li YY, Shao Q, Huang XQ
CHEMISTRY OF MATERIALS 34(20)(2022)9023-9030
256. A Nearly Zero-Strain Li-Rich Rock-Salt Oxide with Multielectron Redox Reactions as a Cathode for Li-Ion Batteries
Zhou K, Li YN, Ha Y, Zhang MJ, Dachraoui W, Liu HD, Zhang CY, Liu XS, Liu FC, Battaglia C, Yang WL, Liu JJ, Yang Y
CHEMISTRY OF MATERIALS 34(21)(2022)9711-9721

257. Tuning the Spin State of Co^{3+} by Crystal Facet Engineering for Enhancing the Oxygen Evolution Reaction Activity
Wu CR, Sun Y, Yang ZN, Hu JY, Ding TY, Cheng J, Zhang KHL
CHEMISTRY OF MATERIALS 34(23)(2022)10509-10516
258. Platinum-Tin/Tin Oxide/CNT Catalysts for High-Performance Electrocatalytic Ethanol Oxidation
Zheng ZP, Jiang QR, Cheng XQ, Han X, Kuang Q, Xie ZX
CHEMISTRY-A EUROPEAN JOURNAL 28(4)(2022)e202103521
259. One- and Two-Electron Transfer Oxidation of 1,4-Disilabenzene with Formation of Stable Radical Cations and Dications
Chen YL, Chen ZK, Jiang LY, Li JC, Zhao YL, Zhu HP, Roesky HW
CHEMISTRY-A EUROPEAN JOURNAL 28(5)(2022)e202103715
260. Developing the Low-Temperature Oxidation Mechanism of Cyclopentane: An Experimental and Theoretical Study
Shi ZF, Jiang YH, Yu JX, Chen SJ, Chen J, Tang ZC, Zheng LS
CHEMISTRY-A EUROPEAN JOURNAL 28(8)(2022)e202103546
261. MOF Encapsulated AuPt Bimetallic Nanoparticles for Improved Plasmonic-Induced Photothermal Catalysis of CO_2 Hydrogenation
Wang YQ, Zhang XB, Chang K, Zhao ZY, Huang JY, Kuang Q
CHEMISTRY-A EUROPEAN JOURNAL 28(16)(2022)e202104514
262. One-Pot Synthesis of High-Strained Metal Vinylidene and Metal Carbyne
Huang FP, Yan ZW, Zheng XJ, Cai YP, Zhang H, Xia HP
CHEMISTRY-A EUROPEAN JOURNAL 28(54)(2022)e202201229
263. Electron Regulation of Single Indium Atoms at the Active Oxygen Vacancy of $\text{In}_2\text{O}_3(110)$ for Production of Acetic Acid and Acetone through Direct Coupling of CH_4 with CO_2
Ma DH, Cao ZX
CHEMISTRY-AN ASIAN JOURNAL 17(6)(2022)e202101383
264. Theoretical Study on Reaction Mechanisms of Dinitrogen Activation and Coupling by Carbene-Stabilized Borylenes in Comparison with Intramolecular C-H Bond Activation
You FY, Zeng J, Rouf AM, Dong SC, Zhu J
CHEMISTRY-AN ASIAN JOURNAL 17(12)(2022)e202200232
265. Editorial: Enzymatic Catalysis and Applications
Wang L, Wang BJ, Dong RF
CHEMISTRY-AN ASIAN JOURNAL 17(19)(2022)e202200875
266. The Cluster Design and Redox Behavior Characterization of Polyoxometalates for Redox Flow Batteries
Han Y, Lan J, Li K, Yang L, Zhu C, Chen J

267. Fe₃C Decorated N, Fe Co-Doped Hollow Carbon Microspheres as Efficient Air Electrode Catalyst for Zinc-Air Battery
Zhang XT, Hu SZ, Sun SG, Zhang XS
CHEMISTRYSELECT 7(26)(2022)e202201503
268. A New Spiropyran Hydrazone as an Unusual Colorimetric Sensor for Detection of Cu²⁺ and Cr³⁺ Based on Aggregation-Induced Enhancement Effects in Aqueous Solvent Mixtures
Li ZC, Xiong H, Liang H, Chen WT, Tian Q, Yan MH, Su HF, Royal G
CHEMISTRYSELECT 7(31)(2022)e202201868
269. Efficient Oxygen Reduction and Evolution on 3D Fe/N Co-Doped Carbon Nanosheet-Nanotube Composites with Carbonaceous Heterostructure via In-Situ Growth of Carbon Nanotubes
Zhang XT, Hu SZ, Sun SG, Zhang XS
CHEMNANOMAT 8(1)(2022)e202100410
270. Surfactant-Free and Microporous AlOOH/Al₂O₃ Nanosheets on TiO₂-Based Nanofibers: A Sustained-Release Dominated Topotactic Transformation
Fu WL, Zhan Q, Yu Y, Meng XY, Tang MY, Wang YP, Sun YM, Dai YQ
CHEMNANOMAT 8(8)(2022)e202100459
271. Impact of Pore Structure on Two-Electron Oxygen Reduction Reaction in Nitrogen-Doped Carbon Materials: Rotating Ring-Disk Electrode vs. Flow Cell
Xu H, Lv XH, Wang HY, Ye JY, Yuan JY, Wang YC, Zhou ZY, Sun SG
CHEMSUSCHEM 15(5)(2022)e202102587
272. Enhanced Phase-Change Heat Transfer by Surface Wettability Control
Zhou L, He W, Wang M, Hou X
CHEMSUSCHEM 15(6)(2022)e202102531
273. Noble Metal Single-Atom Catalysts for the Catalytic Oxidation of Volatile Organic Compounds
Zhang LN, Xue LL, Lin BY, Zhao QG, Wan SL, Wang Y, Jia HP, Xiong HF
CHEMSUSCHEM 15(7)(2022)e202102494
274. Molecular Mechanism of the Mononuclear Copper Complex-Catalyzed Water Oxidation from Cluster-Continuum Model Calculations
Wu P, Yan SH, Fang WH, Wang BJ
CHEMSUSCHEM 15(7)(2022)e202102508
275. Two-Dimensional Metal–Organic Framework Nanosheets: Synthesis and Applications in Electrocatalysis and Photocatalysis
Liu YL, Liu XY, Feng L, Shao LX, Li SJ, Tang J, Cheng H, Chen Z, Huang R, Xu HC, Zhuang JL
CHEMSUSCHEM 15(10)(2022)e202102603

276. Confinement-Enhanced Selective Oxidation of Lignin Derivatives to Formic Acid Over Fe-Cu/ZSM-5 Catalysts Under Mild Conditions
Zhang ZX, Han PJ, Li LS, Zhang XD, Cheng XJ, Lin JD, Wan SL, Xiong HF, Wang Y, Wang S
CHEMSUSCHEM 15(12)(2022)e202200218
277. Promotion Strategies of Hole Transport Materials by Electronic and Steric Controls for n-i-p Perovskite Solar Cells
Cheng FW, Cao F, Fan FR, Wu BH
CHEMSUSCHEM 15(14)(2022)e202200340
278. Upcycling Plastic Wastes into Value-Added Products by Heterogeneous Catalysis
Tan T, Wang W, Zhang K, Zhan ZX, Deng WP, Zhang QH, Wang Y
CHEMSUSCHEM 15(14)(2022)e202200522
279. A Prospective Life Cycle Assessment of Electrochemical CO₂ Reduction to Selective Formic Acid and Ethylene
Ai L, Ng SF, Ong WJ
CHEMSUSCHEM 15(19)(2022)e202200857
280. Loading Halloysite Nanotubes on MXene as Functional Composite Filler Towards A Polybenzoxazine Anticorrosion Coating
Deng YJ, Song GL, Zhang T, Lang ZQ, Wu PP, Zheng DJ
COLLOIDS AND SURFACES A-PHYSICOCHEMICAL AND ENGINEERING ASPECTS 650(2022)129498
281. Protocol for Quantifying Inactive Lithium in Anode-Free Lithium Batteries by Mass Spectrometry Titration
Tao MM, Xiang YX, Zhao DH, Shan PZ, Yang Y
COMMUNICATIONS MATERIALS 3(1)(2022)50
282. Copper-Catalyzed Pyrolysis of Halloysites@Polyphosphazene for Efficient Carbonization and Smoke Suppression
Hong J, Wu T, Wang X, Lu ZW, Zhang JL, Zeng BR, Yuan CH, Dai LZ
COMPOSITES PART B-ENGINEERING 230(2022)109547
283. An Intelligent Mg Anode for Protection of the Concrete-Covered Steel Tubing in Carbon Capture and Storage
Wu PP, Song GL, Zhu YX, Deng YJ, Zheng DJ
COMPOSITES PART B-ENGINEERING 243(2022)110165
284. The Controlled In-Situ Growth of Silver-Halloysite Nanostructure via Interaction Bonds to Reinforce A Novel Polybenzoxazine Composite Resin and Improve Its Antifouling and Anticorrosion Properties
Deng YJ, Song GL, Zhang T, Xia LX, Zhao Y, Zheng DJ
COMPOSITES SCIENCE AND TECHNOLOGY 221(2022)109312

285. Lanthanide-Containing Clusters for Catalytic Water Splitting and CO₂ Conversion
Pan ZH, Weng ZZ, Kong XJ, Long LS, Zheng LS
COORDINATION CHEMISTRY REVIEWS 457(2022)214419
286. N-Heterocyclic Carbene Coordinated Metal Nanoparticles and Nanoclusters
Shen H, Tian GL, Xu Z, Wang LZ, Wu QY, Zhang YH, Teo BK, Zheng NF
COORDINATION CHEMISTRY REVIEWS 458(2022)214425
287. Recent Progress in Low-Dimensional Palladium-Based Nanostructures for Electrocatalysis and Beyond
Xu BY, Zhang Y, Li LG, Shao Q, Huang XQ
COORDINATION CHEMISTRY REVIEWS 459(2022)214388
288. Coordination Structure at Work: Atomically Dispersed Heterogeneous Catalysts
Zhang Z, Li HY, Wu DF, Zhang LN, Li JW, Xu JL, Lin S, Datye AK, Xiong HF
COORDINATION CHEMISTRY REVIEWS 460(2022)214469
289. Photoinduced Nickel-Catalyzed Enantioselective Coupling Reactions
Li ZL, Li CY, Ding Y, Huo HH
COORDINATION CHEMISTRY REVIEWS 460(2022)214479
290. Coordinating Single-Atom Catalysts on Two-Dimensional Nanomaterials: A Paradigm Towards Bolstered Photocatalytic Energy Conversion
Lin XL, Ng SF, Ong WJ
COORDINATION CHEMISTRY REVIEWS 471(2022)214743
291. Intelligentization of Traditional Sacrificial Anode Zn by Mg-Alloying for Reinforcing Steel
Wu PP, Song GL, Zhu YX, Zheng DJ
CORROSION SCIENCE 194(2022)109943
292. Crystal Phase, Electronic Structure, and Surface Band Bending of (In_xGa_{1-x})₂O₃ Alloy Wide-Band-Gap Semiconductors
Yang ZN, Chen WS, Kuang SL, Sheng ZQ, Shi JL, Chen DY, Cui MY, Qi HJ, Zhang KHL
CRYSTAL GROWTH & DESIGN 22(12)(2022)7325-7330
293. Synthesis, Structure, and Magnetism of a Novel Series of Trinuclear Nickel(II) Clusters
Luo R, Xu CG, Tong JP, Shi HY, Kong XJ, Fan YH, Shao F
CRYSTENGCOMM 24(34)(2022)5987-5994
294. Exploring Interfacial Electrocatalytic Reactions by Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy
Huang YH, Lin JS, Zhang FL, Zhang YJ, Lin XM, Jin SZ, Li JF
CURRENT OPINION IN COLLOID & INTERFACE SCIENCE 61(2022)101622
295. Plasmonic Photoelectrochemical Reactions on Noble Metal Electrodes of Nanostructures

- Rani KK, Devasenathipathy R, Wang JZ, Hui XY,
Lin JD, Zhang YM, Zhao LB, Zhou JZ, Wu DY, Tian ZQ
CURRENT OPINION IN ELECTROCHEMISTRY 34(2022)100985
296. Electrochemical Dehydrogenative N-H/N-H Coupling Reactions
Hou ZW, Xu HC, Wang L
CURRENT OPINION IN ELECTROCHEMISTRY 34(2022)100988
297. Combining NMR and Molecular Dynamics Simulations for Revealing the Alkali-Ion Transport in Solid-State Battery Materials
Lin M, Fu RQ, Xiang YX, Yang Y, Cheng J
CURRENT OPINION IN ELECTROCHEMISTRY 35(2022)101048
298. Insights Into the Gold(i)-Catalyzed Intermolecular Annulations of Alkynes with N-Allenamides: a Mechanistic DFT Study
Sun Q, Deng TY, Chen JJ, Liu JY, Lu X, Zhang ZX, Li JH
DALTON TRANSACTIONS 51(9)(2022)3734-3739
299. Isolated Molybdenum-Based Microporous POMs for Selective Adsorption of Gases
Deng L, Lin RY, Zhou ZH
DALTON TRANSACTIONS 51(13)(2022)5239-5249
300. Rational Design of Two-Dimensional Flaky Fe/Void/C Composites for Enhanced Microwave Absorption Properties
Mao RJ, Bao SS, Li QS, Yuan YS, Liang ZH, Zhang MX, Jiang ZY, Xie ZX
DALTON TRANSACTIONS 51(22)(2022)8705-8713
301. Two-Dimensional Metal-Organic Layers Constructed from Hf₆/Hf₁₂-oxo Clusters and a Trigonal Pyramidal Phosphine Oxide Ligand
Chen JW, Ye Z, Chen PC, Hu HH, Zhang SH, Xu H, Cao LY, Wang C
DALTON TRANSACTIONS 51(30)(2022)11236-11240
302. Successive Constructions of Regular Tetra-, Hexa- and Octanuclear Microporous Polyoxovanadates(III) for Gas Adsorption
Xie ZL, An DL, Weng WZ, Zhou ZH
DALTON TRANSACTIONS 51(30)(2022)11286-11294
303. Cuprousiloxane as Two Self-Assemblies, Cu₂₀O₂₀Si₁₀Me₁₀R₁₀ and Cu₂₄O₂₄Si₁₂Me₁₂R₁₂, with Catalytic Property
Jiang WJ, Wang JJ, Chen YL, Chen ZK, Li JC, Jiang LY, Peng YB, Zhu HP
DALTON TRANSACTIONS 51(33)(2022)12432-12435
304. Thermally Induced Charge Transfer in A Quinoid-Bridged Linear Cu₃ Compound
Liu XL, Zhang XY, Zhao HX, Long LS, Zheng LS
DALTON TRANSACTIONS 51(36)(2022)13826-13830

305. Interplay Between Anisotropy and Magnetic Exchange to Modulate the Magnetic Relaxation Behaviours of Phenoxo Bridged Dy₂ Dimers with Axial β-Diketonate Co-Ligands
Roy S, Shukla P, Ahmed N, Du MH, Tarannum I, Kong XJ, Gupta T, Singh SK, Das S
DALTON TRANSACTIONS 51(47)(2022)18187-18202
306. Dependence of Concentration Polarization on Discharge Profile in Electrochemical Lithium Extraction
Hong ZX, Zhu QP, Liu YZ, Wang SY, Wu J, Jiang HF, Hu XJ, Liu K
DESALINATION 527(2022)115567
307. Identification of Clinical and Molecular Features of Recurrent Serous Borderline Ovarian Tumour
Lu ZY, Lin FH, Li T, Wang JH, Liu CX, Lu GX, Li B,
Pan MP, Fan SH, Yue JQ, Huang H, Song J, Gu C, Li J
ECLINICALMEDICINE 46(2022)101377
308. Shining Light on ZnIn₂S₄ Photocatalysts: Promotional Effects of Surface and Heterostructure Engineering Toward Artificial Photosynthesis
Oh VBY, Ng SF, Ong WJ
ECOMAT 4(5)(2022)e12204
309. High-Efficiency and High-Quality Photogalvanic Etching of the Silicon Doped N-Type Gallium Nitride Using Potassium Peroxomonosulfate Oxidant
Guo S, Zhang MM, Qiao LQ, Hu HQ, Shi K
ECS JOURNAL OF SOLID STATE SCIENCE AND TECHNOLOGY 11(5)(2022)054001
310. Research Advances in Regulating the Microenvironment of Enzyme Electrodes in Non-aqueous Systems: a Mini-review
Wang SZ, Xiong Y, Sartin MM, Zhan DP
ELECTROANALYSIS 34(4)(2022)590-598
311. A Rigidity/Flexibility Compatible Strategy to Improve the Stability and Durability of Flexible Electrochemical Sensor Based on a Polydimethylsiloxane Membrane Supported Prussian Blue@Carbon Nanotube Array
Jiang T, Nan WJ, Han LH, Wei H, Wang M, Peng J, Chen Y, Hou X, Zhan DP
ELECTROANALYSIS 34(4)(2022)655-658
312. Flexible Prussian Blue-Au Fibers as Robust Peroxidase - Like Nanozymes for Wearable Hydrogen Peroxide and Uric Acid Monitoring
Li JH, Jiao L, Xiao X, Nashalian A, Mathur S, Zhu ZJ, Wu WT, Guo WW, Zhai YL, Lu XQ, Chen J
ELECTROANALYSIS 34(11)(2022)1763-1771
313. Controlled Synthesis of High-index Faceted Pt nanocatalysts Directly on Carbon Paper for Methanol Electrooxidation
Ji RY, Huang R, Cheng XY, Fu F, Jiang YX, Sun SG
ELECTROCATALYSIS 13(6)(2022)747-758

314. A Biomass-Based Hierarchical Carbon via MOFs-Assisted Synthesis for High-Rate Lithium-Ion Storage
Zhang RG, Hou Q, Wang YH, Zhu WX, Fan JM, Zheng MS, Dong QF
ELECTROCHEMISTRY COMMUNICATIONS 139(2022)107310
315. Interface pH Regulation to Improve ORR Performance of FePc Catalyst in Acid Electrolyte
Li YY, Wang YC, Zhou ZY, Sun SG
ELECTROCHEMISTRY COMMUNICATIONS 141(2022)107357
316. Theoretical and Experimental Studies of Electron Transfer in Electrochemical and Bioelectrochemical Systems: Foreword
Magner E, Mao BW, Nichols R, Xiao XX
ELECTROCHIMICA ACTA 403(2022)139400
317. Boosting the ORR Performance of Fe-N/C Catalyst via Increasing the Density and Modifying the Electronic Structure of Fe-N_x Active Sites
Qu XM, Li YR, Li G, Ji RY, Yin SH, Cheng XY, Wang CT, Yang J, Jiang YX, Sun SG
ELECTROCHIMICA ACTA 403(2022)139604
318. Exploring Hybrid Mg²⁺/H⁺ Reactions of C@MgMnSiO₄ with Boosted Voltage in Magnesium-Ion Batteries
Rubio S, Liang ZT, Li YX, Zuo WH, Lavela P, Tirado JL,
Liu R, Zhou K, Zhu JP, Zheng BZ, Liu XS, Yang Y, Ortiz GF
ELECTROCHIMICA ACTA 404(2022)139738
319. Synthetic Strategies of Single-Atoms Catalysts and Applications in Electrocatalysis
Li J, Yue MF, Wei YM, Li JF
ELECTROCHIMICA ACTA 409(2022)139835
320. Electrochemical and In Situ FTIR Spectroscopic Studies of Gentian Violet as A Novel Leveler in Through-Holes Metallization for Printed Circuit Board Applications
Wang ZY, Jin L, Li G, Yang JQ, Li WQ, Zhan DP, Jiang YX, Yang FZ, Sun SG
ELECTROCHIMICA ACTA 410(2022)140018
321. 2,2'-Bipyridine Palladium (II) Complexes Derived N-Doped Carbon Encapsulated Palladium Nanoparticles for Formic Acid Oxidation
Hu SZ, Zhang XS, Gao SJ, Luo GM, Sun SG
ELECTROCHIMICA ACTA 413(2022)140179
322. CoP@C with Chemisorption-Catalysis Effect Toward Lithium Polysulfides as Multifunctional Interlayer for High-Performance Lithium-Sulfur Batteries
Liu L, Li Y, Zhang Y, Qiao Z, Lin L, Yan X, Meng Z, Huang Y, Lin J, Wang L, Sa B, Xie Q, Peng DL
ELECTROCHIMICA ACTA 419(2022)140391
323. Sulfur-Modified Copper Synergy with Nitrogen-Defect Sites for the Electroreduction of CO₂ to

- Formate at Low Overpotentials
Hu SN, Tian N, Li MY, Li YY, Liang XD, Zhou ZY, Sun SG
ELECTROCHIMICA ACTA 422(2022)140557
324. A Dual Force Cross-Linked Gamma-PGA-PAA Binder Enhancing the Cycle Stability of Silicon-Based Anodes for Lithium-Ion Batteries
Guo MJ, Xiang CC, Hu YY, Deng L, Pan SY, Lv C, Chen SX, Deng HT, Sun CD, Li JT, Zhou Y, Sun SG
ELECTROCHIMICA ACTA 425(2022)140704
325. Systematic Assessment of Adsorption-Coupled Electron Transfer Toward Voltammetric Discrimination Between Concerted and Non-Concerted Mechanisms
Janda DC, Barma K, Kurapati N, Klymenko OV, Oleinick A, Svir I, Amatore C, Amemiya S
ELECTROCHIMICA ACTA 428(2022)140912
326. Stable Zn Anodes Enabled by High-Modulus Agarose Gel Electrolyte with Confined Water Molecule Mobility
Sun PF, Liu WX, Yang DW, Zhang Y, Xiong WM, Li S, Chen JJ, Tian JH, Zhang L
ELECTROCHIMICA ACTA 429(2022)140985
327. Electrochemical Failure Results Inevitable Capacity Degradation in Li-Ion Batteries—A Review
Li W, Li H, He Z, Ji WJ, Zeng J, Li X, Zhang YY, Zhang P, Zhao JB
ENERGIES 15(23)(2022)9165
328. Gas-Carrying Enhances the Combustion Temperature of the Biomass Particles
Jia YS, Wang YJ, Zhang Q, Rong HW, Liu YH, Xiao B, Guo DB, Laghari M, Ruan R
ENERGY 239(2022)121956
329. Promising Electrode and Electrolyte Materials for High-Energy-Density Thin-Film Lithium Batteries
Lin J, Lin L, Qu SS, Deng DY, Wu YF, Yan XL, Xie QS, Wang LS, Peng DL
ENERGY & ENVIRONMENTAL MATERIALS 5(1)(2022)133-156
330. Electronic Coupling of Single Atom and FePS₃ Boosts Water Electrolysis
Tang CY, He D, Zhang N, Song XY, Jia SF, Ke ZJ, Liu JC, Wang JB, Jiang CZ, Wang ZY, Huang XQ, Xiao XH
ENERGY & ENVIRONMENTAL MATERIALS 5(3)(2022)899-905
331. Seizing Gaseous Fe²⁺ to Densify O₂-Accessible Fe-N₄ Sites for High-Performance Proton Exchange Membrane Fuel Cells
Yin SH, Yang SL, Li G, Li G, Zhang BW, Wang CT, Chen MS, Liao HG, Yang J, Jiang YX, Sun SG
ENERGY & ENVIRONMENTAL SCIENCE 15(7)(2022)3033-3040
332. Highly Reversible Li₂RuO₃ Cathodes in Sulfide-Based All Solid-State Lithium Batteries
Wu YQ, Zhou K, Ren FC, Ha Y, Liang ZT, Zheng XF, Wang ZY, Yang W,

- Zhang MJ, Luo MZ, Battaglia C, Yang WL, Zhu LY, Gong ZL, Yang Y
ENERGY & ENVIRONMENTAL SCIENCE 15(8)(2022)3470-3482
333. Chemical and Structural Evolutions of Li-Mn-Rich Layered Electrodes at Different Current Densities
He X, Wu J, Zhu ZY, Liu HD, Li N, Zhou D, Hou X, Wang J,
Zhang HW, Bresser D, Fu YB, Crafton MJ, McCloskey BD,
Chen Y, An K, Liu P, Jain A, Li J, Yang WL, Yang Y, Winter M, Kostecki R
ENERGY & ENVIRONMENTAL SCIENCE 15(10)(2022)4137-4147
334. Governing PbI_6 Octahedral Frameworks for High-Stability Perovskite Solar Modules
Feng QF, Huang XF, Tang ZH, Hou YL, Chang Q,
Nie SQ, Cao F, Niu XY, Yin J, Li J, Zheng NF, Wu BH
ENERGY & ENVIRONMENTAL SCIENCE 15(10)(2022)4404-4413
335. Insights Into the Local Structure, Microstructure and Ionic Conductivity of Silicon Doped
NASICON-Type Solid Electrolyte $\text{Li}_{1.3}\text{Al}_{0.3}\text{Ti}_{1.7}\text{P}_3\text{O}_{12}$
Zhu JP, Xiang YX, Zhao J, Wang HC, Li YX, Zheng BZ, He HJ, Zhang ZR, Huang JY, Yang Y
ENERGY STORAGE MATERIALS 44(2022)190-196
336. Advanced Red Phosphorus/Carbon Composites with Practical Application Potential for Sodium Ion
Batteries
Zhou JH, Ye WB, Lian XY, Shi QT, Liu Y, Yang XQ, Liu LJ,
Wang D, Choi JH, Sun JY, Yang RZ, Wang MS, Rummeli MH
ENERGY STORAGE MATERIALS 46(2022)20-28
337. Highly Stable Operation of LiCoO_2 at Cut-Off ≥ 4.6 V Enabled by Synergistic Structural and
Interfacial Manipulation
Fu A, Zhang ZF, Lin JD, Zou Y, Qin CD, Xu CJ, Yan PF, Zhou K,
Hao JL, Yang XR, Cheng Y, Wu DY, Yang Y, Wang MS, Zheng JM
ENERGY STORAGE MATERIALS 46(2022)406-416
338. In-Situ Probing the Near-Surface Structural Thermal Stability of High-Nickel Layered Cathode
Materials
Li JY, Hua HM, Kong XB, Yang HY, Dai PP, Zeng J, Zhao JB
ENERGY STORAGE MATERIALS 46(2022)90-99
339. Conductivity Gradient Modulator Induced Highly Reversible Li Anodes in Carbonate Electrolytes
for High-Voltage Lithium-Metal Batteries
Zhou S, Fu CY, Chang Z, Zhang YF, Xu DM, He Q,
Chai SM, Meng XY, Feng MY, Zhang YP, Lin JD, Pan AQ
ENERGY STORAGE MATERIALS 47(2022)482-490
340. A Cubic Mg_2MnO_4 Cathode for Non-Aqueous Magnesium Batteries
Ruiz R, Perez-Vicente C, Rubio S, Stoyanova R, Zuo WH, Yang Y, Ortiz GF
ENERGY STORAGE MATERIALS 48(2022)12-19

341. Achieving Ultra-Long Lifespan Zn Metal Anodes by Manipulating Desolvation Effect and Zn Deposition Orientation in A Multiple Cross-Linked Hydrogel Electrolyte
Lin PX, Cong JL, Li JY, Zhang MH, Lai PB, Zeng J, Yang Y, Zhao JB
ENERGY STORAGE MATERIALS 49(2022)172-180
342. Conductive Inks Composed of Multicomponent Carbon Nanomaterials and Hydrophilic Polymer Binders for High-Energy-Density Lithium-Sulfur Batteries
Qiao X, Wang CZ, Zang J, Guo BF, Zheng Y, Zhang RR, Cui JQ, Fang XL
ENERGY STORAGE MATERIALS 49(2022)236-245
343. Disposing of Excessive Decomposition and Destructive Intercalation of Solvated Li⁺ in CNT-Based Flexible 3D Si Anode of Flexible Battery
Lv C, Tong Z, Wu ZP, Gao F, Zhou SY, Zhang PF, Zhou ZH, Liao HG, Zhou Y, Sun SG, Li JT
ENERGY STORAGE MATERIALS 51(2022)361-371
344. Modulation of Hydrogel Electrolyte Enabling Stable Zinc Metal Anode
Fu CY, Wang YP, Lu CG, Zhou S, He Q, Hu YZ, Feng MY, Wan YL, Lin JD, Zhang YF, Pan AQ
ENERGY STORAGE MATERIALS 51(2022)588-598
345. Realizing Rapid Electrochemical Kinetics of Mg²⁺ in Ti-Nb Oxides through a Li⁺ Intercalation Activated Strategy Toward Extremely Fast Charge/Discharge Dual-Ion Batteries
Wu DZ, Wang F, Yang HY, Xu YQ, Zhuang YC, Zeng J, Yang Y, Zhao JB
ENERGY STORAGE MATERIALS 52(2022)94-103
346. Modulation and Quantitative Study of Conformal Electrode-Electrolyte Interfacial Chemistry Toward High-Energy-Density LiNi_{0.6}Co_{0.2}Mn_{0.2}O₂|SiO-C Pouch Cells
Zhao WM, Zheng GR, Ji YC, Peng CX, Ren FC, Liu M, Pan F, Yang Y
ENERGY STORAGE MATERIALS 53(2022)424-434
347. Modification of NASICON Electrolyte and Its Application in Real Na-Ion Cells
Zhang QQ, Zhou Q, Lu YX, Shao YJ, Qi YR, Qi XG, Zhong GM, Yang Y, Chen LQ, Hu YS
ENGINEERING 8(2022)170-180
348. Hydrogen Production by Electrocatalysis Using the Reaction of Acidic Oxygen Evolution: A Review
Zhu WJ, Huang ZH, Zhao MT, Huang RP, Wang ZC, Liang HF
ENVIRONMENTAL CHEMISTRY LETTERS 20(6)(2022)3429-3452
349. Carbon Dioxide Electroreduction Into Formic Acid and Ethylene: A Review
Ai L, Ng SF, Ong WJ
ENVIRONMENTAL CHEMISTRY LETTERS 20(6)(2022)3555-3612
350. Mixed-Ligand Oxidovanadium(IV/V) Complexes Chelated by alpha-Hydroxycarboxylate and 2-(1H-Imidazol-2-yl)pyridine: Localized Structures and Gas Adsorption
Xie ZL, Yuan C, Jin WT, Zhou ZH

351. Formation Sequence of Solid Electrolyte Interphases and Impacts on Lithium Deposition and Dissolution on Copper: An In Situ Atomic Force Microscopic Study
Wang WW, Gu Y, Yan H, Li KX, Chen ZB, Wu QH, Kranz C, Yan JW, Mao BW
FARADAY DISCUSSIONS 233(0)(2022)190-205
352. Rapid Qualitative and Quantitative Analysis of Trace Aconitum Phytotoxin by SERS
Wang WL, Lu JL, Gu JL, Xie LF, Chang J, Zou B, Wang FL, Liu GK, Tian ZQ
FOOD CHEMISTRY 391(2022)133234
353. Theoretical and Experimental Perspectives of Interaction Mechanism Between Zein and Lysozyme
Huang M, Song YL, Lv N, Liu CZ, Ren GR, Shen Q, Wang BJ, Cao ZX, Xie HJ
FOOD HYDROCOLLOIDS 132(2022)107876
354. pH-Dependent Interaction Mechanisms Between β -Lactoglobulin and EGCG: Insights from Multi-Spectroscopy and Molecular Dynamics Simulation Methods
Liu CZ, Lv N, Xu YQ, Tong HF, Sun YL, Huang M, Ren GR, Shen Q, Wu RB, Wang BJ, Cao ZX, Xie HJ
FOOD HYDROCOLLOIDS 133(2022)108022
355. Thermally-Stable Single-Atom Catalysts and Beyond: A Perspective
Liu SX, Li JW, Xiong HF
FRONTIERS IN CHEMISTRY 10(2022)959525
356. Zn and Na Promoted Fe Catalysts for Sustainable Production of High-Valued Olefins by CO₂ Hydrogenation
Zhang ZQ, Huang GX, Tang XL, Yin HR, Kang JC, Zhang QH, Wang Y
FUEL 309(2022)122105
357. Organic-Solvent Assisted Synthesis of Highly Dispersed Iron Based Fischer-Tropsch Catalysts with MCF Support: The Effect of Organic-Solvent
Huang SY, Liu CC, Chen Y, Hong JP, Lyu S, Zhao YX, Zhang YH, Li JL
FUEL 313(2022)122666
358. Surface Spinel-Coated and Polyanion-Doped Co-Free Li-Rich Layered Oxide Cathode for High-Performance Lithium-Ion Batteries
Chang ZY, Zhang YM, He W, Wang J, Zheng HF, Qu BH, Wang XH, Xie QS, Peng DL
INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH 61(22)(2022)7464-7473
359. Energy Saving Thermal Adaptive Liquid Gating System.
Chen BY, Zhang MC, Hou YQ, Wang HM, Zhang RR, Fan Y, Chen XY, Hou X
INNOVATION 3(3)(2022)100231-100231
360. Predicting Dinitrogen Activation by Five-Electron Boron-Centered Radicals

- Zeng J, Dong SC, Dai CS, Zhu J
INORGANIC CHEMISTRY 61(4)(2022)2234-2241
361. Asymmetric Cyanosilylation of Aldehydes by a Lewis Acid/Base Synergistic Catalyst of Chiral Metal Clusters
Weng ZZ, Xie J, Huang KX, Li JP, Long LS, Kong XJ, Zheng LS
INORGANIC CHEMISTRY 61(9)(2022)4121-4129
362. Homocoupling of Isocyanide at the Si(II) Center of Borylaminoamidinosilylene
Zhao YL, Chen YL, Zhang L, Li JC, Peng YB, Chen ZK, Jiang LY, Zhu HP
INORGANIC CHEMISTRY 61(13)(2022)5215-5223
363. Hydroboration of CO₂ to Methyl Boronate Catalyzed by a Manganese Pincer Complex: Insights into the Reaction Mechanism and Ligand Effect
Zhang L, Zhao YQ, Liu C, Pu M, Lei M, Cao ZX
INORGANIC CHEMISTRY 61(14)(2022)5616-5625
364. Metal-Ligand Bonds in Rare Earth Metal-Biphenyl Complexes
Huang DJ, Ying FM, Chen SF, Zhou C, Su PF, Wu W
INORGANIC CHEMISTRY 61(21)(2022)8135-8143
365. Family of Nanoclusters, Ln₃₃ (Ln = Sm/Eu) and Gd₃₂, Exhibiting Magnetocaloric Effects and Fluorescence Sensing for MnO₄⁻
Lu TQ, Xu H, Cheng LT, Wang XT, Chen C, Cao LY, Zhuang GL, Zheng J, Zheng XY
INORGANIC CHEMISTRY 61(23)(2022)8861-8869
366. Stabilizing a 20-Electron Metallaazulyne by Aromaticity
Qiu RL, Wu JS, Zhu J
INORGANIC CHEMISTRY 61(24)(2022)9073-9081
367. Photoluminescence of Lanthanide-Titanium-Oxo Clusters Eu₉Ti₂ and Tb₉Ti₂ Based on a β-Diketone Ligand
Liu WD, Li GJ, Xu H, Du MH, Long LS, Zheng LS, Kong XJ
INORGANIC CHEMISTRY 61(26)(2022)9849-9854
368. Cyclometalated Platinum(II) Metallomesogens Based on Half-Disc-Shaped β-Diketonate Ligands with Hexacatenar: Crystal Structures, Mesophase Properties, and Semiconductor Devices
Zou G, Zhang SR, Feng SS, Li QH, Yang B, Zhao Y, Luo KJ, Wen TB
INORGANIC CHEMISTRY 61(30)(2022)11702-11714
369. Chiral Supramolecular Microporous Thio-Oxomolybdenum(V) Tartrates for the Selective Adsorptions of Gases
Deng L, Zhou ZH
INORGANIC CHEMISTRY 61(37)(2022)14787-14799

370. In Situ Anodic Oxidation Tuning of NiFeV Diselenide to the Core-Shell Heterojunction for Boosting Oxygen Evolution
Yang Y, Zhu B, Guo PF, Ding TY, Yang QN, Feng WX, Jia Y, Wang K, Wang WT, He ZH, Liu ZT
INORGANIC CHEMISTRY 61(42)(2022)16805-16813
371. Atom-Precise Chiral Lanthanide-Silver(I) Heterometallic Clusters Ln_3Ag_5
Wang XT, Cheng LT, Chen C, Cao LY, Zheng J, Zheng XY
INORGANIC CHEMISTRY 61(44)(2022)17387-17391
372. Aminopolyol-Dependent Assembly of Heterometallic Lanthanide-Iron-Oxo Clusters
Chen SS, Zheng XY, Tian HQ, Long LS, Zheng LS, Kong XJ
INORGANIC CHEMISTRY 61(50)(2022)20365-20372
373. Biodegradation of 2,5-Dihydroxypyridine by 2,5-Dihydroxypyridine Dioxygenase and Its Mutants: Insights into O-O Bond Activation and Flexible Reaction Mechanisms from QM/MM Simulations
Fu YZ, Wang BJ, Cao ZX
INORGANIC CHEMISTRY 61(50)(2022)20501-20512
374. Water-Driven Successive Structural Transformation in a Two-Dimensional (2D) Lead-Free Hybrid Double Perovskite
Hong JF, Wang B, Zhang XY, Xu H, Zhao HX, Long LS, Zheng LS
INORGANIC CHEMISTRY 61(50)(2022)20531-20537
375. Synthesis, Structure and Luminescence Characterizations of Pyramid-like Lanthanide-Titanium-Oxo Clusters EuTi_9 and TbTi_9
Meng FK, Liu WD, Li GJ, Deng JJ, Kong XJ
INORGANIC CHEMISTRY COMMUNICATIONS 141(2022)109565
376. Catalytic Degradation of Organic Dyes Using Au-Poly (Styrene@N-Isopropylmethacrylamide) Hybrid Microgels
Arif M, Shahid M, Irfan A, Wang XF, Noor H, Farooqi ZH, Begum R
INORGANIC CHEMISTRY COMMUNICATIONS 144(2022)109870
377. Computational Predictions of Adaptive Aromaticity for the Design of Singlet Fission Materials
Lin L, Zhu J
INORGANIC CHEMISTRY FRONTIERS 9(5)(2022)914-924
378. Assembling Lanthanide-Transition Metal Clusters on TiO_2 for Photocatalytic Nitrogen Fixation
Chen CL, Wang HY, Li JP, Long LS, Kong XJ, Zheng LS
INORGANIC CHEMISTRY FRONTIERS 9(12)(2022)2862-2868
379. Decisive Role of Non-Rare Earth Metals in High-Regioselectivity Addition of μ_3 -Carbido Clusterfullerene
Chen MQ, Zhao YX, Jin F, Li MY, Guan RN, Xin JP,
Yao YR, Zhao X, Wang GW, Zhang QY, Xie SY, Yang SF

380. A Conjugated Diosma-Octacyclic Complex and Its Mixed-Valence Singly Reduced State
Hu YX, Deng QQ, Ou YP, Yang XF, Zhang J, Garrett EK, Zhu J, Liu SH, Hartl F
INORGANIC CHEMISTRY FRONTIERS 9(22)(2022)5893-5902
381. Synchronous Colorimetric Determination of CN⁻, F⁻, and H₂PO₄⁻ Based on Structural Manipulation of Hydrazone Sensors
Chen WT, Liang H, Wen X, Li ZC, Xiong H, Tian Q, Yan MH, Tan YZ, Royal G
INORGANICA CHIMICA ACTA 532(2022)120760
382. Magnetocaloric Effect of Two Gd-Based Frameworks
Liu BL, Xu QF, Long LS, Zheng LS
INORGANICS 10(7)(2022)91
383. Dual Interface Design of Ga-Doped Li₇La₃Zr₂O₁₂/Polymer Composite Electrolyte for Solid-State Lithium Batteries
Rath PC, Hsu WL, Chen CC, Huang CY, Wu WW, Okada S, Dong QF, Yang CC, Lee TC, Chang JK
INTERNATIONAL JOURNAL OF ENERGY RESEARCH 46(12)(2022)17693-17705
384. The Fabrication, Characterization and Functionalization in Molecular Electronics
Zhao Y, Liu WQ, Zhao JY, Wang YS, Zheng JT, Liu JY, Hong WJ, Tian ZQ
INTERNATIONAL JOURNAL OF EXTREME MANUFACTURING 4(2)(2022)022003
385. Revealing the Role of Ni²⁺ Ions in Inducing the Synthesis of Porous Carbon Balls: A Novel Substrate to Enhance the Pt Catalytic Activity Towards Methanol-Oxidation
Yang F, Yang B, Rani KK, Wei YH, Peng XL, Wang LM, Liu XT, Chen DH, Fan YJ, Chen W
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 47(56)(2022)23583-23592
386. Photoelectrocatalytic Nitrogen Fixation with Vo-BiOBr/TiO₂ Heterostructured Photoelectrode as Photocatalyst
Lin S, Chen YH, Fu JJ, Sun L, Jiang QR, Li JF, Cheng J, Lin CJ, Tian ZQ
INTERNATIONAL JOURNAL OF HYDROGEN ENERGY 47(98)(2022)41553-41563
387. The Influence of SrCl₂ on the Corrosion Behavior of Magnesium
Cao FY, Zhang J, Song X, Chen JH, Ying T, Song GL
INTERNATIONAL JOURNAL OF MATERIALS RESEARCH 113(5)(2022)537-545
388. Development and Preclinical Evaluation of a Near-Infrared Fluorescence Probe Based on Tailored Hepatitis B Core Particles for Imaging-Guided Surgery in Breast Cancer
Yang RQ, Chen M, Zhang Q, Gao YY, Lou KL, Lin TT, Huang WH, Zeng YZ, Zhang YQ, Dang YY, Ren L, Zhang GJ
INTERNATIONAL JOURNAL OF NANOMEDICINE 17(2022)1343-1360
389. Oxygen Vacancies on Surface of the TiO₂ Fillers Hinder Li⁺ Conduction in PEO All-Solid-State

Electrolyte

Wang X, Hua HM, Li JY, Shen X, Xie XH, Zhang P, Zhao JB

IONICS 28(1)(2022)85-97

390. Distinct Role of Surface Hydroxyls in Single-Atom Pt1/CeO₂Catalyst for Room-Temperature Formaldehyde Oxidation: Acid-Base Versus Redox
Zhang LN, Bao QQ, Zhang BJ, Zhang YB, Wan SL, Wang S, Lin JD, Xiong HF, Mei DH, Wang Y
JACS Au 2(7)(2022)1651-1660
391. Fine-Grained Phosphors for Red-Emitting Mini-LEDs with High Efficiency and Super-Luminance
Kang Y, Li SX, Tian RD, Liu GZ, Dong HR, Zhou TL, Xie RJ
JOURNAL OF ADVANCED CERAMICS 11(9)(2022)1383-1390
392. Pnictides: An Emerging Class of Infrared Nonlinear Optical Material Candidates
Chen JD, Jiang XT, Wu QC, Lin ZS, Luo M, Ye N
JOURNAL OF ALLOYS AND COMPOUNDS 901(2022)163384
393. Building Oxygen-Vacancy in Co₃O_{4-x} Nanocrystal Towards Ultrahigh Pseudocapitance
Hu ZL, Liu WX, Liu JJ, Li S, Hu XB, Hu XL, Zhang L
JOURNAL OF ALLOYS AND COMPOUNDS 929(2022)167299
394. Quantum Nickelate Platform for Future Multidisciplinary Research
Zhang Z, Sun Y, Zhang HT
JOURNAL OF APPLIED PHYSICS 131(12)(2022)120901
395. Atomic Ruthenium Stabilized on Vacancy-Rich Boron Nitride for Selective Hydrogenation of Esters
Huang LL, Liu XF, Zou JL, Duan XP, Chen ZC, Zhou ZH, Ye LM, Liang XL, Xie SY, Yuan YZ
JOURNAL OF CATALYSIS 406(2022)115-125
396. Structure Sensitivity of Ceria-Supported Au Catalysts for CO Oxidation
Su YQ, Qin YY, Wu TT, Wu DY
JOURNAL OF CATALYSIS 407(2022)353-363
397. Systematic Improvement of the Performance of Machine Learning Scoring Functions by Incorporating Features of Protein-Bound Water Molecules
Qu XY, Dong LN, Zhang JY, Si YB, Wang BJ
JOURNAL OF CHEMICAL INFORMATION AND MODELING 62(18)(2022)4369-4379
398. Cavity Quantum-Electrodynamical Time-Dependent Density Functional Theory within Gaussian Atomic Basis. II. Analytic Energy Gradient
Yang JJ, Pei Z, Leon EC, Wickizer C, Weng BB, Mao YZ, Ou Q, Shao YH
JOURNAL OF CHEMICAL PHYSICS 156(12)(2022)124104
399. Size-Dependent Phase Transitions Boost Catalytic Activity of Sub-Nanometer Gold Clusters
Sun JJ, Fan QY, Jin X, Liu JL, Liu TT, Ren B, Cheng J

- JOURNAL OF CHEMICAL PHYSICS 156(14)(2022)144304
400. lambda-DFVB(U): A Hybrid Density Functional Valence Bond Method Based on Unpaired Electron Density
Zheng PK, Gan ZX, Zhou C, Su PF, Wu W
JOURNAL OF CHEMICAL PHYSICS 156(20)(2022)204103
401. Diagrammatic Quantum Monte Carlo Toward the Calculation of Transport Properties in Disordered Semiconductors
Wang YC, Zhao Y
JOURNAL OF CHEMICAL PHYSICS 156(20)(2022)204116
402. Evaluation of Molecular Photophysical and Photochemical Properties Using Linear Response Time-Dependent Density Functional Theory with Classical Embedding: Successes and Challenges
Liang WZ, Pei Z, Mao YZ, Shao YH
JOURNAL OF CHEMICAL PHYSICS 156(21)(2022)210901
403. Automated Workflow for Computation of Redox Potentials, Acidity Constants, and Solvation Free Energies Accelerated by Machine Learning
Wang F, Cheng J
JOURNAL OF CHEMICAL PHYSICS 157(2)(2022)024103
404. A General Tight-Binding Based Energy Decomposition Analysis Scheme for Intermolecular Interactions in Large Molecules
Xu Y, Zhang S, Lindahl E, Friedman R, Wu W, Su PF
JOURNAL OF CHEMICAL PHYSICS 157(3)(2022)034104
405. Compact and Accurate Ab Initio Valence Bond Wave Functions for Electron Transfer: The Classic But Challenging Covalent-Ionic Interaction in LiF
Ren MX, Liu X, Zhang LN, Lin XH, Wu W, Chen ZH
JOURNAL OF CHEMICAL PHYSICS 157(8)(2022)084106
406. Modeling Stepped Pt/Water Interfaces at Potential of Zero Charge with Ab Initio Molecular Dynamics
Chen A, Le JB, Kuang YB, Cheng J
JOURNAL OF CHEMICAL PHYSICS 157(9)(2022)094702
407. Exciton-Exciton Annihilation in Thin Indium Selenide Layers
Yang ZQ, Zhang JX, Ding XY, Sheng ZQ, Zhang KHL, Chen L, Yang Y
JOURNAL OF CHEMICAL PHYSICS 157(13)(2022)134710
408. Analytic High-Order Energy Derivatives for Metal Nanoparticle-Mediated Infrared and Raman Scattering Spectra within the Framework of Quantum Mechanics/Molecular Mechanics Model with Induced Charges and Dipoles
Pei Z, Mao YZ, Shao YH, Liang WZ

JOURNAL OF CHEMICAL PHYSICS 157(16)(2022)164110

409. Resolving the Odd-Even Oscillation of Water Dissociation at rutile TiO₂(110)-Water Interface by Machine Learning Accelerated Molecular Dynamics
Zhuang YB, Bi RH, Cheng J
JOURNAL OF CHEMICAL PHYSICS 157(16)(2022)164701
410. Liquid Cell Electrochemical TEM: Unveiling the Real-Time Interfacial Reactions of Advanced Li-Metal Batteries
Zhou SY, Zheng QZ, Tang S, Sun SG, Liao HG
JOURNAL OF CHEMICAL PHYSICS 157(23)(2022)230901
411. Facile One-Pot Pyrolysis Preparation of SnO₂/g-C₃N₄ Composites for Improved Photocatalytic H₂ Production
Cai CZ, Wang ZH, Shi JW, Zhang YZ, Mao LH, Chen F, Wang TH, Chen YB
JOURNAL OF CHEMICAL TECHNOLOGY AND BIOTECHNOLOGY
97(10)(2022)2921-2931
412. Accurate and Efficient Estimation of Lennard-Jones Interactions for Coarse-Grained Particles via a Potential Matching Method
Zhang YW, Wang YC, Xia F, Cao ZX, Xu X
JOURNAL OF CHEMICAL THEORY AND COMPUTATION 18(8)(2022)4879-4890
413. Newton-X Platform: New Software Developments for Surface Hopping and Nuclear Ensembles
Barbatti M, Bondanza M, Crespo-Otero R, Demoulin B, Dral PO,
Granucci G, Kossoski F, Lischka H, Mennucci B, Mukherjee S,
Pederzoli M, Persico M, Pinheiro M, Pittner J, Plasser F, Gil ES, Stojanovic L
JOURNAL OF CHEMICAL THEORY AND COMPUTATION 18(11)(2022)6851-6865
414. Naturally Effective Inhibition of Microbial Corrosion by Bacterium-Alga Symbiosis on 304 Stainless Steel
Dong YQ, Song GL, Zheng DJ
JOURNAL OF CLEANER PRODUCTION 356(2022)131823
415. Is Photocatalytic Hydrogen Production Sustainable? - Assessing the Potential Environmental Enhancement of Photocatalytic Technology Against Steam Methane Reforming and Electrocatalysis
Oh VBY, Ng SF, Ong WJ
JOURNAL OF CLEANER PRODUCTION 379(2022)134673
416. Grain Boundary Enriched CuO Nanobundle for Efficient Non-Invasive Glucose Sensors/Fuel Cells
Yang HJ, Wang SB, Wang XP, Zhang PY, Yan C, Luo YY, Chen LN, Li MJ, Fan F, Zhou ZY, Li XF
JOURNAL OF COLLOID AND INTERFACE SCIENCE 609(2022)139-148
417. Dictating the Interfacial Stability of Nickel-Rich LiNi_{0.90}Co_{0.05}Mn_{0.05}O₂ via a Diazacyclo Electrolyte Additive-2-Fluoropyrazine

- Zhang XZ, Liu GP, Zhou K, Cheng Y, Jiao TP, Huang L, Zou Y, Wang MS, Yang Y, Zheng JM
JOURNAL OF COLLOID AND INTERFACE SCIENCE 618(2022)431-441
418. EDTA-Dominated Hollow Tube-Like Porous Graphitic Carbon Nitride Towards Enhanced Photocatalytic Hydrogen Evolution
Zhang YZ, Wang TH, Zheng BT, Shi JW, Cai CZ, Mao LH, Cheng C, Zong SC, Guo X, Chen QY
JOURNAL OF COLLOID AND INTERFACE SCIENCE 619(2022)289-297
419. Electrochemical Synthesis of Tetrahedral Cu Nanocrystals with High-Index Facets for Efficient Nitrate Electroreduction
Chen LF, Xie AY, Lou YY, Tian N, Zhou ZY, Sun SG
JOURNAL OF ELECTROANALYTICAL CHEMISTRY 907(2022)116022
420. Large-Area Homogeneous Corrosion Process for Electrochemical Nanoimprint Lithography on GaAs Wafer by Modulating Contact Pressure
Meng QH, Han LH, Xu HT, Lin XT, Zhang J, Peng YF, Su JJ, Zhan DP
JOURNAL OF ELECTROANALYTICAL CHEMISTRY 908(2022)116097
421. A DFT and SERS Study of Synergistic Roles of Thermodynamics and Kinetics during the Electrocatalytic Reduction of Benzyl Chloride at Silver Cathodes
Chen YL, Weng TW, Cai ZY, Shi H, Wu TR, Wu DY, Oleinick A, Svir I, Mao BW, Amatore C, Tian ZQ
JOURNAL OF ELECTROANALYTICAL CHEMISTRY 914(2022)116267
422. Experimental and DFT Studies of Oxygen Reduction Reaction Promoted by Binary Site Fe/Co-N-C Catalyst in Acid
Han Y, Yin SH, Chen YH, Chen C, Yan W, Cheng XY, Li YR, Zhang TN, Yang J, Jiang YX, Sun SG
JOURNAL OF ELECTROANALYTICAL CHEMISTRY 914(2022)116322
423. Feedback Current Production by A Ferrous Mediator Revealing the Redox Properties of *Shewanella Oneidensis* MR-1
Tian XC, Wu RR, Li X, Wu XE, Jiang YX, Zhao F
JOURNAL OF ELECTROANALYTICAL CHEMISTRY 916(2022)116387
424. Application for the Porous Structure of Cellulose Separators: Ionic Conduction Path in Lithium-Ion Battery
Huang BY, Lai PB, Hua HM, Ma HS, Li RY, Shen X, Zhang P, Zhang YJ, Zhao JB
Journal of Electroanalytical Chemistry 926(2022)116937
425. Layered Ag-Graphene Films Synthesized by Gamma Ray Irradiation for Stable Lithium Metal Anodes in Carbonate-Based Electrolytes
Liu JX, Ma HS, Wen ZP, Li HY, Yang J, Pei NB, Zhang P, Zhao JB
JOURNAL OF ENERGY CHEMISTRY 64(2022)354-363
426. Promote the Conductivity of Solid Polymer Electrolyte at Room Temperature by Constructing a Dual Range Ionic Conduction Path

Li RY, Hua HM, Zeng YJ, Yang J, Chen ZQ, Zhang P, Zhao JB
JOURNAL OF ENERGY CHEMISTRY 64(2022)395-403

427. Correlating the Electronic Structure of Perovskite $\text{La}_{1-x}\text{Sr}_x\text{CoO}_3$ with Activity for the Oxygen Evolution Reaction: The Critical role of Co 3d Hole State
Shen ZC, Qu M, Shi J, Oropeza FE, O'Shea VAD,
Gorni G, Tian CM, Hofmann JP, Cheng J, Li J, Zhang KHL
JOURNAL OF ENERGY CHEMISTRY 65(2022)637-645
428. The Origins of Kinetics Hysteresis and Irreversibility of Monoclinic $\text{Li}_3\text{V}_2(\text{PO}_4)_3$
Huo H, Lin ZY, Zhong GM, Lou SF, Wang JJ, Ma YL, Dai CS, Xiong YP, Yin GP, Yang Y
JOURNAL OF ENERGY CHEMISTRY 67(2022)593-603
429. A Robust Interphase via In-Situ Pre-Reconfiguring Lithium Anode Surface for Long-Term Lithium-Oxygen Batteries
Xu P, Lin XD, Sun ZQ, Li KX, Dou WJ, Hou Q, Zhou ZY, Yan JW, Zheng MS, Yuan RM, Dong QF
JOURNAL OF ENERGY CHEMISTRY 72(2022)186-194
430. Synergistic Coupling of Amorphous Carbon and Graphitic Domains Toward High-Rate And Long-Life K^+ Storage
Zhang HH, Li WQ, Pan JH, Sun ZF, Xiao BS, Ye WB,
Ke CZ, Gao HW, Cheng Y, Zhang QB, Wang MS
JOURNAL OF ENERGY CHEMISTRY 73(2022)533-541
431. Efficient Plasmon-Enhanced Perovskite Solar Cells by Molecularly Isolated Gold Nanorods
Hui Y, You EM, Luo QP, Wang T, Nan ZA, Gu Y, Zhang WH,
Cai ZY, Chen L, Zhou JZ, Yan JW, Xie ZX, Mao BW, Tian ZQ
JOURNAL OF ENERGY CHEMISTRY 73(2022)60-67
432. Scalable Spray Coated High Performance Sulfurized Electron Transporter for Efficient and Stable Perovskite Solar Modules
Nie SQ, Feng QF, Tang ZH, Hou YL, Huang XF, Chen RH, Cao F, Wu BH, Yin J, Li J, Zheng NF
JOURNAL OF ENERGY CHEMISTRY 75(2022)391-398
433. Distinct Capacity Fade Modes of Nickel-Rich/Graphite- SiO_x Power Lithium Ion Battery
Li H, Ji WJ, He Z, Zhang YC, Zhao JB
JOURNAL OF ENERGY STORAGE 47(2022)103830
434. Safety Boundary of Power Battery Based on Quantitative Lithium Deposition
Li H, Ji WJ, Zhang P, Zhao JB
JOURNAL OF ENERGY STORAGE 52(2022)104789
435. Multi-Stimulus Responsive Multilayer Coating for Treatment of Device-Associated Infections
Li WL, Hua GP, Cai JF, Zhou YM, Zhou X, Wang M, Wang XM, Fu BQ, Ren L
JOURNAL OF FUNCTIONAL BIOMATERIALS 13(1)(2022)24

436. Extremely Low Efficiency Roll-Off in Vacuum- and Solution-Processed Deep-Red/Near-Infrared OLEDs Based on 1,8-Naphthalimide TADF Emitters
Lin CJ, Wu ZS, Liu JB, Deng WT, Zhuang YX, Xuan TT, Xue J, Zhang L, Wei GD, Xie RJ
JOURNAL OF LUMINESCENCE 243(2022)118683
437. Highly Stable Carbon Nanodot-Based Phosphor as A Color Converter for WLED
Zhang GW, Bai Y, Yu CY, Xuan TT
JOURNAL OF LUMINESCENCE 246(2022)118836
438. Simultaneous Acquirement of Pure Shift 2D Homonuclear Correlation Spectra
Yang C, Chen JY, Zeng Q, Luo Y, Chen Z, Lin YQ
JOURNAL OF MAGNETIC RESONANCE 339(2022)107229
439. Influence of Intrinsic Defects on the Structure and Dynamics of the Mixed Pb-Sn Perovskite: First-Principles DFT and NAMD Simulations
Liu Q, Li AK, Chu WB, Prezhdov OV, Liang WZ
JOURNAL OF MATERIALS CHEMISTRY A 10(1)(2022)234-244
440. Bichannel Design Inspired by Membrane Pump: A Rate Booster for the Conversion-Type Anode of Sodium-Ion Battery
Yin B, He HY, Lin JD, Hong YR, Cheng BS, Zhu L, He HL, Ma MC, Wang JW
JOURNAL OF MATERIALS CHEMISTRY A 10(7)(2022)3373-3381
441. Co/Li-Dual-Site Doping Towards LiCoO₂ as A High-Voltage, Fast-Charging, and Long-Cycling Cathode Material
Chen SX, Wang CW, Zhou Y, Liu JK, Shi CG, Wei GZ, Yin BY, Deng HT, Pan SY, Guo MJ, Zheng WC, Wang HZ, Jiang YH, Huang L, Liao HG, Li JT, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(10)(2022)5295-5304
442. Helical PdPtAu Nanowires Bounded with High-Index Facets Selectively Switch the Pathway of Ethanol Electrooxidation
Tang JX, Tian N, Xiao LP, Chen QS, Wang Q, Zhou ZY, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(20)(2022)10902-10908
443. A Superior Electrocatalyst toward the Oxygen Reduction Reaction Obtained by Atomically Dispersing Copper on N, F Co-Doped Graphene Through Atomic Interface Engineering
Zhong JP, Hou C, Sun ML, Yang ZY, Chen DH, Fan YJ, Chen W, Liao HG, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(26)(2022)13876-13883
444. Enhancing Li Ion Transfer Efficacy in PEO-Based Solid Polymer Electrolytes to Promote Cycling Stability of Li-Metal Batteries
Song C, Li ZG, Peng J, Wu XH, Peng H, Zhou SY, Qiao Y, Sun H, Huang L, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(30)(2022)16087-16094

445. A New Type of Sealed Rechargeable Lithium-Lithium Oxide Battery Based on Reversible $\text{LiO}_2/\text{Li}_2\text{O}_2$ Interconversion
Chen LB, Yang J, Lu ZX, Dai P, Wu XH, Hong YH, Xiao LP, Huang L, Bai H, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(31)(2022)16570-16577
446. Promoting the Conversion of S and Li_2S Using a $\text{Co}_3\text{O}_4@\text{NC}$ Additive in All-Solid-State Li-S Batteries
Zheng XF, Wu YQ, Li C, Peng JX, Yang W, Lv ZW, Zhong HY, Gong ZL, Yang Y
JOURNAL OF MATERIALS CHEMISTRY A 10(36)(2022)18907-18915
447. Ultrafine Platinum-Iridium Distorted Nanowires as Robust Catalysts toward Bifunctional Hydrogen Catalysis
Wang MM, Wang MJ, Zhan CH, Geng HB, Li YH, Huang XQ, Bu LZ
JOURNAL OF MATERIALS CHEMISTRY A 10(36)(2022)18972-18977
448. The Facilitated Cathodic Elementary Reactions of Solid Oxide Electrolysis Cells for CO_2 Conversion Over a Ce Decorated $\text{La}_{0.43}\text{Ca}_{0.37}\text{Ti}_{0.94}\text{Ni}_{0.06}\text{O}_{3-\delta}$ Electrocatalyst
Li ZS, Peng ML, Zhu YL, Hu ZW, Pao CW, Chang YC, Zhang YF, Zhao YR, Li JH, Sun YF
JOURNAL OF MATERIALS CHEMISTRY A 10(38)(2022)20350-20364
449. A Functional Electrolyte Additive Enabling Robust Interphases in High-Voltage $\text{Li}||\text{LiNi}_{0.8}\text{Co}_{0.1}\text{Mn}_{0.1}\text{O}_2$ Batteries at Elevated Temperatures
Zheng WC, Shi CG, Dai P, Huang Z, Lin JX, Chen H, Sun ML, Shen CH, Luo CX, Wang Q, Feng X, Wei YM, Huang L, Sun SG
JOURNAL OF MATERIALS CHEMISTRY A 10(41)(2022)21912-21922
450. Photocatalytic Hydrogen Evolution from Water Based on Zn-Terpyridine 2D Coordination Nanosheets
Xiang S, Khan A, Zhou ZY, He BL, Wang X, Wang BJ, Weng QH
JOURNAL OF MATERIALS CHEMISTRY A 10(45)(2022)24345-24352
451. Biomimetic Hierarchical Implant Surfaces Promote Early Osseointegration in Osteoporotic Rats by Suppressing Macrophage Activation and Osteoclastogenesis
Dai XH, Bai YY, Heng BC, Li YP, Tang ZG, Lin CJ, Liu OS, He Y, Zhang XH, Deng XL
JOURNAL OF MATERIALS CHEMISTRY B 10(11)(2022)1875-1885
452. A Self-Activated Cascade Nanoreactor Based on Pd-Ru/ GO_x for Bacterial Infection Treatment
Zhu TB, Hu XY, Ye ZC, Li JC, Ming J, Guo ZD, Wang JJ, Chen XL
JOURNAL OF MATERIALS CHEMISTRY B 10(38)(2022)7827-7835
453. Water-Induced Reversible Phase Transformation Between Cesium Lead Halide Perovskite Nanocrystals Enables Fluorescent Anti-Counterfeiting
Zhao HY, Lin TY, Shi SC, Bai WH, Xuan TT, Zhou TL, Xie RJ
JOURNAL OF MATERIALS CHEMISTRY C 10(19)(2022)7552-7557

454. Bidentate Aliphatic Quaternary Ammonium Ligand-Stabilized CsPbBr₃ Perovskite Nanocrystals with High PLQY (92.3%) and Superior Stability
Li Y, Cai M, Shen M, Cai Y, Xie RJ
JOURNAL OF MATERIALS CHEMISTRY C 10(21)(2022)8356-8363
455. Adsorptive Removal of Uremic Toxins Using Zr-Based MOFs for Potential Hemodialysis Membranes
Zeng S, Hou YQ, Zhou YM, Zhou X, Ye SF, Wang M, Ren L
JOURNAL OF MATERIALS SCIENCE 57(4)(2022)2909-2923
456. Functional Study on Dendritic Structure Composite Catalyst for Enhanced Visible Light Photocatalytic Hydrogen Production
Yang W, Xu S, Zhang Y, Wu DY, Li JF, Xu J
JOURNAL OF MATERIALS SCIENCE 57(32)(2022)15488-15501
457. Layered Double Hydroxide (LDH) for Multi-Functionalized Corrosion Protection of Metals: A Review
Cao YH, Zheng DJ, Zhang F, Pan JS, Lin CJ
JOURNAL OF MATERIALS SCIENCE & TECHNOLOGY 102(2022)232-263
458. The Effect of Prolonged Holding Time on the Mechanical Property and Microstructural Property of Lithium Disilicate Glass-Ceramic
Lin F, Wang B, Zhang YM, Li SG, Zhang QF, Xiao Y, Zuo QL
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN MEDICINE 33(10)(2022)69
459. Characterizing the Potentially Neuronal Acetylcholinesterase Reactivity Toward Chiral Pyraclofos: Enantioselective Insights from Spectroscopy, in Silico Docking, Molecular Dynamics Simulation and Per-Residue Energy Decomposition Studies
Peng W, Wang T, Liang XR, Yang YS, Wang QZ, Cheng HF, Peng YK, Ding F
JOURNAL OF MOLECULAR GRAPHICS & MODELLING 110(2022)108069
460. Highly Water-Soluble Ternary Citrate and Malate Lanthanide Ethylenediaminetetraacetes with Carbonate
Shi YR, Lin RY, Chen ML, Dong X, Li HY, Weng WZ, Zhou ZH
JOURNAL OF MOLECULAR STRUCTURE 1254(2022)132303
461. Insights into the Mechanism of Metal-Catalyzed Transformation of Oxime Esters: Metal-Bound Radical Pathway vs Free Radical Pathway
Hong P, Song XL, Huang ZQ, Tan K, Wu AA, Lu X
JOURNAL OF ORGANIC CHEMISTRY 87(9)(2022)6014-6024
462. Mechanistic Insight into the Ni-Catalyzed Kumada Cross-Coupling: Alkylmagnesium Halide Promotes C-F Bond Activation and Electron-Deficient Metal Center Slows Down beta-H Elimination
Li YY, Zhu J
JOURNAL OF ORGANIC CHEMISTRY 87(14)(2022)8902-8909

463. Density Functional Theory Study on the H₂-Acceptorless Dehydrogenative Boration of Alkenes Catalyzed by a Zirconium Complex
Dai YL, Yuan BF, Li ZW, Zhang L, Li LF, Pu M, Lei M
JOURNAL OF ORGANIC CHEMISTRY 87(24)(2022)16632-16643
464. Vibronic Coupling Effect on the Vibrationally Resolved Electronic Spectra and Intersystem Crossing Rates of a TADF Emitter: 7-PhQAD
Lin SR, Pei Z, Zhang B, Ma HL, Liang WZ
JOURNAL OF PHYSICAL CHEMISTRY A 126(2)(2022)239-248
465. Substituent Effect on Vibrationally Resolved Absorption Spectra and Exciton Dynamics of Dipyrrolonaphthyridinedione Aggregates
Feng SS, Zhao Y, Liang WZ
JOURNAL OF PHYSICAL CHEMISTRY A 126(37)(2022)6395-6406
466. Thermodynamic Conditions for the Nernstian Response of the Flat Band Potential of the Metal Oxide Semiconductor: A Theoretical Study
Li JQ, Meng LY, Cheng J
JOURNAL OF PHYSICAL CHEMISTRY C 126(1)(2022)578-587
467. Promotion Effect of Cu for CO Oxidation on Ceria Supported PdxCuy Bimetallic Catalysts
Li YY, Hu J, Chen MS, Wan HL
JOURNAL OF PHYSICAL CHEMISTRY C 126(3)(2022)1420-1425
468. The Journal of Physical Chemistry C Virtual Special Issue on 'Energy and Catalysis in China'
Li JF, Yang J, Fu Q
JOURNAL OF PHYSICAL CHEMISTRY C 126(5)(2022)2301-2306
469. Revealing the Origin of Nitrogen Electroreduction Activity of Molybdenum Disulfide Supported Iron Atoms
Xie K, Wang FT, Wei FF, Zhao J, Lin S
JOURNAL OF PHYSICAL CHEMISTRY C 126(11)(2022)5180-5188
470. Single-Molecule Charge Transport through Thiazole-End-Capped Conjugated Oligomers: Synergistic Au-N and Au- π Interactions and Controllable Self-Decoupled Properties
Li Y, Zhou Y, Li Y, Hong W, Li H
JOURNAL OF PHYSICAL CHEMISTRY C 126(14)(2022)6420-6426
471. Machine Learning for Designing Mixed Metal Halides for Efficient Ammonia Separation and Storage
de Rezende A, Malmali M, Dral PO, Lischka H, Tunega D, Aquino AJA
JOURNAL OF PHYSICAL CHEMISTRY C 126(29)(2022)12184-12196
472. Why Does Pt Shell Bearing Tensile Strain Still Have Superior Activity for the Oxygen Reduction

Reaction?

Zhou D, Li Zheng Y, Ze HJ, Ye XX, Cai J, Chen YX, Tian ZQ
JOURNAL OF PHYSICAL CHEMISTRY C 126(42)(2022)17913-17922

473. Adsorption and Degradation of the G-Type Nerve Agent Soman and Its Simulant Dimethyl 4-Nitrophenylphosphate by Metal-Exchange- Modified MFU-4l Metal-Organic Frameworks
Ma DH, Cao ZX
JOURNAL OF PHYSICAL CHEMISTRY C 126(45)(2022)19159-19168

474. Alkynyl-Protected Ag₁₂Cu₄ Cluster with Aggregation-Induced Emission Enhancement
Deng GC, Lee K, Deng HW, Bootharaju MS, Zheng NF, Hyeon T
JOURNAL OF PHYSICAL CHEMISTRY C 126(48)(2022)20577-20583

475. Superatomic Orbital Splitting in Coinage Metal Nanoclusters
Kang SY, Nan ZA, Wang QM
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(1)(2022)291-295

476. Operando Electrochemical X-ray Diffraction and Raman Spectroscopic Studies Revealing the Alkali-Metal Ion Intercalation Mechanism in Prussian Blue Analogues
Li HY, Huang JX, Yang K, Lu ZX, Yan S, Su HS, Liu C, Wang X, Ren B
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(2)(2022)479-485

477. Intermediate Chemistry of Halide Perovskites: Origin, Evolution, and Application
Huang XF, Cheng FW, Wu BH, Zheng NF
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(7)(2022)1765-1776

478. Fast Acquisition of High-Quality Nuclear Magnetic Resonance Pure Shift Spectroscopy via a Deep Neural Network
Zheng XX, Yang ZX, Yang C, Shi XQ, Luo Y, Luo J, Zeng Q, Lin YQ, Chen Z
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(9)(2022)2101-2106

479. Cation-Gated Ion Transport at Nanometer Scale for Tunable Power Generation
Quan AC, Zhu JY, Ma JJ, Guan KW, Yang CY, Wang H, Jiang Y, Zhou SY, Chen JW, Wang C, Hu S
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(11)(2022)2625-2631

480. Critical Roles of Exchange and Superexchange Interactions in Dictating Electron Transfer and Reactivity in Metalloenzymes
Wang BJ, Wu P, Shaik S
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(13)(2022)2871-2877

481. Toward Chemical Accuracy in Predicting Enthalpies of Formation with General-Purpose Data-Driven Methods
Zheng PK, Yang WD, Wu W, Isayev O, Dral PO
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(15)(2022)3479-3491

482. Ultrafast Anisotropic Evolution of Photoconductivity in Sb₂Se₃ Single Crystals
Liu HJ, Luo GY, Cheng HR, Yang ZQ, Xie ZX, Zhang KHL, Yang Y
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(22)(2022)4988-4994
483. Transient Suppression of Carrier Mobility Due to Hot Optical Phonons in Lead Bromide Perovskites
Lai RC, Yang ZQ, Zhi CY, Cao XH, Li Z, Di DW, Yang Y
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(24)(2022)5488-5494
484. A Single Hydrogen Bond Controls the Selectivity of Transglycosylation vs Hydrolysis in Family 13 Glycoside Hydrolases
Guo ZY, Wang L, Su LQ, Chen S, Xia W, Andre I, Rovira C, Wang BJ, Wu J
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(24)(2022)5626-5632
485. One-Shot Trajectory Learning of Open Quantum Systems Dynamics
Ullah A, Dral PO
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(26)(2022)6037-6041
486. Kinetic Insights of Proton Exchange Membrane Water Electrolyzer Obtained by Operando Characterization Methods
Liu H, Tao HB, Liu B
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(28)(2022)6520-6531
487. Bimolecular Self-Trapped Exciton Formation in Bismuth Vanadate
Zhang JZ, Shi JL, Chen YH, Zhang KHL, Yang Y
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(42)(2022)9815-9821
488. Direct Conversion of N₂ and O₂ to Nitric Oxide at Room Temperature Initiated by Double Aromaticity in the Y₂BO⁺ Cation
Wang M, You FY, Gao M, Chen ZY, Chu LY, Hu LR, Zhu J, Ma JB
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(46)(2022)10697-10704
489. Plasmon-Enhanced C-C Bond Cleavage toward Efficient Ethanol Electrooxidation
Wei Y, Mao ZJ, Ma XY, Zhan C, Cai WB
JOURNAL OF PHYSICAL CHEMISTRY LETTERS 13(48)(2022)11288-11294
490. Plasmonic Properties and Sensor Application of the Ag Nanocaps
Wang ZY, Zheng XL, Gao MY, Zhao JT, Lan JS, Ye XF,
Wan J, Fei YC, Guo SS, Wu YF, Huang SL, Li SP, Kang JY
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS 161(2022)110414
491. Exploring the Nature of Electron-Pair Bonds: an Energy Decomposition Analysis Perspective
Zhang Y, Wu X, Su PF, Wu W
JOURNAL OF PHYSICS-CONDENSED MATTER 34(29)(2022)294004

492. High-Energy-Capacity Metal-Air Battery Based on A Magnetron-Sputtered Mg-Al Anode
Huang DY, Cao FY, Ying T, Zheng DJ, Song GL
JOURNAL OF POWER SOURCES 520(2022)230874
493. Tuning Interface Stability of Nickel-Rich $\text{LiNi}_{0.9}\text{Co}_{0.05}\text{Mn}_{0.05}\text{O}_2$ Cathode via a Novel Bis(Vinylsulphonyl)Methane Additive
Jiao TP, Liu GP, Huang L, Zou Y, Zhang XZ, Zheng JM, Yang Y
JOURNAL OF POWER SOURCES 521(2022)230917
494. Heteroatom-Rich Polymers as A Protective Film to Control Lithium Growth for High-Performance Lithium-Metal Batteries
Su TT, Le JB, Ren WF, Zhang SJ, Yuan JM, Wang K, Shao CY, Li JT, Sun SG, Sun RC
JOURNAL OF POWER SOURCES 521(2022)230949
495. Improving Interfacial Stability of High Voltage LiCoO_2 -Based Cells with 4-Methylmorpholine-2,6-Dione Additive
Zou Y, Zhang J, Lin JD, Wu DY, Yang Y, Zheng JM
JOURNAL OF POWER SOURCES 524(2022)231049
496. Temperature-Dependence of Calcination Processes of Ni-Rich Layered Oxides
Wang DW, Zhang X, Zhong GM, Li YX, Hong CY, Dong KJ, Chen CX, Yang Y
JOURNAL OF POWER SOURCES 529(2022)231258
497. Boosting High Voltage Cycling of LiCoO_2 Cathode via Triisopropanolamine Cyclic Borate Electrolyte Additive
Zou Y, Cheng Y, Lin JD, Xiao YK, Ren FC, Zhou K, Wang MS, Wu DY, Yang Y, Zheng JM
JOURNAL OF POWER SOURCES 532(2022)231372
498. Strong Ion Pairing at the Origin of Modified Li-Cation Solvation and Improved Performances of Dual-Salt Electrolytes
Zhang XZ, Lin XD, Xu P, Yuan RM, Gupta D, Rupp R, Barozzino-Consiglio G, Xu HW, Dong QF, Vlad A
JOURNAL OF POWER SOURCES 541(2022)231644
499. New UV-Initiated Lithiated-Interpenetrating Network Gel-Polymer Electrolytes for Lithium-Metal Batteries
Zeng YJ, Yang J, Shen X, Li RY, Chen ZQ, Huang X, Zhang P, Zhao JB
JOURNAL OF POWER SOURCES 541(2022)231681
500. Rational Design of Electrolyte Solvation Structure for Stable Cycling and Fast Charging Lithium Metal Batteries
Xia M, Jiao TP, Liu GP, Chen YH, Gao J, Cheng Y, Yang Y, Wang MS, Zheng JM
JOURNAL OF POWER SOURCES 548(2022)232106
501. Simple Cleaning and Regeneration of Tip-Enhanced Raman Spectroscopy Probe with UV Sources

- Zhang KF, Taniguchi S, Saeki T, Bao YF, Cao MF,
Watanabe M, Wang X, Kobayashi K, Ren B, Yamada H
JOURNAL OF RAMAN SPECTROSCOPY 53(12)(2022)2023-2030
502. Iron(II/III) Sulfite and Sulfates for Oxygen Adsorption and Degradation of Methyl Orange
Wang SY, Xin D, Zhou ZH
JOURNAL OF SOLID STATE CHEMISTRY 306(2022)122784
503. Preparation of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode Materials by Using Different-Sized Mn_3O_4 Nanocrystals as Precursors
Chen RH, Mei J, Xu J, Xu WJ, Wang LS, Chen YZ, Peng DL
JOURNAL OF SOLID STATE ELECTROCHEMISTRY 26(2022)1359-1368
504. Intermolecular 1,2-Difunctionalization of Alkenes Enabled by Fluoroamide-Directed Remote Benzyl C(sp³)-H Functionalization
Zhong LJ, Xiong ZQ, Ouyang XH, Li Y, Song RJ, Sun Q, Lu X, Li JH
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(1)(2022)339-348
505. Selective Difunctionalization of Unactivated Aliphatic Alkenes Enabled by a Metal-Metallaaromatic Catalytic System
Cui FH, Hua YH, Lin YM, Fei JW, Gao LH, Zhao X, Xia HP
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(5)(2022)2301-2310
506. Organoelectrocatalysis Enables Direct Cyclopropanation of Methylene Compounds
Jie LH, Guo B, Song JS, Xu HC
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(5)(2022)2343-2350
507. Pt Particle Size Affects Both the Charge Separation and Water Reduction Efficiencies of CdS-Pt Nanorod Photocatalysts for Light Driven H₂ Generation
Liu YW, Yang WX, Chen QL, Cullen DA, Xie ZX, Lian TQ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(6)(2022)2705-2715
508. Plasmonic Photoelectrochemical Coupling Reactions of para-Aminobenzoic Acid on Nanostructured Gold Electrodes
Devasenathipathy R, Wang JZ, Xiao YH, Rani KK,
Lin JD, Zhang YM, Zhan C, Zhou JZ, Wu DY, Tian ZQ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(9)(2022)3821-3832
509. Radical S-Adenosyl Methionine Enzyme BlsE Catalyzes a Radical-Mediated 1,2-Diol Dehydration during the Biosynthesis of Blasticidin S
Lee YH, Hou XL, Chen RD, Feng JQ, Liu X, Ruszczycky MW, Gao JM, Wang BJ, Zhou JH, Liu HW
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(10)(2022)4478-4486
510. Design and Ribosomal Incorporation of Noncanonical Disulfide-Directing Motifs for the Development of Multicyclic Peptide Libraries

- Dong HL, Li JJ, Liu HT, Lu SM, Wu JJ, Zhang YM, Yin YZ, Zhao YB, Wu CL
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(11)(2022)5116-5125
511. Phosphine-Stabilized Germylidenylpnictinidenes as Synthetic Equivalents of Heavier Nitrile and Isocyanide in Cycloaddition Reactions with Alkynes
He YH, Dai CS, Wang DM, Zhu J, Tan GW
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(11)(2022)5126-5135
512. Counterintuitive Lanthanide Hydrolysis-Induced Assembly Mechanism
Du MH, Chen LQ, Jiang LP, Liu WD, Long LS, Zheng LS, Kong XJ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(12)(2022)5653-5660
513. Engineering O-O Species in Boron Nitrogen Nanotubes Increases Olefins for Propane Oxidative Dehydrogenation
Li PP, Zhang XJ, Wang JN, Xue YM, Yao YB, Chai SS, Zhou B, Wang X, Zheng NF, Yao JN
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(13)(2022)5930-5936
514. Enantioselective Rh-Catalyzed Azide-Internal-Alkyne Cycloaddition for the Construction of Axially Chiral 1,2,3-Triazoles
Guo WT, Zhu BH, Chen Y, Yang J, Qian PC, Deng C, Ye LW, Li L
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(15)(2022)6981-6991
515. Oxidative Stability Matters: A Case Study of Palladium Hydride Nanosheets for Alkaline Fuel Cells
Li HQ, Zeng R, Feng XR, Wang HS, Xu WX, Lu XY, Xie ZX, Abruna HD
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(18)(2022)8106-8114
516. Magnetic 3d-4f Chiral Clusters Showing Multimetal Site Magneto-Chiral Dichroism
Wang X, Wang SQ, Chen JN, Jia JH, Wang C, Paillot K, Breslavetz I,
Long LS, Zheng LS, Rikken GLJA, Train C, Kong XJ, Atzori M
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(19)(2022)8837-8847
517. Effective Storage of Electrons in Water by the Formation of Highly Reduced Polyoxometalate Clusters
Chen JJ, Vila-Nadal L, Sole-Daura A, Chisholm G, Minato T, Busche C, Zhao TT,
Kandasamy B, Ganin AY, Smith RM, Colliard I, Carbo JJ, Poblet JM, Nyman M, Cronin L
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(20)(2022)8951-8960
518. High CO-Tolerant Ru-Based Catalysts by Constructing an Oxide Blocking Layer
Wang T, Li LY, Chen LN, Sheng T, Chen LN, Wang YC, Zhang PY, Hong YH,
Ye JY, Lin WF, Zhang QH, Zhang P, Fu G, Tian N, Sun SG, Zhou ZY
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(21)(2022)9292-9301
519. Photoconductance from the Bent-to-Planar Photocycle between Ground and Excited States in Single-Molecule Junctions
Zou Q, Chen XY, Zhou Y, Jin X, Zhang ZY, Qiu J, Wang R, Hong WJ, Su JH, Qu DH, Tian H

520. Homeostasis inside Single Activated Phagolysosomes: Quantitative and Selective Measurements of Submillisecond Dynamics of Reactive Oxygen and Nitrogen Species Production with a Nanoelectrochemical Sensor
Qi YT, Jiang H, Wu WT, Zhang FL, Tian SY, Fan WT, Liu YL, Amatore C, Huang WH
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(22)(2022)9723-9733
521. Nitrogen-Embedded Quintuple [7]Helicene: A Helicene-Azacorannulene Hybrid with Strong Near-Infrared Fluorescence
Wu YF, Ying SW, Su LY, Du JJ, Zhang L, Chen BW, Tian HR, Xu H, Zhang ML, Yan XM, Zhang QY, Xie SY, Zheng LS
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(24)(2022)10736-10742
522. N-Heterocyclic Carbene-Stabilized Gold Nanoclusters with Organometallic Motifs for Promoting Catalysis
Shen H, Wu QY, Malola S, Han YZ, Xu Z, Qin RX, Tang XK, Chen YB, Teo BK, Hakkinen H, Zheng NF
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(24)(2022)10844-10853
523. Oxygen Vacancy-Mediated Selective C-N Coupling toward Electrocatalytic Urea Synthesis
Wei XX, Wen XJ, Liu YY, Chen C, Xie C, Wang DD, Qiu MY, He NH, Zhou P, Chen W, Cheng J, Lin HZ, Jia JF, Fu XZ, Wang SY
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(26)(2022)11530-11535
524. Spatially Patterned Neutralizing Icosahedral DNA Nanocage for Efficient SARS-CoV-2 Blocking
Zhang JL, Xu YY, Huang YH, Sun M, Liu SW, Wan S, Chen HL, Yang CY, Yang Y, Song YL
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(29)(2022)13146-13153
525. Insight into the Heterogeneity of Longitudinal Plasmonic Field in a Nanocavity Using an Intercalated Two-Dimensional Atomic Crystal Probe with a similar to 7 angstrom Resolution
Chen SY, Weng SR, Xiao YH, Li P, Qin M, Zhou GL, Dong RL, Yang LB, Wu DY, Tian ZQ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(29)(2022)13174-13183
526. Gd(OH)F₂: A Promising Cryogenic Magnetic Refrigerant
Xu QF, Liu BL, Ye MY, Zhuang GL, Long LS, Zheng LS
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(30)(2022)13787-13793
527. Surface Re-Engineering of Perovskites with Buckybowls to Boost the Inverted-Type Photovoltaics
Xing Z, An MW, Chen ZC, Hu MY, Huang XZ, Deng LL, Zhang QY, Guo XG, Xie SY, Yang SH
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(30)(2022)13839-13850
528. Step-Assisted On-Surface Synthesis of Graphene Nanoribbons Embedded with Periodic Divacancies
Yin RT, Wang JN, Qiu ZL, Meng J, Xu HM, Wang ZY,

- Liang YF, Zhao XJ, Ma CX, Tan YZ, Li QX, Wang B
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(32)(2022)14798-14808
529. Conductance Growth of Single-Cluster Junctions with Increasing Sizes
Feng AN, Hou SJ, Yan JZ, Wu QQ, Tang YX, Yang Y,
Shi J, Xiao ZY, Lambert CJ, Zheng NF, Hong WJ
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(34)(2022)15680-15688
530. Quantum Interference-Controlled Conductance Enhancement in Stacked Graphene-like Dimers
Li PH, Hou SJ, Alharbi B, Wu QQ, Chen YJ, Zhou L, Gao TY, Li RH, Yang L, Chang XY, Dong G,
Liu XS, Decurtins S, Liu SX, Hong WJ, Lambert CJ, Jia CC, Guo XF
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(34)(2022)15689-15697
531. Evolution of Transient Luminescent Assemblies Regulated by Trace Water in Organic Solvents
Zhang YL, Zhang SL, Wu HT, Dong X, Shi PC, Qu H, Chen YQ, Cao XY, Tian ZQ, Hu XL, Yang LL
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(42)(2022)19410-19416
532. Photoelectrochemical Asymmetric Catalysis Enables Direct and Enantioselective Decarboxylative
Cyanation
Lai XL, Chen M, Wang YQ, Song JS, Xu HC
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(44)(2022)20201-20206
533. Reaction Mechanism and Selectivity Tuning of Propene Oxidation at the Electrochemical Interface
Liu XC, Wang T, Zhang ZM, Yang CH, Li LY, Wu SM, Xie SJ, Fu G, Zhou ZY, Sun SG
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(45)(2022)20895-20902
534. Elucidating the Effect of Nanoscale Receptor-Binding Domain Organization on SARS-CoV-2
Infection and Immunity Activation with DNA Origami
Zhang JL, Xu YY, Chen MY, Huang YH, Song T, Yang CY, Yang Y, Song YL
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(46)(2022)21295-21303
535. Monometallic Endohedral Azafullerene
Xiang WH, Jiang XL, Yao YR, Xin JP, Jin HM, Guan RN,
Zhang QY, Chen MQ, Xie SY, Popov AA, Yang SF
JOURNAL OF THE AMERICAN CHEMICAL SOCIETY 144(47)(2022)21587-21595
536. Probing Mechanical Properties of Solid-Electrolyte Interphases on Li Nuclei by In Situ AFM
Wang WW, Gu Y, Wang JH, Chen ZB, Yin XT, Wu QH, Yan JW, Mao BW
JOURNAL OF THE ELECTROCHEMICAL SOCIETY 169(2)(2022)020563
537. An Online Estimation Method of State of Health for Lithium-Ion Batteries Based on Constant
Current Charging Curve
Liu W, Zhao JB
JOURNAL OF THE ELECTROCHEMICAL SOCIETY 169(5)(2022)050514

538. Core-Shell Structured Gel Polymer Electrolyte with Single-Ion Conducting and Thermal Stability Bifunction for Lithium-Ion Batteries
Shen X, Hu TX, Zeng YJ, Huang X, Zhang P, Zhao JB
JOURNAL OF THE ELECTROCHEMICAL SOCIETY 169(7)(2022)070505
539. Predicting Capacity Fading Behaviors of Lithium Ion Batteries: An Electrochemical Protocol-Integrated Digital-Twin Solution
Li H, Huang J, Ji W, He Z, Cheng J, Zhang P, Zhao J
JOURNAL OF THE ELECTROCHEMICAL SOCIETY 169(10)(2022)100504
540. Plasma-Catalytic Biogas Reforming for Hydrogen Production over K-Promoted Ni/Al₂O₃ Catalysts: Effect of K-Loading
Zeng YX, Chen GX, Wang JQ, Zhou RS, Sun YF, Weidenkaff A, Shen BX, Tu X
JOURNAL OF THE ENERGY INSTITUTE 104(2022)12-21
541. Selective, User-Friendly, Highly Porous, Efficient, and Rapid (SUPER) Filter for Isolation and Analysis of Rare Tumor Cells
Zhao KF, Liu YP, Wang H, Song YL, Chen XF, Huang C, Niu Q, Cao J, Chen X, Wang W, Wu LL, Yang CY
LAB ON A CHIP 22(2)(2022)367-376
542. LY6E Protein Facilitates Adeno-Associated Virus Crossing in A Biomimetic Chip Model of the Human Blood-Brain Barrier
Liu D, Zhu MY, Lin Y, Li MM, Huang RL, Yang L, Song YL, Diao Y, Yang CY
LAB ON A CHIP 22(21)(2022)4180-4190
543. Resolving the Heterogeneous Adsorption of Antibody Fragment on a 2D Layered Molybdenum Disulfide by Super-Resolution Imaging
Huang TX, Yang M, Giang H, Dong B, Fang N
LANGMUIR 38(24)(2022)7455-7461
544. Quantification of Intracellular Proteins in Single Cells Based on Engineered Picoliter Droplets
Liu WZ, Zhang RH, Huang SQ, Li XR, Liu WL, Zhou JH, Zhu L, Song YL, Yang CY
LANGMUIR 38(26)(2022)7929-7937
545. Structure and Properties of Ultrathin SiO_x Films on Cu(111)
Xu J, Mu CL, Chen MS
LANGMUIR 38(37)(2022)11414-11420
546. Thermally Robust Orange-Red-Emitting Color Converters for Laser-Driven Warm White Light with High Overall Optical Properties
Deng TL, Huang LH, Li SX, Zhu QQ, Wang L, Takeda T, Hirosaki N, Xie RJ
LASER & PHOTONICS REVIEWS 16(6)(2022)2100722
547. Uniformity and Stability of Quantum Dot Pixels Evaluated by Microscale Fluorescence

Spectroscopy

Shi SC, Bai WH, Lin CJ, Xuan TT, Dong GY, Huang F, Xie RJ

LASER & PHOTONICS REVIEWS 16(8)(2022)2100699

548. Manipulating the Light-Matter Interactions in Plasmonic Nanocavities at 1 nm Spatial Resolution

Wen BY, Wang JY, Shen TL, Zhu ZW, Guan PC, Lin JS,

Peng W, Cai WW, Jin HZ, Xu QC, Yang ZL, Tian ZQ, Li JF

LIGHT-SCIENCE & APPLICATIONS 11(1)(2022)235

549. Enabling Robust and Hour-Level Organic Long Persistent Luminescence from Carbon Dots by Covalent Fixation

Jiang K, Wang YC, Lin CJ, Zheng LC, Du JR, Zhuang YX, Xie RJ, Li ZJ, Lin HW

LIGHT-SCIENCE & APPLICATIONS 11(1)(2022)80

550. A Comparative Study of Different Machine Learning Methods for Dissipative Quantum Dynamics

Rodriguez LEH, Ullah A, Espinosa KJR, Dral PO, Kananenka AA

MACHINE LEARNING-SCIENCE AND TECHNOLOGY 3(4)(2022)045016

551. Boosting the Optical Absorption of Melanin-Like Polymers

Bai WJ, Yang P, Liu HJ, Zou Y, Wang XH, Yang Y, Gu ZP, Li YW

MACROMOLECULES 55(9)(2022)3493-3501

552. Molecular Hyperpolarization-Directed Photothermally Enhanced Melanin-Inspired Polymers

Bai WJ, Xiang PJ, Liu HJ, Guo HY, Tang ZR, Yang P, Zou Y, Yang Y, Gu ZP, Li YW

MACROMOLECULES 55(15)(2022)6426-6434

553. Hierarchically Structured Powder Metallurgy Austenitic Stainless Steel with exceptional Strength and Ductility

Liu GY, Sun B, Du C, Li S, Xin S, Shen T

MATERIALS SCIENCE AND ENGINEERING A-STRUCTURAL MATERIALS PROPERTIES

MICROSTRUCTURE AND PROCESSING 861(2022)144351

554. The Combined Effect of Carbonation and Chloride-Contamination of Concrete on the Intelligence of Mg Alloy Sacrificial Anode for Reinforcing Steel

Wu PP, Song GL, Zhu YX, Zheng DJ

MATERIALS TODAY COMMUNICATIONS 32(2022)103977

555. Tuning Atomic Pt Site Surface on PtAu Alloy Toward Electro-Oxidation of Formic Acid

Zheng JH, Zhang JL, Li G, Zhang JM, Zhang BW, Jiang YX, Sun SG

MATERIALS TODAY ENERGY 27(2022)101028

556. Dimensionality-Dependent MoS₂ toward Efficient Photocatalytic Hydrogen Evolution: from Synthesis to Modifications in Doping, Surface and Heterojunction Engineering

Lv Y, Chen P, Foo JJ, Zhang J, Qian W, Chen C, Ong WJ

MATERIALS TODAY NANO 18(2022)100191

557. Achievement of A Giant Piezoelectric Coefficient and Piezoelectric Voltage Coefficient through Plastic Molecular-Based Ferroelectric Materials
Wang B, Hong JF, Yang YT, Zhao HX, Long LS, Zheng LS
MATTER 5(4)(2022)1296-1304
558. Self-Oscillating Liquid Gating Membranes with Periodic Gas Transport
Xu X, Liu J, Cao M, Zhang J, Huang XL, Hou X
MEMBRANES 12(7)(2022)642
559. Confined and Synergistic Effects Between Protonated Amines and Gases in the Frameworks of Lanthanum 1,3-Propanediaminetetraacetates
Deng L, Chen X, Chen ML, An DL, Zhou ZH
MICROPOROUS AND MESOPOROUS MATERIALS 335(2022)111813
560. Advances in the Solar-Energy Driven Conversion of Methanol to Value-Added Chemicals
Feng J, Xu S, Du H, Gong QB, Xie SJ, Deng WP, Zhang QH, Wang Y
MOLECULAR CATALYSIS 530(2022)112593
561. Mechanism of the Micellar Solubilization of Curcumin by Mixed Surfactants of SDS and Brij35 via NMR Spectroscopy
Zhan X, Wu ZX, Chen Z, Cui XH
MOLECULES 27(15)(2022)5032
562. Supercapacitor-Inspired Triboelectric Nanogenerator Based on Electrostatic Double Layer
Dong JN, Huang SY, Luo JJ, Zhao JW, Fan FR, Tian ZQ
NANO ENERGY 95(2022)106971
563. Ultrastable and Highly Efficient Green-Emitting Perovskite Quantum Dot Composites for Mini-LED Displays or Backlights
Xuan TT, Guo SQ, Bai WH, Zhou TL, Wang L, Xie RJ
NANO ENERGY 95(2022)107003
564. A General Strategy for Overcoming the Trade-Off Between Ultrasmall Size and High Loading of MOF-Derived Metal Nanoparticles by Millisecond Pyrolysis
Han YC, Liu ML, Sun L, Li XC, Yao YG, Zhang C,
Ding SY, Liao HG, Zhang L, Fan FR, Moskovits M, Tian ZQ
NANO ENERGY 97(2022)107125
565. Enhancing Cycling Stability in Li-Rich Mn-Based Cathode Materials by Solid-Liquid-Gas Integrated Interface Engineering
Guo WB, Zhang YG, Lin L, He W, Zheng HF, Lin J, Sa BS, Wei QL, Wang LS, Xie QS, Peng DL
NANO ENERGY 97(2022)107201
566. Ion-Conductive Gradient Sodiophilic 3D Scaffold Induced Homogeneous Sodium Deposition for

- Highly Stable Sodium Metal Batteries
Zhuang YP, Deng DY, Lin L, Liu B, Qu SS, Li SC, Zhang YG,
Sa BS, Wang LS, Wei QL, Mai LQ, Peng DL, Xie QS
NANO ENERGY 97(2022)107202
567. Revealing the Optimal Configuration for Synergy Effect of Metal Nanoparticles and MN4 Sites for Oxygen Reduction Reaction
Cheng XY, Li YR, Zheng JH, Yin SH, Wang CT, Qu XM, Yang J, Jiang YX, Sun SG
NANO ENERGY 100(2022)107440
568. Promoting the Performances of P2-Type Sodium Layered Cathode by Inducing Na Site Rearrangement
Zhang TL, Ji HC, Hou XH, Ji WH, Fang H, Huang ZY, Chen GJ,
Yang TT, Chu MH, Xu SY, Chen ZW, Wang CQ, Yang WY, Yang JB,
Ma XB, Sun K, Chen DF, Tao MM, Yang Y, Zheng JX, Pan F, Xiao YG
NANO ENERGY 100(2022)107482
569. Whisker-Inspired and Self-Powered Triboelectric Sensor for Underwater Obstacle Detection and Collision Avoidance
Liu JH, Xu P, Zheng JX, Liu XY, Wang XY, Wang SY, Guan TZ, Xie GM, Xu MY
NANO ENERGY 101(2022)107633
570. Fingerprint-Inspired Dual-Mode Pressure Sensor for Robotic Static and Dynamic Perception
Fu X, Dong JN, Li L, Zhang L, Zhang JQ, Yu LT, Lin QH, Zhang JH,
Jiang CP, Zhang J, Wang YC, Wu WZ, Fan FR, Wang YX, Yang Q
NANO ENERGY 103(2022)107788
571. Size-Dependent Chemomechanical Failure of Sulfide Solid Electrolyte Particles during Electrochemical Reaction with Lithium
Zhao J, Zhao C, Zhu JP, Liu XS, Yao JM, Wang B, Dai QS, Wang ZF, Chen JZ,
Jia P, Li YS, Harris SJ, Yang Y, Tang YF, Zhang LQ, Ding F, Huang JY
NANO LETTERS 22(1)(2022)411-418
572. Nonvolatile and Nonflammable Sulfolane-Based Electrolyte Achieving Effective and Safe Operation of the Li-O₂ Battery in Open O₂ Environment
Li ZG, Song C, Dai P, Wu XH, Zhou SY, Qiao Y, Huang L, Sun SG
NANO LETTERS 22(2)(2022)815-821
573. Electrostatic Shielding Regulation of Magnetron Sputtered Al-Based Alloy Protective Coatings Enables Highly Reversible Zinc Anodes
Zheng JX, Huang ZH, Zeng Y, Liu WQ, Wei BB, Qi ZB, Wang ZC, Xia C, Liang HF
NANO LETTERS 22(3)(2022)1017-1023
574. Long-Life Aqueous Zn-I₂ Battery Enabled by a Low-Cost Multifunctional Zeolite Membrane Separator
Li ZG, Wu XH, Yu XY, Zhou SY, Qiao Y, Zhou HS, Sun SG

- NANO LETTERS 22(6)(2022)2538-2546
575. Revealing the Interaction of Charge Carrier-Phonon Coupling by Quantification of Electronic Properties at the SrTiO₃/TiO₂ Heterointerface
Qin TX, You EM, Zhang JY, Wang HL, Zhang KHL, Mao BW, Tian ZQ
NANO LETTERS 22(7)(2022)2755-2761
576. Photoinduced Superhydrophilicity of Gd-Doped TiO₂ Ellipsoidal Nanoparticles Boosts T₁ Contrast Enhancement for Magnetic Resonance Imaging
Liu K, Cai ZY, Chi XQ, Kang BL, Fu SX, Luo XJ, Lin ZW, Ai H, Gao JH, Lin HY
NANO LETTERS 22(8)(2022)3219-3227
577. Stabilizing Li-O₂ Batteries with Multifunctional Fluorinated Graphene
Wu XH, Wang XT, Li ZG, Chen LB, Zhou SY, Zhang HT, Qiao Y, Yue HJ, Huang L, Sun SG
NANO LETTERS 22(12)(2022)4985-4992
578. In Situ Probe of the Hydrogen Oxidation Reaction Intermediates on PtRu a Bimetallic Catalyst Surface by Core-Shell Nanoparticle-Enhanced Raman Spectroscopy
Lin XM, Wang XT, Deng YL, Chen X, Chen HN, Radjenovic PM,
Zhang XG, Wang YH, Dong JC, Tian ZQ, Li JF
NANO LETTERS 22(13)(2022)5544-5552
579. Enhanced Cyclability of Lithium Metal Anodes Enabled by Anti-aggregation of Lithiophilic Seeds
Sun JJ, Cheng Y, Zhang HH, Yan XL, Sun ZF, Ye WB, Li WQ,
Zhang MY, Gao HW, Han JJ, Peng DL, Yang Y, Wang MS
NANO LETTERS 22(14)(2022)5874-5882
580. Quantifying the Evolution of Inactive Li/Lithium Hydride and Their Correlations in Rechargeable Anode-free Li Batteries
Tao MM, Xiang YX, Zhao DH, Shan PZ, Sun Y, Yang Y
NANO LETTERS 22(16)(2022)6775-6781
581. In Situ TEM Observation of Stagnant Liquid Layer Activation in Nanochannel
Xue P, Qu M, Shi J, Jiang YH, He NA, Zhao TQ, Luo SW, Zhang JJ,
Zhou SY, Luo Y, Chu GW, Li H, Chen JF, Sun SG, Liao HG
NANO LETTERS 22(17)(2022)6958-6963
582. Hot Carrier Lifetimes and Electrochemical Water Dissociation Enhanced by Nickel Doping of a Plasmonic Electrocatalyst
Wan RD, Liu SL, Wang Y, Yang Y, Tian Y, Jain PK, Kang XW
NANO LETTERS 22(19)(2022)7819-7825
583. Titration Mass Spectroscopy (TMS): A Quantitative Analytical Technology for Rechargeable Batteries
Zhang HT, Chen JK, Hong YH, Wu XH, Huang X, Dai P, Luo HY, Zhang BD, Qiao Y, Sun SG

584. Phase and Structure Modulating of Bimetallic Cu/In Nanoparticles Realizes Efficient Electrosynthesis of Syngas with Wide CO/H₂ Ratios
Shen CQ, Wang PT, Li LG, Huang XQ, Shao Q
NANO RESEARCH 15(1)(2022)528-534
585. One-Dimensional Iridium-Based Nanowires for Efficient Water Electrooxidation and Beyond
Li LG, Wang PT, Cheng ZF, Shao Q, Huang XQ
NANO RESEARCH 15(2)(2022)1087-1093
586. Endogenous Fe²⁺-Activated ROS Nanoamplifier for Esterase-Responsive and Photoacoustic Imaging-Monitored Therapeutic Improvement
Xiang SJ, Fan ZX, Ye ZC, Zhu TB, Shi D, Ye SF, Hou ZQ, Chen XL
NANO RESEARCH 15(2)(2022)907-918
587. Atomically Isolated Pd Sites within Pd-S Nanocrystals Enable Trifunctional Catalysis for Direct, Electrocatalytic and Photocatalytic Syntheses of H₂O₂
Yang T, Yang CY, Le JB, Yu ZY, Bu LZ, Li LG, Bai SX, Shao Q, Hu ZW, Pao CW, Cheng J, Feng YG, Huang XQ
NANO RESEARCH 15(3)(2022)1861-1867
588. S Incorporated RuO₂-Based Nanorings for Active and Stable Water Oxidation in Acid
Yao Q, Yu ZY, Chu YH, Lai YH, Chan TS, Xu Y, Shao Q, Huang XQ
NANO RESEARCH 15(5)(2022)3964-3970
589. External Field-Strengthened Ostwald Nanowelding
Li MX, Xie X, Xu YML, Liu JF, Fu YA, Han M, Li XC, Duan XD, Min CJ, Hu JW
NANO RESEARCH 15(5)(2022)4525-4535
590. Investigation of Electronic Excited States in Single-Molecule Junctions
Xu W, Li RH, Wang CH, Zhong JH, Liu JY, Hong WJ
NANO RESEARCH 15(6)(2022)5726-5745
591. The Exclusive Surface and Electronic Effects of Ni on Promoting the Activity of Pt Towards Alkaline Hydrogen Oxidation
Wang KC, Yang H, Zhang JT, Ren GM, Cheng T, Xu Y, Huang XQ
NANO RESEARCH 15(7)(2022)5865-5872
592. Phosphorus-Doping-Tuned PtNi Concave Nanocubes with High-Index Facets for Enhanced Methanol Oxidation Reaction
Fan AX, Qin CL, Zhao RX, Sun HX, Sun H, Dai XP, Ye JY, Sun SG, Lu YH, Zhang X
NANO RESEARCH 15(8)(2022)6961-6968
593. Efficient Oxygen Electrocatalysts with Highly-Exposed Co-N₄ Active Sites on N-Doped

- Graphene-Like Hierarchically Porous Carbon Nanosheets Enhancing the Performance of Rechargeable Zn-Air Batteries
Yu NF, Chen H, Kuang JB, Bao KL, Yan W, Ye JL, Yang ZT, Huang QH, Wu YP, Sun SG
NANO RESEARCH 15(8)(2022)7209-7219
594. Interface Engineering of Zn Meal Anodes Using Electrochemically Inert Al₂O₃ Protective Nanocoatings
Wang R, Wu QF, Wu MJ, Zheng JX, Cui J, Kang Q, Qi ZB, Ma JD, Wang ZC, Liang HF
NANO RESEARCH 15(8)(2022)7227-7233
595. A top-down strategy to realize the synthesis of small-sized L1(0)-platinum-based intermetallic compounds for selective hydrogenation
Jin Y, Ren GM, Feng YG, Geng SZ, Li L, Zhu X, Guo J, Shao Q, Xu Y, Huang XQ, Lu JM
NANO RESEARCH 15(10)(2022)9631-9638
596. Edge Engineering in Chemically Active Two-Dimensional Materials
Zhou LJ, Li MY, Wang W, Wang C, Yang HP, Cao Y
NANO RESEARCH 15(11)(2022)9890-9905
597. Gap-Mode Plasmons at 2 nm Spatial-Resolution Under A Graphene-Mediated Hot Spot
Zhang FL, Yi J, Lin WY, You EM, Lin JS, Jin HZ, Cai WW, Tian ZQ, Li JF
NANO TODAY 44(2022)101464
598. Spherical Neutralizing Aptamer Suppresses SARS-CoV-2 Omicron Escape
Sun M, Wu ZJ, Zhang JL, Chen MY, Lu Y, Yang CY, Song YL
NANO TODAY 44(2022)101499
599. Inhomogeneity of Fluorescence Lifetime and Intensity in A Plasmonic Nanocavity
You XQ, Peng W, He JX, Lin JS, Zong XQ, Zhao N, Yang JL, Li MD, Zhang YJ, Yi J, Jin HZ, Tian ZQ, Li JF
NANO TODAY 45(2022)101548
600. Simultaneous Single-Cell Genome and Transcriptome Sequencing in Nanoliter Droplet with Digital Microfluidics Identifying Essential Driving Genes
Xu X, Lin L, Yang J, Qian WZ, Su R, Guo XX, Cai L, Zhao ZR, Song J, Yang CY
NANO TODAY 46(2022)101596
601. A General Strategy for Detection of Tumor-Derived Extracellular Vesicle MicroRNAs Using Aptamer-Mediated Vesicle Fusion
Cui L, Peng RX, Zeng CF, Zhang JL, Lu YZ, Zhu L, Huang MJ, Tian QH, Song YL, Yang CY
NANO TODAY 46(2022)101599
602. Quantitative Studies of Single-Molecule Chemistry Using Conductance Measurement
Zeng BF, Zou YL, Wang G, Hong WJ, Tian ZQ, Yang Y
NANO TODAY 47(2022)101660

603. Tailoring Functional Terminals on Solution-Processable Fullerene Electron Transporting Materials for High Performance Perovskite Solar Cells
Liu F, Xing Z, Ren Y, Huang RJ, Xu PY, Xie FF, Li SH, Zhong XX
NANOMATERIALS 12(7)(2022)1046
604. Synthesis and Fluorescent Properties of Multi-Functionalized C₇₀ Derivatives of C₇₀(OCH₃)₁₀[C(COOEt)₂] and C₇₀(OCH₃)₁₀[C(COOEt)₂]₂
Luan K, Wang L, Xie FF, Chen BW, Chen ZC, Deng LL, Xie SY, Zheng LS
NANOMATERIALS 12(9)(2022)1426
605. Carbene Addition Isomers of C₇₀ formed in the Flame of Low-Pressure Combustion
Xie FF, Chen ZC, Wu YH, Tian HR, Deng SL, Xie SY, Zheng LS
NANOMATERIALS 12(18)(2022)3087
606. Well-Designed Internal Electric Field from Nano-Ferroelectrics Promotes Formic Acid Oxidation on Pd
Luo GM, Hu SZ, Niu DF, Sun SG, Zhang XS
NANOSCALE 14(16)(2022)6007-6020
607. A Core/Shell Nanogenerator Achieving pH-Responsive Nitric Oxide Release for Treatment of Infected Diabetic Wounds
Zhou YRN, Jiang YJ, Cai JF, Wang JP, Li S, Wang M, Zhou X, Wang XM, Zhao XQ, Ren L
NANOSCALE 14(40)(2022)14984-14996
608. *In-situ* Raman Spectroscopic Insight into Charge Delocalization-Improved Electrical Conductivity in Metal-Cyanide Frameworks
Lu ZX, Huang YJ, Shao LT, Cao MF, Hu S, Liu C, Wang X, Ren B
NANOSCALE 14(48)(2022)18184-18191
609. Catalytic Confinement Effects in Nanochannels: from Biological Synthesis to Chemical Engineering
Shen YG, Wang X, Lei JM, Wang SL, Hou YQ, Hou X
NANOSCALE ADVANCES 4(6)(2022)1517-1526
610. Sieving Carbons Promise Practical Anodes with Extensible Low-Potential Plateaus for Sodium Batteries
Li Q, Liu XS, Tao Y, Huang JX, Zhang J, Yang CP, Zhang YB, Zhang SW,
Jia YR, Lin QW, Xiang YX, Cheng J, Lv W, Kang FY, Yang Y, Yang QH
NATIONAL SCIENCE REVIEW 9(8)(2022)nwac084
611. Photoinduced Chemomimetic Biocatalysis for Enantioselective Intermolecular Radical Conjugate Addition
Huang XQ, Feng JQ, Cui JW, Jiang GD, Harrison W, Zang X, Zhou JH, Wang BJ, Zhao HM
NATURE CATALYSIS 5(7)(2022)586-+
612. Reversible Dehydrogenation and Rehydrogenation of Cyclohexane and Methylcyclohexane by Single-Site Platinum Catalyst

- Chen LN, Verma P, Hou KP, Qi ZY, Zhang SC, Liu YS, Guo JH, Stavila V, Allendorf MD, Zheng LS, Salmeron M, Prendergast D, Somorjai GA, Su J
NATURE COMMUNICATIONS 13(1)(2022)1092
613. A Top-Down Strategy for Amorphization of Hydroxyl Compounds for Electrocatalytic Oxygen Evolution
Liu SH, Geng SZ, Li L, Zhang Y, Ren GM, Huang BL, Hu ZW, Lee JF, Lai YH, Chu YH, Xu Y, Shao Q, Huang XQ
NATURE COMMUNICATIONS 13(1)(2022)1187
614. Host-Guest Liquid Gating Mechanism with Specific Recognition Interface Behavior for Universal Quantitative Chemical Detection
Wang HM, Fan Y, Hou YQ, Chen BY, Lei JM, Yu SJ, Chen XY, Hou X
NATURE COMMUNICATIONS 13(1)(2022)1906
615. Entropy and Crystal-Facet Modulation of P2-Type Layered Cathodes for Long-Lasting Sodium-Based Batteries
Fu F, Liu X, Fu XG, Chen HW, Huang L, Fan JJ, Le JB, Wang QX, Yang WH, Ren Y, Amine K, Sun SG, Xu GL
NATURE COMMUNICATIONS 13(1)(2022)2826
616. Identification of a Quasi-Liquid Phase at Solid-Liquid Interface
Peng XX, Zhu FC, Jiang YH, Sun JJ, Xiao LP, Zhou SY, Bustillo KC, Lin LH, Cheng J, Li JF, Liao HG, Sun SG, Zheng HM
NATURE COMMUNICATIONS 13(1)(2022)3601
617. Boosting Electrocatalytic CO₂-to-Ethanol Production via Asymmetric C-C Coupling
Wang PT, Yang H, Tang C, Wu Y, Zheng Y, Cheng T, Davey K, Huang XQ, Qiao SZ
NATURE COMMUNICATIONS 13(1)(2022)3754
618. Electrochemical Aromatic C-H Hydroxylation in Continuous Flow
Long H, Chen TS, Song JS, Zhu SB, Xu HC
NATURE COMMUNICATIONS 13(1)(2022)3945
619. Visualizing the Failure of Solid Electrolyte under GPa-Level Interface Stress Induced by Lithium Eruption
Gao HW, Ai X, Wang HC, Li WQ, Wei P, Cheng Y, Gui SW, Yang H, Yang Y, Wang MS
NATURE COMMUNICATIONS 13(1)(2022)5050
620. Observation of Formation and Local Structures of Metal-Organic Layers via Complementary Electron Microscopy Techniques
Peng XX, Pelz PM, Zhang QB, Chen PC, Cao LY, Zhang YQ, Liao HG, Zheng HM, Wang C, Sun SG, Scott MC
NATURE COMMUNICATIONS 13(1)(2022)5197

621. Unconventional Interfacial Water Structure of Highly Concentrated Aqueous Electrolytes at Negative Electrode Polarizations
Li CY, Chen M, Liu S, Lu XY, Meng JH, Yan JW, Abruna HD, Feng G, Lian TQ
NATURE COMMUNICATIONS 13(1)(2022)5330
622. Endowing Homodimeric Carbamoyltransferase GdmN with Iterative Functions through Structural Characterization and Mechanistic Studies
Wei JH, Zhang X, Zhou YC, Cheng XN, Lin Z, Tang MC, Zheng JT, Wang BJ, Kang QJ, Bai LQ
NATURE COMMUNICATIONS 13(1)(2022)6617
623. Tandem Catalysis with Double-Shelled Hollow Spheres
Xiao JD, Cheng K, Xie XB, Wang MH, Xing SY, Liu YS, Hartman T, Fu DL, Bossers K, van Huis MA, van Blaaderen A, Wang Y, Weckhuysen BM
NATURE MATERIALS 21(5)(2022)572-+
624. Direct Photo-Oxidation Of Methane to Methanol over a Mono-Iron Hydroxyl Site
An B, Li Z, Wang Z, Zeng XD, Han X, Cheng YQ, Sheveleva AM, Zhang ZY, Tuna F, McInnes EJJ, Frogley MD, Ramirez-Cuesta AJ, Natrajan LS, Wang C, Lin WB, Yang SH, Schroder M
NATURE MATERIALS 21(8)(2022)932-+
625. Highly Dispersed Rhodium Atoms Supported on Defect-Rich Co(OH)₂ for the Chemoselective Hydrogenation of Nitroarenes
Fu H, Zhang H, Yang GC, Liu J, Xu JY, Wang PH, Zhao N, Zhu LH, Chen BH
NEW JOURNAL OF CHEMISTRY 46(3)(2022)1158-1167
626. Highly Water-Soluble Dimeric and Trimeric Lanthanide Carbonates with Ethylenediaminetetraacetates as Precursors of Catalysts for the Oxidative Coupling Reaction of Methane
Lin RY, Shi YR, Hou YH, Xia WS, Weng WZ, Zhou ZH
NEW JOURNAL OF CHEMISTRY 46(8)(2022)3707-3715
627. Structure, Bonding and Adaptive Aromaticity in Rhenium-Oxo Complexes: a DFT Study
Ye QF, Zhu J
NEW JOURNAL OF CHEMISTRY 46(18)(2022)8838-8846
628. Comparisons of Bond Valences and Distances for CO- and N₂-Bound Clusters of FeMo-Cofactors
Yuan C, Jin WT, Zhou ZH
NEW JOURNAL OF CHEMISTRY 46(20)(2022)9519-9525
629. Computational Design of Phenazine Derivative Molecules as Redox-Active Electrolyte Materials in alkaline aqueous organic flow batteries
Zhang WF, Chen YL, Wu TR, Xia X, Xu J, Chen ZD, Cao JY, Wu DY
NEW JOURNAL OF CHEMISTRY 46(24)(2022)11662-11668
630. Recent Progress in Palladium-Nonmetal Nanostructure Development for Fuel Cell Applications

Wang MJ, Li LG, Wang MM, Huang XQ
NPG ASIA MATERIALS 14(1)(2022)78

631. A Hybrid Triboelectric Nanogenerator for Enhancing Corrosion Prevention of Metal in Marine Environment
Wu MZ, Guo WX, Dong SG, Liu AD, Cao YH, Xu ZJ, Lin CJ, Zhang J
NPJ MATERIALS DEGRADATION 6(1)(2022)73
632. Comparison of Helium Ion Irradiation Resistance between Nanocrystalline and Coarse Grained 304 Austenitic Stainless Steel
Zhang WP, Xiong Y, Wu JW, Cheng WR, Du CC, Jin SX, Sun BR, Shen TD
NUCLEAR FUSION 62(12)(2022)126034
633. Ultrafine-Grained Oxide-Dispersion-Strengthened 9Cr Steel with Exceptional Strength and Thermal Stability
Sun BR, Zhou AD, Li YL, Zhang ZL, Du CC, Gu SXY, Chen Z, Cai XC, Xin SW, Shen TD
NUCLEAR MATERIALS AND ENERGY 30(2022)101112
634. A Significant Wave Height Forecast Framework with End-to-End Dynamic Modeling and Lag Features Length Optimization
Yang HY, Wang H, Gao YY, Liu XY, Xu MY
OCEAN ENGINEERING 266(2022)113037
635. Large-Area Metal-Dielectric Heterostructures for Surface-Enhanced Raman Scattering
Shen ST, Wang JY, Zhu YZ, Yang WM, Gao RX, Li JF, Sun GY, Zhilin Y
OPTICS EXPRESS 30(21)(2022)38256-38265
636. Electrochemical 5-Exo-Dig Aza-Cyclization of 2-Alkynylbenzamides toward 3-Hydroxyisoindolinone Derivatives
Shi ZJ, Li N, Wang WZ, Lu HK, Yuan YF, Li Z, Ye KY
ORGANIC & BIOMOLECULAR CHEMISTRY 20(21)(2022)4320-4323
637. Antiaromaticity-Promoted Radical Anion Stability in α -Vinyl Heterocyclics
Lin L, Zhu J
ORGANIC CHEMISTRY FRONTIERS 9(5)(2022)1427-1436
638. Efficient Synthesis of Tetracyclic γ -Lactams via Gold-Catalyzed Oxidative Cyclization of Alkenyl Dienes
Shi CY, Zhou JJ, Hong P, Zhu BH, Hong FL, Qian PC, Sun Q, Lu X, Ye LW
ORGANIC CHEMISTRY FRONTIERS 9(9)(2022)2557-2562
639. A Copper-Catalyzed B-H Bond Insertion Reaction of Azide-Ynamide with Borane Adducts via α -Imino Copper Carbenes
Weng CY, Zhu GY, Zhu BH, Qian PC, Zhu XQ, Zhou JM, Ye LW
ORGANIC CHEMISTRY FRONTIERS 9(10)(2022)2773-2778

640. Electrochemical Oxidative Dearomatization of 2-Arylthiophenes
Shi ZJ, Lu HK, Li N, Yuan YF, Li Z, Ye KY
ORGANIC CHEMISTRY FRONTIERS 9(11)(2022)2921-2925
641. Metal-Free Dearomatization Reactions of Naphthol-Ynamides for the Divergent and Enantioselective Synthesis of Azaspirocycles
Li HH, Zhang YP, Zhai TY, Liu BY, Shi CY, Zhou JM, Ye LW
ORGANIC CHEMISTRY FRONTIERS 9(14)(2022)3709-3717
642. Multiple [n]Helicenes with Various Aromatic Cores
Wu YF, Zhang L, Zhang QY, Xie SY, Zheng LS
ORGANIC CHEMISTRY FRONTIERS 9(17)(2022)4726-4743
643. Theoretical Insights into the Mechanism and Origin of Chemoselectivity in the Catalyst- and Directing Group-Dependent Oxidative Cyclization of Diynes with Pyridine N-Oxides
Chen JJ, Liu JY, Cao XX, Hu JX, Lu X, Shen WB, Sun Q, Song RJ, Li JH
ORGANIC CHEMISTRY FRONTIERS 9(19)(2022)5168-5177
644. Copper-Catalyzed Si-H Bond Insertion Reaction of N-Propargyl Ynamides with Hydrosilanes
Huang EH, Zhang YQ, Cui DQ, Zhu XQ, Li X, Ye LW
ORGANIC LETTERS 24(1)(2022)196-201
645. Asymmetric Construction of α,γ -Disubstituted α,β -Butenolides Directly from Allylic Ynoates Using a Chiral Bifunctional Phosphine Ligand Enables Cooperative Au Catalysis
Li T, Dong SC, Tang CH, Zhu ML, Wang N, Kong WG, Gao WC, Zhu J, Zhang LM
ORGANIC LETTERS 24(24)(2022)4427-4432
646. Electrochemical Dearomative Spirocyclization of N-Acyl Thiophene-2-sulfonamides
Shi ZJ, Wang WZ, Li N, Yuan YF, Ye KY
ORGANIC LETTERS 24(34)(2022)6321-6325
647. Highly Site-Selective Oxidative Cyclization of Ene-ynamides via Non-Noble-Metal Catalysis: Access to Functionalized Lactams
Zhu BH, Shen CH, Nie ML, Zheng FM, Huang CZ, Chen F, Li L, Deng C, Ye LW, Qian PC
ORGANIC LETTERS 24(38)(2022)7009-7014
648. Predicting Dinitrogen Activation by Carborane-Based Frustrated Lewis Pairs
Dai CS, Huang YY, Zhu J
ORGANOMETALLICS 41(12)(2022)1480-1487
649. Probing the Hyperconjugative Aromaticity of Cyclopentadiene and Pyrroliums Containing Group 7 Transition Metal Substituents
Chen SW, Zhu J
ORGANOMETALLICS 41(19)(2022)2742-2752

650. Degradation of Pesticides Diazinon and Diazoxon by Phosphotriesterase: Insight into Divergent Mechanisms from QM/MM and MD Simulations
Fu YZ, Zhang YW, Fan FF, Wang BJ, Cao ZX
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(2)(2022)687-696
651. Substitution Pattern Controlled Charge Transport in BN-Embedded Aromatics-Based Single Molecule Junctions
Wang R, Song K, Wei CY, Hong WJ, Zang YP, Qu DH, Li HX
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(4)(2022)2227-2233
652. Aromaticity-Promoted CS₂ Activation by Heterocycle-Bridged P/N-FLPs: a Comparative DFT Study with CO₂ Capture
Li YY, Zhuang DL, Qiu RL, Zhu J
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(4)(2022)2521-2526
653. Vibrationally Resolved Absorption Spectra and Ultrafast Exciton Dynamics in α -Phase and β -Phase Zinc Phthalocyanine Aggregates
Feng SS, Wang YC, Liang WZ, Zhao Y
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(5)(2022)2974-2987
654. High Activity of Step Sites on Pd Nanocatalysts in Electrocatalytic Dichlorination
Lou YY, Xiao C, Fang JY, Sheng T, Ji LF, Zheng QZ, Xu BB, Tian N, Sun SG
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(6)(2022)3896-3904
655. sp²-to-sp³ Transitions in Graphite during Cold-Compression
Yuan XH, Cheng Y, Tang H, Wang P, Liu FY, Han SB, Zhu JL, Wang MS, Wang LP
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(17)(2022)10561-10566
656. Structural Dynamics of Ru Clusters during Nitrogen Dissociation in Ammonia Synthesis
Fan QY, Liu JL, Gong FQ, Wang Y, Cheng J
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(18)(2022)10820-10825
657. QM/MM and MM MD Simulations on Decontamination of the V-Type Nerve Agent VX by Phosphotriesterase: toward a Comprehensive Understanding of Steroselectivity and Activity
Fan FF, Zheng YC, Fu YZ, Zhang YW, Zheng H, Lyu CJ, Chen LY, Huang J, Cao ZX
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(18)(2022)10933-10943
658. Predicting Dinitrogen Activation by Borenium and Borinium Cations
Dai CS, Zhu J
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(23)(2022)14651-14657
659. Hydrogenation of CO₂ to Methanol over In-Doped m-ZrO₂: a DFT Investigation into the Oxygen Vacancy Size-Dependent Reaction Mechanism
Yu J, Zeng YB, Lin W, Lu X

- PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(38)(2022)23182-23194
660. Evidence for $\pi(\text{CHR}) \rightarrow d(\text{M})$ Bonding in Transition Metal Carbene Compounds ($\text{LnM}=\text{CHR}$) and Its Decisive Role in the α -Agostic Effect
Lin XH, Tian WQ, Wu W, Mo YR
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(38)(2022)23420-23426
661. Exploring the Photocatalytic Properties and Carrier Dynamics of 2D Janus XMMX' ($X = \text{S, Se; M} = \text{Ga, In; and X}' = \text{Te}$) Materials
Zhang BF, Li AK, Lin JH, Liang WZ
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(38)(2022)23437-23446
662. RBD Spatial Orientation of the Spike Protein and Its Binding to ACE2: Insight into the High Infectivity of the SARS-CoV-2 Delta Variant from MD Simulations
Lv N, Cao ZX
PHYSICAL CHEMISTRY CHEMICAL PHYSICS 24(39)(2022)24155-24165
663. Manipulating the Metal-to-Insulator Transition and Magnetic Properties in Manganite Thin Films via Epitaxial Strain
Li D, Zhu BN, Backes D, Veiga LSI, Lee TL, Wang HG, He Q, Roy P, Zhang JY, Shi JL, Chen AP, van Aken PA, Jia QX, Dhessi SS, Scanlon DO, Zhang KHL, Li WW
PHYSICAL REVIEW B 105(16)(2022)165426
664. Direct Determination of Band-Gap Renormalization in Degenerately Doped Ultrawide Band Gap $\beta\text{-Ga}_2\text{O}_3$ Semiconductor
Zhang JY, Willis J, Yang ZN, Sheng ZQ, Wang LS, Lee TL, Chen L, Scanlon DO, Zhang KHL
PHYSICAL REVIEW B 106(20)(2022)205305
665. Scaling of Quantum Interference from Single Molecules to Molecular Cages and Their Monolayers
Xu XH, Wang JJ, Blankevoort N, Daaoub A, Sangtarash S, Shi J, Fang C, Yuan S, Chen LC, Liu JY, Yang Y, Sadeghi H, Hong WJ
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 119(46)(2022)e2211786119
666. LINEAGE: Label-Free Identification of Endogenous Informative Single-Cell Mitochondrial RNA Mutation for Lineage Analysis
Lin L, Zhang YF, Qian WZ, Liu Y, Zhang YK, Lin FH, Liu CX, Lu GX, Sun D, Guo XX, Song YL, Song J, Yang CY, Li J
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA 119(5)(2022)e2119767119
667. Conjugated Polymers Based on Metalla-Aromatic Building Blocks
Chen SY, Peng LX, Liu YN, Gao X, Zhang Y, Tang C, Zhai ZH, Yang LL, Wu WT, He XM, Liu LL, He F, Xia HP
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES

- OF AMERICA 119(29)(2022)e2203701119
668. Ultrahigh Efficient Emulsification with Drag-Reducing Liquid Gating Interfacial Behavior
Yu SJ, Jing Y, Fan Y, Xiong LH, Wang HM, Lei JM,
Zhang YM, Liu J, Wang SL, Chen XY, Sun H, Hou X
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES
OF AMERICA 119(29)(2022)e2206462119
669. Unveiling the Mechanism for Selective Cleavage of C-C Bonds in Sugar Reactions on Tungsten
Trioxide-Based Catalysts
Liu Y, Zhang W, Hao C, Wang S, Liu HC
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES
OF AMERICA 119(34)(2022)e2206399119
670. Effect of Viscoelasticity on the Foaming Behaviour of Long-Chain Branched Polypropylene with
Different Branching Degrees Analysed by Using Bubble-Growth Modelling
Song M, Luo W, Feng S, Jiang W, Ge Y, Liu T
Polymer 238(2022)124397
671. Highly Stable N-Containing Polymer-Based Fe/N_x/C Electrocatalyst for Alkaline Anion Exchange
Membrane Fuel Cell Applications
Rauf M, Wang JW, Handschuh-Wang S, Zhou ZY,
Iqbal W, Khan SA, Zhuang L, Ren XZ, Li YL, Sun SG
PROGRESS IN NATURAL SCIENCE-MATERIALS INTERNATIONAL 32(1)(2022)27-33
672. Efficient Photoelectrodes Based on Two-Dimensional Transition Metal Dichalcogenides
Heterostructures: from Design to Construction
Lu XC, Lu YZ, Wang C, Cao Y
RARE METALS 41(4)(2022)1142-1159
673. Mechanisms and Applications of Layer/Spinel Phase Transition in Li- and Mn-Rich Cathodes for
Lithium-Ion Batteries
He W, Xie QS, Lin J, Qu BH, Wang LS, Peng DL
RARE METALS 41(5)(2022)1456-1476
674. Cell Osteogenic Bioactivity Mediated Precisely by Varying Scaled Micro-Pits on Ordered
Micro/Nano Hierarchical Structures of Titanium
Zhang YM, Wang XK, Li YX, Liang JH, Jiang PL,
Huang QL, Yang Y, Duan HP, Dong X, Rui G, Lin CJ
REGENERATIVE BIOMATERIALS 9(2022)rbac046
675. Molten Salt Synthesis of Carbon-Supported Pt-Rare Earth Metal Nanoalloy Catalysts for Oxygen
Reduction Reaction
Jiang Y, Fu T, Liu J, Zhao J, Li B, Chen Z
RSC ADVANCES 12(8)(2022)4805-4812

676. Polymer Microgels for the Stabilization of Gold Nanoparticles and Their Application in the Catalytic Reduction of Nitroarenes in Aqueous Media
Arif M, Shahid M, Irfan A, Nisar J, Wu W, Farooqi Z, Begum R
RSC ADVANCES 12(9)(2022)5105-5117
677. Statistical Analysis of P-N Clusters in Mo/VFe Protein Crystals Using a Bond Valence Method toward Their Electronic Structures
Yuan C, Jin WT, Zhou ZH
RSC ADVANCES 12(9)(2022)5214-5224
678. Electron Beam-Induced Athermal Nanowelding of Crossing SiO_x Amorphous Nanowires
Zheng Y, Cheng L, Su J, Chen C, Zhu X, Li H
RSC ADVANCES 12(10)(2022)6018-6024
679. Maximizing Noble Metal Utilization in Solid Catalysts by Control of Nanoparticle Location
Cheng K, Smulders LCJ, van der Wal LI, Oenema J, Meeldijk JD, Visser NL, Sunley G, Roberts T, Xu ZR, Doskocil E, Yoshida H, Zheng YP, Zecevic J, de Jongh PE, de Jong KP
SCIENCE 377(6602)(2022)204-+
680. Single-Site Pt-Doped RuO₂ Hollow Nanospheres with Interstitial C for High-Performance Acidic Overall Water Splitting
Wang J, Yang H, Li F, Li LG, Wu JB, Liu SH, Cheng T, Xu Y, Shao Q, Huang XQ
SCIENCE ADVANCES 8(9)(2022)eabl9271
681. Surface Chemistry on a Polarizable Surface: Coupling of CO with KTaO₃(001)
Wang ZC, Reticcioli M, Jakub Z, Sokolovic I, Meier M, Boatner LA, Schmid M, Parkinson GS, Diebold U, Franchini C, Setvin M
SCIENCE ADVANCES 8(33)(2022)eabq1433
682. Lithium-Ion Spontaneous Exchange and Synergistic Transport in Ceramic-Liquid Hybrid Electrolytes for Highly Efficient Lithium-Ion Transfer
Shi K, Chen LK, Wan ZP, Biao J, Zhong GM, Li X, Yang L, Ma JB, Lv W, Ren FZ, Wang HQ, Yang Y, Kang FY, He YB
SCIENCE BULLETIN 67(9)(2022)946-954
683. Interface Engineering of Snow-Like Ru/RuO₂ Nanosheets for Boosting Hydrogen Electrocatalysis
Zhang JT, Ren GM, Li DY, Kong QY, Hu ZW, Xu Y, Wang SL, Wang L, Cao MF, Huang XQ
SCIENCE BULLETIN 67(20)(2022)2103-2111
684. Metal-Air Batteries: Progress and Perspective
Chen YH, Xu JJ, He P, Qiao Y, Guo SH, Yang HJ, Zhou HS
SCIENCE BULLETIN 67(23)(2022)2449-2486
685. High Interfacial-Energy Heterostructure Facilitates Large-Sized Lithium Nucleation and Rapid Li+

Desolvation Process

Wen Z, Kang Y, Wu Q, Shen X, Lai P, Yang Y, Li C, Zhao J

SCIENCE BULLETIN 67(24)(2022)2531-2540

686. An Automated Nucleic acid Detection Platform Using Digital Microfluidics with an Optimized Cas12a System

Sun Z, Lin KF, Zhao ZH, Wang Y, Hong XX, Guo JG,

Ruan QY, Lu LY, Li X, Zhang R, Yang CY, Li BA

SCIENCE CHINA-CHEMISTRY 65(3)(2022)630-640

687. Non-Contact Biomimetic Mechanism for Selective Hydrogenation of Nitroaromatics on Heterogeneous Metal Nanocatalysts

Zhou W, Li L, Qin R, Zhu J, Liu S, Mo S, Shi Z, Fang H, Ruan P, Cheng J, Fu G, Zheng N

SCIENCE CHINA-CHEMISTRY 65(4)(2022)726-732

688. Spatially-Separated and Photo-Enhanced Semiconductor Corrosion Processes for High-Efficient And Contamination-Free Electrochemical Nanoimprint Lithography

Xu H, Han L, Su JJ, Tian ZQ, Zhan D

SCIENCE CHINA-CHEMISTRY 65(4)(2022)810-820

689. Amplified Visualization and Function Exploration of Exosomal Protein-Specific Glycosylation Using Hybridization Chain Reaction from Non-Functional Epitope

Kang S, Zhu L, Wang W, Lu Y, You Z, Zhang C, Xu Y, Yang C, Song Y

SCIENCE CHINA-CHEMISTRY 65(6)(2022)1204-1211

690. Monolayer Core-Shell Catalysts Breaking the Selectivity-Activity Seesaw in Chemoselective Hydrogenation

Zhang LN, Li HY, Xiong HF

SCIENCE CHINA-CHEMISTRY 65(1)(2022)1-2

691. Unactivated C(sp³)-H Functionalization via Vinyl Cations

Liu XJ, Xu Y, Tang CH, Qian PC, Ye LW

SCIENCE CHINA-CHEMISTRY 65(1)(2022)20-30

692. Face-Centered Cubic Structured RuCu Hollow Urchin-Like Nanospheres Enable Remarkable Hydrogen Evolution Catalysis

Zhang JT, Le JB, Dong YT, Bu LZ, Zhang Y, Cheng J, Li LG, Huang XQ

SCIENCE CHINA-CHEMISTRY 65(1)(2022)87-95

693. Electrochemical Hydrogen-Storage Capacity of Graphene Can Achieve a Carbon-Hydrogen Atomic Ratio of 1:1

He QF, Zeng LP, Han LH, Peng J, Sartin MM, Tan YZ, Zhan DP, Tian ZQ

SCIENCE CHINA-CHEMISTRY 65(2)(2022)318-321

694. Two-Dimensional PtPb-PbS Heterostructure Enables Improved Kinetics and Highlighted

- Bifunctional Antipoisoning for Methanol Electrooxidation
Liu LB, Tang CY, Bu LZ, Xiao XH, Huang XQ
SCIENCE CHINA-CHEMISTRY 65(6)(2022)1112-1121
695. Synthesis of Yolk-Shell Bi₂O₃@TiO₂ Submicrospheres with Enhanced Potassium Storage
Xu YF, Zhang HH, Ding TJ, Tian RQ, Sun DM, Wang MS, Zhou XS
SCIENCE CHINA-CHEMISTRY 65(9)(2022)1807-1816
696. Highly Insulating Alkane Rings with Destructive Sigma-Interference
Ye JY, Al-Jobory A, Zhang QC, Cao WQ, Alshehab A, Qu K,
Alotaibi T, Chen H, Liu JY, Ismael AK, Chen ZN, Lambert CJ, Hong WJ
SCIENCE CHINA-CHEMISTRY 65(9)(2022)1822-1828
697. Vertically Aligned Ni/NiO Nanocomposites with Abundant Oxygen Deficient Hetero-Interfaces for
Enhanced Overall Water Splitting
Wang HX, Cui MY, Fu GL, Zhang JY, Ding XY, Azaceta I, Bugnet M,
Kepaptsoglou DM, Lazarov VK, O'Shea VAD, Oropeza FE, Zhang KHL
SCIENCE CHINA-CHEMISTRY 65(10)(2022)1885-1894
698. Three-Dimensional Direct-Writing via Photopolymerization Based on Triplet-Triplet Annihilation
Wang ZY, Zhang YS, Su YM, Zhang CK, Wang C
SCIENCE CHINA-CHEMISTRY 65(11)(2022)2283-2289
699. Converting CO₂ to Ethanol on Ag Nanowires with High Selectivity Investigated by Operando
Raman Spectroscopy
Liu Q, Zhang XG, Du ZY, Zou CJ, Chen HY, Zhao Y, Dong JC, Fang PP, Li JF
SCIENCE CHINA-CHEMISTRY 66(1)(2022)259-265
700. General Strategy for Evaluating the d-Band Center Shift and Ethanol Oxidation Reaction Pathway
towards Pt-Based Electrocatalysts
Zheng JH, Li G, Zhang JM, Cheng NY, Ji LF, Yang J, Zhang JL, Zhang BW, Jiang YX, Sun SG
SCIENCE CHINA-CHEMISTRY 66(1)(2022)279-288
701. Regulating Li⁺ Migration and Li₂S Deposition by Metal-Organic Framework-Derived
Co₄S₃-Embedded Carbon Nanoarrays for Durable Lithium-Sulfur Batteries
Liu JB, Song YF, Lin CJ, Xie QS, Peng DL, Xie RJ
SCIENCE CHINA-MATERIALS 65(4)(2022)947-957
702. In Situ Synergistic Strategy of Sacrificial Intermedium for Scalable-Manufactured and Controllable
Layered Double Hydroxide Film
Zhu YX, Song GL, Zheng DJ, Serdechnova M, Blawert C, Zheludkevich ML
SCIENCE CHINA-MATERIALS 65(7)(2022)1842-1852
703. Enhanced Performance of Si-Based Li-Ion Batteries through Elastic Cushioning with Hollow
Graphene Shells

- Shi QT, Ye WB, Kurtyka K, Wang HM, Lian XY, Ta HQ, Zhou JH,
Yang XQ, Guo LL, Trzebicka B, Sun JY, Liu LJ, Wang MS, Rummeli MH
SCIENCE CHINA-MATERIALS 65(9)(2022)2343-2353
704. Enhancing the Performance of Magnetic Refrigerants through Tuning Their Magnetism from Antiferromagnetism to Weak Ferromagnetism
Xu QF, Liu BL, Xu H, Ye MY, Long LS, Zheng LS
SCIENCE CHINA-MATERIALS 65(11)(2022)3171-3174
705. Defect Engineered 2D Mesoporous Mo-Co-O Nanosheets with Crystalline-Amorphous Composite Structure for Efficient Oxygen Evolution
He CH, Hu XC, Wang J, Bu LZ, Zhan CH, Xu BY, Li LG, Li YC, Huang XQ
SCIENCE CHINA-MATERIALS 65(12)(2022)3470-3478
706. Ultrahigh-Power Iron Oxysulfide Thin Films for Microbatteries
Ke BY, Wang XH, Cheng SL, Li WY, Deng RM, Zhang CC, Lin J, Xie QS, Peng DL
SCIENCE CHINA-MATERIALS 66(1)(2022)118-126
707. Application of MXenes in Lithium-Sulfur Batteries
Hou JY, Wang Y, Yang WH, Wang F, Yang D, Zhang YY, Liang F, Li X, Zhang YJ, Zhao JB
SCIENCE CHINA-TECHNOLOGICAL SCIENCES 65(10)(2022)2259-2273
708. VIB5 Database with Accurate ab initio Quantum Chemical Molecular Potential Energy Surfaces
Zhang LA, Zhang S, Owens A, Yurchenko SN, Dral PO
SCIENTIFIC DATA 9(1)(2022)84
709. Efficient Oil-Water Separation Coating with Robust Superhydrophobicity and High Transparency
Chen BY, Zhang RR, Fu HX, Xu JD, Jing Y, Xu GH, Wang B, Hou X
SCIENTIFIC REPORTS 12(1)(2022)2187
710. In Situ Real-Time Quantitative Determination in Electrochemical Nuclear Magnetic Resonance Spectroscopy
Liu M, Ni ZR, Sun HJ, Cao SH, Chen Z
SENSORS 22(1)(2022)282
711. Hollow Microneedles on a Paper Fabricated by Standard Photolithography for the Screening Test of Prediabetes
Wu TW, You XQ, Chen Z
SENSORS 22(11)(2022)4253
712. Novel Electroactive Ferrocene-Based Covalent Organic Frameworks towards Electrochemical Label-Free Aptasensors for the Detection of Cardiac Troponin I
Song Z, Song J, Gao F, Chen X, Wang Q, Zhao Y, Huang X, Yang C, Wang Q
SENSORS AND ACTUATORS B-CHEMICAL 368(2022)132205

713. NO₂ Sensing with a Part-Per-Billion Limit of Detection using Fe₂(MoO₄)₃ Hollow Microspheres Synthesized by a Bubble Template Method
Zhang YF, Gou JM, Chen L, Peng Y, Gao DJ, Bi J, Wu JT, Xie ZX
SENSORS AND ACTUATORS B-CHEMICAL 370(2022)132402
714. Mixed-Linker Synthesis of L-Histidine@Zeolitic Imidazole Framework-8 on Amyloid Nanofibrils-Modified Polyacrylonitrile Membrane with High Separation and Antifouling Properties
Zeng S, Wang YH, Zhou YM, Li WL, Zhou WB, Zhou X, Wang M, Zhao XQ, Ren L
SEPARATION AND PURIFICATION TECHNOLOGY 290(2022)120856
715. Toward Green and Efficient Recycling of Au(III), Pd(II) and Pt(IV) from Acidic Medium Using UCST-Type Ionic Liquid
Wang YY, Chen SW, Liu RH, Zhang LX, Xue WF, Yang YZ
SEPARATION AND PURIFICATION TECHNOLOGY 298(2022)121620
716. Tracking Confined Reaction Based on Host-Guest Interaction Using Single-Molecule Conductance Measurement
Yuan SS, Qian QZ, Zhou Y, Zhao SQ, Lin LC, Duan P, Xu XH, Shi J, Xu W, Feng AN, Shi J, Yang Y, Hong WJ
SMALL 18(3)(2022)2104554
717. An Active-Oxygen-Scavenging Oriented Cathode-Electrolyte-Interphase for Long-Life Lithium-Rich Cathode Materials
Wang YJ, Cai SR, Sun ZQ, Hou Q, Huang HH, Cheng JC, Fan JM, Zheng MS, Dong QF
SMALL 18(7)(2022)2106072
718. The Evolution of the Charge Transport Mechanism in Single-Molecule Break Junctions Revealed by Flicker Noise Analysis
Pan ZC, Chen LCA, Tang C, Hu Y, Yuan SS, Gao TY, Shi J, Shi J, Yang Y, Hong WJ
SMALL 18(10)(2022)2107220
719. Two-Photon 3D Printing in Metal-Organic Framework Single Crystals
Zhang YS, Su YM, Zhao Y, Wang ZY, Wang C
SMALL 18(18)(2022)2200514
720. Transport Modulation Through Electronegativity Gating in Multiple Nitrogenous Circuits
Duan P, Wang YP, Chen LC, Qu K, Liu JY, Zhang QC, Chen ZN, Hong WJ
SMALL 18(20)(2022)2200361
721. Equilibrated PtIr/IrO_x Atomic Heterojunctions on Ultrafine 1D Nanowires Enable Superior Dual-Electrocatalysis for Overall Water Splitting
Huang HP, Fu LH, Kong WQ, Ma HR, Zhang X, Cai JL, Wang SP, Xie ZX, Xie SF
SMALL 18(20)(2022)2201333
722. Surface and Interface Engineering of Zn Anodes in Aqueous Rechargeable Zn-Ion Batteries

Zheng JX, Huang ZH, Ming FW, Zeng Y, Wei BB, Jiang Q, Qi ZB, Wang ZC, Liang HF
SMALL 18(21)(2022)2200006

723. Construction of Bio-Inspired Film with Engineered Hydrophobicity to Boost Interfacial Reaction Kinetics of Aqueous Zinc-Ion Batteries

Gou QZ, Luo HR, Zheng YJ, Zhang Q, Li C, Wang JC, Odunmbaku O, Zheng J, Xue JM, Sun K, Li M
SMALL 18(24)(2022)2201732

724. A Top-Down Templating Strategy toward Functional Porous Carbons

Zhang LL, Tong L, Lv XH, Yan QQ, Ding YW, Wang YC, Liang HW
SMALL 18(26)(2022)2201838

725. An All-Solid-State Battery Based on Sulfide and PEO Composite Electrolyte

Su Y, Zhang XD, Du CC, Luo Y, Chen JZ, Yan JT, Zhu DD, Geng L,
Liu SX, Zhao J, Li YS, Rong ZY, Huang Q, Zhang LQ, Tang YF, Huang JY
SMALL 18(29)(2022)2202069

726. In Situ Induced Lattice-Matched Interfacial Oxygen-Passivation-Layer Endowing Li-Rich and Mn-Based Cathodes with Ultralong Life

He W, Zhuang YP, Mei J, Guo WB, Chen F, Chang ZY,
Fan MJ, Liu C, Wang LS, Liu PF, Zhu ZZ, Xie QS, Peng DL
SMALL 18(30)(2022)2200942

727. Shell-Isolated Nanoparticle-Enhanced Electrochemiluminescence

Lin LH, Wang JY, You CY, Qiu LH, Lin JS, Zhang FL, Yang ZL, Zhang YJ, Chen X, Li JF
SMALL 18(39)(2022)2203513

728. Robust Room-Temperature Sodium-Sulfur Batteries Enabled by a Sandwich-Structured MXene@C/Polyolefin/MXene@C Dual-functional Separator

Wang CZ, Wu KH, Cui JQ, Fang XL, Li J, Zheng NF
SMALL 18(43)(2022)2106983

729. Challenge and Strategies in Room Temperature Sodium-Sulfur Batteries: A Comparison with Lithium-Sulfur Batteries

Lin L, Zhang CK, Huang YZ, Zhuang YP, Fan MJ, Lin J, Wang LS, Xie QS, Peng DL
SMALL 18(43)(2022)2107368

730. Highly Dispersed Ru-Co Nanoparticles Interfaced With Nitrogen-Doped Carbon Polyhedron for High Efficiency Reversible Li-O₂ Battery

Tong Z, Lv C, Zhou Y, Zhang PF, Xiang CC, Li ZG, Wang Z, Liu ZK, Li JT, Sun SG
SMALL 18(48)(2022)2204836

731. Accelerated Water Oxidation Kinetics Triggered by Supramolecular Porphyrin Nanosheet for Robust Visible-Light-Driven CO₂ Reduction

Chen Q, Zhang Y, You EM, Jiang QR, Chen XJ, Wang Y, Song ZJ, Chang K, Xie ZX, Kuang Q

SMALL 18(51)(2022)2204924

732. Regulating Lithium Plating/Stripping Behavior by a Composite Polymer Electrolyte Endowed with Designated Ion Channels

Hu AJ, Sun ZQ, Hou Q, Duan JN, Li C, Dou WJ, Fan JM, Zheng MS, Dong QF

SMALL 18(52)(2022)2205571

733. Well-Paired-Seq: A Size-Exclusion and Locally Quasi-Static Hydrodynamic Microwell Chip for Single-Cell RNA-Seq

Yin K, Zhao MJ, Lin L, Chen YW, Huang SQ, Zhu C,

Liang X, Lin FH, Wei HP, Zeng HM, Zhu Z, Song J, Yang CY

SMALL METHODS 6(7)(2022)2200341

734. Quantification-Promoted Discovery of Glycosylated Exosomal PD-L1 as a Potential Tumor Biomarker

Zhu L, Xu Y, Kang S, Lin B, Zhang C, You Z, Lin H, Yang C, Song Y

SMALL METHODS 6(9)(2022)2200549

735. A Review on 3D Zinc Anodes for Zinc Ion Batteries

Guo N, Huo WJ, Dong XY, Sun ZF, Lu YT, Wu XW, Dai L,

Wang L, Lin HC, Liu HD, Liang HF, He ZX, Zhang QB

SMALL METHODS 6(9)(2022)2200597

736. ZnIn₂S₄-Based Nanostructures in Artificial Photosynthesis: Insights into Photocatalytic Reduction toward Sustainable Energy Production

Ren YJ, Foo JJ, Zeng DQ, Ong WJ

SMALL STRUCTURES 3(11)(2022)2200017

737. Scalable Preparation of High-Performance ZnO–SnO₂ Cascaded Electron Transport Layer for Efficient Perovskite Solar Modules

He R, Nie S, Huang X, Wu Y, Chen R, Yin J, Wu B, Li J, Zheng N

SOLAR RRL 6(3)(2022)2100639

738. Effective Multifunctional Additive Engineering for Efficient and Stable Inverted Perovskite Solar Cells

Li FQ, Huang XF, Xue JP, Liu FW, Kim D, Yang HS, Yang E, Shin I, Kim J, Lee BR, Park SH

SOLAR RRL 6(11)(2022)2200645

739. Qualitative Analysis of Trace Quinolone Antibiotics by SERS with Fine Structure Dependent Sensitivity

Zhang MZ, Zhou ZM, Xu J, Wang WL, Pu SH, Hu WY, Luo P, Tian ZQ, Gong ZB, Liu GK

SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY

278 (2022)121365

740. Catalytic Deoxygenative Cyclopropanation of 1,2-Dicarbonyl or Monocarbonyl Compounds via Molybdenum Catalysis

Wang JL, Zhuo CX

SYNLETT 33(7)(2022)599-608

741. Claisen Rearrangement Triggered by Bronsted Acid Catalyzed Alkyne Alkoxylation
Yan YH, Li L, Ye LW
SYNLETT 33(18)(2022)1813-1818
742. Co₃O₄ Nanocrystals as Matrices for the Detection of Amino Acids, Harmful Additives and Pesticide Residues by MALDI-TOF MS
Qiu ZF, Zheng ZP, Song ZJ, Sun YC, Shan QH, Lin ZW, Xie ZX
TALANTA 242 (2022)123299
743. Label-Free SERS Strategy for Rapid Detection of Capsaicin for Identification of Waste Oils
Liu SH, Lin XM, Yang ZL, Wen BY, Zhang FL, Zhang YJ, Li JF
TALANTA 245 (2022)123488
744. Computational Tools for Aptamer Identification and Optimization
Sun D, Sun M, Zhang JL, Lin X, Zhang YK, Lin FH, Zhang P, Yang CY, Song J
TRAC-TRENDS IN ANALYTICAL CHEMISTRY 157 (2022)116767
745. Enhanced Molecular Recognition on Microfluidic Affinity Interfaces
Liu WZ, Wu QY, Wang WC, Xu X, Yang CY, Song YL
TRAC-TRENDS IN ANALYTICAL CHEMISTRY 157(2022)116827
746. Recent Advances Towards Organocatalytic Enantioselective Desymmetrizing Reactions
Xu Y, Zhai TY, Xu Z, Ye LW
TRENDS IN CHEMISTRY 4(3)(2022)191-205
747. Raman Spectroscopic Investigation on the Biomedical Evolution of Spinal Cord Injury and the Therapeutic Outcomes of Its Low-Level Laser Therapy
Zhang FR, Liang ZW, Song DL, Wang Z, Wang KG, Wang S
VIBRATIONAL SPECTROSCOPY 118(2022)103337
748. Recent Progress on Multiscale Modeling of Electrochemistry
Yang XH, Zhuang YB, Zhu JX, Le JB, Cheng J
WILEY INTERDISCIPLINARY REVIEWS-COMPUTATIONAL MOLECULAR SCIENCE
12(1)(2022)e1559
749. Extraction of Copper Ions from Aqueous Medium by Microgel Particles for in-situ Fabrication of Copper Nanoparticles to Degrade Toxic Dyes
Arif M, Shahid M, Irfan A, Nisar J, Wang XF, Batool N, Ali M, Farooqi ZH, Begum R
ZEITSCHRIFT FUR PHYSIKALISCHE CHEMIE-INTERNATIONAL JOURNAL OF
RESEARCH IN PHYSICAL CHEMISTRY & CHEMICAL PHYSICS
236(9)(2022)1219-1241

C类 其它研究论文

1. Advances in Pretreatments for Electroless Copper Plating on Polymer Materials
Zheng AN, Jin L, Yang JQ, Li WQ, Wang ZY, Yang FZ, Zhan DP, Tian ZQ
ACTA CHIMICA SINICA 80(5)(2022)659-667
2. Regulation Strategies Based on Quantum Interference in Electrical Transport of Single-Molecule Devices
Li RH, Liu JY, Hong WJ
ACTA PHYSICA SINICA 71(6)(2022)067303
3. Surface and Interface Engineering for Electrochemical Energy Storage and Conversion Preface
Yu L, Huang XQ, Zhang QB, Zhang ZC
ACTA PHYSICO-CHIMICA SINICA 38(6)(2022)2109020
4. Heterogeneous Catalysis for Deoxygenation of Cellulose and Its Derivatives to Chemicals
Wang W, Wang Y, Zhan ZX, Tan T, Deng WP, Zhang QH, Wang Y
ACTA PHYSICO-CHIMICA SINICA 38(10)(2022)2205032
5. Effects of 5, 5-Dimethylhydantoin on Electroless Copper Plating
Zheng AN, Jin L, Yang JQ, Wang ZY, Li WQ, Yang FZ, Zhan DP, Tian ZQ
CHEMICAL JOURNAL OF CHINESE UNIVERSITIES-CHINESE 43(8)(2022)147-151
6. Crystallographic Understanding of Photoelectric Properties for C₆₀ Derivatives Applicable as Electron Transporting Materials in Perovskite Solar Cells
Xing Z, Li SH, Xu PY, Tian HR, Deng LL, Yao YR,
Chen BW, Xie FF, An MW, Yun DQ, Xie SY, Zheng LS
CHEMICAL RESEARCH IN CHINESE UNIVERSITIES 38(1)(2022)75-81
7. Quantum Interference Enhanced Thermopower in Single-Molecule Thiophene Junctions
Chen H, Chen YR, Zhang HW, Cao WQ, Fang C,
Zhou YC, Xiao ZY, Shi J, Chen WB, Liu JY, Hong WJ
CHINESE CHEMICAL LETTERS 33(1)(2022)523-526
8. A Hybrid Lithium Sulfonated Polyoxadiazole Derived Single-Ion Conducting Gel Polymer Electrolyte Enabled Effective Suppression of Dendritic Lithium Growth
Li DZ, Luo LB, Zhu JD, Qin HM, Liu PQ, Sun ZM, Lei Y, Jiang MJ
CHINESE CHEMICAL LETTERS 33(2)(2022)1025-1031
9. Light-Mediated CO₂-Responsiveness of Metallopolymer Microgels
Wang XF, Lin XZ, Qiu HJ, Xie JD, Lu ZY, Wang YS, Wu WT
CHINESE CHEMICAL LETTERS 33(3)(2022)1445-1449
10. Strain Tuned Efficient Heterostructure Photoelectrodes

- Zheng HH, Li MY, Chen JS, Quan AC, Ye KH, Ren H, Hu S, Cao Y
CHINESE CHEMICAL LETTERS 33(3)(2022)1450-1454
11. Electrochemistry Enabled Selective Vicinal Fluorosulfenylation and Fluorosulfoxidation of Alkenes
Yu Y, Jiang YM, Wu SF, Shi ZJ, Wu JN, Yuan YF, Ye KY
CHINESE CHEMICAL LETTERS 33(4)(2022)2009-2014
 12. $[(CrGe_9)Cr_2(CO)_{13}]^{4-}$: A Disubstituted Case of Ten-Vertex Closo Cluster with Spherical Aromaticity
Huang YS, Chen DD, Zhu J, Sun ZM
CHINESE CHEMICAL LETTERS 33(4)(2022)2139-2142
 13. Hydrophilic Carbon Nanotube Membrane Enhanced Interfacial Evaporation for Desalination
Hou YQ, Wang QX, Wang SL, Wang M, Chen XM, Hou X
CHINESE CHEMICAL LETTERS 33(4)(2022)2155-2158
 14. Photochemical Effect Driven Fluid Behavior Control in Microscale Pores and Channels
Wang SL, Zhou RM, Hou YQ, Wang M, Hou X
CHINESE CHEMICAL LETTERS 33(8)(2022)3650-3656
 15. Single Molecular Insight into Steric Effect on C-Terminal Amino Acids with Various Hydrogen Bonding Sites
Xie YZ, Liu CH, Cheng LX, Fan YL, Li HF, Liu W, Zhu L, Li X, Deng K, Zeng QD, Han SF
CHINESE CHEMICAL LETTERS 33(10)(2022)4649-4654
 16. Toward Accurate and Efficient Dynamic Computational Strategy for Heterogeneous Catalysis: Temperature-Dependent Thermodynamics and Kinetics for the Chemisorbed on-Surface CO
Chen J, Jin T, Jiang YH, Shen TH, Yang MJ, Chen ZN
CHINESE CHEMICAL LETTERS 33(11)(2022)4936-4942
 17. Preface to Special Issue "Bioinspired Material Chemistry"-Learning from Nature: Building New Material Systems
Hou X
CHINESE JOURNAL OF APPLIED CHEMISTRY 39(1)(2022)1-2
 18. In Situ Studies of Energy-Related Electrochemical Reactions Using Raman and X-Ray Absorption Spectroscopy
Chen HQ, Zou L, Wei DY, Zheng LL, Wu YF, Zhang H, Li JF
CHINESE JOURNAL OF CATALYSIS 43(1)(2022)33-46
 19. Toluene Methylation with Syngas to Para-Xylene by Bifunctional $ZnZrO_x$ -HZSM-5 Catalysts
Han XQ, Zuo JC, Wen DL, Yuan YZ
CHINESE JOURNAL OF CATALYSIS 43(4)(2022)1156-1164
 20. Theoretical Perspective on Mononuclear Copper-Oxygen Mediated C-H and O-H Activations: A Comparison Between Biological and Synthetic Systems

- Wu P, Zhang JY, Chen QQ, Peng W, Wang BJ
CHINESE JOURNAL OF CATALYSIS 43(4)(2022)913-927
21. A trace of Pt Can Significantly Boost RuO₂ for Acidic Water Splitting
Yao Q, Le JB, Yang SZ, Cheng J, Shao Q, Huang XQ
CHINESE JOURNAL OF CATALYSIS 43(6)(2022)1493-1501
22. Revealing the Concentration of Hydrogen Peroxide in Fuel Cell Catalyst Layers by an In-Operando Approach
Qiu CY, Wan LY, Wang YC, Rauf M, Hong YH, Yuan JY, Zhou ZY, Sun SG
CHINESE JOURNAL OF CATALYSIS 43(7)(2022)1918-1926
23. Applications of In-Situ Wide Spectral Range Infrared Absorption Spectroscopy for CO Oxidation over Pd/SiO₂ and Cu/SiO₂ Catalysts
Weng XF, Yang SL, Ding D, Chen MS, Wan HL
CHINESE JOURNAL OF CATALYSIS 43(8)(2022)2001-2009
24. Direct Identification of the Carbonate Intermediate during Water-Gas Shift Reaction at Pt-NiO Interfaces Using Surface-Enhanced Raman Spectroscopy
Qin SN, Wei DY, Wei J, Lin JS, Chen QQ, Wu YF, Jin HZ, Zhang H, Li JF
Chinese Journal of Catalysis 43(8)(2022)2010-2016
25. Bismuth Nanosheets with Rich Grain Boundaries for Efficient Electroreduction of CO₂ to Formate under High Pressures
Ruan SH, Zhang B, Zou JH, Zhong WF, He XY, Lu JH, Zhang QH, Wang Y, Xie SJ
CHINESE JOURNAL OF CATALYSIS 43(12)(2022)3161-3169
26. Photo-Induced Ultrafast Electron Dynamics in Anatase and Rutile TiO₂: Effects of Electron-phonon Interaction
Lian M, Wang YC, Peng SP, Zhao Y
CHINESE JOURNAL OF CHEMICAL PHYSICS 35(2)(2022)270-280
27. Plasmonic Core-Shell Nanostructures Enhanced Spectroscopies
Zhou J, Wei DY, Zhang YJ, Zhang H, Li JF
CHINESE JOURNAL OF CHEMISTRY 40(3)(2022)392-406
28. NO Reduction on Cu-Based Model Catalysts Studied by in-situ IRAS
Huang WJ, Lin N, Xie XW, Chen MS, Wan HL
CHINESE JOURNAL OF CHEMISTRY 40(11)(2022)1267-1274
29. Fabrication and Photoelectrochemical Cathodic Protection Effect of Bi₂S₃/CdSe Co-Modified TiO₂ Nanotube Film
Wang X, Guan ZC, Shi HY, Jin PA, Liu GK, Du RG
CHINESE JOURNAL OF INORGANIC CHEMISTRY 38(5)(2022)861-872

30. Homogeneous Catalytic Hydrogenation of Dimethyl Malonate into 1,3-Propanediol
Fang XL, Li B, Jin J, Duan N
CHINESE JOURNAL OF ORGANIC CHEMISTRY 42(5)(2022)1407-1413
31. Tuning Solvent Composition to Enhance the Stability of Metal Clusters in Mass Spectrometry
Han YZ, Jiang YH, Yang JJ, Lin SC, Tang ZC, Zheng LS
CHINESE JOURNAL OF STRUCTURAL CHEMISTRY 41(4)(2022)2204034-2204039
32. Progress in the Synthesis of Degradable Polyglycolic Acid from Coal via Syngas
Ye LM, Huang LL, Duan XP, Yuan YZ, Xie SY
CLEAN COAL TECHNOLOGY 28(1)(2022)110-121
33. The Recent Progress and Future Opportunities of Na₂S Cathode for Room Temperature Sodium Sulfur Batteries
Zhang BW, Wei ZD, Sun SG
ENERGY STORAGE SCIENCE AND TECHNOLOGY 11(9)(2022)2811-2824
34. Catalytic Methane Combustion over CeO₂ Supported PdO and Ce_{1-x}Pd_xO_{2-δ} Species
Wang M, Zheng Y, Weng W
CHEMICAL JOURNAL OF CHINESE UNIVERSITIES 43(4)(2022)120-131
35. Density-functional Theoretical Study on the Interaction of Indium Oxyhydroxide Clusters with Carbon Dioxide and Methane
He H, Xia W, Zhang Q, Wan H
CHEMICAL JOURNAL OF CHINESE UNIVERSITIES 43(8)(2022)136-146
36. Progress of Pt-Based Catalysts in Proton-Exchange Membrane Fuel Cells: A Review
Huang L, Xu HC, Jing B, Li QX, Yi W, Sun SG
JOURNAL OF ELECTROCHEMISTRY 28(1)(2022)16-32
37. Synthesis of Lithium-Rich Manganese-Based Layered Cathode Materials and Study on Its Structural Evolution of First Cycle Overcharge
Luo CX, Shi CG, Yu ZY, Huang L, Sun SG
JOURNAL OF ELECTROCHEMISTRY 28(1)(2022)49-57
38. Adjusting the Alloying Degree of Pt₃Zn to Improve Acid Oxygen Reduction Activity and Stability
Zhang TE, Yan YN, Zhang JM, Qu XM, Li YR, Jiang YX
JOURNAL OF ELECTROCHEMISTRY 28(4)(2022)22-32
39. Investigation on Electrochemical Processes of p-Aminothiophenol on Gold Electrode of Nanostructures
Peng HY, Wang JZ, Liu J, Yu HH, Lin JD, Wu DY, Tian ZQ
JOURNAL OF ELECTROCHEMISTRY 28(4)(2022)4-11
40. Electrodeposition Mechanism and Process of a Novel Cyanide-Free Gold Sulfite Bath

Yang JQ, Jin L, Li WQ, Wang ZY, Yang FZ, Zhan DP, Tian ZQ
JOURNAL OF ELECTROCHEMISTRY 28(7)(2022)89-96

41. Achieving High Light Uniformity Laser-driven White Lighting Source by Introducing Secondary Phases in Phosphor Converters
Deng TL, Chen HX, Hei LL, Li SX, Xie RJ
JOURNAL OF INORGANIC MATERIALS 37(8)(2022)891-+
42. Advanced Rare Earth Luminescence Materials for Sensing and Detection
Xia ZG, Xie RJ
JOURNAL OF THE CHINESE CERAMIC SOCIETY 50(12)(2022)3091
43. Dynamics of Photoinduced Electron Transfer between CdSe Quantum Dots and C₆₀
Yu WJ, Su YM, He YH, Liu XL, Ning QQ, Wang C, Wang ZH
JOURNAL OF XIAMEN UNIVERSITY(NATURAL SCIENCE) 61(1)(2022)25-32
44. Preparation of Monoclinic and Cubic Eu₂O₃ and Photo-Induced Formation of Peroxide Species on Their Surfaces
Zheng YH, Liu CL, Zhang YG, Weng WZ
JOURNAL OF XIAMEN UNIVERSITY(NATURAL SCIENCE) 61(1)(2022)33-41
45. Theoretical Study on Improving the Properties of Thermally Activated Delayed Fluorescence Molecule CzDBA by Halogen Substitution
Lin SR, Liang WZ
JOURNAL OF XIAMEN UNIVERSITY(NATURAL SCIENCE)61(5)(2022)768-776
46. Application of Convolutional Neural Networks in the Generation and Property Prediction of Novel Non-Fullerene Acceptor Molecules
Yang XY, Peng SP, Zhao Y
JOURNAL OF XIAMEN UNIVERSITY(NATURAL SCIENCE) 61(5)(2022)777-785
47. Synthesis and Characterization of 1,3,5,7,9-Pentaphenothiazinylcorannulene and 1,3,5,7,9-Pentaphenoxazinylcorannulene
Zeng J, Xie XM, Li SH, Yao YR, Chen ZC,
Chen BW, Deng LL, Zhang QY, Xie SY, Zheng LS
JOURNAL OF XIAMEN UNIVERSITY(NATURAL SCIENCE) 61(5)(2022)786-793
48. Interface Engineering of Snow-Like Ru/RuO₂ Nanosheets for Boosting Hydrogen Electrocatalysis
Zhang J, Xu Y, Huang X
CHINESE SCIENCE BULLETIN 67(34)(2022)2103-2111
49. Mechanism of Mechanoluminescent Materials: Review, Progress and Challenges
Pan X, Zhuang Y, Mei L, Xie R
JOURNAL OF THE CHINESE CERAMIC SOCIETY 50(12)(2022)3147-3164

50. Study on Swelling of Butadiene Rubber Gel by Solvent
Li M, Shen HY, Xu JG, Jiang WJ
GUANGDONG CHEMICAL INDUSTRY 49(13)(2022)1-4

51. High Temperature Friction and Wear Properties of TiCN/W-Cu Composites by Spark Plasma Sintering
Huang YT, Li XW, Zhao YF, Zhou XL, Huang X, Hua NB, Chen WZ, Peng DL
MATERIALS FOR MECHANICAL ENGINEERING 46(6)(2022)11-20

52. The Research of Synthesis of One-Site Functionalized Polystyrene
Shen HY, Li Y, Xu JG, Liang SB, Tao J, Li M
MODERN CHEMICAL RESEARCH 2022(12)(2022)168-170

53. Rapidly Detection of Chemical Warfare Agent Simulants by Surface Enhanced Raman Spectroscopy
Zhang L, Wen BY, Liu WE, Fu WX, Kong JL, Li JF
SPECTROSCOPY AND SPECTRAL ANALYSIS 42(1)(2022)110-114

54. A Spike Removal Algorithm Based on Median Filter and Statistic for Raman Spectra
Ye RQ, He H, Zheng P, Xu MX, Wang L
SPECTROSCOPY AND SPECTRAL ANALYSIS 42(10)(2022)3174-3179