

## 固体所2021年第一署名单位论文

序号	标题	期刊	DOI	作者列表	卷	期	起始页	截至页
1	Ultralow Thermal Conductivity and Enhanced Figure of Merit for CuSbSe <sub>2</sub> via Cd-Doping	Acs Applied Energy Materials	10.1021/acsaem.0c02820	Chen, Tao; Ming, Hongwei; Zhang, Baoli; Zhu, Chen; Zhang, Jian; Li, Di; Xin, Hongxing; Qin, Xiaoying	4	2	1637	1643
2	Stitching Graphene Sheets with Graphitic Carbon Nitride: Constructing a Highly Thermally Conductive rGO/g-C <sub>3</sub> N <sub>4</sub> Film with Excellent Heating Capability	Acs Applied Materials And Interfaces	10.1021/acsami.0c22057	Wang, Yanyan; Zhang, Xian; Ding, Xin; Zhang, Ping; Zhang, Qian; Du, Yuhang; Gong, Yi; Zheng, Kang; Tian, Xingyou	13	5	6699	6709
3	Improved Thermoelectric Performance of Cu <sub>12</sub> Sb <sub>4</sub> S <sub>13</sub> through Gd-Substitution Induced Enhancement of Electronic Density of States and Phonon Scattering	Acs Applied Materials And Interfaces	10.1021/acsami.1c03493	Zhu, Chen; Chen, Quan; Ming, Hongwei; Qin, Xiaoying; Yang, Yong; Zhang, Jian; Peng, Di; Chen, Tao; Li, Di; Kawazoe, Yoshiyuki	13	34	25092	25101
4	Liquid-Phase Manipulation Securing Enhanced Thermoelectric Performance of Ag <sub>2</sub> Se	Acs Applied Materials And Interfaces	10.1021/acsami.1c08410	Li, Di; Zhang, Bao Li; Ming, Hong Wei; Wang, Ling; Zu, Yan; Qin, Xiao Ying	13	34	34543	34549
5	Intrinsic Pseudocapacitive Affinity in Manganese Spinel Ferrite Nanospheres for High-Performance Selective Capacitive Removal of Ca <sup>2+</sup> and Mg <sup>2+</sup>	Acs Applied Materials And Interfaces	10.1021/acsami.1c09996	Xu, Yingsheng; Xiang, Shuhong; Zhou, Hongjian; Wang, Guozhong; Zhang, Haimin; Zhao, Huijun	13	34	38886	38896
6	Hierarchical Porous Iron Metal-Organic Gel/Bacterial Cellulose Aerogel: Ultrafast, Scalable, Room-Temperature Aqueous Synthesis, and Efficient Arsenate Removal	Acs Applied Materials And Interfaces	10.1021/acsami.1c14938	Li, Huaimeng; Ye, Mengxiang; Zhang, Xi; Zhang, Haimin; Wang, Guozhong; Zhang, Yunxia	13	40	47684	47695
7	Boosting Thermoelectric Performance of Cu <sub>2</sub> SnSe <sub>3</sub> via Comprehensive Band Structure Regulation and Intensified Phonon Scattering by Multidimensional Defects	Acs Nano	10.1021/acsnano.1c03120	Ming, Hongwei; Zhu, Gaofan; Zhu, Chen; Qin, Xiaoying; Chen, Tao; Zhang, Jian; Li, Di; Xin, Hongxing; Jabar, Bushra	15	6	10532	10541

8	Solution-Processed All-inorganic Planar Heterojunction Solar Cells by Employing In Situ Grown Interfacial Layer with Dual Functions: Complementary Absorption and Selective Extraction of Photogenerated Holes	Acs Omega	10.1021/acsomega.0c06231	[Chen, Wangwei; Cao, Wenbo; Liu, Rong; Dong, Chao; Wan, Zhiyang; Chen, Junwei; Ashebir, Getinet Y.; Wang, Mingtai	6	10	6973	6980
9	Voltage-Stabilizer-Grafted SiO <sub>2</sub> Increases the Breakdown Voltage of the Cycloaliphatic Epoxy Resin	Acs Omega	10.1021/acsomega.1c02108	Qin, Yi; Zhang, Shudong; Han, Shuai; Xu, Tingting; Liu, Cui; Xi, Min; Yu, Xinling; Li, Nian; Wang, Zhenyang	6	30	15523	15531
10	Quantitative Surface-Enhanced Raman Spectroscopy for Field Detections Based on Structurally Homogeneous Silver-Coated Silicon Nanocone Arrays	Acs Omega	10.1021/acsomega.1c02179	Fu, Hao; Bao, Haoming; Zhang, Hongwen; Zhao, Qian; Zhou, Le; Zhu, Shuyi; Wei, Yi; Li, Yue; Cai, Weiping	6	30	18928	18938
11	Visible-Light Localized Surface Plasmon Resonance of WO <sub>3-x</sub> Nanosheets and Its Photocatalysis Driven by Plasmonic Hot Carriers	Acs Sustainable Chemistry & Engineering	10.1021/acssuschemeng.0c08140	Tang, Haibin; Tang, Zimu; Wang, Xiujuan; Meng, Guowen; Tang, Haibin; Tang, Zihui; Wang, Xiujuan; Meng, Guowen	9	4	1500	1506
12	High-contrast, reversible change of thermal conductivity in hexagonal nickel-iron sulfides	Acta Materialia	10.1016/j.actamat.2021.116709	Zhang, X.K.;Li, J.Y.;Lin, J.C.;Tong, P.;Wang, M.;Wang, X.L.;Tong, H.Y.;Zhang, Y.S.;Song, W.H.;Sun, Y.P./Sun, Y.P.	208			
13	Accurate prediction of vacancy cluster structures and energetics in bcc transition metals	Acta Materialia	10.1016/j.actamat.2021.116860	Hou, Jie;You, Yu-Wei;Kong, Xiang-Shan;Liu, C.S.	211			
14	Effect of charge coupling on breakdown voltage of high voltage trench-gate-type super barrier rectifier	Acta Physica Sinica	10.7498/aps.70.20201558	[Xu Da-Lin; Wang Yu-Qi; Shi Tong-Fei	70	6		
15	Optimization of thermoelectric transport performance of nickel-doped Cu <sub>2</sub> CoTe <sub>2</sub>	Acta Physica Sinica	10.7498/aps.70.20211165	Huang, Lu-Lu;Zhang, Jian;Li, Di;Xin, Hong-Xing;Qin, Xiao-Ying	70	20		
16	Improved the Comprehensive Properties of Low-Temperature Co-Fired Ceramic Composites Based on ZnO-B <sub>2</sub> O <sub>3</sub> -Na <sub>2</sub> O-Al <sub>2</sub> O <sub>3</sub> -SiO <sub>2</sub> Glass by Introducing AlN Nano particles	Advanced Engineering Materials	10.1002/adem.202001548	Chen, Lin; Sun, Jun; Li, Xiaoxiao; Ding, Jianjun; Zheng, Kang; Gong, Yi; Zhang, Xian; Tian, Xingyou; Lv, Yuanyuan; Zhang, Lan; Yang, Shuquan; Wang, Zhihua; Chen, Lin; Sun, Jun; Li, Xiaoxiao; Ding, Jianjun; Zheng, Kang; Gong, Yi; Zhang, Xian; Tian,				

17	3D Porous Honeycomb-Like CoN-Ni <sub>3</sub> N/N-C Nanosheets Integrated Electrode for High-Energy-Density Flexible Supercapacitor	Advanced Functional Materials	10.1002/adfm.202103073	[Li, Kunzhen; Zhao, Bangchuan; Lv, Hongyan; Bai, Jin; Ma, Hongyang; Wang, Peiyao; Li, Wanyun; Si, Jianguo; Zhu, Xuebin; Sun, Yunqin/Sun Yunqin	31	28		
18	Hydrogel Film@Au Nanoparticle Arrays Based on Self-Assembly Co-Assisted by Electrostatic Attraction and Hydrogel-Shrinkage for SERS Detection with Active Gaps	Advanced Materials Interfaces	10.1002/admi.202101055	Xing, Changchang; Zhong, Shichuan; Liu, Dilong; Zhang, Tao; Cao, An; Zeng, Pan; Men, Dandan; Li, Cuncheng; Cai, Weiping; Li, Yue	8	18		
19	Enhancement of Curie temperature and reorientation of spin in doped Cr <sub>2</sub> S <sub>3</sub> /2T <sub>2</sub> O <sub>6</sub>	Aip Advances	10.1063/5.0055983	Liu, Xiao; Wang, Zhong-Yi; Liu, Da-Yong; Zou, Liang-Jian	11	9		
20	Traceless Removal of Two Kernel Atoms in a Gold Nanocluster and Its Impact on Photoluminescence	Angewandte Chemie-International Edition	10.1002/anie.202016692	Zhou, Yue; Liao, Lingwen; Zhuang, Shengli; Zhao, Yan; Gan, Zibao; Gu, Wanmiao; Xia, Nan; Wu, Zhikun	60	16	8668	8672
21	Compression-Driven Internanocluster Reaction for Synthesis of Unconventional Gold Nanoclusters	Angewandte Chemie-International Edition	10.1002/anie.202014828	[Gan, Zibao; Xia, Nan; Yan, Nan; Zhuang, Shengli; Dong, Jingwu; Zhao, Yan; Wu, Zhikun	60	22	12253	12257
22	Unravelling the Structure of a Medium-Sized Metalloid Gold Nanocluster and its Filming Property	Angewandte Chemie-International Edition	10.1002/anie.202100879	[Gu, Wanmiao; Zhao, Yan; Zhuang, Shengli; Zha, Jun; Dong, Jingwu; You, Qing; Gan, Zibao; Xia, Nan; Wu, Zhikun	60	20	11184	11189
23	Synthesizing Photoluminescent Au-28(SCH <sub>2</sub> Ph-Bu-t)(22) Nanoclusters with Structural Features by Using A Combined Method	Angewandte Chemie-International Edition	10.1002/anie.202105530	Dong, Jingwu; Gan, Zibao; Gu, Wanmiao; You, Qing; Zhao, Yan; Zha, Jun; Li, Jin; Deng, Haiteng; Yan, Nan; Wu, Zhikun	60	33	17932	17936
24	Tunable synthesis of imines and secondary-amines from tandem hydrogenation-coupling of aromatic nitro and aldehyde over NiCo <sub>5</sub> bimetallic catalyst	Applied Catalysis B-Environmental	10.1016/j.apcatb.2020.119448	Chen, Chun; Fan, Ruoyu; Han, Miaomiao; Zhu, Xiaoguang; Zhang, Yunxia; Zhang, Haimin; Zhao, Huijun; Wang, Guozhong	280			
25	Selective electrocatalytic hydrogenation of nitrobenzene over copper-platinum alloying catalysts: Experimental and theoretical studies	Applied Catalysis B-Environmental	10.1016/j.apcatb.2021.120545	Jin, Meng; Liu, Yanyan; Zhang, Xian; Wang, Jialu; Zhang, Shengbo; Wang, Guozhong; Zhang, Yunxia; Yin, Huajie; Zhang, Haimin; Zhao, Huijun	298			

26	Sizeable bandgap modulation in Y2Hf2O7 pyrochlore oxide thin films through B-site substitution	Applied Physics Letters	10.1063/5.0047701	[Zhu, M.; Liang, X.; Yang, B. B.; Zhu, S. J.; Hu, L.; Wei, R. H.; Lu, W. J.; Zhu, X. B.; Sun, Y. P./Sun, Y. P.	118	14		
27	Chiral charge density waves induced by Ti-doping in 1 T -TaS2	Applied Physics Letters	10.1063/5.0052240	Gao, J.J.;Si, J.G.;Luo, X.;Yan, J.;Jiang, Z.Z.;Wang, W.;Lv, H.Y.;Tong, P.;Song, W.H.;Zhu, X.B.;Lu, W.J.;Sun, Y.P./Sun, Y.P.	118	21		
28	Cu&Si Core-Shell Nanowire Thin Film as High-Performance Anode Materials for Lithium Ion Batteries	Applied Sciences-Basel	10.3390/app11104521	[Zhang, Lifeng; Zhang, Linchao; Xie, Zhuoming; Yang, Junfeng	11	10		
29	Surface-active MnFeO@C cubes as enhanced peroxymonosulfate activators for efficient degradation of bisphenol A	Applied Surface Science	10.1016/j.apsusc.2020.148008	Ya Yang; Li, Yulian; Hong, Peidong; Wu, Zijian; Chao Xie; Zhang, Kaisheng; He, Junyong; Kong, Lingtao; Liu, Jinhuai	538			
30	Carbon framework-encapsulated copper oxide particles to activate peroxymonosulfate for the efficient degradation of tetracycline	Applied Surface Science	10.1016/j.apsusc.2021.149424	Yang, Dandan;Hong, Peidong;Hu, Yi;Li, Yulian;He, Junyong;Kong, Lingtao;Liu, Jinhuai				
31	Review of Cluster Dynamics Modeling of Neutron Radiation Damage in Nuclear Materials	Atomic Energy Science And Technology	10.7538/yzk.2020.youxian.0513	Zheng, Qirong;Wei, Liuming;Li, Yonggang;Zhang, Chuanguo;Zeng, Zhi	44	1	76	86
32	Oxygen vacancies enhance lithium-ion storage properties of TiO2 hierarchical spheres	Batteries & Supercaps	10.1002/batt.202100157	Li, Zhaoqian; Peng, Yuqi; Zhang, Xianxi; Ren, Yingke; Chen, Wangchao; Xu, Feng; Wang, Ning; Liu, Chaofeng; Mo, Lie; Ding, Yanwei; Hu, Linhua; Ji, Denghui; Cao, Guozhong				
33	Surface morphology and payload synergistically caused an enhancement of the longitudinal relaxivity of a Mn3O4/PtOx nanocomposite for magnetic resonance tumor imaging	Biomaterials Science	10.1039/d0bm01993c	[Ji, Sihan; Cai, Yunyu; Liang, Changhao/Ji, Sihan; Cai, Yunyu; Liang, Changhao/Zhao, Xianglong; Wang, Changhao; Ma, Kun; Hong, Bo/Zhang, Xiaopeng; Sun, Feilong/Chen, Qi; Deng, Qingmei; Hong, Bo	9	7	2732	2742
34	High-performance field-effect transistor glucose biosensors based on bimetallic Ni/Cu metal-organic frameworks	Biosensors & Bioelectronics	10.1016/j.bios.2020.112736	Wang, Bingfang; Luo, Yuanyuan; Gao, Lei	171			

35	Nanostructure-Based Surface-Enhanced Raman Spectroscopy Techniques for Pesticide and Veterinary Drug Residues Screening	Bulletin Of Environmental Contamination And Toxicology	10.1007/s00128-020-02989-5	Li, Mingtao;Zhang, Xiang	107	2	194	205
36	Evaluation of the flocculation and dewatering performance of dual polymers for treating oil sands tailings	Canadian Journal Of Chemical Engineering	10.1002/cjce.24031	Li, Xiaoxiao; Li, Xiaoxiao				
37	Optically induced insulator-to-semiconductor transition in fluorescent carbon quantum dots measured by terahertz time-domain spectroscopy	Carbon	10.1016/j.carbon.2020.11.075	Song, Dan; Xu, Wen; Wen, Hua; Wang, Chao	174		741	749
38	Tailoring of N-doped graphite coated cobalt nanoparticles via arc discharge enables the high microwave absorption	Carbon	10.1016/j.carbon.2021.02.068	Shao, Xuelian;Wang, Tianhui;Gan, Zhengya;Hu, Rui;Gong, Yi;Li, Xiaoxiao;Zhang, Xian;Tian, Xinyou			171	180
39	E-beam direct synthesis of macroscopic thick 3D porous graphene films	Carbon	10.1016/j.carbon.2021.06.035	Han, Shuar; Li, Nian; Song, Yanping; Chen, Liqing; Liu, Cui; Xi, Min; Yu, Xinling; Qin, Yi; Xu, Tingting; Ma, Cheng; Zhang, Shudong; Wang, Zhenyang	182		393	403
40	Effect of graphene addition on a borosilicate glass/alumina composite for LTCC technology	Ceramics International	10.1016/j.ceramint.2021.01.167	[Lv, Yuanyuan; Zhang, Lan; Yang, Shuquan; Wang, Zhihua; Chen, Lin; Sun, Jun; Li, Xiaoxiao; Ding, Jianjun; Zheng, Kang; Gong, Yi; Zhang, Xian; Tian, Xinyou/Chen, Lin; Sun, Jun; Li, Xiaoxiao; Ding, Jianjun; Zheng, Kang; Gong, Yi; Zhang, Xian; Tian, Xinyou	47	9	13035	13042
41	Close band center and rapid adsorption kinetics facilitate selective electrochemical sensing of heavy metal ions dagger	Chemical Communications	10.1039/d1cc00735a	Song, Zong-Yin; Li, Pei-Hua; Yang, Meng; Chen, Shi-Hua; Xiao, Xiang-Yu; Lin, Chu-Hong; Huang, Xing-Jiu; Song, Zong-Yin; Li, Pei-Hua; Yang, Meng; Chen, Shi-Hua; Xiao, Xiang-Yu; Lin, Chu-Hong; Huang, Xing-Jiu				
42	Zero-valent iron nanomaterial Fe0@Fe2MnO4for ultrasensitive electroanalysis of As(iii): Fe0influenced surficial redox potential	Chemical Communications	10.1039/d0cc07256g	Yang, Meng;Lin, Chu-Hong;Huang, Xing-Jiu/Yang, Meng;Xie, Feng;Liu, Wen-Qing		11	1324	1327

43	An oxygen-coordinated molybdenum single atom catalyst for efficient electrosynthesis of ammonia	Chemical Communications	10.1039/d1cc01455b	[Geng, Jing; Zhang, Shengbo; Xu, Hui; Wang, Guozhong; Zhang, Haimin	57	44	5410	5413
44	A universal route to fabricate bacterial cellulose-based composite membranes for simultaneous removal of multiple pollutants	Chemical Communications	10.1039/d1cc02397g	Gu, Yue; Li, Huaimeng; Ye, Mengxiang; Zhang, Xi; Zhang, Haimin; Wang, Guozhong; Zhang, Yunxia	57	69	8592	8595
45	Tailoring multifunctional passivation molecules with halogen functional groups for efficient and stable perovskite photovoltaics	Chemical Engineering Journal	10.1016/j.cej.2020.127204	Liu, Guozhen; Zhang, Liying; Xu, Huifen; Xu, Shendong; Xu, Xiaoxiao; Liang, Zheng; Pan, Xu	407			
46	Fe/Fe <sub>3</sub> C@CNTs anchored on carbonized wood as both self-standing anode and cathode for synergistic electro-Fenton oxidation and sequestration of As(III)	Chemical Engineering Journal	10.1016/j.cej.2021.128925	Wang, Yongchuang; Li, Wenyi; Li, Huaimeng; Ye, Mengxiang; Zhang, Xian; Gong, Chengyun; Zhang, Haimin; Wang, Guozhong; Zhang, Yunxia	414			
47	Understanding the ensemble electrochemistry of random-walk nanoparticles: Improved reaction efficiency and mechanistic insights	Chemical Engineering Journal	10.1016/j.cej.2021.129393	Lin, Chu-Hong; Huang, Xing-Jiu	418			
48	Efficient generation of singlet oxygen (1O <sub>2</sub> ) by hollow amorphous Co/C composites for selective degradation of oxytetracycline via Fenton-like process	Chemical Engineering Journal	10.1016/j.cej.2021.129594	Hong, Peidong; Wu, Zijian; Yang, Dandan; Zhang, Kaisheng; He, Junyong; Li, Yulian; Xie, Chao; Yang, Wu; Yang, Ya; Kong, Lingtao; Liu, Jinhui	421			
49	NiCo <sub>2</sub> N hollow sphere with interconnected nanosheets shell: A potential anode material for high performance lithium-ion batteries	Chemical Engineering Journal	10.1016/j.cej.2021.130607	Wang, Peiyao; Bai, Jin; Li, Kunzhen	425			
50	Defective-tin-oxide wrapped gold nanoparticles with strong sunlight harvesting and efficient charge separation for photocatalysis	Chemical Engineering Journal	10.1016/j.cej.2021.129981	Bao, Haoming; Zhou, Le; Liu, Dilong; Zhang, Hongwen; Zhu, Shuyi; Fu, Hao; Cai, Weiping	420			
51	MOF-derived NiCoZnP nanoclusters anchored on hierarchical N-doped carbon nanosheets array as bifunctional electrocatalysts for overall water splitting	Chemical Engineering Journal	10.1016/j.cej.2021.130533	Chen, Bin; Kim, Dokyoung; Zhang, Zhuo; Lee, Minseok; Yong, Kijung	422			

52	Flotation mechanism and application of PEA with different chain lengths in quartz flotation	Chemical Engineering Science	10.1016/j.ces.2021.116813	Jiang, Xuesong; Shi, Jian; Chen, Chen; Song, Wangfeng	246			
53	Controlling ultrasmall gold nanoparticles with atomic precision	Chemical Science	10.1039/d0sc05363e	Xia, Nan; Wu, Zhikun	12	7	2368	2380
54	A universal route with fine kinetic control to a family of penta-twinned gold nanocrystals	Chemical Science	10.1039/d1sc03040j	Zhang, Tao; Li, Xuejiao; Sun, Yiqiang; Liu, Dilong; Li, Cuncheng; Cai, Weiping; Li, Yue	12	38	12631	12639
55	Convective Self-Assembly of 2D Nonclose-Packed Binary Au Nanoparticle Arrays with Tunable Optical Properties	Chemistry Of Materials	10.1021/acs.chemmater.0c03799	Xing, Changchang; Liu, Dilong; Cai, Weiping; Li, Yue	33	1	310	319
56	One-Pot Synthesis of Ultrasmooth, Precisely Shaped Gold Nanospheres via Surface Self-Polishing Etching and Regrowth	Chemistry Of Materials	10.1021/acs.chemmater.1c00315	[Zhang, Tao; Li, Xuejiao; Cai, Weiping; Li, Yue	33	7	2593	2603
57	In Situ Growth of Ultrathin Ni(OH) <sub>2</sub> Nanosheets as Catalyst for Electrocatalytic Oxidation Reactions	Chemsuschem	10.1002/cssc.202100811	[Zhang, Jifang; Gong, Wanbing; Yin, Huajie; Wang, Dongdong; Zhang, Yunxia; Zhang, Haimin; Wang, Guozhong; Zhao, Huijun				
58	Integration of Fe <sub>2</sub> O <sub>3</sub> -based photoanode and atomically dispersed cobalt cathode for efficient photoelectrochemical NH <sub>3</sub> synthesis	Chinese Chemical Letters	10.1016/j.ccllet.2020.04.013	[Wang, Weikang; Zhang, Shengbo; Liu, Yanyan; Wang, Guozhong; Zhang, Yunxia; Zhang, Haimin; Zhao, Huijun	32	2	805	810
59	Encapsulated Ni-Co alloy nanoparticles as efficient catalyst for hydrodeoxygenation of biomass derivatives in water	Chinese Journal Of Catalysis	10.1016/S1872-2067(21)63828-7	Wang, Dongdong; Gong, Wanbing; Zhang, Jifang; Han, Miaomiao; Chen, Chun; Zhang, Yunxia; Wang, Guozhong; Zhang, Haimin; Zhao, Huijun	42	11	2027	2037
60	NH <sub>2</sub> -MIL-53(A1) for simultaneous removal and detection of fluoride anions	Chinese Journal Of Chemical Physics	10.1063/1674-0068/cjcp2004054	[Xie, Dong-hua; Qin, Wen-xiu; Zhang, Yun-xia	34	2	227	237
61	Quantum nature of proton transferring across one-dimensional potential fields*	Chinese Physics B	10.1088/1674-1056/abe114	[Bi, Cheng; Chen, Quan; Yang, Yong/Li, Wei	30	4		
62	Synthesis and Frost Suppression Performance of PDMS-SiO <sub>2</sub> /PFA Hybrid Coating	Coatings	10.3390/coatings11020256	Jia, Li; Sun, Jun; Li, Xiaoxiao; Zhang, Xian; Chen, Lin; Tian, Xinyou	11	2		
63	Preparation of double-layer two wavelength infrared antireflective coating on CdSe substrate	Colloids And Surfaces A- Physicochemical And Engineering Aspects	10.1016/j.colsurfa.2021.127329	Xu, Shao Hui; Huang, Jian Yong; Fei, Guang Tao; Wei, Yong Shuai; Yuan, Li Gang; Wang, Biao; Gao, Xu Dong	628			

64	Efficient electrocatalytic nitrogen reduction to ammonia with aqueous silver nanodots	Communications Chemistry	10.1038/s42004-021-00449-7	Li, Wenyi; Li, Ke; Ye, Yixing; Zhang, Shengbo; Liu, Yanyan; Wang, Guozhong; Liang, Changhao; Zhang, Haimin	4	1		
65	Nanoarray heterojunction and its efficient solar cells without negative impact of photogenerated electric field	Communications Physics	10.1038/s42005-021-00678-1	Liu, Rong; Shen, Zhitao; Wan, Zhiyang; Zhu, Liangxin; Chen, Junwei; Dong, Chao; Chen, Wangwei; Cao, Wenbo; Chen, Bin; Yuan, Xiaogang; Ding, Bojiang; Yang, Shangfeng; Chen, Tao; Tian, Xingyou; Chen, Chong; Wang, Mingtai	4	1		
66	A simple strategy to prepare functional PI microspheres by constructing coating on PAA microspheres followed thermal imidization reaction	Composites Communications	10.1016/j.coco.2021.100642	[Zhang, Qian; Ding, Xin; Zhang, Ping; Wang, Yanyan; Shu, Mengting; Gong, Yi; Zheng, Kang; Tian, Xingyou; Zhang, Xian/Zhang, Qian; Ding, Xin; Zhang, Ping; Wang, Yanyan; Shu, Mengting; Gong, Yi; Zheng, Kang; Tian, Xingyou; Zhang, Xian	24			
67	Effective regulation of thermal conductivity of polyetherimide/low-melting-point alloy composites based on the construction of segregated structure	Composites Part A-Applied Science And Manufacturing	10.1016/j.compositesa.2020.106245	Shu, Mengting; Zhang, Ping; Ding, Xin; Wang, Yanyan; Zhang, Qian; Gong, Yi; Zheng, Kang; Tian, Xingyou; Zhang, Xian; Shu, Mengting; Zhang, Ping; Ding, Xin; Wang, Yanyan; Zhang, Qian; Gong, Yi; Zheng, Kang; Tian, Xingyou; Zhang, Xian	142			
68	Three-dimensional network constructed by vertically oriented multilayer graphene and SiC nanowires for improving thermal conductivity and operating safety of epoxy composites with ultralow loading (vol 139, 106062-2020)	Composites Part A-Applied Science And Manufacturing	10.1016/j.compositesa.2021.106324	Wang, Hua; He, Jing; Wang, Hua; Qu, Qiqi; Su, Zheng; Qin, Tengfei; Tian, Xingyou	143			

69	Enhanced thermal conductivity of carbon nitride-doped graphene/polyimide composite film via a deciduous-like strategy	Composites Science And Technology	10.1016/j.compscitech.2021.108693	Wang, Yanyan; Zhang, Xian; Ding, Xin; Zhang, Ping; Shu, Mengting; Zhang, Qian; Gong, Yi; Zheng, Kang; Tian, Xingyou; Wang, Yanyan; Zhang, Xian; Ding, Xin; Zhang, Ping; Shu, Mengting; Zhang, Qian; Gong, Yi; Zheng, Kang; Tian, Xingyou	205			
70	Microstructural Engineering of Solution-Processed Epitaxial La-Doped BaSnO <sub>3</sub> Transparent Conducting Films	Crystal Growth And Design	10.1021/acs.cgd.1c00698	He, Yuandi; Wei, Renhuai; Zhou, Chen; Cheng, Wangping; Shao, Cheng; Hu, Ling; Song, Wenhai; Zhu, Xuebin; Sun, Yuping; Ding, Xin; Sun, Yuping	21	10	5800	5806
71	Evaluating the electro-sensing behaviors of single-atom catalysts based on mechanistic insights	Current Opinion In Electrochemistry	10.1016/j.coelec.2020.100646	Lin, Chu-Hong; Yang, Meng; Li, Pei-Hua; Huang, Xing-Jiu				
72	Fluoride removal performance and mechanism of superparamagnetic Fe <sub>3</sub> O <sub>4</sub> nanoparticles	Desalination And Water Treatment	10.5004/dwt.2021.27541	Zhang, Kaisheng; Zhu, Baisheng; Jia, Yong; Kong, Lingtao; Liu, Jinhuai	233		281	291
73	Carbon nanotubes-enhanced lithium storage capacity of recovered silicon/carbon anodes produced from solar-grade silicon kerf scrap	Electrochimica Acta	10.1016/j.electacta.2021.138269	[Shi, Jian; Jiang, Xuesong; Ban, Boyuan; Li, Jingwei; Chen, Jian	381			
74	Oxygen-deficient TiO <sub>2</sub> Yolk-shell Spheres for Enhanced Lithium Storage Properties	Energy & Environmental Materials	10.1002/eem2.12156	Li, Zhaoqian; Peng, Yuqi; Huang, Yang				
75	Fabrication and stability of ultrathin ZrC nanoparticles dispersion strengthened sub-micrometer grained W alloy	Fusion Engineering And Design	10.1016/j.fusengdes.2021.112483	Wang, M.M.; Wang, H.; Xie, Z.M.; Wang, X.P.; Fang, Q.F.; Liu, C.S.	169			
76	Fabrication of an ultrafine-grained W-ZrC-Re alloy with high thermal stability	Fusion Engineering And Design	10.1016/j.fusengdes.2020.112208	Zhao, B.L.; Xie, Z.M.; Liu, R.; Wang, H.; Wang, M.M.; Zhang, L.F.; Gao, R.; Wu, X.B.; Hao, T.; Fang, Q.F.; Liu, C.S.	164			
77	Synthesis and properties of responsive self-healing polyurethane containing dynamic disulfide bonds	High Performance Polymers	10.1177/09540083211022818	Qu, Qiqi; Wang, Hua; He, Jing; Da, Yunsheng; Zhu, Menghan; Liu, Yanyan; Tian, Xingyou				
78	Novel layered boron nitride nanosheets/cellulose nanofibers/epoxy composite with high thermal conductivity	High Performance Polymers	10.1177/09540083211046456	Da, Yunsheng; He, Jing; Qu, Qiqi; Zhu, Menghan; Wang, Hua; Liu, Yanyan				

79	Fast Solar-to-Thermal Conversion/Storage Nanofibers for Thermoregulation, Stain-Resistant, and Breathable Fabrics	Industrial & Engineering Chemistry Research	10.1021/acs.iecr.1c00278	[Xu, Tingting; Zhang, Shudong; Han, Shuai; Qin, Yi; Liu, Cui; Xi, Min; Yu, Xinling; Li, Nian; Wang, Zhenyang/Zhang, Shudong; Liu, Cui; Xi, Min; Yu, Xinling; Li, Nian; Wang, Zhenyang	60	16	5869	5878
80	Sol-Gel preparation of high transmittance of infrared antireflective coating for TeO2 crystals	Infrared Physics & Technology	10.1016/j.infrared.2021.103881	Xu, Shao Hur; Huang, Jian Yong; Fei, Guang Tao; Wei, Yong Shuai; Yuan, Li Gang; Wang, Biao	118			
81	Metal (Co/Mo)-N bond anchor-doped N in porous carbon for electrochemical nitrogen reduction	Inorganic Chemistry Frontiers	10.1039/d0qi01324b	Liu, Yanyan; Zhang, Shengbo; Li, Wenyi; Zhou, Hongjian; Wang, Guozhong; Zhang, Haimin	8	6	1476	1481
82	Cobalt single atom catalysts for the efficient electrosynthesis of hydrogen peroxide	Inorganic Chemistry Frontiers	10.1039/d1qi00158b	[Xu, Hui; Zhang, Shengbo; Geng, Jing; Wang, Guozhong; Zhang, Haimin	8	11	2829	2834
83	A fluidized electrocatalysis approach for ammonia synthesis using oxygen vacancy-rich Co3O4nanoparticles	Inorganic Chemistry Frontiers	10.1039/d1qi00721a	Li, Wenyi;Ye, Yixing;Zhang, Shengbo;Liang, Changhao;Zhang, Haimin	8	17	4026	4034
84	Energy absorption diagram characteristic of metallic self-supporting 3D lattices fabricated by additive manufacturing and design method of energy absorption structure	International Journal Of Solids And Structures	10.1016/j.ijsolstr.2021.111082	Zhang, Hairi; Zhou, Hao; Zhou, Zuoxin; Zeng, Huizhong; Zhang, Xiaoyu; Yang, Jianzhong; Lei, Hongshuai; Han, Fusheng	226			
85	Detection and characterization of folded-chain clusters in the structured melt of isotactic polypropylene	Iucrj	10.1107/S2052252521003821	Li, Xiangyang; Ding, Jianjun; Chen, Pujing; Zheng, Kang; Zhang, Xian; Tian, Xingyou	8		595	607
86	Mechanism of boron removal of primary Si phases and morphology evolution of impurity phases during slow cooling solidification refining of Al-30wt.%Si alloy with Zr additions	Journal Of Alloys And Compounds	10.1016/j.jallcom.2020.158517	Chen, Chen; Ban, Boyuan; Sun, Jifei; Li, Jingwei; Jiang, Xuesong; Shi, Jian; Chen, Jian	860			
87	Recycled silicon-based anodes with three-dimensional hierarchical porous carbon framework synthesized by a self-assembly CaCO3 template method for lithium ion battery	Journal Of Alloys And Compounds	10.1016/j.jallcom.2020.157703	Shi, Jian; Jiang, Xuesong; Sun, Jifei; Ban, Boyuan; Li, Jingwei; Chen, Jian	858			

88	Behavior and mechanism of internal friction peak in quenched Fe-18 at.% Ga alloy	Journal Of Alloys And Compounds	10.1016/j.jallcom.2020.158178	Sun, Meng; Huang, Wenjie; Li, Lan; Jiang, Weibin; Gao, Rui; Hao, Ting; Wang, Xianping; Fang, Qianfeng	856			
89	VOOH nanosheets with enhanced capacitance as supercapacitor electrode	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.159367	Xu, Chang;Li, Ming;Li, Kaibin;Du, Zengyan;Chen, Jiawang;Zou, Fengxia;Xu, Sichao;Li, Nian;Li, Guanghai	869			
90	Large negative thermal expansion promoted by microstructure in hexagonal Fe <sub>1-x</sub> Co <sub>x</sub> S	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.158616	Wang, X.L.;Tong, P.;Lin, J.C.;Zhang, X.K.;Yang, C.;Wang, Z.C.;Wang, M.;Wu, Y.;Song, W.H.;Sun, Y.P./Zhang, L.;Tong, W.;Sun, Y P	862			
91	Plasma synthesis of Pt/g-C <sub>3</sub> N <sub>4</sub> photocatalysts with enhanced photocatalytic hydrogen generation	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.159871	[Ding, Jianjun; Li, Xiangyang; Li, Xiaoxiao; Chen, Lin; Zhang, Xian/Sun, Xuxu; Wang, Qi	873			
92	Constructing electron pathways by graphene oxide for V <sub>2</sub> O <sub>5</sub> nanoparticles in ultrahigh-performance and fast charging aqueous zinc ion batteries	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.160324	[Wu, Shougang; Liu, Shuang; Hu, Linhua; Chen, Shuanghong	878			
93	High-performance visible-near IR photodetectors based on high-quality Sn <sup>2+</sup> -sensitized PbS films	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.160860	Li Liu, Shu; Fei, Guang Tao; Xu, Shao Hui; Gao, Xu Dong	883			
94	Internal friction phenomena in a wide temperature range up to 800 degrees C in long-term annealed Fe-(0-30) at% Ga alloys	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.161444	Sun, Meng; Li, Lan; Jiang, Weibin; Gao, Yunxia; Wang, Hui; Wang, Xianping; Fang, Qianfeng	887			
95	Immiscibility in N <sub>2</sub> -H <sub>2</sub> O solids up to 140 GPa	Journal Of Chemical Physics	10.1063/5.0052315	Zhang, Xiao;Wang, Yu	154	23		
96	Synchronous removal of tetracycline and water hardness ions by capacitive deionization	Journal Of Cleaner Production	10.1016/j.jclepro.2021.128251	Sun, Na;Zhou, Hongjian;Zhang, Haimin;Zhang, Yunxia;Zhao, Huijun;Wang, Guozhong	316			
97	A surface-engineering-assisted method to synthesize recycled silicon-based anodes with a uniform carbon shell-protective layer for lithium-ion batteries	Journal Of Colloid And Interface Science	10.1016/j.jcis.2020.11.105	Shi, Jian; Jiang, Xuesong; Sun, Jifei; Ban, Boyuan; Li, Jingwei; Chen, Jian	588		737	748

98	Stability evolution of ultrafine Ag nanoparticles prepared by laser ablation in liquids	Journal Of Colloid And Interface Science	10.1016/j.jcis.2020.10.025	Chen, Qi; Ye, Yixing; Liu, Jun; Wu, Shouliang; Li, Pengfei; Liang, Changhao; Chen, Qi; Ye, Yixing; Liu, Jun; Wu, Shouliang; Li, Pengfei; Liang, Changhao	585		444	451
99	Solvents-dependent selective fabrication of face-centered cubic and hexagonal close-packed structured ruthenium nanoparticles during liquid-phase laser ablation	Journal Of Colloid And Interface Science	10.1016/j.jcis.2020.10.026	Pang, Beibei; Tian, Zhenfei; Liu, Jun; Wu, Shouliang; Li, Pengfei; Liang, Changhao; Pang, Beibei; Tian, Zhenfei; Liu, Jun; Wu, Shouliang; Li, Pengfei; Liang, Changhao	585		452	458
100	Crystal plane effect of ceria on supported copper catalyst for liquid-phase hydrogenation of unsaturated aldehyde	Journal Of Colloid And Interface Science	10.1016/j.jcis.2021.03.137	[Hu, Zhi; Zou, Zidan; Chen, Chun; Zhu, Xiaoguang; Zhang, Yunxia; Zhang, Haimin; Zhao, Huijun; Wang, Guozhong	596		34	43
101	Hierarchically porous poly(amidoxime)/bacterial cellulose composite aerogel for highly efficient scavenging of heavy metals	Journal Of Colloid And Interface Science	10.1016/j.jcis.2021.05.071	Li, Huaimeng; Wang, Yongchuang; Ye, Mengxiang; Zhang, Xi; Zhang, Haimin; Wang, Guozhong; Zhang, Yunxia	600		752	763
102	Electrical and Magnetic Properties for Bulk FeSe and FeSe <sub>0.5</sub> Te <sub>0.5</sub> Superconductors	Journal Of Electronic Materials	10.1007/s11664-020-08666-x	Li, D.; Zhang, B. L.; Ming, H. W.; Qin, X. Y.; Zhang, J.; Qin, X. Y.; Zhang, J.	50	3	941	946
103	Recent Advances on Interface Design and Preparation of Advanced Tungsten Materials for Plasma Facing Materials	Journal Of Fusion Energy	10.1007/s10894-020-00271-4	Wu, Xuebang; Li, Xiangyan; Zhang, Yange; Xu, Yichun; Liu, Wei; Xie, Zhuoming; Liu, Rui; Liu, C. S.; Luo, Guang-Nan	39	6	342	354
104	Boosting sensitive and selective detection toward Pb(II) via activation effect of Co and orbital coupling between Pb and O over Co@Co <sub>3</sub> O <sub>4</sub> nanocatalyst	Journal Of Hazardous Materials	10.1016/j.jhazmat.2021.126157	Chen, Shi-Hua; Song, Zong-Yin; Li, Pei-Hua; Xiao, Xiang-Yu; Yang, Meng; Lin, Chu-Hong; Huang, Xing-Jiu	416			
105	Ultrasensitive surface-enhanced Raman spectroscopy detection of gaseous sulfur-mustard simulant based on thin oxide-coated gold nanocone arrays	Journal Of Hazardous Materials	10.1016/j.jhazmat.2021.126668	Xu, Wangsheng; Bao, Haoming; Zhang, Hongwen; Fu, Hao; Zhao, Qian; Li, Yue; Cai, Weiping	420			
106	In situ transformation of Fe-doped Ni <sub>12</sub> P <sub>5</sub> into low-crystallized NiFe <sub>2</sub> O <sub>4</sub> with high-spin Fe <sup>4+</sup> for efficient electrocatalytic water oxidation	Journal Of Materials Chemistry A	10.1039/d1ta01310f	[Wang, Haojie; Zhao, Cuijiao; Wang, Guozhong; Zhang, Haimin	9	16	10289	10296

107	Grain size control for high-performance formamidinium-based perovskite solar cells via suppressing heterogenous nucleation	Journal Of Materials Chemistry C	10.1039/d0tc04833j	Xu, Xiaoxiao; He, Dingchao; Liang, Zheng; Liu, Guozhen; Xu, Shendong; Li, Zhaoqian; Zhu, Liangzheng; Pan, Xu; Zhu, Liangzheng	9	1	208	213
108	One-electron reduction induced spin transition in Fe(ii) spin crossover molecules and the effect of the ligand dagger	Journal Of Materials Chemistry C	10.1039/d1tc00041a	[Hao, Hua; Jia, Ting; Zheng, Xiaohong; Zeng, Zhi	9	14	4808	4814
109	Defect passivation and humidity protection for perovskite solar cells enabled by 1-dodecanethiol	Journal Of Materials Chemistry C	10.1039/d1tc01720a	He, Dingchao; Xu, Xiaoxiao; Liang, Zheng; Niu, Yuanjuan; Sun, Yuan; Gavin, Tulloch; Falaras, Polycarpos; Hu, Linhua	9	34	9584	9591
110	Stabilizing TiO2/CH3NH3PbI3 heterostructure and enhancing interface trap passivation for efficient and stable perovskite solar cells	Journal Of Materials Chemistry C	10.1039/d1tc02812j	Xu, Shendong; Liang, Zheng; Zheng, Haiying; Zhang, Liying; Xu, Xiaoxiao; Xu, Huifen; Zhu, Liangzheng; Ye, Jiajiu; Liu, Guozhen; Pan, Xu	9	34	9982	9989
111	A sensitive colorimetric chiral recognition for thiol-containing amino acids based on NIR plasmonic MoO3-x nanoparticles	Journal Of Materials Chemistry C	10.1039/d1tc01399h	Zhong, Shichuan; Xing, Changchang; Cao, An; Zeng, Pan; Cai, Weiping; Li, Yue	9	34	11091	11097
112	High damping in Fe-Ga-La alloys: Phenomenological model for magneto-mechanical hysteresis damping and experiment	Journal Of Materials Science And Technology	10.1016/j.jmst.2020.07.043	Sun, Meng; Wang, Xianping; Fang, Qianfeng			69	80
113	A TiO2 nanotubes film with excellent antireflective and near-perfect self-cleaning performances	Journal Of Materials Science And Technology	10.1016/j.jmst.2021.01.080	Li, Karim; Li, Ming; Xu, Chang; Du, Zengyan; Chen, Jiawang; Zou, Fengxia; Xu, Sichao; Li, Guanghui	88		11	20
114	Enhanced electrical properties in Ce/Mo co-substituted CaBi2Nb2O9 high-temperature piezoelectric ceramic	Journal Of Materials Science-Materials In Electronics	10.1007/s10854-021-06518-w	Pan, C. B.; Zhao, G. C.; Li, S. M.; Shu, M. F.; Wu, J.; Wang, J. M. Z.; Yin, L. H.; Song, W. H.; Zhu, X. B.; Yang, J.; Sun, Y. P.	32	17	19938	19946
115	Synergistic optimization of electrical and thermal transport in n-type Bi-doped PbTe by introducing coherent nanophase Cu1.75Te	Journal Of Materiomics	10.1016/j.jmat.2020.08.001	Zhu, Chen; Zhang, Jian; Ming, Hongwei; Huang, Lulu; Chen, Tao; Li, Di; Zhang, Baoli; Qin, Xiaoying	7	1	146	155
116	Microstructure evolution of pure tungsten after low-energy and high-fluence He+ implantation assessed by synchrotron grazing incidence X-ray diffraction	Journal Of Nuclear Materials	10.1016/j.jnucmat.2020.152663	Huang, W. J.; Sun, M.; Yang, J. F.; Xie, Z. M.; Zhang, L. C.; Liu, R.; Wang, X. P.; Wu, X. B.; Fang, Q. F.	544			

117	Study on thermal stability and irradiation response of copper/iron nano-multilayer composite fabricated by cross accumulative roll bonding	Journal Of Nuclear Materials	10.1016/j.jnucmat.2020.152548	Zhang, L. F.; Gao, R.; Zhao, B. L.; Sun, M.; Hao, T.; Xie, Z. M.; Liu, R.; Wang, X. P.; Fang, Q. F.; Liu, C. S.	543			
118	Hydrogen embrittlement of bulk W-0.5 wt% ZrC alloy induced by annealing in hydrogen atmosphere	Journal Of Nuclear Materials	10.1016/j.jnucmat.2021.153177	Wang, H.; Cheng, X.; Zhang, Y. G.; Wang, M. M.; Zhao, B. L.; Xie, Z. M.; Liu, R.; Wu, X. B.; Wang, X. P.; Fang, Q. F.; Liu, C. S.	556			
119	Atomic Resonant Tunneling in the Surface Diffusion of H Atoms on Pt(111)	Journal Of Physical Chemistry C	10.1021/acs.jpcc.0c08906	Bi, Cheng; Yang, Yong	125	1	464	480
120	High-Pressure Insertion of Dense H <sub>2</sub> into a Model Zeolite	Journal Of Physical Chemistry C	10.1021/acs.jpcc.1c02177	[Xu, Wan; Liu, Xiao-Di; Jiang, Hua-Chao; Gregoryanz, Eugene; Santoro, Mario	125	13	7511	7517
121	Defect-Modified Ultrathin BiOX (X = Cl, Br) Nanosheets Via a Top-Down Approach with Effective Visible-Light Photocatalytic Degradation	Journal Of Physical Chemistry C	10.1021/acs.jpcc.1c02950	Yuan, Qinglin; Wei, Shuxian; Hu, Taiping; Ye, Yixing; Cai, Yunyu; Liu, Jun; Li, Pengfei; Liang, Changhao	125	34	18630	18639
122	All-Optical-Input Transistors with Light-Controlled Enhancement and Fast Stabilization of Hot-Electron Photocurrent	Journal Of Physical Chemistry C	10.1021/acs.jpcc.1c03364	Liu, Shu Li; Fei, Guang Tao; Xu, Shao Hui; Gao, Xu Dong; Li, Hui	125	34	18887	18895
123	Investigations of High-Pressure Properties of MnF <sub>2</sub> Based on the First-Principles Method	Journal Of Physical Chemistry C	10.1021/acs.jpcc.1c06568	Zhao, Jing; Zhang, Hanxing; Niu, Caoping; Zhang, Jie; Zeng, Zhi; Wang, Xianlong	125	39	21709	21717
124	Two-Dimensional IV-V Monolayers with Highly Anisotropic Carrier Mobility and Electric Transport Properties	Journal Of Physical Chemistry Letters	10.1021/acs.jpcllett.0c03656	Li, Pengfei; Liu, Jun; Wu, Shouliang; Ye, Yixing; Liang, Changhao; Li, Pengfei; Liu, Jun; Wu, Shouliang; Ye, Yixing; Liang, Changhao	12	3	1058	1065
125	Polymerization of Nitrogen in Nitrogen-Fluorine Compounds under Pressure	Journal Of Physical Chemistry Letters	10.1021/acs.jpcllett.1c01181	Zhang, Jie; Niu, Caoping; Zhang, Hanxing; Zhao, Jing; Wang, Xianlong; Zeng, Zhi	12	36	5731	5737
126	High-Pressure Structural Evolution of Disordered Polymeric CS <sub>2</sub>	Journal Of Physical Chemistry Letters	10.1021/acs.jpcllett.1c01762	Yan, Jinwei; Toth, Ondrej; Xu, Wan; Liu, Xiao-Di; Gregoryanz, Eugene; Dalladay-Simpson, Philip; Qi, Zeming; Xie, Shiyu; Gorelli, Federico; Martonak, Roman; Santoro, Mario	12	36	7229	7235

127	Structural, electronic and magnetic properties of TiFeSe2 under high pressure	Journal Of Physics-Condensed Matter	10.1088/1361-648X/ac16ac	Zhang, Hanxing; Zhao, Jing; Niu, Caoping; Zou, Liangjian; Zeng, Zhi; Wang, Xianlong	33	41		
128	Suppressing the skeleton decomposition in Ti-doped NH4V4O10 for durable aqueous zinc ion battery	Journal Of Power Sources	10.1016/j.jpowsour.2020.229284	He, Dingchao; Peng, Yuqi; Ding, Youcai; Xu, Xiaoxiao; Huang, Yang; Li, Zhaoqian; Hu, Lihua	484			
129	Laser crystallized sandwich-like MXene/Fe3O4/MXene thin film electrodes for flexible supercapacitors	Journal Of Power Sources	10.1016/j.jpowsour.2021.229882	[Li, Hui; Liu, Yanqiu; Lin, Shuai; Li, Han; Wu, Ziqiang; Zhu, Lili; Li, Changdian; Wang, Xin; Zhu, Xuebin; Sun, Yuning/Sun, Yuning	497			
130	Solution-processable hierarchical-porous vanadium nitride films on silicon substrates for highly efficient symmetric supercapacitors	Journal Of Power Sources	10.1016/j.jpowsour.2021.230269	Wu, Z. Q.; Yang, B. B.; Li, H.; Tong, H. Y.; Wang, X.; Li, C. D.; Zhu, L. L.; Wei, R. H.; Hu, L.; Liang, C. H.; Zhu, X. B.; Sun, Y. P.	507			
131	Simultaneously enhanced piezoelectricity and curie temperature in BiFeO3-based high temperature piezoelectrics	Journal Of The European Ceramic Society	10.1016/j.jeurceramsoc.2021.08.030	Wu, Jie; Zhao, Gaochao; Pan, Chengbing; Tong, Peng; Yang, Jie; Zhu, Xuebin; Yin, Lihua; Song, Wenhai; Sun, Yuning/Sun, Yuning	41	15	7645	7653
132	Surface-enhanced Raman Scattering from Electrospun Cellulose Acetate Nanofibers Loaded with Aggregated Ag Nanocubes	Kuei Suan Jen Hsueh Pao/Journal Of The Chinese Ceramic Society	10.14062/j.issn.0454-5648.20200476	Ke, Yan; Chen, Bin; Zhou, Ningning; Huang, Zhulin; Meng, Guowen	49	2	220	228
133	Rate Performance Modification of a Lithium-Rich Manganese-Based Material through Surface Self-Doping and Coating Strategies	Langmuir	10.1021/acs.langmuir.1c00225	[Li, Wanyun; Zhao, Bangchuan; Bai, Jin; Ma, Hongyang; Li, Kunzhen; Wang, Peiyao; Mao, Yunjie; Zhu, Xuebin; Sun, Yuping/Sun, Yuning	37	10	3223	3230
134	High Toughness Polyurethane toward Artificial Muscles, Tuned by Mixing Dynamic Hard Domains	Macromolecules	10.1021/acs.macromol.1c01098	Qu, Qiqi; He, Jing; Da, Yunsheng; Zhu, Menghan; Liu, Yanyan; Li, Xiaoxiao; Tian, Xingyou; Wang, Hua	54	17	8243	8254
135	Microstructural Change of Poly(1-butene) during Crystallization, Phase Transition, and Melting Revealed by Synchrotron Small-Angle X-ray Scattering	Macromolecules	10.1021/acs.macromol.1c01472	Li, Xiangyang; Chen, Pujing; Xu, Min; Ding, Jianjun; Chen, Lin; Zhang, Xian; Tian, Xingyou	54	18	8751	8769
136	Preparation and optical properties of Au nanoparticle Sandwich structure (AuNPs/ZNNs/AuNPs) substrate based on ZnO nanosheets template	Materials Chemistry And Physics	10.1016/j.matchemphys.2021.124715	[Zhang, Haibao; Li, Guang; Zhang, Xian; Tian, Xingyou/Zhang, Haibao; Li, Guang; Zhang, Xian; Tian, Xingyou	268			

137	Ultra-low thermal conductivity and high thermoelectric performance realized in a Cu <sub>3</sub> SbSe <sub>4</sub> based system	Materials Chemistry Frontiers	10.1039/d0qm00553c	LI, J. M.; Ming, H. W.; Zhang, B. L.; Song, C. J.; Wang, L.; Xin, H. X.; Zhang, J.; Qin, X. Y.; Li, D.	5	1	324	332
138	Solution-processed In <sub>2</sub> S <sub>3</sub> nanosheet arrays for CuInS <sub>2</sub> thin film solar cells	Materials Letters	10.1016/j.matlet.2021.129490	Chen, Wangwei; Wan, Zhiyang; Cao, Wenbo; Dong, Chao; Chen, Junwei; Liu, Rong; Zhu, Liangxin; Zhang, Xueqiang; Wang, Mingtai				
139	Sb <sub>2</sub> S <sub>3</sub> -based bulk/nano planar heterojunction film solar cells with graphene/polymer composite layer as hole extracting interface	Materials Letters	10.1016/j.matlet.2021.130190	Chen, Junwei; Liu, Rong; Zhu, Liangxin; Chen, Wangwei; Dong, Chao; Wan, Zhiyang; Cao, Wenbo; Zhang, Xueqiang; Peng, Ruixiang; Wang, Mingtai	300			
140	A comparative study on the grain boundary internal friction peak of pure iron	Materials Letters	10.1016/j.matlet.2021.130814	Sun, Meng; Jiang, Weibin; Liu, Xueqing; Chen, Tianlu; Wang, Xianping; Fang, Qianfeng	305			
141	The high thermal conductive and flexible boron nitride/silicone rubber composites with segregated structure	Materials Research Express	10.1088/2053-1591/abed6b	Ding, Jiwan; Zhang, Yajie; Zhang, Xian; Liu, Gang; Zheng, Kang	8	3		
142	Strengthening of copper with homogeneous dispersion of nanoscale tungsten particles fabricated by spark plasma sintering	Materials Science And Engineering A-Structural Materials Properties Microstructure And Processing	10.1016/j.msea.2021.141438	Ke, J. G.; Xie, Z. M.; Liu, R.; Gao, R.; Wang, X. P.; Wu, X. B.; Jing, K.; Wang, L.; Zhao, B. L.; Fang, Q. F.; Liu, C. S.	818			
143	Mechanical properties and microstructures of W-TiC and W-Y <sub>2</sub> O <sub>3</sub> alloys fabricated by hot-pressing sintering	Materials Science And Engineering A-Structural Materials Properties Microstructure And Processing	10.1016/j.msea.2021.141496	Xie, X. F.; Jing, K.; Xie, Z. M.; Liu, R.; Yang, J. F.; Fang, Q. F.; Liu, C. S.; Wu, Xuebang	819			
144	First principles investigation of intrinsic and Na defects in XTe (X=Ca, Sr, Ba) nanostructured PbTe	Materials Today Physics	10.1016/j.mtphys.2021.100415	Zhang, Xuemei; Guo, Shuping; Ti, Zhuoyang; Zhang, Yongsheng	19			
145	3D-printed smartphone-based device for fluorimetric diagnosis of ketosis by acetone-responsive dye marker and red emissive carbon dots	Microchimica Acta	10.1007/s00604-021-04965-0	Yang, Fan; Yang, Linlin; Xu, Longchang; Guo, Wei; Pan, Lei; Zhang, Chuanglin; Xu, Shihao; Zhang, Ningning; Yang, Liang; Jiang, Changlong	188	9		

146	Enhanced power factor and thermoelectric performance for n-type Bi <sub>2</sub> Te <sub>2.7</sub> Se <sub>0.3</sub> based composites incorporated with 3D topological insulator nano-inclusions	Nano Energy	10.1016/j.nanoen.2020.105512	Jabar, Bushra; Qin, Xiaoying; Mansoor, Adil; Ming, Hongwei; Huang, Lulu; Danish, Mazhar Hussain; Zhang, Jian; Li, Di; Zhu, Chen; Xin, Hongxing; Song, Chunjun	80			
147	Robust enhanced hydrogen production at acidic conditions over molybdenum oxides-stabilized ultrafine palladium electrocatalysts	Nano Research	10.1007/s12274-020-3083-3	Sun, Ji; Zhang, Xian; Jin, Meng; Xiong, Qizhong; Wang, Guozhong; Zhang, Haimin; Zhao, Huijun	14	1	268	274
148	Synergistic catalysis of cluster and atomic copper induced by copper-silica interface in transfer-hydrogenation	Nano Research	10.1007/s12274-021-3384-1	[Fan, Ruoyu; Zhang, Yange; Hu, Zhi; Chen, Chun; Shi, Tongfei; Zhang, Haimin; Zhao, Huijun; Wang, Guozhong	14	12	4601	4609
149	Pseudocapacitive desalination via valence engineering with spindle-like manganese oxide/carbon composites	Nano Research	10.1007/s12274-021-3467-z	Xu, Yingsheng; Xiang, Shuhong; Mao, Hengjian; Zhou, Hongjian; Wang, Guozhong; Zhang, Haimin; Zhao, Huijun	14	13	4878	4884
150	Plasmonic Cu <sub>2</sub> S/ZnO nanocages for novel solar photothermal nanoink and nanofilm	Nano Research	10.1007/s12274-021-3880-3	Xi, Min; Xu, Longchang; Li, Nian; Zhang, Shudong; Wang, Zhongyong				
151	Converting Co <sup>2+</sup> -impregnated g-C <sub>3</sub> N <sub>4</sub> into N-doped CNTs-confined Co nanoparticles for efficient hydrogenation rearrangement reactions of furanic aldehydes	Nano Research	10.1007/s12274-021-3298-y	Wang, Dongdong; Gong, Wanbing; Lv, Yang; Chen, Chun; Wang, Guozhong; Zhang, Haimin; Zhao, Huijun	14	8	2846	2852
152	Glass-Forming Ability and Thermal Properties of Al <sub>70</sub> Fe <sub>12.5</sub> V <sub>12.5</sub> X <sub>5</sub> (X = Zr, Nb, Ni) Amorphous Alloys via Minor Alloying Additions	Nanomaterials	10.3390/nano11020488	Liu, Xuan; Wang, Xingfu; Si, Yongli; Han, Fusheng	11	2		
153	Effect of Nano-Y <sub>2</sub> O <sub>3</sub> Content on Microstructure and Mechanical Properties of Fe <sub>18</sub> Cr Films Fabricated by RF Magnetron Sputtering	Nanomaterials	10.3390/nano11071754	Zhao, Bang-Lei; Wang, Le; Zhang, Li-Feng; Ke, Jian-Gang; Xie, Zhuo-Ming; Yang, Jun-Feng; Wang, Xian-Ping; Hao, Ting; Liu, Chang-Song; Wu, Xue-Bang	11	7		
154	Improving the thermoelectric performance of Cu <sub>2</sub> SnSe <sub>3</sub> via regulating micro- and electronic structures	Nanoscale	10.1039/d0nr08045d	Ming, Hongwei; Zhu, Chen; Qin, Xiaoying; Jabar, Bushra; Chen, Tao; Zhang, Jian; Xin, Hongxing; Li, Di; Zhang, Linhua	13	7	4233	4240

155	Influence of carbon nano-dots in water on sonoluminescence	Nanoscale	10.1039/d1nr02194j	Song, Dan; Xu, Wen; Luo, Man; Zhang, Mingjun; Wen, Hua; Cheng, Xingjia; Luo, Xiaobing; Wang, Zhibiao	13	33	14130	14138
156	Ultra-fast synthesis of water soluble MoO <sub>3-x</sub> quantum dots with controlled oxygen vacancies and their near infrared fluorescence sensing to detect H <sub>2</sub> O <sub>2</sub> (vol 5, pg 1538, 2020)	Nanoscale Horizons	10.1039/d1nh90005f	Zhong, Shichuan; Xing, Changchang; Cao, An; Zhang, Tao; Li, Xuejiao; Yu, Jie; Cai, Weiping; Li, Yue	6	2	192	192
157	Synthesis of Polyaniline Coating on the Modified Fiber Ball and Application for Cr(VI) Removal	Nanoscale Research Letters	10.1186/s11671-021-03509-y	[Ma, Xiao Li; Fei, Guang Tao; Xu, Shao Hui/Ma, Xiao Li; Fei, Guang Tao; Xu, Shao Hui	16	1		
158	Template-assisted fabrication of Ag-nanoparticles@ZnO-nanorods array as recyclable 3D surface enhanced Raman scattering substrate for rapid detection of trace pesticides	Nanotechnology	10.1088/1361-6528/abc50e	Huo, Dexian; Chen, Bin; Li, Mingtao; Meng, Guowen; Zhu, Chuhong; Huo, Dexian; Chen, Bin; Li, Mingtao; Meng, Guowen; Zhu, Chuhong	32	14		
159	Widely tunable surface plasmon resonance and uniquely superior SERS performance of Au nanotube network films	Nanotechnology	10.1088/1361-6528/abf511	[Lin, Yongxing; Wang, Liang; Zhang, Haibao; Liu, Xianglan; Zheng, Ruobing; Tian, Xingyou; He, Hui	32	29		
160	Two-dimensional centrosymmetrical antiferromagnets for spin photogalvanic devices	Npj Quantum Information	10.1038/s41534-021-00365-7	Jiang, Peng; Tao, Xixi; Hao, Hua; Zheng, Xiaohong; Zeng, Zhi	7	1		
161	Hydrostatic pressure effect of photocarrier dynamics in GaAs probed by time-resolved terahertz spectroscopy	Optics Express	10.1364/OE.421011	[Xu, Shujuan; Liu, Zheng; Zhang, Kai; Jiang, Huachao; Zeng, Zhi; Su, Fuhai	29	9	14058	14068
162	Terahertz optical Hall effect in p-type monolayer hexagonal boron nitride on fused silica substrate	Optics Letters	10.1364/OL.421049	[Bilal, Muhammad; Xu, Wen; Wen, Hua; Cheng, Xingjia	46	9	2196	2199
163	Domain-wall induced giant tunneling electroresistance effect in two-dimensional Graphene/In <sub>2</sub> Se <sub>3</sub> ferroelectric tunnel junctions	Physica E: Low-Dimensional Systems And Nanostructures	10.1016/j.physe.2021.114783	Kang, Lili; Jiang, Peng; Zhang, Xiaoli; Hao, Hua; Zheng, Xiaohong; Zeng, Zhi	133			
164	Spin-crossover induced ferromagnetism and layer stacking-order change in pressurized 2D antiferromagnet MnPS <sub>3</sub>	Physical Chemistry Chemical Physics	10.1039/d0cp04917d	[Zhang, Hanxing; Niu, Caoping; Zhang, Jie; Zou, Liangjian; Zeng, Zhi; Wang, Xianlong	23	16	9679	9685

165	Giant tunneling electroresistance arising from reversible partial barrier metallization in the NaTiO <sub>3</sub> /BaTiO <sub>3</sub> /LaTiO <sub>3</sub> ferroelectric tunnel junction	Physical Chemistry Chemical Physics	10.1039/d1cp01767e	Xiao, Wei; Kang, Lili; Hao, Hua; Zhou, Yanhong; Zhang, Lei; Zheng, Xiaohong; Zeng, Zhi	23	38	16349	16356
166	Large Thermal Rectification in a Solid-State Thermal Diode Constructed of Iron-Doped Nickel Sulfide and Alumina	Physical Review Applied	10.1103/PhysRevApplied.16.014031	Zhang, Xuekai; Tong, Peng; Lin, Jianchao; Tao, Kun; Wang, Xuelian; Xie, Lulu; Song, Wenhai; Sun, Yuping	16	1		
167	Unveiling the mechanisms of metal-insulator transitions in V <sub>2</sub> O <sub>3</sub> : The role of trigonal distortion	Physical Review B	10.1103/PhysRevB.103.085119	Hu, L.; Xie, C.; Zhu, S. J.; Zhu, M.; Wei, R. H.; Tang, X. W.; Lu, W. J.; Song, W. H.; Dai, J. M.; Zhu, X. B.; Sun, Y. P.; Zhang, R. R.; Zhang, C. J.; Sun, Y. P.	103	8		
168	Memory of pressure-induced superconductivity in a phase-change alloy	Physical Review B	10.1103/PhysRevB.103.174515	[Huang, Ge	103	17		
169	Giant tunnel electroresistance in ferroelectric tunnel junctions with metal contacts to two-dimensional ferroelectric materials	Physical Review B	10.1103/PhysRevB.103.125414	[Kang, Lili; Jiang, Peng; Hao, Hua; Zheng, Xiaohong; Zeng, Zhi	103	12		
170	Entropic broadening of the spin-crossover pressure in ferropericlyase	Physical Review B	10.1103/PhysRevB.103.224105	Yang, Kaisnua; wang, Xianlong; Zhang, Jie; Cheng, Ya; Zhang, Chuanguo; Zeng, Zhi; Lin, Haiqiao	103	12		
171	Planar Hall effect in the quasi-one-dimensional topological superconductor	Physical Review B	10.1103/PhysRevB.104.155106	Yang, X.C.; Luo, X.; Gao, J.J.; Jiang, Z.Z.; Wang, W.; Wang, T.Y.; Si, J.G.; Song, W.H.; Sun, Y.P./Xi, C.Y.; Sun, Y.P.	104	15		
172	Magnetic superexchange couplings in Sr <sub>2</sub> IrO <sub>4</sub>	Physical Review B	10.1103/PhysRevB.104.125116	Zhang, Guoren	104	12		
173	Ionic Phases of Ammonia-Rich Hydrate at High Densities	Physical Review Letters	10.1103/PhysRevLett.126.015702	Xu, Wan; Zhang, Xiao; Zhang, Hui-Chao; Liu, Xiao-Di; Gregoryanz, Eugene	126	1		
174	Orbital driven two-dome superconducting phases in multiorbital superconductors	Physics Letters A	10.1016/j.physleta.2020.127118	Liu, Jing; Zou, Liang-Jian	391			
175	Reexamining the role of intercrystalline links in the II-I phase transition of Poly(1-butene)	Polymer	10.1016/j.polymer.2021.123763	[Chen, Pujing; Xu, Min; Ding, Jianjun; Zheng, Kang; Zhang, Xian; Tian, Xingyou	224			
176	Reexamining the role of intercrystalline links in the II-I phase transition of poly(1-butene) (vol 224, 123763, 2021)	Polymer	10.1016/j.polymer.2021.123849	[Li, Xiangyang; Chen, Pujing; Xu, Min; Ding, Jianjun; Zheng, Kang; Zhang, Xian; Tian, Xingyou	226			

177	The rationality of using core-shell nanoparticles with embedded internal standards for SERS quantitative analysis based glycerol-assisted 3D hotspots platform	Rsc Advances	10.1039/d1ra01957k	Wang, Xiao-An;Shen, Wei;Zhou, Binbin;Yu, Daoyang;Tang, Xianghu;Liu, Jinhuai;Huang, Xingjiu	11	33	20326	20334
178	Investigation on the interlayer coupling and bonding in layered nitride-halides ThNF and ThNCl	Rsc Advances	10.1039/d1ra05578j	Liu, Xiao; Liu, Da-Yong; Li, Ting-Ting; Chen, Dong-Meng; Zou, Liang-Jian	11	46	28698	28703
179	Preparation of poly glycidyl methacrylate (PGMA) chain-grafted boron nitride/epoxy composites and their thermal conductivity properties	Rsc Advances	10.1039/d1ra00976a	Zhang, Haibao;Zhang, Xian;Zheng, Kang;Tian, Xingyou/Zhang, Xian;Zheng, Kang;Tian, Xingyou	11	36	22343	22351
180	Facile fabrication of flexible electrodes with poly(vinylidene fluoride)/Si3N4 composite separator prepared by electrospinning for sodium-ion batteries	Scripta Materialia	10.1016/j.scriptamat.2020.08.053	Ma, Xiaohang; Dai, Jianming	190		153	157
181	Giant reversible barocaloric effect with low hysteresis in antiperovskite PdNMn3 compound	Scripta Materialia	10.1016/j.scriptamat.2021.114049	Tao, Kun; Song, Wenhai; Lin, Jianchao; Zhang, Xuekai; Tong, Peng; Zhang, Zhao; Qi, Ji; Li, Bing; Ling, Langsheng; Ma, Long; Sun, Yuping	203			
182	Grain boundary relaxation behavior and phase stability of AlCrTiV <sub>x</sub> (x=0, 0.5 and 1) high-entropy alloys	Scripta Materialia	10.1016/j.scriptamat.2021.114144	Sun, Meng; Liu, Xueqing; Jiang, Weibin; Lei, Yawei; Ke, Jiangang; Liu, Rui; Wang, Xianping; Wu, Xuebang; Fang, Qianfeng; Liu, Changsong	204			
183	CuO nanoparticle loaded ZnO hierarchical heterostructure to boost H <sub>2</sub> S sensing with fast recovery	Sensors And Actuators B-Chemical	10.1016/j.snb.2021.129806	[Wang, Hong; Luo, Yuanyuan; Liu, Bo; Gao, Lei	338			
184	Upconversion-based dual-mode optical nanosensor for highly sensitive and colorimetric evaluation of heparin in serum	Sensors And Actuators B-Chemical	10.1016/j.snb.2021.130378	Zhu, Jiawei; Hu, Bin; Yang, Liang; Jiang, Changlong	345			
185	Progress in recovery and recycling of kerf loss silicon waste in photovoltaic industry	Separation And Purification Technology	10.1016/j.seppur.2020.117581	Li, Jingwei; Shi, Jian; Sun, Jifei; Ban, Boyuan; Chen, Jian	254			
186	Highly selective capacitive deionization of copper ions in FeS <sub>2</sub> @N, S co-doped carbon electrode from wastewater	Separation And Purification Technology	10.1016/j.seppur.2021.118336	Gao, Yong;Fu, Zhen;Zhang, Haimin;Wang, Guozhong;Zhou, Hongjian	262			

187	Purification Mechanism of Quartz Sand by Combination of Microwave Heating and Ultrasound Assisted Acid Leaching Treatment	Silicon	10.1007/s12633-020-00457-7	Li, Feifei;Jiang, Xuesong;Li, Jingwei;Ban, Boyuan;Chen, Jian		2	531	541
188	2D Silicon-Based Semiconductor Si <sub>2</sub> Te <sub>3</sub> toward Broadband Photodetection	Small	10.1002/sml.202006496	Chen, Jiawang;Li, Ming;Li, Guanghai	17	13		
189	Chemical Solution Route for High-Quality Multiferroic BiFeO <sub>3</sub> Thin Films	Small	10.1002/sml.201903663	Yang, Bingbing;Jin, Linghua;Wei, Renhuai;Tang, Xianwu;Hu, Ling;Tong, Peng;Yang, Jie;Song, Wenhai;Dai, Jianming;Zhu, Xuebin;Sun, Yunine	17	9		
190	Metal Nanoparticles Confronted with Foreign Ligands: Mere Ligand Exchange or Further Structural Transformation?	Small	10.1002/sml.202000609	Yan, Nan;Xia, Nan;Wu, Zhikun	17	27		
191	Effect of low grain boundary crystallization Cu <sub>2</sub> ZnSnS <sub>x</sub> Se <sub>4-x</sub> counter electrode on the performance of dye sensitized solar cells	Solar Energy	10.1016/j.solener.2021.05.067	Ye, Jiajiu;Liang, Zheng;Liu, Guozhen	224		88	92
192	Solution-Processed Compact Sb <sub>2</sub> S <sub>3</sub> Thin Films by a Facile One-Step Deposition Method for Efficient Solar Cells	Solar Rrl	10.1002/solr.202100666	Zhu, Liangxin; Chen, Junwei; Liu, Rong; Dong, Chao; Yang, Shangfeng; Chen, Tao; Chen, Chong; Qiao, Quinn; Wang, Mingtai				
193	Ag-coated 3D Cu(OH)( <sub>2</sub> ) nanowires on the woven copper mesh as a cost-effective surface-enhanced Raman scattering substrate	Surface & Coatings Technology	10.1016/j.surfcoat.2021.127132	[Zhou, Ningning; Meng, Guowen; Huang, Zhulin; Zhang, Xiang; Zhu, Chuhong; Ke, Yan	415			
194	Enhanced oxygen evolution catalytic activity of NiS <sub>2</sub> by coupling with ferrous phosphite and phosphide	Sustainable Energy & Fuels	10.1039/d0se01837f	Yu, Jie; Zhang, Tao; Xing, Changchang; Li, Xuejiao; Li, Xinyang; Li, Yue	5	6	1801	1808
195	Structural manipulation of silver nanowire transparent conductive films for optoelectrical property optimization in different application fields	Thin Solid Films	10.1016/j.tsf.2021.138679	[Tao, Jingqi; Li, Shuxin; Shi, Jun; Ji, Shulin/Tao, Jingqi; Li, Shuxin; Shi, Jun; Ji, Shulin	729			

## 固体所2021年合作论文

序号	标题	期刊	DOI	作者列表	卷	期	起始页	截至页
1	Amorphization of Purely Organic Phosphors into Carbon Dots to Activate Matrix-Free Room-Temperature Phosphorescence for Multiple Applications	Acs Applied Electronic Materials	10.1021/acsaelm.1c00250	Zou, Wen-Sheng; Chen, Tao; Lin, Dan; Kong, Wei-li; Li, Weihua; Xie, Fazhi; Qu, Qishu; Wang, Yaqin; Jiang, Changlong	3	8	2661	2670
2	Amine-Modified S-Scheme Porous g-C <sub>3</sub> N <sub>4</sub> /CdSe-Diethylenetriamine Composite with Enhanced Photocatalytic CO <sub>2</sub> Reduction Activity	Acs Applied Energy Materials	10.1021/acsaem.0c02896	Liang, Changhao; Liang, Changhao	4	1	956	968
3	Effect of Surface Charge Distribution of Phosphorus-Doped MoS <sub>2</sub> on Hydrogen Evolution Reaction	Acs Applied Energy Materials	10.1021/acsaem.1c00485	Ding, Jianjun	4	5	4887	4896
4	Gold Nanoparticle-Based Peroxyoxalate Chemiluminescence System for Highly Sensitive and Rapid Detection of Thiram Pesticides	Acs Applied Nano Materials	10.1021/acsanm.1c00305	Li, Lingfei; Lin, Dan; Yang, Fan; Yang, Liang; Jiang, Changlong/Lin, Dan; Yang, Fan; Yang, Liang; Jiang, Changlong	4	4	3932	3939
5	Carbon Dot/Gold Nanocluster-Based Fluorescent Colorimetric Paper Strips for Quantitative Detection of Iodide Ions in Urine	Acs Applied Nano Materials	10.1021/acsanm.1c02167	Jiang, Ruoxuan; Zhang, Yuchao; Zhang, Qianru; Li, Lingfei; Yang, Liang	4	9	9760	9767
6	Lattice Strain Leads to High Thermoelectric Performance in Polycrystalline SnSe	Acs Nano	10.1021/acsnano.1c01469	Zhang, Jian; Li, Di; Zhang, Xuemei; Zhang, Yongsheng	15	5	8204	8215
7	Introduction of 4-hydroxybenzaldehyde as interface modifier with multidimensional defects passivation effect for high-performance perovskite solar cells	Applied Surface Science	10.1016/j.apsusc.2021.151259	Xu, Huifen; Liu, Guozhen; Pan, Xu	570			
8	Electrochemically Exfoliated Graphene/Manganese Dioxide Nanowire Composites as Electrode Materials for Flexible Supercapacitors	Australian Journal Of Chemistry	10.1071/CH20215	Yu, Ximing; Sun, Lidong; Chen, Liqing; Liu, Cui; Zhang, Shudong; Wang, Zhenyang; Li, Nian		3	192	198
9	Novel 2D SnNb <sub>2</sub> O <sub>6</sub> /Ag <sub>3</sub> VO <sub>4</sub> S-scheme heterojunction with enhanced visible-light photocatalytic activity	Ceramics International	10.1016/j.ceramint.2020.111070	Hu, Taiping; Liang, Changhao; Hu, Taiping; Liang, Changhao	47	5	7169	7176
10	Giant photoresponse enhancement in Cr <sub>2</sub> O <sub>3</sub> films by Ni doping-induced insulator-to-semiconductor transition	Ceramics International	10.1016/j.ceramint.2021.011226	Zhu, Min; Hu, Ling	47	10	13655	13659

11	Insight into the synergy of amine-modified S-scheme Cd <sub>0.5</sub> Zn <sub>0.5</sub> Se/porous g-C <sub>3</sub> N <sub>4</sub> and noble-metal-free Ni <sub>2</sub> P for boosting photocatalytic hydrogen generation	Ceramics International	10.1016/j.ceramint.2021.01.207	Liang, Changhao/Liang, Changhao	47	10	13488	13499
12	Insertable and reusable SERS sensors for rapid on-site quality control of fish and meat products	Chemical Engineering Journal	10.1016/j.cej.2021.130733	Tang, Xianghu;Li, Yang Yang	426			
13	Effect of FeCo <sub>2</sub> S <sub>4</sub> on electrocatalytic I <sup>3-</sup> reduction: Theoretical and experimental aspects	Chemical Engineering Journal	10.1016/j.cej.2021.130419	Ding, Jianjun	424			
14	Effective Interface Defect Passivation via Employing 1-Methylbenzimidazole for Highly Efficient and Stable Perovskite Solar Cells	Chemosuschem	10.1002/cssc.202101097	Zheng, Haiying; Liu, Guozhen; Wu, Weiwei; Xu, Huifen; Pan, Xu	14	15	3147	3154
15	A novel step-scheme BiVO <sub>4</sub> /Ag <sub>3</sub> VO <sub>4</sub> photocatalyst for enhanced photocatalytic degradation activity under visible light irradiation	Chinese Journal Of Catalysis	10.1016/S1872-2067(20)63560-4	Liang, Changhao; Liang, Changhao	42	1	46	55
16	Concurrent Structural and Electronic Phase Transitions in V <sub>2</sub> O <sub>3</sub> Thin Films with Sharp Resistivity Change	Chinese Physics Letters	10.1088/0256-307X/38/7/07	Xie, Chuang; Hu, Ling; Zhang, Ran-Ran; Zhu, Shun-Jin; Zhu, Min; Wei, Ren-Huai; Tang, Xian-Wu; Song, Wen-Hai; Zhu, Xue-Bin; Sun, Yu-Ping	38	8		
17	Superhydrophobic polymer membrane coated by mineralized beta-FeOOH nanorods for direct contact membrane distillation	Desalination	10.1016/j.desal.2020.114889	Li, Jingwei	500			
18	Ultrasensitive electroanalysis of trace As(III) in water and human serum via gold nanoparticles uniformly anchored to Co <sub>3</sub> O <sub>4</sub> porous microsheets	Electrochimica Acta	10.1016/j.electacta.2020.137605	Shen, Wei; Yang, Meng	368			
19	Scalable and controllable fabrication of CNTs improved yolk-shelled Si anodes with advanced in operando mechanical quantification	Energy & Environmental Science	10.1039/d1ee00639h	Zhang, Lei; Meng, Guowen/Zhang, Lei; Meng, Guowen	14	6	3502	3509
20	Nano-selenium attenuates mitochondrial-associated apoptosis via the PI3K/AKT pathway in nickel-induced hepatotoxicity in vivo and in vitro	Environmental Toxicology	10.1002/tox.23381	Wang, Caixia; Gu, Zhangyu; Gu, Xueyan; Tan, Xinyue; Wang, Shuang; Zhang, Rui; Li, Ruifen; Sun, Mingkun; Gui, Chunyan; Li, Sheng; Ye, Yixing; Ma, Jianhua; Su, Li; Liang, Changhao				
21	Retainable Superconductivity and Structural Transition in 1T-TaSe <sub>2</sub> Under High Pressure	Inorganic Chemistry	10.1021/acs.inorgchem.1c01378	Lin, Tao; Wang, Xiaojun; Chen, Xin; Liu, Xiaobing; Luo, Xuan; Li, Xue; Jing, Xiaoling; Dong, Qing; Liu, Bo; Liu, Hanyu; Li, Qianjun; Zhu, Xuebin; Liu, Bingbing	60	15	11385	11393

22	Magneto-Optical Properties of Tri-Layer Graphene Measured via Terahertz Time Domain Spectroscopy	Integrated Ferroelectrics	10.1080/10584587.2020.1728822	Xu, Wen; Wang, Chao; Wen, Hua		1	35	40
23	Electronic energy loss assessment in theoretical modeling of primary radiation damage in tungsten	International Journal Of Modern Physics	10.1142/S01291831215013	Cheng, Fan; Zheng, Qirong; Li, Yonggang; Zhang, Chuanguo; Zeng, Zhi	32	10		
24	Rational design of ZnS/CoS heterostructures in three dimensional N-doped CNTs for superior lithium storage	Journal Of Alloys And Compounds	10.1016/j.jallcom.2020.157867	Zhang, Lei; Zhang, Lei	859			
25	Ultrafast dynamics of photoconductivity in lead sulfide nanocrystals in terahertz region	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.158873	Liu, Zheng; Xu, Shujuan; Xie, Binhe; Luo, Yuanyuan; Jiang, Huachao; Zeng, Zhi; Fei, Guangtao; Su, Fuhai				
26	Zinc doped Fe <sub>2</sub> O <sub>3</sub> hierarchical particles for stable all-solid-state Ni-Co/Fe battery	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.160436	Shen, Hao; Lan, Binbin; Li, Chun-Chao; Yan, Jian; Wang, Junzeng; Wang, Zhaoming; Hu, Xiaoye; Liu, Jiaqin; Wu, Yucheng	879			
27	Vertical strain tuning and perpendicular magnetic anisotropy in La <sub>0.5</sub> Ca <sub>0.5</sub> MnO <sub>3</sub> vertically aligned nanostructured thin films by the application of high magnetic fields	Journal Of Alloys And Compounds	10.1016/j.jallcom.2021.161511	Dai, Jianming; Zhu, Xuebin; Sun, Yuping/Sun, Yuping	888			
28	Physicochemical characterization and flocculation performance evaluation of PAC/PMAPTAC composite flocculant	Journal Of Applied Polymer Science	10.1002/app.51653	Guo, Yiming; Li, Xiaoxiao; Sun, Jun; Liu, Yanyan; Wang, Hua; Ding, Jianjun; Chen, Lin; Tian, Xingyou; Yuan, Yun				
29	An efficient nanocluster catalyst for Sonogashira reaction	Journal Of Catalysis	10.1016/j.jcat.2021.07.023	Yang, Ying; Chen, Cheng; Xu, Guo-Yong; Yuan, Jinyun; Ye, Sun-Feng; Chen, Li; Lv, Qi-Long; Luo, Gen; Yang, Jinlong; Li, Man-Bo; Wu, Zhikun	401		206	213
30	Efficient interfacial charge transfer of 2D/2D porous carbon nitride/bismuth oxychloride step-scheme heterojunction for boosted solar-driven CO <sub>2</sub> reduction	Journal Of Colloid And Interface Science	10.1016/j.jcis.2020.10.048	Liang, Changhao; Liang, Changhao	585		684	693
31	Enhanced Fenton-like degradation of sulfadiazine by single atom iron materials fixed on nitrogen-doped porous carbon	Journal Of Colloid And Interface Science	10.1016/j.jcis.2021.03.168	Yang, Wu; Hong, Peidong; Yang, Dandan; Yang, Ya; Wu, Zijian; Xie, Chao; He, Junyong; Zhang, Kaisheng; Kong, Lingtao; Liu, Jinhui	597		56	65

32	Highly efficient and stable perovskite solar cells with strong hydrophobic barrier via introducing poly(vinylidene fluoride) additive	Journal Of Energy Chemistry	10.1016/j.jechem.2020.09.026	Liu, Guozhen; Xu, Huifen; Pan, Xu			593	600
33	Highly efficient and stable perovskite solar cells with strong hydrophobic barrier via introducing poly(vinylidene fluoride) additive	Journal Of Energy Chemistry	10.1016/j.jechem.2020.09.026	Liu, Guozhen; Xu, Huifen; Pan, Xu	57		593	600
34	Phosphate modified hydrochars produced via phytic acid-assisted hydrothermal carbonization for efficient removal of U(VI), Pb(II) and Cd(II)	Journal Of Environmental Management	10.1016/j.jenvman.2021.11.3487	Zhao, Xin; Li, Meng; Zhai, Fuqiang; Hou, Yanling; Hu, Rui	298			
35	Effects of pyridine-like and pyrrolic-like nitrogen on the photoluminescence blue-shift of nitrogen-doped graphene oxide quantum dots	Journal Of Luminescence	10.1016/j.jlumin.2021.117983	Yang, Yong				
36	Nonhysteretic metamagnetic phase transition in Ho <sub>2</sub> In <sub>1-x</sub> Al <sub>x</sub> (0 ≤ x ≤ 0.4) by heterostructural alloying	Journal Of Magnetism And Magnetic Materials	10.1016/j.jmmm.2021.168305	Liu, Rui; Sun, Shengyu; Yao, Guiquan; Wang, Qiang; Tong, Peng; Zhu, Jie; Yang, Sen; Cui, Weibin	538			
37	A high performance Li-rich beta-Li <sub>2</sub> IrO <sub>3</sub> electrode for symmetric lithium ion batteries	Journal Of Materials Chemistry A	10.1039/d1ta02368c	Dou, Yuhai; Al-Mamun, Mohammad				
38	Copper-assisted growth of high-purity carbon nanofiber networks with controllably tunable wettabilities	Journal Of Materials Chemistry A	10.1039/d1ta05391d	Zhao, Xianglong; Meng, Guowen; Wang, Ping; Pan, Qijun; Chen, Bin; Zhang, Haimin; Bai, Jiong Boon	9		22039	22047
39	Compressive mechanical properties of ex-situ auxetic composite-filled tubes	Journal Of Materials Research And Technology	10.1016/j.jmrt.2021.07.061	Shi, Zimu	14		1644	1654
40	Modulation of red-light emission from carbon quantum dots in acid-based environment and the detection of chromium (VI) ions	Journal Of Materials Science And Technology	10.1016/j.jmst.2020.11.072	Xu, Wen			58	65
41	Room-temperature multiferrocity and magnetodielectric properties of ternary BiFeO <sub>3</sub> -Bi <sub>0.5</sub> Na <sub>0.5</sub> TiO <sub>3</sub> -CaTiO <sub>3</sub> ceramics across the rhombohedral-orthorhombic phase boundary	Journal Of Materials Science-Materials In Electronics	10.1007/s10854-021-05729-5	Shu, M. F.; Wu, J.; Yin, L. H.; Song, W. H.; Tong, P.; Zhu, X. B.; Yang, J.; Sun, Y. P./Sun, Y. P.	32	9	11524	11535
42	Nitrogen/phosphorus enriched biochar with enhanced porosity activated by guanidine phosphate for efficient passivation of Pb(II), Cu(II) and Cd(II)	Journal Of Molecular Liquids	10.1016/j.molliq.2020.115071	Hu, Rui	323			
43	Synthesis of Wear-Resistant Barium Polyhydride	Journal Of Physical Chemistry Letters	10.1021/acs.jpclett.1c00826	Gregoryanz, Eugene	12	20	4910	4916
44	Realizing stable half-metallicity in zigzag silicene nanoribbons with edge dihydrogenation and chemical doping	Journal Of Physics-Condensed Matter	10.1088/1361-648X/abed65	Zheng, Xiaohong	33	19		
45	Compressive Behaviour of Aluminium Pyramidal Lattice Material-Filled Tubes	Materials	10.3390/ma14143817	Huang, Yingjie; Zha, Wenke; Xue, Yingying; Shi, Zimu	14	14		

46	Electrodeposition of rough gold nanoarrays for surface-enhanced Raman scattering detection	Materials Chemistry And Physics	10.1016/j.matchemphys.2021.124388	Zhao, Qiangsheng; Huo, Dexian; Hu, Xiaoye; Wang, Yimin				
47	Enhancement of strength and ductility in non-equiatomic CoCrNi medium-entropy alloy at room temperature via transformation-induced plasticity	Materials Science And Engineering A-Structural Materials Properties Microstructure And Processing	10.1016/j.msea.2020.140516	Wang, M. M.; Xie, Z. M.; Wang, X. P.; Fang, Q. F.	804			
48	An Improved Tool Wear Monitoring Method Using Local Image and Fractal Dimension of Workpiece	Mathematical Problems In Engineering	10.1155/2021/9913581	Yu, Haicheng; Wang, Kun; Zhang, Ruhai; Wu, Xiaojun; Tong, Yulin; Wang, Ruiyuan; He, Dadao	2021			
49	Self-assembly of superstructures at all scales	Matter	10.1016/j.matt.2020.12.020	Liu, Dilong; Li, Yue		3	927	941
50	High-performance eco-friendly MnTe thermoelectrics through introducing SnTe nanocrystals and manipulating band structure	Nano Energy	10.1016/j.nanoen.2020.105649	Zhang, Jian; Li, Di; Zhang, Xuemei; Zhang, Yongsheng				
51	Highly selective electrocatalytic Cl <sup>-</sup> oxidation reaction by oxygen-modified cobalt nanoparticles immobilized carbon nanofibers for coupling with brine water remediation and H <sub>2</sub> production	Nano Research	10.1007/s12274-020-3200-3	Zhang, Xian	14	5	1443	1449
52	Flexible Carbon Nanotubes Confined Yolk-Shelled Silicon-Based Anode with Superior Conductivity for Lithium Storage	Nanomaterials	10.3390/nano11030699	Zhang, Lei	11	3		
53	Pure spin current generation with photogalvanic effect in graphene interconnect junctions	Nanophotonics	10.1515/nanoph-2020-0646	Zheng, Xiaohong	10	6	1701	1709
54	An electrically switchable anti-ferroelectric bilayer In <sub>2</sub> Se <sub>3</sub> based opto-spintronic device	Nanoscale	10.1039/d1nr00369k	Zheng, Xiaohong	13	18	8555	8561
55	Restructured single parabolic band model for quick analysis in thermoelectricity	Npj Computational Materials	10.1038/s41524-021-00587-5	Zhu, Jianbo; Zhang, Xuemei; Guo, Muchun; Li, Jingyu; Hu, Jinsuo; Cai, Songting; Cai, Wei; Zhang, Yongsheng; Sui, Jiehe	7	1		
56	Structural phase transition and superconductivity hierarchy in 1T-TaS <sub>2</sub> under pressure up to 100 GPa	Npj Quantum Materials	10.1038/s41535-021-00320	Luo, Xuan; Si, Jianguo; Lu, Wenjian; Sun, Yuping/Hao, Ning; Sun, Yuping	6	1		
57	Effects of disorder and hydrostatic pressure on charge density wave and superconductivity in 2H-TaS <sub>2</sub>	Physical Review B	10.1103/PhysRevB.103.224509	Sun, Yuping/Gao, Jingjing; Luo, Xuan; Sun, Yuping	103	22		
58	Prediction of the two-dimensional Janus ferrovalley material LaBrI	Physical Review B	10.1103/PhysRevB.104.035430	Jiang, Peng; Kang, Lili; Li, Yan-Ling; Zheng, Xiaohong; Zeng, Zhi; Sanvito, Stefano	104	12		
59	Terahertz magneto-optical properties of graphene hydrodynamic electron liquid	Physical Review B	10.1103/PhysRevB.104.125420	Xu, W.; Wen, H.	104	12		

60	Photoluminescence and electronic transition behaviors of single-stranded DNA	Physical Review E	10.1103/PhysRevE.104.034412	Wang, Qiuji; Lin, Shuo; Liu, Xuan; Xu, Wen; Xiao, Yiming; Liang, Changneng; Ding, Lan; Peeters, F. M.	104	3		
61	Stronger Interlayer Interactions Contribute to Faster Hot Carrier Cooling of Bilayer Graphene under Pressure	Physical Review Letters	10.1103/PhysRevLett.126.027402	Yang, Jin; Xu, Shujuan; Zhang, Kai; Su, Fuhai	126	2		
62	Investigation of the dissolution and diffusion properties of interstitial oxygen at grain boundaries in body-centered-cubic iron by the first-principles study	Rsc Advances	10.1039/d1ra00367d	Liu, Zhijie; Zhang, Yange; Li, Xiangyan; Xu, Yichun; Wu, Xuebang; Liu, Changsong		15	8643	8653
63	Reliable electroanalysis of Hg(II) in water via flower-like porous MnCo <sub>2</sub> O <sub>4</sub> : Excellent multilayer adsorption and (Mn, Co)(II)/(Mn, Co)(III) cycles	Sensors And Actuators B-Chemical	10.1016/j.snb.2020.129008	Yang, Meng	326			
64	Highly sensitive and selective electrochemical detection of Pb(II) in serum via an alpha-Fe <sub>2</sub> O <sub>3</sub> /NiO heterostructure: Evidence from theoretical calculations and adsorption investigation	Sensors And Actuators B-Chemical	10.1016/j.snb.2021.130295	Wei, Juan; Zhao, Jie; Li, Chun-Yang; Xie, Xiao-Yu; Wei, Yuan-Yuan; Shen, Wei; Wang, Jian-Ping; Yang, Meng	344			
65	Tracking lipid droplet dynamics for the discrimination of cancer cells by a solvatochromic fluorescent probe	Sensors And Actuators, B: Chemical	10.1016/j.snb.2021.129541	Yang, Linlin; Liu, Bianhua; Yang, Liang; Zhao, Jun; Han, Ming-Yong; Zhang, Zhongping				
66	Integrated S-Scheme Heterojunction of Amine-Functionalized 1D CdSe Nanorods Anchoring on Ultrathin 2D SnNb <sub>2</sub> O <sub>6</sub> Nanosheets for Robust Solar-Driven CO <sub>2</sub> Conversion	Solar Rrl	10.1002/solr.202000805	Liang, Changhao; Liang, Changhao				
67	Spiro-OMeTAD:Sn <sub>2</sub> S <sub>3</sub> Hole Transport Layer with Triple Functions of Overcoming Lithium Salt Aggregation, Long-Term High Conductivity, and Defect Passivation for Perovskite Solar Cells	Solar Rrl	10.1002/solr.202100622	Du, Qing; Shen, Zhitao; Chen, Chong; Li, Fumin; Jin, Mengqi; Li, Huilin; Dong, Chao; Zheng, Jihong; Ji, Mingxing; Wang, Mingtai				
68	Effect of dispersants on the physicochemical properties of ultra-fine ZrB <sub>2</sub> powder in Sol-gel synthesis	Surfaces And Interfaces	10.1016/j.surfin.2021.10116	Shen, Hao; Li, Xinyang; Hu, Chenguang; Wang, Zhen; Hu, Xiaoye; Li, Yue; Yan, Jian	25			
69	Turning single bubble sonoluminescence from blue in pure water to green by adding trace amount of carbon nanodots	Ultrasonics Sonochemistry	10.1016/j.ultsonch.2021.105727	Song, Dan; Xu, Wen; Wen, Hua; Cheng, Xingjia	78			
70	Graphene oxide composite membrane accelerates organic pollutant degradation by Shewanella bacteria	Water Science And Technology	10.2166/wst.2021.285	Li, Zhi; Zhao, Jun; Liu, Bianhua; Yang, Linlin; Han, Guangmei; Yang, Fan; Han, Shuai; Wang, Zhenyang; Zhang, Zhongping	84	4	1037	1047