

The novel $\gamma\delta$ T cell subset in human colorectal cancer and its clinical implication



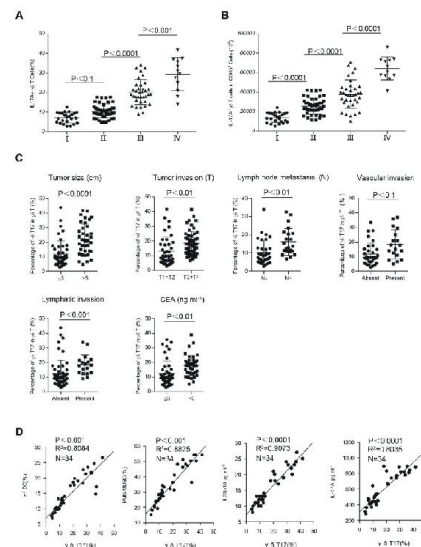
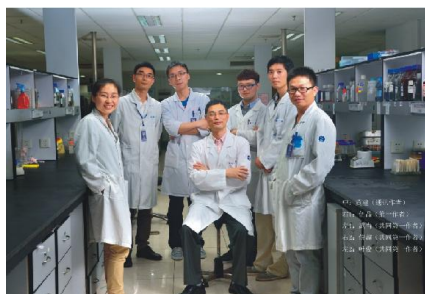
Selected as The TOP 10 Academic Advances of the Year

This project firstly demonstrated innate $\gamma\delta$ T cells were the major cellular source of IL-17 in human CRC and the key role of infDCs/ $\gamma\delta$ T17/PMN-MDSCs regulatory axis in colorectal cancer progression. We also found tumorous $\gamma\delta$ T17 cells were correlated with clinicopathological features of human CRC. Research results were published as cover story in the Immunity.

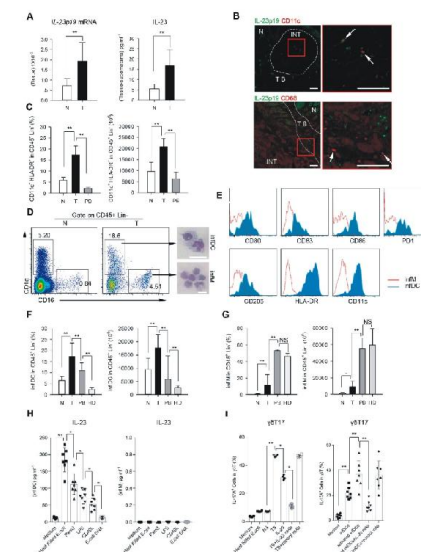
Project Leader: Jian Huang

Colorectal cancer (CRC) is one of the most common fatal malignancies worldwide. Links between cancer and inflammation were first made by Rudolf Virchow in the nineteenth century. Accumulating evidences have demonstrated that chronic inflammation and cancer are closely linked, particularly IL-23/IL-17 pathway. However, the cellular source of IL-17 and underlying mechanisms by which IL-17-producing cells promote human CRC remain poorly defined.

We used multicolor flow cytometry analysis and primary cell separation technology to study the cellular source of IL-17 and inflammatory cells composition in human fresh tumor and paired normal tissues. To investigate the mechanism of $\gamma\delta$ T17 polarization in tumor, we used fluorescence-activated cell sorting and in vitro co-culture experiment to study the impact of infDCs on $\gamma\delta$ T17 polarization and the role of $\gamma\delta$ T17 in tumor immunity. We also analyzed the correlation between tumor infiltrating $\gamma\delta$ T17 and clinicopathological features of patients.



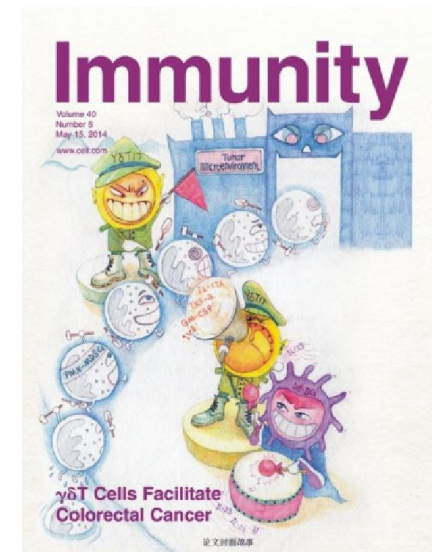
$\gamma\delta$ T17细胞与人类肠癌临床病理不良指标相关



肿瘤浸润IL17Cg促进 $\gamma\delta$ T17极化

Here, we have demonstrated that tumor-infiltrating $\gamma\delta$ T17 cells, but not Th17 cells or Tc17 cells, are the major IL-17A (hereafter referred to as IL-17)-producing cells in human CRC. Epithelial barrier failure led to bacterial invasion in CRC, which correlated with inflammatory dendritic cells (infDCs) accumulation and activation to secrete IL-23 thus triggering $\gamma\delta$ T17 polarization. Activated $\gamma\delta$ T17 cells also secreted IL-8, TNF- α , and GM-CSF which appear to chemoattract polymorphonuclear myeloid-derived suppressor cells (PMN-MDSCs) in the tumor and sustained their immunosuppressive activity. $\gamma\delta$ T17 cell infiltration in tumor is positively correlated with TNM stages and other clinicopathological features in CRC.

Our study uncovers a novel infDCs/ $\gamma\delta$ T17/PMN-MDSCs regulatory axis in human CRC with $\gamma\delta$ T17 at its core that correlates immunosuppression with tumor-elicited inflammation. These findings suggest that $\gamma\delta$ T17 cells may be key players in human CRC progression and have the potential for treatment or prognosis prediction.



The novel mechanism for histamine H3 receptors in ischemic brain injury



The present investigation has found a novel mechanism by which central histaminergic neurons confer their biological functions. These findings shed light on the therapy for ischemic stroke by H3R antagonists.

Project Leader: Zhong Chen

Ischemic stroke is one of the leading causes of death worldwide. Unfortunately, few therapy has been demonstrated effective in the treatment of ischemic stroke. Prof. Chen Zhong's lab has been focusing in the neurobiological functions of histaminergic neurons in the central nervous system during the last decade. Our previously investigations suggest that histaminergic neurons may serve as a potential therapeutic target against ischemic brain injury. As presynaptic histamine receptors, H3R are involved in regulating synaptic histamine release in a negative feedback manner. Therefore, it has been proposed that H3R blockade is generally neuroprotective. However, its role in ischemia and the underlying mechanisms remain unclear. Prof. Chen's group for the first time found that



ARTICLE

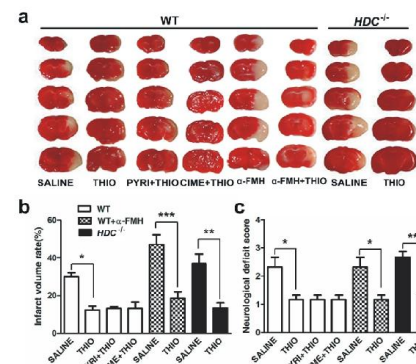
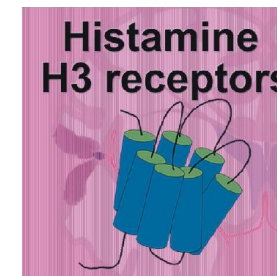
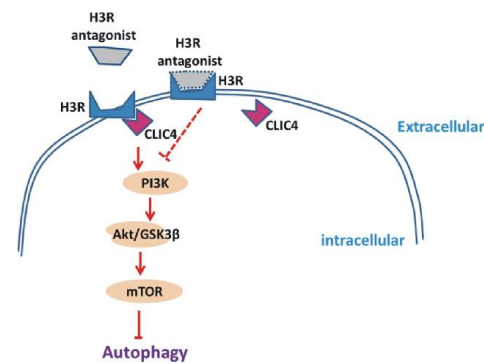
Received 21 Nov 2013 | Accepted 28 Jan 2014 | Published 25 Feb 2014

DOI: 10.1038/ncomms4334

OPEN

Histamine H3 receptors aggravate cerebral ischaemic injury by histamine-independent mechanisms

Haijing Yan^{1,*}, Xiangnan Zhang^{1,2,*}, Weiwei Hu^{1,2,*}, Jing Ma¹, Weiwei Hou¹, Xingzhou Zhang¹, Xiaofen Wang^{1,3}, Jieqiong Gao^{1,3}, Yao Shen^{1,3}, Jianxin Lv³, Hiroshi Ohtsu⁴, Feng Han¹, Guanghui Wang⁵ & Zhong Chen^{1,2}



H3R antagonism and H3R deletion protect against ischemia/reperfusion (I/R) injury. Surprisingly, further study revealed that the H3R-antagonism-conferred neuroprotection is histamine-independent. H3R antagonism reinforced I/R-induced autophagy and the neuroprotection of H3R antagonism are reversed by autophagy blockade. Further investigations showed that H3R antagonism inhibits the binding of H3R to chloride intracellular channel 4 (CLIC4), and subsequently further activates I/R-induced autophagy, which protects against ischemia injury. The present study provides new prospects for H3R antagonists in therapeutic intervention for cerebral ischemia. These works have been published in Nature Communications.

CRL4A^{CRBN} E3 ubiquitin ligase restricts BK channel activity and prevents epileptogenesis



This research uncovered the role of the ubiquitination of BK channels regulated by CRL4ACRBN ubiquitin ligase in epileptogenesis, providing a new insight to treat this type of epilepsy.

Project Leader: Yong Cang

The activity and expression of ion channels at the cell membrane have to be tightly regulated to maintain ion and fluid homeostasis. Genetic mutations, especially those in genes encoding subunits of voltage-gated and ligand-gated ion channels often alter channel functions and induce epilepsy. Compared with extensive analyses of channel protein structure and function, much less is known about the fine tuning of channel activity by post-translational modification.

BK channels are formed by four α subunits and regulated by four types of β subunits in various tissues. It is uniquely activated by both membrane depolarization and increased intracellular Ca^{2+} levels, thereby functioning as a neuronal calcium sensor and regulating neurotransmitter release and neuronal excitability. Gain-of-function mutations in BK channel pore-forming α subunit or deletion of the regulatory $\beta 4$ subunit can lead to enhanced channel activation and

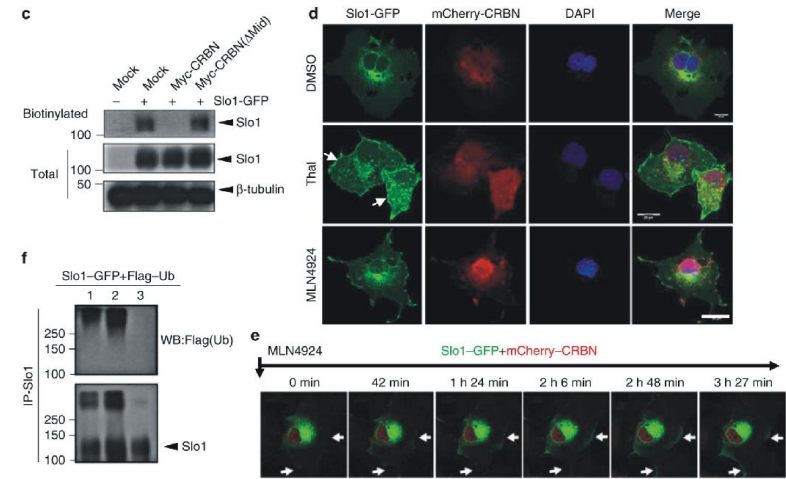
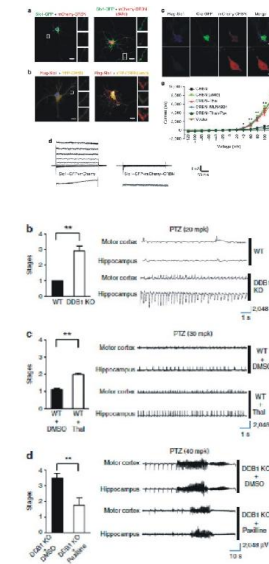


Figure 3 | CRL4A^{CRBN} retains ubiquitinated BK channels in the ER and inhibits their surface expression in cultured cells. (a) Confocal fluorescent imaging of COS-7 cells transfected with Slo1-GFP and mCherry-CRBN or mCherry-CRBN(AMid). ER-Tracker was used to stain the ER. Scale bar, 10 μ m. (b) Confocal imaging of cells transfected with N-terminally tagged Flag-Slo1 and YFP-CRBN or YFP-CRBN(AMid). The extracellular Flag epitope was visualized by indirect immunofluorescence under nonpermeabilized conditions. Scale bar, 10 μ m. (c) Western blot analysis of the levels of extracellularly biotinylated BK channels in HEK 293 cells transfected with expression vectors of CRBN or CRBN(AMid). Cells were incubated with 1 mg ml⁻¹ Sulfo-NHS-SS-biotin solution. Surface biotinylated proteins were precipitated with streptavidin agarose resins. (d) Confocal imaging of COS-7 cells transfected with Slo1-GFP and mCherry-CRBN and treated with 50 μ M thalidomide or 0.1 μ M MLN4924 for 6 h. Scale bar, 20 μ m. (e) Live imaging of COS-7 cells



development of epilepsy in patients. BK channel function can also be regulated by posttranslational modifications such as protein phosphorylation and palmitoylation; however, the in vivo significance has not been defined.

Here we report that the large conductance, Ca^{2+} - and voltage-activated K^+ (BK) channels are targeted by the E3 ubiquitin ligase CRL4ACRBN for poly-ubiquitination and retained in the endoplasmic reticulum (ER). Inactivation of CRL4ACRBN releases de-ubiquitinated BK channels from ER to plasma membrane, leading to markedly enhanced channel activity. Mice with CRL4ACRBN mutation in the brain or treated with a CRL4ACRBN inhibitor are very sensitive to seizure induction, which can be attenuated by blocking BK channels. Finally, the mutant mice develop spontaneous epilepsy when aged. Therefore, ubiquitination of BK channels prior to their cell surface expression is an important step to prevent systemic neuronal excitability and epileptogenesis.

Application and popularization of major technological breakthrough in renal replacement therapy for end-stage renal disease



Uremia is the major diseases that seriously threaten human health. The kidney disease center of Zhejiang University created the integrated treatment of end-stage renal disease in theory and system, taking a series of major technological breakthroughs in hemodialysis, peritoneal dialysis and kidney transplantation to increase the long-term survival rate in uremic patients.

Project Leader: Jianghua Chen

End-stage renal disease is a major chronic disease which seriously threatens human's health. The patients could survive mainly relying on the three renal replacement therapy that is hemodialysis, peritoneal dialysis, and kidney transplantation. All kinds of renal replacement therapy have technical limitations and bottlenecks, the long-term survival in patients treated with a single renal replacement therapy is not ideal. There is a desperate need in technical breakthroughs and system innovation to further improve the patients' long-term survival. This project has been supported by the national and provincial science and technology department, and has obtained the following innovative results after 31-years' studies.

First, the key technology innovation in renal transplantation: (1) Creating the early warning system of acute rejection and non-invasive diagnostic technique based on urine biomarkers, which successfully screens for the susceptible that are at risk of rejection and realizes the non-invasive diagnosis of acute rejection; (2) Establishing the technology of the individualized immunosuppressive therapy: to strengthen the intervention in high-rejection-risk group has led to a dramatic decrease in the incidence of acute rejection from 53.7% to 14.6%; For low-risk groups treating with low dose of immunosuppression, safely reduced 30.1% dosage of immunosuppressants; (3) Establishing the technology in prevention and treatment of the specific infection after renal transplantation, which make great accomplishment that in continuous 1906 cases of recipients no one died from severe pneumonia within 1 year after operation and among 173 cases of hepatitis b recipients no case occurred severe hepatitis; (4) Establishing the technology in prevention and treatment of chronic allograft nephropathy, making its incidence decreased by 66.5%; Created a technology for clinical immune tolerance induction, carrying out the first case in China surviving without immunosuppressant after renal transplantation.



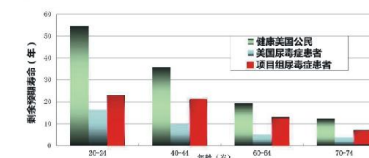
Second, the key technology innovation in hemodialysis: (1) Creating a series of technology in vascular access and solved the difficult technical problem restricting the long-term survival of hemodialysis patients; (2) Establishing a sterile and pyrogen-free dialysis water technology and the prevention and treatment technology of cardiovascular and cerebrovascular disease in hemodialysis patients, making the mortality rate of cardiovascular and cerebrovascular disease in patients decreased from 5.6%-8.3% to 0.55%-1.04%. (3) Creating the prevention and control technology in hemodialysis cross infection and developed related products, realizing that among the continuous more than 423,000 person-time hemodialysis patients no case suffered from hepatitis b or hepatitis c cross-infection.

Third, the key technology innovation in peritoneal dialysis: Creating the classified network management technology of peritoneal dialysis, which improved the treatment rate of end-stage renal disease patients, significantly reduced the incidence of peritonitis and made 5-year technical survival rate increase to 80.2%.

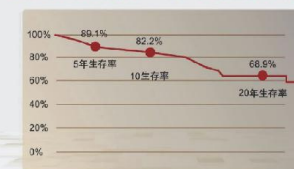
Fourth, creating the integrated treatment system of end-stage renal disease: based on the technological innovation, created the renal transplantation-centred integrated therapy system of renal replacement, realized the medical model shift from the single technology-dependent treatment to the individualized treatment for purpose of patients' benefits and efficacy maximization, which significantly improves the patients' long-term survival.

The project team has accomplished renal replacement therapy for 10447 cases suffering from end-stage renal diseases (as known as the largest number of cases in a single center in the world). 10-year survival rate reached 82.2%, identified as the international leading level. The team has hosted the national standard formulation of hemodialysis and participated in an international guideline, four health technical specification/guidelines and two industry operation procedures. In the report published by the kidney transplantation science registration system in Ministry of Health, both quantity and quality of the renal transplant of the project team in 2011-2013 were ranked first in the country. The team has totally published 366 papers, including 151 SCI articles (total impact factor of 487.1, 26 papers reach IF > 5.0, including TOP journal such as JAMA and so on) and been cited 1246 times. The results made 6 provincial science and technology awards (including 4 first prize) and 4 invention patents authorization. The overall technology has widely spread in use in 242 hospitals in 31 provinces, autonomous regions of the country, benefiting 163,000 patients. The results was highly recognized by the international professional organization and the project host professor Chen Jianghua was honored with International Outstanding Award by American National Kidney Foundation (NKF) in 2012. The project results have made a major contribution to the development of society and technology.

经一体化治疗,项目组终末期肾病患者预期寿命显著延长



终末期肾病一体化治疗成效



经鉴定达到了国际领先水平



Evolution of Motion Expressions in Chinese



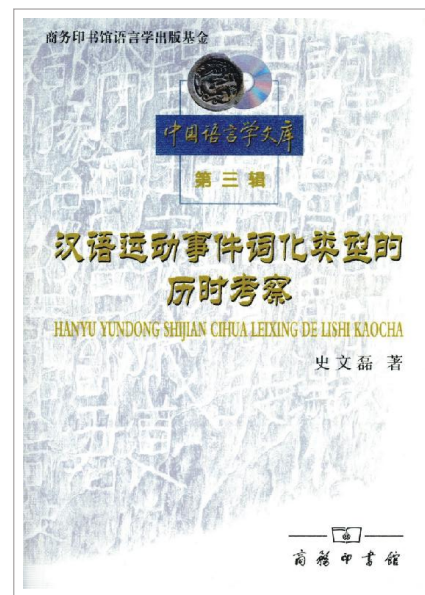
Selected as The TOP 10 Academic Advances of the Year

This study investigates from an evolutionary perspective the typological status of Chinese, with regard to linguistic encodings of motion event, with emphasis on the roles of both language structure and language use.

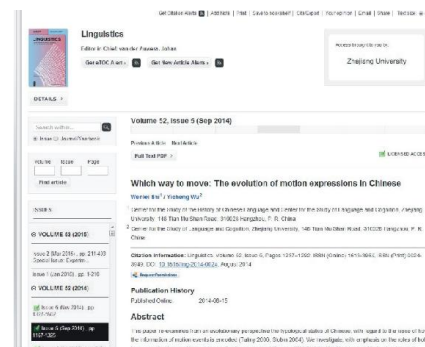
Project Leader: Wenlei Shi Yicheng Wu

Since Talmy's (1985, 1991) seminal work on the lexicalization pattern of motion event, it has attracted much attention from related disciplines, e.g., linguistics, cognitive science, psychology, and anthropology. This framework opens a new window to observe how language structure interacts with conceptual structure. In the past three decades, it has been successfully applied to many fields, e.g., first language acquisition, second language acquisition, translation, and sign language.

The typological status of Chinese with respect to the linguistic encoding of motion event has been an issue of much debate. This study is dedicated to investigating this issue from an evolutionary perspective, with emphasis on the roles of both language structure and language use. The main contribution of this study is basically four folds. First, the results of this study revise some viewpoints which used to be widely accepted, and deepen our knowledge of the typological



status of Chinese. Second, four types of evolution in terms of lexicalization of conceptual elements in the history of Chinese are generalized, i.e., from covert to overt encoding, from focusing on path to manner, from synthetic to analytic conflation, and alternation of different semantic elements. Third, based on the comparison between the evolution of Romance languages and that of Chinese, the mechanism and motivation of pattern shift are put forward. Forth, it investigates from a cross-linguistic perspective the four periods of Chinese (Old, Middle, Pre-Modern and Modern) in terms of parameters such as path, manner and ground. The statistical study shows that Chinese has been undergoing a typological shift from a verb-framed language to a satellite-framed language, and some crucial arguments of previous studies do not hold. It also proposes that the thinking-for-speaking pattern (Slobin 1996) of Modern Chinese is typologically different from that of Old Chinese.



This program makes an important contribution to the study of other fields, such as cognitive science, psychology, and anthropology. Some works of this program have been published in international top journals, e.g., *Linguistics* (2014(5):1237 - 1292) and domestic top journals, e.g., *Studies of the Chinese Language* (2011(6):483 - 498). The monograph *Evolution of Lexicalization Pattern of Motion Events: A Case Study from Chinese* was selected to be released by the Commercial Press in December 2014. Reviewers of this book remarked with high evaluation: "This book is of high quality, making a significant progress with respect to both description and explanation." "The arguments and viewpoints of this book are highly original." This program is supported by the National Social Science Foundation, and some works were awarded the Li Shuxiang Linguistic Award, which is one of the two highest level linguistic awards in China.

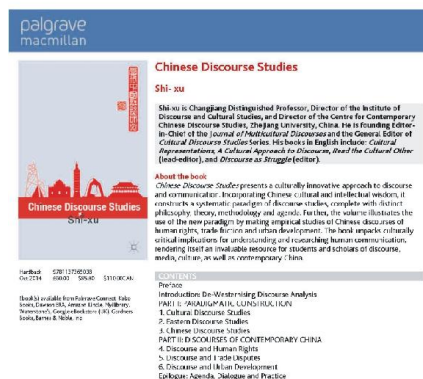
Contemporary Chinese Discourse Studies



Chinese Discourse Studies presents a culturally innovative approach to human communication in general and to the discourses of contemporary China in particular.

Project Leader: Xu Shi

Chinese Discourse Studies presents a culturally innovative approach to discourse and communication. Incorporating Chinese cultural and intellectual wisdom, it constructs a systematic research paradigm complete with distinct philosophy, theory, methodology and agenda. In addition, the volume illustrates the use of this paradigm by empirical studies of Chinese discourses of human rights, trade friction and urban development, respectively. An exemplar of Cultural Discourse Studies, Chinese Discourse Studies will have culturally critical implications for understanding and researching human communication, rendering itself an invaluable resource for students and scholars of discourse, communication, media, culture, as well as contemporary China.



Rock paper scissors: Dynamical pattern and its microscope mechanism at mixed strategy Nash equilibrium



Selected as The TOP 10 Academic Advances of the Year

Modern game theory was established 70 years ago, in which Rock-Paper-Scissors and Matching Pennies game being two elementary examples to illustrate mixed strategy Nash equilibrium. At these two games, firstly, they observed cyclic dynamical patterns.

Project Leader: Zhijian Wang

Game, or competition, exists generally in human society. Nash equilibrium is a central concept in modern game theory. In social science, Nash equilibrium has fundamental and pervasive impact which is comparable to that of DNA double helix in biological science and has brought an intellectual revolution to social science. Roc-Paper-Scissors and Matching-Pennies games are the two elementary examples to illustrate Nash equilibrium. In these two games, game dynamics theory has predicted the existence of dynamical pattern, but not observed in experiment.

By recruiting 360 students at Zhejiang University for the 5 parameter experiments of Rock-Paper-Scissors game (RPS), the researchers investigated the dynamics and its microscope mechanism. They found that, (1) The macroscopic dynamical pattern exists generally, disregarding the stability of the game; (2) The microscopic behaviors (individual conditional responses) depend on the game parameter; (3) The microscopic-macroscopic behaviors can be bridged mathematically exactly. At the same time, using an experiment having 12 parameters and 864 student subjects from Born University, they found the persistent (non-equilibrium) cycles in 2x2 (generalized matching pennies) games. They provided the first evidence of the dependence of the cyclic periods on the game payoff-matrix. These findings indicate --- there could generally exist persistent non-equilibrium dynamical pattern at mixed strategy Nash equilibrium.



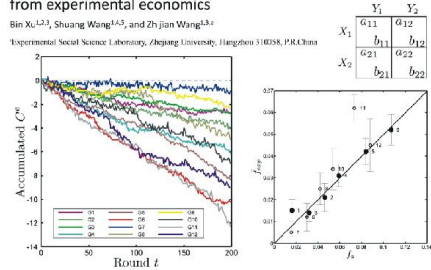
This interdisciplinary research team is composed of scholars of economics and physics. Team members include Research Professor Wang Zhijian (Experimental Social Science Laboratory, Zhejiang University), Professor Xu Bin (director of ESSL, ZJU), Research Professor Zhou Haijun (Institute of Theoretical Physics, Chinese Academy of Sciences), Wang Shuang (Undergraduate of Chu Kochen Honors College, Zhejiang University), Wang Zunfeng and Sun Anping (research and administrative assistants of ESSL, ZJU).

Eur. Phys. J.B (2014) 87:6
DOI: 10.1140/epjb/e2014-31074-2

Periodic frequencies of the cycles in 2 x 2 games: evidence from experimental economics

Bin Xu^{1,2,3}, Shuang Wang^{1,2,3}, and Zhijian Wang^{1,2,3*}

Experimental Social Science Laboratory, Zhejiang University, Hangzhou 310258, P.R.China



报道此项成果的部分学术网站、
教学科研机构和大众媒体



Nash equilibrium concept has fundamental and pervasive impact in social science. The founded dynamical pattern and the measurement could be a source of inspiration to the theory and application influenced by Nash equilibrium. The quantitative dynamical patterns were found by Zhijian Wang. Then Zhijian Wang and Bin Xu confirmed the dynamical pattern by conducting their own experiments, as well as by re-analyzing third party experiments. At their RPS experiments, the investigation was improved significant. Importantly, Bin Xu has found that the conditional responses depend on the incentive level in experiments. Her structural measurement on individual conditional response has opened up a novel way to model social dynamics based on real human behavior. By developing strictly mathematic model, firstly, Haijun Zhou has established the bridge between microscopic individual conditional responses to macroscopic dynamical pattern. He has successfully illustrated us a practical way to apply statistical physics methods on non-equilibrium social dynamical processes at the elementary game experiments.

At the end of 2014, their RPS was selected as “Best of 2014” by MIT Technology Reviews and “The science news highlight of 2014” by BBC ----- It is the first time for Chinese scientific achievement being highlighted in the social science realm. This result has become a topic at academic cycles, been cited by prestigious peer-reviewed papers, and become the course material for undergraduate students in Europe and US. More than 1000 media, including professional and prestigious media (e.g., Naturphilosophie, AMS, PhysicsToday, Phys.Org, PsychologyToday) have reported their RPS. At the same time, for its key scientific contribution, their paper on the periodic frequency of cycles at generalized Matching-Pennies game experiments was selected by “Advance in Engineering” .

The understanding of fundamental social science is a long process, just as the understanding of natural science. China is not an early started in the research of modern fundamentals social science with quantitative methods at the core. Hopefully, the research on experimental game theory will promote the fundamental social science research in China.

Social cycling and conditional responses in the Rock-Paper-Scissors game

Zhijian Wang^{1*}, Bin Xu^{1,2,3}, Haijun Zhou¹

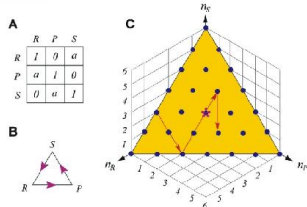


Figure 1 The Rock-Paper-Scissors game. (a) Indicated on the row and column respectively. (b) Non-stochastic dominance solution (R beats S, S beats P, P beats R) using the three action. (c) The social state space for a population of size $N=6$. Each fixed circle denotes a social state. Arrows (e.g., e_{12}) the star marks the control e_{ij} ; the arrows indicate their social state transitions at game rounds $t=1, 2, 3$.

Social cycling and conditional responses in the Rock-Paper-Scissors game

Zhijian Wang^{1*}, Bin Xu^{1,2,3}, Haijun Zhou¹

Scientific Reports 4, Article number: 5830 doi:10.1038/srep05830

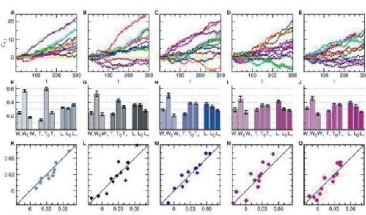


Figure 1 Social cycling by conditional response. The payoff parameter is $a = 1, 1, 1, 4, 0$ and 100 from left to right, three rows. (a-c) Accumulated cycle measure C^* vs population N ($N=100$) respectively. (d-f) Empirical observed US parameters, with the mean (black dot) and the SD (vertical bar) of each CR parameter obtained by considering all the population of the same N value. (g-i) Comparison between the empirical cycling frequency (vertical axis) of one population and the theoretical frequency (horizontal axis) obtained by using the empirical CR parameter of this population, as open.

Role of CRL4 Complex in Female Reproduction



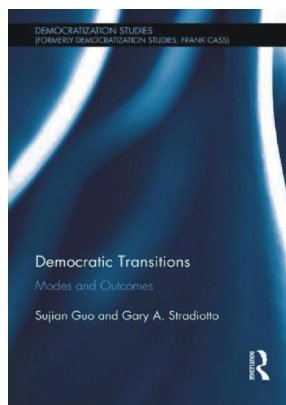
This book project aims at the theoretical exploration, quantitative testing, and cross-national comparative analysis of the relationship between modes and outcomes of democratic transitions since 1900 based on 130 cases across the world, i.e., the effects of transitioning modes on the survival and quality of democracy after the transition.

Project Leader: Sujian Guo

Global Democratic Transition Modes and Outcomes: A Comparative Study is a joint research project conducted by Sujian Guo, School of Public Affairs at Zhejiang University and Gary Stradiotto at George Washington University. The end result is the book titled Democratic Transitions: Modes and Outcomes published by Routledge in 2014.

This book project aims at the theoretical exploration, quantitative testing, and cross-national comparative analysis of the relationship between modes and outcomes of democratic transitions since 1900 based on 130 cases across the world, i.e., the effects of transitioning modes on the survival and quality of democracy after the transition.





Based on cross-national comparison of datasets of 130 cases of democratic transitions across the world since 1900 (Appendix A), the findings demonstrate that 1) modes of transition have direct impacts on the success and failure of democratic transition, i.e., democratic survival or duration and quality in post-transition; 2) cooperative transitions, i.e., cooperation between ruling elites and social forces, result in higher average levels of democratic survival rate and democratic quality than other modes of transition, and contribute to more successful and sustainable democracy.

The main contribution and academic values can be summarized as follows: 1) challenged international main stream hypotheses of democratic transition (determining effects of economic levels, religions, cultures, or regime types), and proposed a new hypothesis (modes of transition have determining effects on the success and failure of democratic transition); 2) created a cross-national dataset of all transitioning states since 1900, and conducted statistical, quantitative research on the relationship between modes and outcomes of democratic transition through a longitudinal, large-N and cross-national testing and comparison; 3) strongly confirmed that cooperative transitions would be more likely to contribute to successful, sustainable democracy than other modes of transition; 4) the results can be universally applicable to the observation and study of all states, including democratic, non-democratic, unfinished, transitioning, with practical and significant values for their democratic transition and consolidation in post-transition democracy.

Theory and System of Modern Administrative Law

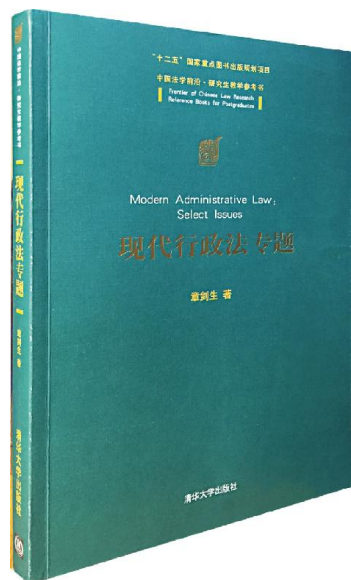


In the context of comprehensively promoting Rule by Law Strategy, the project of "Theory and System of Modern Administrative Law" is aimed at providing theoretical support, which generated from the local practices, for this policy.

Project Leader: Jiansheng Zhang

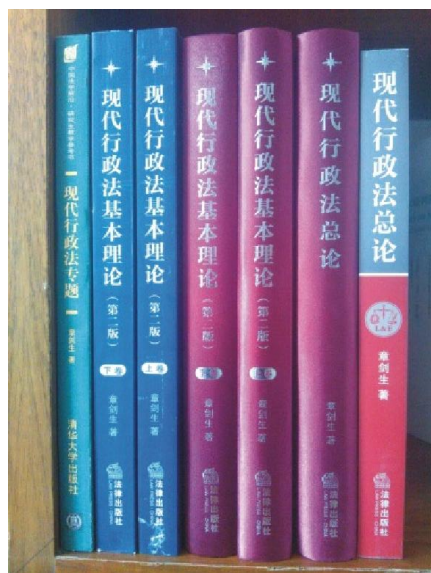
As a major part of Rule by Law Strategy, law-based administration has drawn great attention in recent years. The application of law-based administration depends on the support from administrative theory. To the contrary, the legal research of administrative law in China is still relatively weak, which is mainly manifested in the logical confusions of administrative legal system as well as the slavishly copy of foreign legal theories. In turn, the weakness of administrative law retards the development of Rule by Law Strategy. Thus, the key factor of law-based government put forward by the Party and our country since The Eighteenth National Congress of the Communist Party of China is to establish a set of self-consistent and theoretical legal system of modern administrative law.





The project of “Theory and System of Modern Administrative Law” consists of several books and dozens of papers published on leading journals such as China Legal Science, Chinese Journal of Law, China Social Sciences Digest and so forth. Three of them are regarded as prominent achievements of this program, which are The Basic Theory of Modern Administrative Law (Law Press, 2014), The Pandect of Modern Administrative Law (Law Press, 2014), Modern Administrative Law: Select Issues (Tsinghua University Press, 2014). Different from previous legal researches concerning administrative law, these three publications focus on analyzing legal issues with strong local problem-based consciousness in the context of transition period. Meanwhile, the trio has set up a complete system of perfect administrative law to avoid the problem of fragmented comprehension of administrative law. Moreover, they have initiated Case-study Method in order to facilitate the development of Chinese administrative law theory.

In response to the Rule by Law Strategy repeatedly emphasized by the Party and our country, the project of “Theory and System of Modern Administrative Law” has come up with several propositions. For example, “To standardize the effectiveness of administrative power while paying attention to the limitations”, “Modern Administrative Law is a dual-core system made up of intervention administration and interests-conferring administration”, “To strengthen the pragmatism of right relief for administrative counterpart and to develop a none-loophole right protection system of Modern Administrative Law”. All of these are stemming from Chinese judicial practices, and are of vital importance for interpreting Chinese problems as well as leading administrative practices. The major goal of this study is to provide modern administrative jurisprudence theory support for the Rule by Law Strategy. In addition, The Pandect of Modern Administrative Law mentioned above had been selected as part of the Text Books for Outstanding Legal Talent Training Plan. We believe that this book will contribute to cultivating preminent legal talents, which in turn would propel the development of Rule by Law Strategy.



THE OUTSTANDING ACHIEVEMENTS OF ZHEJIANG UNIVERSITY IN 2014

THE ACADEMIC COMMITTEE OF ZHEJIANG UNIVERSITY

The Outstanding Achievements of Zhejiang University in 2014

No.	Project Title	Achiever	Award Type	Levels	Department
1	Identification, molecular variation and pathogenicity of geminiviruses	Xueping Zhou, Qi Xie, Xiaorong Tao, Xiaofeng Cui, Zhonghui Zhang	National Award For Natural Science	Second Prize	Zhejiang University, Institute of Genetics and Developmental Biology, Chinese Academy of Sciences
2	Technology and application of automotive electronics embedded platform	Zhaohui Wu, Jun Li, Chenming Wu, Guoqing Yang, Wenqiang Chen, Hong Li	National Award for Technological Invention	Second Prize	Zhejiang University, China FAW Group Corporation, Zhejiang Geely Automobile Research Institute Co., Ltd.
3	Research and application of key technologies on cryogenic regenerative cryocoolers	Guobang Chen, Limin Qiu, Zhibua Gan, Tao Jin, Yonghua Huang, Kuizhang Zhu	National Award for Technological Invention	Second Prize	Institute of Refrigeration and Cryogenics, College of Energy Engineering, Zhejiang University; The 16th Research Institute of China Electronics Technology Group Corporation
4	Integrated technology of stir-type indirect sludge thermal drying and multi-circulating fluidized bed clean combustion	Jianhua Yan, Yong Chi, Fei Wang, Baoyun Yu, Qiyu Jin, Minren Yu, Qunsing Huang, Desjiang He, Xiaodong Li, Shengyong Lu	National Award for Science and Technology Progress	Second Prize	State Key Laboratory of Clean Energy Utilization, Institute for Thermal Power Engineering, College of Energy Engineering, Zhejiang University
5	Innovation and Application of the key technologies for replacement therapies of end stage of renal disease	Jianghua Chen, Jianyong Wu, Zhangfei Shou, Hong Fang, Jing Yuan, Ping Zhang, Hongfeng Huang, Hong Jiang, Xiaohui Zhang, Wenhan Peng, Hua Jiang, Rendong Wang, Fei Han, Jiong Tian, Zong Zhu	National Award for Science and Technology Progress	Second Prize	The First Affiliated Hospital, College of Medicine, Zhejiang University
6	Research and Industrialization of soft magnetic composites with enhanced performance	Mi Yan, Ruibiao Zhang, Yinzhu Jiang, Shan Tao, Xin Ke, Xiaoling Peng	Technological Invention Award of Zhejiang Province	First Prize	Zhejiang University, TDG Holding Co., Ltd., Zhejiang NBTM KeDa Magnetolectricity Co., Ltd.
7	Research and Application for Complex E-Service System	Zhaohui Wu, Jianwei Yin, Shuiguang Deng, Ying Li, Jian Wu, Jinwu Fan, Jiahong Xu, Xiaolin Zheng, Jianjun Lin, Deren Chen, Huancun Tian, Lu Jin	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Hundson Electronic Holding Co., LTD, Shenzhen iPanel Network Holding CO., LTD.
8	Key Technologies and Serial Equipments Research of Omni-Directional Mobile Platform	Yunan Zhang, Yong He, Fei Liu, Nanming Yan, Jian Zhang, Xiaolic Zhu, Zhongzhong Bei, Junzhong Hu, Yongni Shao, Yinghui Shang, Nianyu Li, Shuangshuang Wang, Peng Tian, Hong Zeng, Xiang Zhang	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Armored Force Engineering Institute of the PLA, Zhejiang Maximal Forklift Co., LTD, Hangzhou Dianzi University
9	Key Technologies Research and Application of High-power Marine Gearbox	Shuiguang Tong, Weihui Liu, Bin Song, Feiyun Cong, Yanxiang Wen, Ning Tang, Xiaomei Zhou, Jianwei Wu, Yue Yu, Qiang Wang, Yi Zhou, Xiaohong Tong, Chenfa Xu	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Hangzhou Advance Gearbox Group Co., Ltd

10	Key Technology and Application of Temperature and Pressure Reducing in Complex Work Condition	Zhijiang Jin, Lilong Chen, Ming Zhang, Baoqing Liu, Rongbin Chen, Lin Wei, Ruya Liu, Jinyuan Qian, Shenggen Wang, Weiping Chen	Scientific & Technological Award of Zhejiang Province	First Prize	Institute of Process Equipment, College of Chemical and Biological Engineering, Zhejiang University Hangzhou Worldwides Valve Co., Ltd.
11	National Rearch Project on the Key Digital Medical Technology and Regional Demonstration and Application	Lanjuan Li, Kun Chen, Jinsong Li, Jianfeng Shen, Qi Xia, Shigui Yang, Huawei Luo, Min Zhang, Qing Guo, Ou Jin, Yi Liu, Meiyuan Xing, Jianfeng Wei, Qianfeng He, Bing Ju	Scientific & Technological Award of Zhejiang Province	First Prize	The First Affiliated Hospital of College of Medicine, Zhejiang University, Institute of Medical-care Information Technology, Zhejiang Health Information Center, Zhejiang Medical Association, Hangzhou Normal University
12	Innovations of comprehensive care for critically ill neonates: basic research and application	Lizhong Du, Shiqiang Shang, Xiaolu Ma, Xuefeng Xu, Liping Shi, Liyan Zhang, An Chen, Zheng Cheng, Lihua Cheng, Fang Luo, Tianming Yuan, Huimin Yu	Scientific & Technological Award of Zhejiang Province	First Prize	The children's hospital Zhejiang University school of medicine
13	Research and Industrialization of Key Technology for Pantoprazole Sodium and Preparation	Fuqiang Hu, Hui Wu, Hong Yuan, Zhongli Yao, Zhiqun Chen, Yun Zhang, Yongzhong Du, Zhongjun Xu, Jian You, Chuanping Zhao	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Hangzhou Sino-US East China Pharmaceutical Co., LTD
14	Selective catalytic reduction (SCR) technology for high efficiency NOx control and its application	Xiang Gao, Mingjiang Ni, Zhongyang Luo, Kefa Cen, Jun Jin, Jianhong Mao, Chenghang Zheng, Wei Meng, Yongxin Zhang, Yi Wen, Zhenliang Zhang, Quan Chen, Linzhong Fu	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Zhejiang Lantian Qiushi Environmental Protection Co., Ltd., Zhejiang Tiandi Environmental Protection Engineering Co., Ltd., Insigma M&E Engineering Co., Ltd, Zhejiang Municipal Research Institute of Environmental Protection, Zhejiang Haijiang Environmental Materials Co., Ltd, RAGA Technology Co., Ltd, Lan-Tian Environmental Engineering Co., Ltd
15	Key Technology for Structural System of Thin-walled Concrete-filled Steel Tubes and Composite Beams and its Engineering Application	Weiliang Jin, Ju Chen, Xiaohong Sheng, Juhu Yu, Ben Young, Dawei Zhang, Jin Xia, Chen Xu, Yuelong Xing, Weibin Yuan, Jun Fu, Yuxi Zhao, Hailong Wang	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang University, Zhejiang Zhejiang Electric Power Design Institute, City infrastructure construction development center of Hang Zhou, The University of Hong Kong
16	Control Technology of Deep Pit Excavation under Complicated Stress in Deep Soft Soils and its Application	Changjie Xu, Hongwei Yin, Jian Zhou, Jinjian Chen, Hong Zhan, Xuzhong Xie, Tianhe Jiang, Zhigang Cao, Tingchao Yu, Lujun Gu, Xiaohua Ma, Yuanlei Xu, Yue Gao	Scientific & Technological Award of Zhejiang Province	First Prize	Zhejiang Univ., Zhejiang Jifeng Geotechnique Co. Ltd., Shanghai Jiastong Unit., Zhejiang Province Dacheng Construction Co. Ltd., etc.
17	The functional recombination and industrialization of deep-processing tea products by biocatalysis	Youying Tu, Hairong Xu, Xueliang Sun, Bo Li, Yuanyuan Wu, Zhusheng Fu, Xianmu Zheng, Yi Xu, Chen Xia, Jianhong Lai, Jianyi Pan, Haiqiang Peng, Huajun Yu	Scientific & Technological Award of Zhejiang Province	First Prize	Department of Tea Science, Zhejiang University, Hangzhou Easily Biotechnology Co., Ltd, Zhejiang Minghuang Natural Products Development CO.LTD



The ZJU100 Papers of Zhejiang University in 2013

18	The study of the pathophysiological mechanisms and diagnosis and treatment strategies of hemorrhagic stroke	Jiamin Zhang, Gao Chen, Lan Wang, Jing Xu, Mann Hong, Sheng Chen, Xiangdong Zhu, Qun Wu, Min Lou, Chongxin Sun, Dingqiao Jiang, Hong Shen, Wenming Fu	Scientific & Technological Award of Zhejiang Province	First Prize	Second Affiliated Hospital, School of Medicine, Zhejiang University
19	Optical microfibers and nanofibers: photonic and applications	Limin Tong, Xin Gao, Xiaoshun Jiang, Jingji Luo, Fuming Gu	Natural Science Award of Zhejiang Province	First Prize	Department of Optical Engineering, Zhejiang University
20	Rheology and applications of complicated systems based on particle filled polymers	Qiang Zheng, Yifu Song, Min Zuo, Miao Du, Yonggang Shuangqun	Natural Science Award of Zhejiang Province	First Prize	Department of Polymer Science and Engineering, Zhejiang University
21	Multi-Freedom Regulation and Hybrid Topologies for Wide Voltage Range Inverter-fed Converters	Xiangping He, Weihua Li, Zhuoming Qian, Rongchang Zhao, Jing Zhao	Natural Science Award of Zhejiang Province	First Prize	Electrical Engineering College, Zhejiang University
22	Functional Design, Controllable Synthesis and Potential Applications of Luminescent Functional Metal-Organic Frameworks	Guodong Qian, Yuanling Cui, Yu Yang, Hui Xu, Banglin Chen	Natural Science Award of Zhejiang Province	First Prize	State Key Laboratory of Silikon Materials, School of Materials Science & Engineering, Zhejiang University
23	The study of community organization and its function establishment of Wenzhou	Dan Mao, Aijun Li, Shaoyin Wang, Jianhong Chen, Meiyang Ma, Cheng Xun Lu, Junyao Huang, Changfeng He, Jin Hu	Essays of civil affairs forum Ministry of Civil Affairs	First Prize	School of public affairs Zhejiang University, Centre for Local Governance studies Zhejiang University

[1] Z. Y. Zhang, K. K. Zhao, Low-Rank Matrix Approximation with Manifold Regularization, *IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE*, 2013, 35, 1717.

[2] H. Zhang, G. N. Ge, Optimal Quaternary Consensus-Weight Codes With Weight Four and Distance Five, *IEEE TRANSACTIONS ON INFORMATION THEORY*, 2013, 59, 1617.

[3] J. H. Liu, S. Li, Y. Shen, Compressed Data Separation With Redundant Dictionaries, *IEEE TRANSACTIONS ON INFORMATION THEORY*, 2013, 59, 4309.

[4] S. X. Li, S. H. Hu, T. Feng, G. N. Ge, The Weight Distribution of a Class of Cyclic Codes Related to Hermitian Forms Groups, *IEEE TRANSACTIONS ON INFORMATION THEORY*, 2013, 59, 3069.

[5] E. Gao, Y. T. Yang, G. N. Ge, An Improvement on the Gilbert-Vanderham Bound for Permutation Codes, *IEEE TRANSACTIONS ON INFORMATION THEORY*, 2013, 59, 3075.

[6] T. Feng, K. Momeni, Evaluation of the Weight Distribution of a Class of Cyclic Codes Based on Index 3 Gauss Sums, *IEEE TRANSACTIONS ON INFORMATION THEORY*, 2013, 59, 5980.

[7] H. D. Wang, C. H. Dong, Q. H. Mao, R. Khan, X. Zhou, C. X. Li, B. Chen, J. H. Tang, Q. P. Su, M. H. Feng, Multiband Superconductivity of Heavy Elements in a TlBa₂Se₂ Single Crystal, *PHYSICAL REVIEW LETTERS*, 2013, 111, 207001.

[8] T. Wang, D. M. Zhao, Effects of source correlation on the spectral shift of light waves on scattering, *OPTICS LETTERS*, 2013, 38, 1545.

[9] Z. D. Han, J. B. Xu, Quantum phase transition in fiber-coupled quantum networks, *OPTICS LETTERS*, 2013, 38, 3639.

[10] G. C. Yu, X. Z. Yan, C. Y. Han, F. H. Huang, Characterization of supramolecular gels, *CHEMICAL SOCIETY REVIEWS*, 2013, 42, 6697.

[11] Q. Sun, Y. J. Lu, E. Zhu, L. Wang, X. J. Meng, E. S. Xiao, Superhydrophobic, chiral, and mesoporous TdPbIn copolymer coordinated to ruthenium species as an efficient catalyst for asymmetric transfer hydrogenation, *NANO TODAY*, 2013, 8, 342.

[12] G. C. Yu, J. Y. Li, W. Xu, C. Y. Han, Z. W. Mao, C. Y. Gao, F. H. Huang, Carbon Nanotube/Bioconjugate Bola-Amphiphilic Supramolecular Biopolymer: Preparation and Their Application in Bacterial Cell Agglutination, *ADVANCED MATERIALS*, 2013, 25, 6373.

[13] X. E. S. Y. Dong, P. E. Wei, D. Y. Xia, E. H. Huang, A Novel Diblock Copolymer with a Supramolecular Polymer Block and Application in Controlled Release, *ADVANCED MATERIALS*, 2013, 25, 5725.

[14] S. Y. Dong, B. Zhang, Y. Xia, C. Y. Han, J. Y. Yuan, M. Antonetti, F. H. Huang, LCST-Type Phase Behavior Induced by Ethyl(2)acrylate/Liquid Hept-Guest Complexation, *ADVANCED MATERIALS*, 2013, 25, 6868.

[15] Q. Zhang, K. Chen, W. H. Bao, Y. L. Zhang, F. J. Chen, B. E. Shi, Stereoselective Synthesis of Chiral alpha-Amino Acids, *Journal of Polymer Science: Part A: Polymer Chemistry*, 2013, 51, 4148. ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, 2013, 52, 15358.

[16] P. F. Zhang, J. Y. Yuan, T. P. Fellinger, M. Antonetti, H. R. Li, Y. Wang, Improving Hydrothermal Carbonization by Using Poly(ene) Imidazole, *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2013, 52, 6028.

[17] Y. Y. Jin, Q. Sun, C. D. Qi, C. G. Yang, J. Xu, E. Chen, X. J. Meng, E. Dong, E. S. Xiao, Solvent-Free Synthesis of Sulfonated Poly(arylene Ether Sulfone)s, *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2013, 52, 9172.

[18] C. He, C. L. Zhu, Z. F. Dai, C. C. Tang, H. E. Dong, Directed Total Synthesis of Indoxamycin A, and E. ANGEWANDTE CHEMIE-INTERNATIONAL EDITION, 2013, 52, 10620.

[19] G. K. Gao, J. J. Zhang, X. Y. Luo, W. J. Liu, F. Ding, H. R. Li, C. M. Wang, Tuning Anion-Functionalized Ionic Liquids for Improved SO₂ Capture, *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2013, 52, 10620.

[20] Z. K. Chen, Q. Q. Yan, Z. X. Liu, Y. M. Xu, Y. H. Zhang, Copper-Mediated Synthesis of 1,2,3-Triazole from N-Trihydroxyacetone and Acetone, *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*, 2013, 52, 13334.

[21] P. F. Zhang, Y. T. Gong, H. R. Li, Z. K. Chen, Y. Wang, Solvent-free aerobic oxidation of hydrocarbons and alcohol with O₂/K₂S₂O₈-doped carbon from glucose, *NATURE COMMUNICATIONS*, 2013, 4, 1925.

[22] R. Zeng, S. Z. Wu, C. L. Fu, S. M. Ma, Room-Temperature Synthesis of Functionalized Alkenes via Photoelectro-Catalytic Functionalization, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2013, 135, 18284.

[23] G. C. Yu, J. Ma, C. Y. Han, Y. Xia, G. P. Tang, Z. W. Mao, C. Y. Gao, E. H. Huang, A Super-Functionalized Amphiphilic P(HEMA)-Janus Synthesis, Self-Assembly in Water and Application in Bacterial Cell Agglutination, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2013, 135, 10310.

[24] X. Z. Yan, S. J. Li, T. R. Cook, X. E. S. Y. Dong, J. B. Blodok, Y. H. Shi, G. C. Yu, J. Y. Li, F. H. Huang, J. J. Zhang, Hierarchical Self-Assembly of Well-Ordered Supramolecular Nanofibers and Nanoparticles, *Journal of Polymer Science: Part A: Polymer Chemistry*, 2013, 51, 1403. JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, 2013, 135, 14036.

[25] X. Z. Yan, B. Jiang, T. R. Cook, Y. Y. Zhang, J. Y. Li, Y. H. Shi, E. H. Huang, H. B. Yang, B. J. Sang, Dendronized Organomodulator(I) Metallacyclic Polymers Constructed by Hierarchical Coordination-Driven Self-Assembly and Hydrogen-Bonding Interactions, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2013, 135, 16813.

[26] Q. Wu, P. Sault, M. T. Reetz, Laboratory Evolution of Fluorocopolymer Catalysts: Aromatic Lipase B₁ Mutant with Broad Substrate Scope, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2013, 135, 1872.

[27] X. E. S. Y. Dong, J. Y. Li, X. Z. Yan, E. H. Huang, A Supramolecular Cross-Linked Congruent Polymer Network for Multiple Hydrogen Sensing, *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*, 2013, 135, 74.

[28] X. Z. Yan, S. J. Li, J. B. Blodok, T. R. Cook, J. Z. Chen, Y. Y. Zhang, X. E. S. Y. H. Huang, E. H. Huang, E. J. Sang, Supramolecular Polymers with tunable interfaces via hierarchical coordination-driven self-assembly and hydrogen bonding interactions, *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 2013, 110, 15955.

[29] G. C. Yu, R. Y. Gao, R. Chen, J. J. Ma, J. F. Han, X. Y. Wang, X. R. Xu, T. Jiang, Q. Q. Yan, K. Y. Gao, E. D. Qin, R. K. Tang, C. E. Qin, Rational design of thermostable vaccines by engineered peptide-induced virus self-immobilization under physiological conditions, *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 2013, 110, 7619.

[30] S. H. Zou, R. H. Li, H. Kobayashi, J. Liu, J. Fan, Photo-assisted generation of transition metal nitrate coupled with room temperature C-C bond cleavage of acetonitrile, *CHEMICAL COMMUNICATIONS*, 2013, 49, 1906.

[31] X. Z. Yan, P. E. Wei, Z. T. Li, B. Zhang, S. Y. Dong, F. H. Huang, Q. Z. Zhou, A dynamic [1+2+2] reaction with Pd-templated complex formed via threading-followed-by-complexation, *CHEMICAL COMMUNICATIONS*, 2013, 49, 2512.

[32] P. E. Wei, X. Z. Yan, J. Y. Li, Y. Ma, F. H. Huang, Two 2,3-copropyl[5]arene conformational isomers synthesis crystal structures and host-guest complexation of their 1:1 complexes with 2,3-dimethyl-2-butene in water, *CHEMICAL COMMUNICATIONS*, 2013, 49, 1070.

[33] L. Wang, B. Zhang, W. Zhang, J. Zhang, X. H. Gao, X. J. Meng, D. S. Su, E. S. Xiao, Positively-charged bulk ionic particles as an efficient catalyst for oxidation of styrene with molecular oxygen, *CHEMICAL COMMUNICATIONS*, 2013, 49, 3449.

[34] H. Wang, X. X. Li, P. Chen, M. Chen, X. M. Zheng, An enhanced plasma-catalytic method for D₂O₂ in simulated flue gas at room temperature, *CHEMICAL COMMUNICATIONS*, 2013, 49, 9353.

- [37] C. M. Wang, J. J. Zheng, G. K. Cui, X. Y. Luo, Y. Guo, H. R. Li: Highly efficient SO₂ capture through tuning the interaction between anion-functionalized ionic liquids and SO₂. CHEMICAL COMMUNICATIONS. 2013, 49, 1166.
- [38] P. Sang, M. Yu, H. F. Tu, J. W. Zou, Y. H. Zhang: Highly regioselective synthesis of fused seven-membered rings through copper-catalyzed cross-coupling. CHEMICAL COMMUNICATIONS. 2013, 49, 701.
- [39] X. J. Li, Y. Y. Zhao, H. J. Qu, Z. J. Mao, X. F. Lin: Organocatalytic asymmetric multicomponent reactions of aromatic aldehydes and anilines with beta-ketocesters: facile and atom-economical access to chiral tetrahydropyridines. CHEMICAL COMMUNICATIONS. 2013, 49, 1401.
- [40] X. F. Ji, M. M. Zhang, X. Z. Yan, J. Y. Li, F. H. Huang: Synthesis of a water-soluble bis(m-phenylene)-32-crown-10-based cryptand and its pH-responsive binding to a paraquat derivative. CHEMICAL COMMUNICATIONS. 2013, 49, 1178.
- [41] L. Y. Gao, C. Y. Han, B. Zheng, S. Y. Dong, F. H. Huang: Formation of a pillar[5]arene-based [3]pseudorotaxane in solution and in the solid state. CHEMICAL COMMUNICATIONS. 2013, 49, 472.
- [42] J. D. Duan, F. Y. Cao, X. Q. Wang, C. Ma: A tertiary amine catalyzed carbocyclization sequence to furnish spirocyclic hexene systems having vicinal quaternary stereocenters. CHEMICAL COMMUNICATIONS. 2013, 49, 1124.
- [43] X. D. Chi, M. Xue, Y. J. Ma, X. Z. Yan, F. H. Huang: A pillar[6]arene with mono(ethylene oxide) substituents: synthesis and complexation with diquat. CHEMICAL COMMUNICATIONS. 2013, 49, 8175.
- [44] W. Chen, Y. Xiao, X. Y. Liu, Y. H. Chen, J. J. Zhang, X. R. Xu, R. K. Tang: Overcoming cisplatin resistance in chemotherapy by biomimicralization. CHEMICAL COMMUNICATIONS. 2013, 49, 4932.
- [45] J. Cao, X. Huang, L. L. Wu: Nickel-catalyzed manipulation of tertiary phosphines via highly selective C-P bond cleavage. CHEMICAL COMMUNICATIONS. 2013, 49, 7747.
- [46] J. Cao, X. Huang, L. L. Wu: Highly regioselective ring-opening coupling of diarylmethylencyclopropa[b]naphthalenes with Grignard reagents. CHEMICAL COMMUNICATIONS. 2013, 49, 4788.
- [47] J. Zhan, Y. Y. Zhong, X. J. Yu, J. F. Peng, S. B. Chen, J. Y. Yin, J. J. Zhang, Y. Zhu: Multi-class method for determination of veterinary drug residues and other contaminants in infant formula by ultra performance liquid chromatography-tandem mass spectrometry. FOOD CHEMISTRY. 2013, 138, 827.
- [48] Z. P. Huang, Q. Subhani, Z. Y. Zhu, W. Q. Guo, Y. Zhu: A single pump cycling-column-switching technique coupled with homemade high exchange capacity columns for the determination of iodate in iodized edible salt by ion chromatography with UV detection. FOOD CHEMISTRY. 2013, 139, 144.
- [49] L. Y. Zhang, Y. Zhong, Z. S. He, J. M. Wang, J. Xu, J. Cai, N. Zhang, H. Zhou, H. Q. Fan, H. B. Shao, J. Q. Zhang, C. N. Cao: Surfactant-assisted photochemical deposition of three-dimensional nanoporous nickel oxyhydroxide films and their energy storage and conversion properties. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 4277.
- [50] H. Y. Zhang, L. L. Chu, Q. Xiao, L. F. Zhu, C. G. Yang, X. J. Meng, F. S. Xiao: One-pot synthesis of Fe-Beta zeolite by an organoemphlate-free and seed-directed route. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 3254.
- [51] S. D. Xu, Y. J. Hong, C. L. Chen, S. Li, L. P. Xiao, J. Fan: A general synthetic strategy for ordered, extra-large mesoporous metal oxides via uniform sol-gel coating. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 6191.
- [52] W. Xiao, J. B. Xu, X. Y. Liu, Q. L. Hu, J. G. Huang: Antibacterial hybrid materials fabricated by nanocoating of microfibril bundles of cellulose substance with titanium/chitosan/silver-nanoparticle composite films. JOURNAL OF MATERIALS CHEMISTRY B. 2013, 1, 3477.
- [53] S. X. Xia, L. P. Zheng, W. S. Ning, L. N. Wang, P. Chen, Z. Y. Hou: Multiwall carbon nanotube-pillared layered Cu-0.4/Mg5.6Al2O8.6: an efficient catalyst for hydrogenolysis of glycerol. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 11548.
- [54] L. K. Wu, J. M. Hu, J. Q. Zhang, C. N. Cao: A silica co-electrodeposition route to highly active Ni-based film electrodes. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 12885.
- [55] L. K. Wu, J. M. Hu, J. Q. Zhang: One step sol-gel electrochemistry for the fabrication of superhydrophobic surfaces. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 14471.
- [56] Z. Wang, T. Chen, W. X. Chen, K. Chang, L. Ma, G. C. Huang, D. Y. Chen, J. Y. Lee: CTAB-assisted synthesis of single-layer MoS₂-graphene composites as anode materials of Li-ion batteries. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 2202.
- [57] L. Wang, J. Zhang, S. Yang, Q. Sun, L. F. Zhu, Q. M. Wu, H. Y. Zhang, X. J. Meng, F. S. Xiao: Sulfonated hollow sphere carbon as an efficient catalyst for acetalisation of glycerol. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 9037.
- [58] R. F. Nie, J. J. Shi, W. C. Da, W. S. Ning, Z. Y. Hou, F. S. Xiao: A sandwich N-doped graphene/Co₃O₄ hybrid: an efficient catalyst for selective oxidation of olefins and alcohols. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 9037.
- [59] Z. F. Lv, Q. Sun, X. J. Meng, F. S. Xiao: Superhydrophilic mesoporous sulfonated melamine-formaldehyde resin supported palladium nanoparticles as an efficient catalyst for biofuel upgrade. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 8630.
- [60] J. J. Liu, S. H. Zou, S. Li, X. F. Liao, Y. J. Hong, L. P. Xiao, J. Fan: A general synthesis of mesoporous metal oxides with well-dispersed metal nanoparticles via a versatile sol-gel process. JOURNAL OF MATERIALS CHEMISTRY A. 2013, 1, 4038.
- [61] Y. Q. Gu, J. G. Huang: Ultrathin cellulose film coating of porous alumina membranes for adsorption of superoxide dismutase. JOURNAL OF MATERIALS CHEMISTRY B. 2013, 1, 5636.
- [62] M. Zhang, L. J. Hang, W. X. Yao, Z. Y. Lu, L. M. Tolbert: A Novel Strategy for Three-Phase/Switch/Level (Vienna) Rectifier Under Severe Unbalanced Grids. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. 2013, 60, 4243.
- [63] J. B. Hu, H. L. Xu, Y. K. He: Coordinated Control of DFIG's RSC and GSC Under Generalized Unbalanced and Distorted Grid Voltage Conditions. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. 2013, 60, 2808.
- [64] L. J. Hang, M. Zhang, L. M. Tolbert, Z. Y. Lu: Digitized Feedforward Compensation Method for High-Power-Density Three-Phase Vienna PFC Converter. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. 2013, 60, 1512.
- [65] D. Chen, J. M. Zhang, Z. M. Qian: An Improved Repetitive Control Scheme for Grid-Connected Inverter With Frequency-Adaptive Capability. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. 2013, 60, 814.
- [66] Y. Zhu, D. H. Xu, N. He, J. Ma, J. Zhang, Y. F. Zhang, G. Q. Shen, C. S. Hu: A Novel RPV (Reactive-Power-Variation) Antisliding Method Based on Adapted Reactive Power Perturbation. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 4998.
- [67] Y. Zhao, X. Xiang, W. H. Li, X. N. He, C. L. Xia: Advanced Symmetrical Voltage Quadrupler Rectifiers for High Step-Up and High Output-Voltage Converters. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 1622.
- [68] W. P. Zhang, D. H. Xu, X. Li, R. Xie, H. J. Li, D. Z. Dong, C. Sun, M. Chen: Seamless Transfer Control Strategy for Fuel Cell Uninterruptible Power Supply System. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 717.
- [69] J. Zhang, D. H. Xu, G. Q. Shen, Y. Zhu, N. He, J. Ma: An Improved Islanding Detection Method for a Grid-Connected Inverter With Intermittent Bilateral Reactive Power Variation. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 268.
- [70] D. M. Zhang, S. T. Wang, F. W. Zhou, L. J. Wang, Z. Y. Lu: Predictive Fast DSP-Based Current Controller for a 12-Pulse Hybrid-Mode Thyristor Rectifier. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 5263.
- [71] X. K. Wu, Z. H. Wang, J. M. Zhang: Design Considerations for Dual-Output Quasi-Resonant Flyback LED Driver With Current-Sharing Transformer. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 4820.
- [72] J. D. Wu, H. M. Wu, C. S. Li, W. H. Li, X. N. He, C. L. Xia: Advanced Four-Pair Architecture With Input Current Balance Function for Power Over Ethernet (PoE) System. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 2343.
- [73] W. H. Li, S. Zong, F. R. Liu, H. Yang, X. N. He, B. Wu: Secondary-Side Phase-Shift-Controlled ZVS DC/DC Converter With Wide Voltage Gain for High Input Voltage Applications. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 5128.
- [74] W. H. Li, Y. M. He, X. N. He, Y. J. Sun, F. Wang, L. Ma: Series Asymmetrical Half-Bridge Converters With Voltage Autobalance for High Input-Voltage Applications. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 3665.
- [75] W. C. Li, X. Xiang, C. S. Li, W. H. Li, X. N. He: Interleaved High Step-Up ZVT Converter With Built-In Transformer Voltage Doubler Cell for Distributed PV Generation System. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 300.
- [76] L. Huang, M. Zhang, L. J. Hang, W. X. Yao, Z. Y. Lu: A Family of Three-Switch Three-State Single-Phase Z-Source Inverters. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 2317.
- [77] N. He, D. H. Xu, Y. Zhu, J. Zhang, G. Q. Shen, Y. F. Zhang, J. Ma, C. J. Liu: Weighted Average Current Control in a Three-Phase Grid Inverter With an LCL Filter. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 2785.
- [78] Y. J. Gu, W. H. Li, Y. Zhao, B. Yang, C. S. Li, X. N. He: Transformerless Inverter With Virtual DC Bus Concept for Cost-Effective Grid-Connected PV Power Systems. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 793.
- [79] W. J. Du, J. M. Zhang, Y. Zhang, Z. M. Qian: Stability Criterion for Cascaded System With Constant Power Load. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 1843.
- [80] C. F. Cai, W. C. Zhou, K. Sheng: Characteristics and Application of Normally-Off SiC-JFETs in Converters Without Antiparallel Diodes. IEEE TRANSACTIONS ON POWER ELECTRONICS. 2013, 28, 4850.
- [81] J. T. Cui, X. R. Li, L. Y. Zhao: Linear Mixture Analysis for Hyperspectral Imagery in the Presence of Less Prevalent Materials. IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING. 2013, 51, 4019.
- [82] Z. X. Li, X. Zhuo, L. Vu-Quoc, B. A. Izzuddin, H. Y. Wei: A four-node corotational quadrilateral elastoplastic shell element using vectorial rotational variables. INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN ENGINEERING. 2013, 95, 181.
- [83] S. Guo, Y. Shao, T. Q. Zhang, D. Z. Zhu, Y. P. Zhang: Physical Modeling on Sand Erosion around Defective Sewer Pipes under the Influence of Groundwater. JOURNAL OF HYDRAULIC ENGINEERING. 2013, 139, 1247.
- [84] W. L. Zhang, Y. Lin, J. Qian, W. Q. Chen, H. J. Gao: Tuning Molecular Adhesion via Material Anisotropy. ADVANCED FUNCTIONAL MATERIALS. 2013, 23, 4729.
- [85] H. F. Zhou, S. X. Qu, W. Yang: An atomistic investigation of structural evolution in metallic glass matrix composites. INTERNATIONAL JOURNAL OF PLASTICITY. 2013, 44, 147.
- [86] T. F. Li, C. Keplinger, R. Baumgartner, S. Bauer, W. Yang, Z. G. Suo: Giant voltage-induced deformation in dielectric elastomers near the verge of snap-through instability. JOURNAL OF THE MECHANICS AND PHYSICS OF SOLIDS. 2013, 61, 611.
- [87] F. Hu, W. Q. Zhu: Stabilization of Quasi Integrable Hamiltonian Systems With Fractional Derivative Damping by Using Fractional Optimal Control. IEEE TRANSACTIONS ON AUTOMATIC CONTROL. 2013, 58, 2968.
- [88] Y. Gan, W. J. Qi, Y. G. Shen, Z. Chen: Electron relaxation effect on the sub-100-fs laser interaction with gold thin film. OPTICS LETTERS. 2013, 38, 2397.
- [89] T. Pabst, J. F. Kok, E. J. R. Parteli, H. J. Herrmann: Flux Saturation Length of Sediment Transport. PHYSICAL REVIEW LETTERS. 2013, 111, 218002.
- [90] L. P. Luo, L. M. Shen, F. Sun, Z. J. Ma: Immunoprecipitation coupled with HPLC-MS/MS to discover the aromatase ligands from Glycyrrhiza uralensis. FOOD CHEMISTRY. 2013, 138, 315.
- [91] L. Lu, Z. Chen, B. Yao, Q. F. Wang: A Two-Loop Performance-Oriented Tip-Tracking Control of a Linear-Motor Flexible Beam System With Experiments. IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS. 2013, 60, 1011.
- [92] L. T. Wang, G. F. Gong, H. Y. Yang, X. Yang, D. Q. Hou: The Development of a High-Speed Segment Erecting System for Shield Tunneling Machine. IEEE-ASME TRANSACTIONS ON MECHATRONICS. 2013, 18, 1713.
- [93] F. Wang, L. Y. Gu, Y. Chen: A Hydraulic Pressure-Boost System Based on High-Speed Non-OFF Valves. IEEE-ASME TRANSACTIONS ON MECHATRONICS. 2013, 18, 733.
- [94] C. X. Hu, B. Yao, Q. F. Wang: Performance-Oriented Adaptive Robust Control of a Class of Nonlinear Systems Preceded by Unknown Dead Zone With Comparative Experimental Results. IEEE-ASME TRANSACTIONS ON MECHATRONICS. 2013, 18, 178.
- [95] Z. Chen, B. Yao, Q. F. Wang: Accurate Motion Control of Linear Motors With Adaptive Robust Compensation of Nonlinear Electromagnetic Field Effect. IEEE-ASME TRANSACTIONS ON MECHATRONICS. 2013, 18, 1122.
- [96] Z. Bo, W. G. Zhu, W. Ma, Z. H. Wen, X. R. Shuai, J. H. Chen, J. H. Yan, Z. H. Wang, K. F. Cen, X. L. Feng: Vertically Oriented Graphene Bridging Active-Layer/Current-Collector Interface for Ultrahigh Rate Supercapacitors. ADVANCED MATERIALS. 2013, 25, 5799.
- [97] J. S. Zhou, W. H. Hou, P. Qi, X. Gao, Z. Y. Luo, K. F. Cen: CoO₂-TiO₂ Sorbents for the Removal of Elemental Mercury from Syngas. ENVIRONMENTAL SCIENCE & TECHNOLOGY. 2013, 47, 10056.
- [98] H. Zhou, B. Zhou, L. T. Li, H. L. Zhang: Experimental Measurement of the Effective Thermal Conductivity of Ash Deposit for High Sodium Coal (Zhun Dong Coal) in a 300 KW Test Furnace. ENERGY & FUELS. 2013, 27, 7008.
- [99] H. Zhou, H. L. Zhang, L. T. Li, B. Zhou: Ash Deposit Shedding during Co-combustion of Coal and Rice Hull Using a Digital Image Technique in a Pilot-Scale Furnace. ENERGY & FUELS. 2013, 27, 7126.
- [100] H. Zhou, T. Ren, Y. Huang, S. T. Hu, K. F. Cen: Low-Nox Modification of a Heavy Fuel Oil Swirl Burner Based on Semi-Industrial Scale Experimental Tests. ENERGY & FUELS. 2013, 27, 5029.
- [101] X. Y. Zheng, Y. Q. Jin, Y. Chi, M. J. Ni: Simultaneous Determination of Water and Oil in Oil Sludge by Low-Field H-1 NMR Relaxometry and Chemometrics. ENERGY & FUELS. 2013, 27, 5787.
- [102] R. Zhang, Q. H. Wang, Z. Y. Luo, M. X. Fang, K. F. Cen: Competition and Inhibition Effects during Coal Char Gasification in the Mixture of H₂O and CO₂. ENERGY & FUELS. 2013, 27, 5107.
- [103] J. C. Zhang, L. M. Cheng, C. H. Zheng, Z. Y. Luo, M. J. Ni: Numerical Studies on the Inclined Flame Front Break of Filtration Combustion in Porous Media. ENERGY & FUELS. 2013, 27, 4969.
- [104] Z. Wang, M. X. Fang, H. Yu, Q. H. Ma, Z. Y. Luo: Modeling of CO₂ Stripping in a Hollow Fiber Membrane Contactor for CO₂ Capture. ENERGY & FUELS. 2013, 27, 6887.
- [105] S. R. Wang, Q. Q. Yin, J. F. Guo, L. J. Zhu: Influence of Ni Promotion on Liquid Hydrocarbon Fuel Production over Co/CNT Catalysts. ENERGY & FUELS. 2013, 27, 3961.
- [106] H. O. Wang, K. Luo, J. R. Fan: Direct Numerical Simulation and Conditional Statistics of Hydrogen/Air Turbulent Premixed Flames. ENERGY & FUELS. 2013, 27, 549.
- [107] N. Rong, Q. H. Wang, M. X. Fang, L. M. Cheng, Z. Y. Luo, K. F. Cen: Steam Hydration Reactivation of CaO-Based Sorbent in Cyclic Carbonation/Calcination for CO₂ Capture. ENERGY & FUELS. 2013, 27, 5332.
- [108] J. Z. Liu, R. K. Wang, Y. R. Hu, J. H. Zhou, K. F. Cen: Improving the Properties of Slurry Fuel Preparation To Recycle Municipal Sewage Sludge by Alkaline Pretreatment. ENERGY & FUELS. 2013, 27, 2883.
- [109] Y. Q. Jin, X. J. Ma, X. G. Jiang, H. M. Liu, X. D. Li, J. H. Yan, K. F. Cen: .. ENERGY & FUELS. 2013, 27, 394.
- [110] Y. Q. Jin, X. J. Ma, X. G. Jiang, H. M. Liu, X. D. Li, J. H. Yan: Hydrothermal Degradation of Polychlorinated Dibenzop-dioxins and Polychlorinated Dibenzofurans in Fly Ash from Municipal Solid Waste Incineration under Non-oxidative and Oxidative Conditions. ENERGY & FUELS. 2013, 27, 414.

- [111] Z. Y. Huang, Y. Li, D. Lai, Z. J. Zhou, Z. H. Wang, J. H. Zhou, K. F. Cen: Improvement of the Coal Ash Slagging Tendency by Coal Washing and Additive Blending with Mullite Generation. *ENERGY & FUELS*. 2013, 27, 2049.
- [112] Y. He, J. J. Zhu, B. Li, Z. H. Wang, Z. S. Li, M. Alden, K. F. Cen: In-situ Measurement of Sodium and Potassium Release during Oxy-Fuel Combustion of Lignite using Laser-Induced Breakdown Spectroscopy: Effects of O₂ and CO₂ Concentration. *ENERGY & FUELS*. 2013, 27, 1123.
- [113] X. Fang, L. W. Fan, Q. Ding, X. Wang, X. L. Yao, J. F. Hou, Z. T. Yu, G. H. Cheng, Y. C. Hu, K. F. Cen: Increased Thermal Conductivity of Eicosane-Based Composite Phase Change Materials in the Presence of Graphene Nanoplatelets. *ENERGY & FUELS*. 2013, 27, 4041.
- [114] Y. Y. Du, X. G. Jiang, X. J. Ma, X. D. Liu, G. J. Lv, Y. Q. Jin, F. Wang, Y. Chi, J. H. Yan: Evaluation of Cofiring Bioferment Residue with Coal at Different Proportions: Combustion Characteristics and Kinetics. *ENERGY & FUELS*. 2013, 27, 6295.
- [115] Y. Bo, Z. Y. Huang, Q. X. Huang, Y. W. Zhang, J. H. Zhou, K. F. Cen: Combustion Characteristics of Coal-Water Slurry in a Slag-Top Vertical Cyclone Furnace through Digital Imaging. *ENERGY & FUELS*. 2013, 27, 3427.
- [116] J. S. Bai, C. J. Yu, L. M. Li, P. Wu, Z. Y. Luo, M. J. Ni: Experimental Study on the NO and N₂O Formation Characteristics during Biomass Combustion. *ENERGY & FUELS*. 2013, 27, 515.
- [117] J. Zhang, Z. Luo, Y. Zhang: HYDROTHERMAL LIQUEFACTION OF CHLORELLA PYRENOIDOSA IN WATER AND ETHANOL. *TRANSACTIONS OF THE ASABE*. 2013, 56, 253.
- [118] J. B. Tang, Y. Q. Sheng, H. J. Hu, Y. Q. Shen: Macromolecular MRI contrast agents: Structures, properties and applications. *PROGRESS IN POLYMER SCIENCE*. 2013, 38, 462.
- [119] J. R. Wang, X. R. Sun, W. W. Mao, W. L. Sun, J. B. Tang, M. H. Sui, Y. Q. Shen, Z. W. Gu: Tumor Redox Heterogeneity-Responsive Prodrug Nanocapsules for Cancer Chemotherapy. *ADVANCED MATERIALS*. 2013, 25, 3670.
- [120] Y. W. Luo, Y. L. Guo, X. Gao, B. G. Li, T. Xie: A General Approach Towards Thermoplastic Multishape-Memory Polymers via Sequence Structure Design. *ADVANCED MATERIALS*. 2013, 25, 743.
- [121] E. L. Jin, B. Zhang, X. R. Sun, Z. X. Zhou, X. P. Ma, Q. H. Sun, J. B. Tang, Y. Q. Shen, E. Van Kirk, W. J. Murdoch, M. Radosz: Acid-Active Cell-Penetrating Peptides for *In Vivo* Tumor-Targeted Drug Delivery. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*. 2013, 135, 933.
- [122] H. E. Zhang, J. Q. Wang, W. W. Mao, J. Huang, X. G. Wu, Y. Q. Shen, M. H. Sui: Novel SN38 conjugate-forming nanoparticles as anticancer prodrug: *In vitro* and *in vivo* studies. *JOURNAL OF CONTROLLED RELEASE*. 2013, 166, 147.
- [123] M. Z. Ye, Y. Qian, J. B. Tang, H. J. Hu, M. H. Sui, Y. Q. Shen: Targeted biodegradable dendritic MRI contrast agent for enhanced tumor imaging. *JOURNAL OF CONTROLLED RELEASE*. 2013, 169, 239.
- [124] M. Liu, J. L. Gu, W. P. Xie, H. W. Yu: Directed co-evolution of an endoglucanase and a beta-glucosidase in *Escherichia coli* by a novel high-throughput screening method. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7219.
- [125] X. W. Long, G. L. Zhang, L. Han, Q. Meng: Dewatering of floated oily sludge by treatment with rhamnolipid. *WATER RESEARCH*. 2013, 47, 4303.
- [126] Q. Zhang, G. Q. Yu, W. J. Wang, H. M. Yuan, B. G. Li, S. P. Zhu: Switchable Block Copolymer Surfactants for Preparation of Reversibly Coagulatable and Redispersible Poly(methyl methacrylate) Latexes. *MACROMOLECULES*. 2013, 46, 1261.
- [127] X. P. Ma, Z. X. Zhou, E. L. Jin, Q. H. Sun, B. Zhang, J. B. Tang, Y. Q. Shen: Facile Synthesis of Polyester Dendrimers as Drug Delivery Carriers. *MACROMOLECULES*. 2013, 46, 37.
- [128] B. Zhang, X. P. Ma, W. Murdoch, M. Radosz, Y. Q. Shen: Bioreducible poly(amido amines) with different branching degrees as gene delivery vectors. *BIOTECHNOLOGY AND BIOENGINEERING*. 2013, 110, 990.
- [129] C. Shen, Q. Meng, G. L. Zhang: Increased curvature of hollow fiber membranes could up-regulate differential functions of renal tubular cell layers. *BIOTECHNOLOGY AND BIOENGINEERING*. 2013, 110, 2173.
- [130] R. S. Liang, Z. B. Bao, B. G. Su, H. B. Xing, Q. W. Yang, Y. W. Yang, Q. L. Ren: Feasibility of Ionic Liquids as Extractants for Selective Separation of Vitamin D-3 and Tachysterol(3) by Solvent Extraction. *JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY*. 2013, 61, 3479.
- [131] F. Yang, J. Fu, J. Mo, X. Y. Lu: Synergy of Lewis and Bronsted Acids on Catalytic Hydrothermal Decomposition of Hexose to Levulinic Acid. *ENERGY & FUELS*. 2013, 27, 6973.
- [132] Q. L. Wang, L. C. Lei, J. K. Zhu, B. Yang, Z. J. Li: Deep Desulfurization of Fuels by Extraction with 4-Dimethylaminopyridinium-Based Ionic Liquids. *ENERGY & FUELS*. 2013, 27, 4617.
- [133] B. H. Lu, X. Q. Wang, Y. F. Xia, N. Liu, S. J. Li, W. Li: Kinetics of Carbon Dioxide Absorption into Mixed Aqueous Solutions of MEA + [Bmim]BF₄ Using a Double Stirred Cell. *ENERGY & FUELS*. 2013, 27, 6002.
- [134] K. Cao, X. X. Wei, B. J. Li, J. S. Zhang, Z. Yao: Study of the Influence of Imidization Degree of Poly(styrene-co-octadecyl maleimide) as Waxy Crude Oil Flow Improvers. *ENERGY & FUELS*. 2013, 27, 640.
- [135] Y. F. Zhou, C. J. Ren, J. D. Wang, Y. R. Yang: Characterization on Hydrodynamic Behavior in Liquid-Containing Gas-Solid Fluidized Bed Reactor. *AICHE JOURNAL*. 2013, 59, 1056.
- [136] C. Zheng, Y. Z. Xu, H. M. Huang, Z. C. Zhang, Z. Liu, K. P. Yan, A. N. Zhu: Water Disinfection by Pulsed Atmospheric Air Plasma Along Water Surface. *AICHE JOURNAL*. 2013, 59, 1458.
- [137] L. Zhang, L. L. Li, N. J. Liu, H. L. Chen, Z. R. Pan, S. J. Luo: Pervaporation Behavior of PVA Membrane Containing beta-Cyclodextrin for Separating Xylene Isomeric Mixtures. *AICHE JOURNAL*. 2013, 59, 604.
- [138] Q. W. Yang, H. B. Xing, B. G. Su, Z. B. Bao, J. Wang, Y. W. Yang, Q. L. Ren: The Essential Role of Hydrogen-Bonding Interaction in the Extractive Separation of Phenolic Compounds by Ionic Liquid. *AICHE JOURNAL*. 2013, 59, 1657.
- [139] J. J. Wang, Y. Han, X. P. Gu, L. F. Feng, G. H. Hu: Effect of Agitation on the Fluidization Behavior of a Gas-Solid Fluidized Bed with a Frame Impeller. *AICHE JOURNAL*. 2013, 59, 1066.
- [140] D. M. Wang, W. J. Wang, B. G. Li, S. P. Zhu: Semibatch RAFT Polymerization of Branched Polyacrylamide Production: Effect of Divinyl Monomer Feeding Policies. *AICHE JOURNAL*. 2013, 59, 1322.
- [141] Z. Tian, X. P. Gu, L. F. Feng, Z. Q. Fan, G. H. Hu: An Atmosphere-Switching Polymerization Process: A Novel Strategy to Advanced Polyolefin Materials. *AICHE JOURNAL*. 2013, 59, 4468.
- [142] W. F. Liu, S. Guo, H. Fan, W. J. Wang, B. G. Li, S. P. Zhu: Synthesis of Ethylene/*t*-Octene Copolymers with Controlled Block Structures by Semibatch Living Copolymerization. *AICHE JOURNAL*. 2013, 59, 4686.
- [143] L. G. Wang, Q. H. Yang, G. L. Ma, W. F. Lin, Z. Wang, M. Huang, S. F. Chen: Development of biocompatible PAMAM "dendrzyme" to maintain catalytic activity in biological complex medium. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 4259.
- [144] P. W. Liu, Z. M. Dong, Z. B. Ye, W. J. Wang, B. G. Li: A conveniently synthesized polyethylene gel encapsulating palladium nanoparticles as a reusable high-performance catalyst for Heck and Suzuki coupling reactions. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 15469.
- [145] W. F. Lin, H. Zhang, J. Wu, Z. Wang, H. T. Sun, J. Yuan, S. F. Chen: A novel zwitterionic copolymer with a short poly(methyl acrylic acid) block for improving both conjugation and separation efficiency of a protein without losing its bioactivity. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 2482.
- [146] H. Huang, X. Y. Qu, X. S. Ji, X. Gao, L. Zhang, H. L. Chen, L. Hou: Acid and multivalent ion resistance of thin film nanocomposite RO membranes loaded with silicate-1 nanosolites. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 11343.
- [147] P. F. Gou, W. W. Liu, W. W. Mao, J. B. Tang, Y. Q. Shen, M. H. Sui: Self-assembling doxorubicin prodrug forming nanoparticles for cancer chemotherapy: synthesis and anticancer study *in vitro* and *in vivo*. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 284.
- [148] H. Zhang, M. S. Jin, Y. J. Xiong, B. Lim, Y. N. Xia: Shape-Controlled Synthesis of Pd Nanocrystals and Their Catalytic Applications. *ACCOUNTS OF CHEMICAL RESEARCH*. 2013, 46, 1783.
- [149] X. G. Yu, J. H. Chen, X. Y. Ma, D. R. Yang: Impurity engineering of Cochralski silicon. *MATERIALS SCIENCE & ENGINEERING R-REPORTS*. 2013, 74, 1.
- [150] J. Gu, M. X. Gao, H. G. Pan, Y. F. Liu, B. Li, Y. J. Yang, C. Liang, H. L. Fu, Z. X. Guo: Improved hydrogen storage performance of Ca(BH₄)₂: a synergetic effect of porous morphology and *in situ* formed TiO₂. *ENERGY & ENVIRONMENTAL SCIENCE*. 2013, 6, 847.
- [151] J. J. Zhou, G. X. Chen, E. Wu, G. Bi, B. T. Wu, Y. Teng, S. F. Zhou, J. R. Qiu: Ultrasensitive Polarized Up-Conversion of Tm³⁺-Yb³⁺ Doped beta-NaYF₄ Single Nanorod. *NANO LETTERS*. 2013, 13, 2241.
- [152] Y. Jiang, Y. Wang, J. Sagendorf, D. West, X. F. Kou, X. Wei, L. He, K. L. Wang, S. B. Zhang, Z. Zhang: Direct Atom-by-Atom Chemical Identification of Nanostructures and Defects of Topological Insulators. *NANO LETTERS*. 2013, 13, 2851.
- [153] X. H. Liu, T. J. Zhu, H. Wang, L. P. Hu, H. H. Xie, G. Y. Jiang, G. J. Snyder, X. B. Zhao: Low Electron Scattering Potentials in High Performance Mg₂Si_{0.45}Sn_{0.55} Based Thermoelectric Solid Solutions with Band Convergence. *ADVANCED ENERGY MATERIALS*. 2013, 3, 1238.
- [154] D. Z. Tan, S. F. Zhou, J. R. Qiu, N. Khosro: Preparation of functional nanomaterials with femtosecond laser ablation *in solution*. *JOURNAL OF PHOTOCHEMISTRY AND PHOTOBIOLOGY C-PHOTOCHEMISTRY REVIEWS*. 2013, 17, 50.
- [155] H. H. Xie, H. Wang, Y. Z. Pei, C. G. Fu, X. H. Liu, G. J. Snyder, X. B. Zhao, T. J. Zhu: Beneficial Contribution of Alloy Disorder to Electron and Phonon Transport in Half-Heusler Thermoelectric Materials. *ADVANCED FUNCTIONAL MATERIALS*. 2013, 23, 5123.
- [156] Y. H. Lu, H. M. Jin, H. J. Zhu, S. W. Yang, C. Zhang, J. Z. Jiang, Y. P. Peng: A Facile Reaction Pathway to Fabricate a Half-Metallic Wire on a Silicon Surface. *ADVANCED FUNCTIONAL MATERIALS*. 2013, 23, 2233.
- [157] J. C. Yu, Y. J. Cui, H. Xu, Y. Yang, Z. Y. Wang, B. L. Chen, G. D. Qian: Confinement of pyridinium hemicyanine dye within an anionic metal-organic framework for two-photon-pumped lasing. *NATURE COMMUNICATIONS*. 2013, 4, 2719.
- [158] H. B. Huang, Z. G. Song, N. Wei, L. Shi, Y. Y. Mao, Y. L. Ying, L. W. Sun, Z. P. Xu, X. S. Peng: Ultrafast viscous water flow through nanostrand-channelled graphene oxide membranes. *NATURE COMMUNICATIONS*. 2013, 4, 2979.
- [159] X. T. Rao, T. Song, J. K. Gao, Y. J. Cui, Y. Yang, C. D. Wu, B. L. Chen, G. D. Qian: A Highly Sensitive Mixed Lanthanide Metal-Organic Framework Self-Calibrated Luminescent Thermometer. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY*. 2013, 135, 15559.
- [160] H. B. Lou, X. D. Wang, Q. P. Cao, D. X. Zhang, J. Zhang, T. D. Hu, H. K. Mao, J. Z. Jiang: Negative expansions of interatomic distances in metallic melts. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*. 2013, 110, 10068.
- [161] J. Xie, S. Y. Liu, G. S. Cao, T. J. Zhu, X. B. Zhao: Self-assembly of CoS₂/graphene nanoarchitecture by a facile one-pot route and its improved electrochemical Li-storage properties. *NANO ENERGY*. 2013, 2, 49.
- [162] W. Wen, J. M. Wu, M. H. Cao: Rapid one-step synthesis and electrochemical performance of NiO/Ni with tunable microporous architectures. *NANO ENERGY*. 2013, 2, 1383.
- [163] X. L. Fan, Z. X. Xiao, J. Shao, L. T. Zhang, S. Q. Li, H. W. Ge, Q. D. Wang, L. X. Chen: Size effect on hydrogen storage properties of NaAlH₄ confined in uniform porous carbons. *NANO ENERGY*. 2013, 2, 995.
- [164] X. D. Pi, C. Delerue: Tight-Binding Calculations of the Optical Response of Optimally P-Doped Si Nanocrystals: A Model for Localized Surface Plasmon Resonance. *PHYSICAL REVIEW LETTERS*. 2013, 111, 177402.
- [165] G. M. Zhu, Y. Y. Jiang, W. Huang, H. Zhang, F. Lin, C. H. Jin: Atomic resolution liquid-cell transmission electron microscopy investigations of the dynamics of nanoparticles in ultrathin liquids. *CHEMICAL COMMUNICATIONS*. 2013, 49, 10944.
- [166] M. G. Zhao, J. Y. Huang, Y. Zhou, X. H. Pan, H. P. He, Z. Z. Ye, X. Q. Pan: Controlled synthesis of spinel ZnFe₂O₄ decorated ZnO heterostructures as peroxidase mimetics for enhanced colorimetric biosensing. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7656.
- [167] L. W. Sun, H. B. Huang, X. S. Peng: Laminar MoS₂ membranes for molecule separation. *CHEMICAL COMMUNICATIONS*. 2013, 49, 10718.
- [168] X. T. Rao, J. F. Cai, J. C. Yu, Y. B. He, C. D. Wu, W. Zhou, T. Yildirim, B. L. Chen, G. D. Qian: A microporous metal-organic framework with both open metal and Lewis basic pyridyl sites for high C₂H₂ and CH₄ storage at room temperature. *CHEMICAL COMMUNICATIONS*. 2013, 49, 6719.
- [169] Y. Y. Mao, L. Shi, H. B. Huang, W. Cao, J. W. Li, L. W. Sun, X. D. Jin, X. S. Peng: Room temperature synthesis of free-standing HKUST-1 membranes from copper hydroxide nanostrands for gas separation. *CHEMICAL COMMUNICATIONS*. 2013, 49, 5666.
- [170] H. B. Huang, Y. Y. Mao, Y. L. Ying, Y. Liu, L. W. Sun, X. S. Peng: Salt concentration, pH and pressure controlled separation of small molecules through lamellar graphene oxide membranes. *CHEMICAL COMMUNICATIONS*. 2013, 49, 5963.
- [171] X. Duan, J. C. Yu, J. F. Cai, Y. B. He, C. D. Wu, W. Zhou, T. Yildirim, Z. J. Zhang, S. C. Xiang, M. O'Keefe, B. L. Chen, G. D. Qian: A microporous metal-organic framework of a rare sty topology for high CH₄ storage at room temperature. *CHEMICAL COMMUNICATIONS*. 2013, 49, 2043.
- [172] Y. Yang, Z. F. Liao, Y. Zhou, Y. J. Cui, G. D. Qian: Self-curable solid-state electric dye lasers capable of mechanical stress probing. *OPTICS LETTERS*. 2013, 38, 1627.
- [173] F. Wang, D. S. Li, L. Jin, C. R. Ren, D. R. Yang, D. L. Que: Size-dependent coupling between localized surface plasmons and excitons in silicon nitride matrix. *OPTICS LETTERS*. 2013, 38, 2832.
- [174] T. J. Zhu, Z. J. Xu, J. He, J. J. Shen, S. Zhu, L. P. Hu, T. M. Tritt, X. B. Zhao: Hot deformation induced bulk nanostructuring of unidirectionally grown p-type (Bi,Sb)(2)Te-3 thermoelectric materials. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 11589.
- [175] J. J. Zhou, J. Y. Deng, H. M. Zhu, X. Y. Chen, Y. Teng, H. Jia, S. Q. Xu, J. R. Qiu: Up-conversion luminescence in LaF₃:Ho³⁺ via two-wavelength excitation for use in solar cells. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 8023.
- [176] F. M. Ye, Q. K. Jiang, G. H. Du, Y. J. Zhong, Q. P. Cao, X. D. Wang, J. Z. Jiang: A heterostructured Ag@In₂S₃ composite with enhanced lithium storage capacity. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 5208.
- [177] Y. Yang, T. Nakamichi, H. Yoshioka, M. Yahiho, M. Era, H. Watanabe, Y. J. Cui, Y. Oki, G. D. Qian: Spectral-resolving capable and integratable multilayered conductive films via an inkjet method. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 1739.
- [178] H. Xu, Y. B. He, Z. J. Zhang, S. C. Xiang, J. F. Cai, Y. J. Cui, Y. Yang, G. D. Qian, B. L. Chen: A microporous metal-organic framework with both open metal and Lewis basic pyridyl sites for highly selective C₂H₂/CH₄ and C₂H₂/CO₂ gas separation at room temperature. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 77.
- [179] H. Xu, J. F. Cai, S. C. Xiang, Z. J. Zhang, C. D. Wu, X. T. Rao, Y. J. Cui, Y. Yang, R. Krishna, B. L. Chen, G. D. Qian: A cationic microporous metal-organic framework for highly selective separation of small hydrocarbons at room temperature. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 9916.
- [180] B. Xiao, N. Ma, P. Y. Du: Percolative NZFO/BTO ceramic composite with magnetism threshold. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 6325.

- [181] Z. Wen, L. P. Zhu, W. M. Mei, Y. G. Li, L. Hu, L. W. Sun, W. T. Wan, Z. Z. Ye: A facile fluorine-mediated hydrothermal route to controlled synthesis of rhombus-shaped Co₃O₄ nanorod arrays and their application in gas sensing. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 7511.
- [182] W. Wen, J. M. Wu, M. H. Cao: NiO/Ni powders with effective architectures as anode materials in Li-ion batteries. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 3881.
- [183] L. Shi, Q. Yu, H. B. Huang, Y. Y. Mao, J. H. Lei, Z. Z. Ye, X. S. Peng: Superior separation performance of ultrathin gelatin films. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 1899.
- [184] J. Shao, X. Z. Xiao, L. X. Chen, X. L. Fan, L. Y. Han, S. Q. Li, H. W. Ge, Q. D. Wang: Enhanced hydrating-dehydrating performance of a 2LiH-MgB₂ composite by the catalytic effects of Ni-B nanoparticles. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 10184.
- [185] Y. Qi, H. Zhang, N. Du, D. R. Yang: Highly loaded CoO/graphene nanocomposites as lithium-ion anodes with superior reversible capacity. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 2337.
- [186] Y. Y. Mao, W. Cao, J. W. Li, Y. Liu, Y. L. Ying, L. W. Sun, X. S. Peng: Enhanced gas separation through well-intergrown MOF membranes: seed morphology and crystal growth effects. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 11711.
- [187] H. Z. Liu, X. H. Wang, Y. A. Liu, Z. H. Dong, G. Z. Cao, S. Q. Li, M. Yan: Improved hydrogen storage properties of MgH₂ by ball milling with AlH₃: preparations, de/rehydrating properties, and reaction mechanisms. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 12527.
- [188] C. Liang, Y. F. Liu, M. X. Gao, H. G. Pan: Understanding the role of K in the significantly improved hydrogen storage properties of a KOH-doped Li-Mg-N-H system. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 5031.
- [189] X. Ge, C. D. Gu, Y. Lu, X. L. Wang, J. P. Tu: A versatile protocol for the ionothermal synthesis of nanostructured nickel compounds as energy storage materials from a choline chloride-based ionic liquid. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 13454.
- [190] M. X. Gao, J. Gu, H. G. Pan, Y. L. Wang, Y. F. Liu, C. Liang, Z. X. Guo: Ca(BH₄)₂-LiBH₄-MgH₂: a novel ternary hydrogen storage system with superior long-term cycling performance. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 12285.
- [191] B. Feng, J. Xie, G. S. Cao, T. J. Zhu, X. B. Zhao: Enhanced thermoelectric properties of p-type CoSb₃/graphene nanocomposite. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 13111.
- [192] X. L. Fan, X. Z. Xiao, L. X. Chen, L. T. Zhang, J. Shao, S. Q. Li, H. W. Ge, Q. D. Wang: Significantly improved hydrogen storage properties of NaAlH₄ catalyzed by Ce-based nanoparticles. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 9752.
- [193] X. L. Fan, X. Z. Xiao, L. X. Chen, X. H. Wang, S. Q. Li, H. W. Ge, Q. D. Wang: High catalytic efficiency of amorphous TiB₂ and NbB₂ nanoparticles for hydrogen storage using the 2LiBH₄(4)-MgH₂ system. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 11368.
- [194] G. F. Cai, J. P. Tu, C. D. Gu, J. H. Zhang, J. Chen, D. Zhou, S. J. Shi, X. L. Wang: One-step fabrication of nanostructured NiO films from deep eutectic solvent with enhanced electrochromic performance. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 4286.
- [195] M. S. Xu, T. Liang, M. M. Shi, H. Z. Chen: Graphene-Like Two-Dimensional Materials. *CHEMICAL REVIEWS*. 2013, 113, 3766.
- [196] Z. Xu, H. Y. Sun, X. L. Zhao, C. Gao: Ultrastrong Fibers Assembled from Giant Graphene Oxide Sheets. *ADVANCED MATERIALS*. 2013, 25, 188.
- [197] Z. Xu, Z. Liu, H. Y. Sun, C. Gao: Highly Electrically Conductive Ag-Doped Graphene Fibers as Stretchable Conductors. *ADVANCED MATERIALS*. 2013, 25, 3249.
- [198] H. Y. Sun, Z. Xu, C. Gao: Multifunctional, Ultra-Flyweight, Synergistically Assembled Carbon Aerogels. *ADVANCED MATERIALS*. 2013, 25, 2554.
- [199] S. P. She, Q. Q. Li, B. W. Shan, W. J. Tong, C. Y. Gao: Fabrication of Red-Blood-Cell-Like Polyelectrolyte Microcapsules and Their Deformation and Recovery Behavior Through a Microcapillary. *ADVANCED MATERIALS*. 2013, 25, 5814.
- [200] C. C. Fan, A. P. Zoombelt, H. Jiang, W. F. Fu, J. K. Wu, W. T. Yuan, Y. Wang, H. Y. Li, H. Z. Chen, Z. N. Bao: Solution-Grown Organic Single-Crystalline p-n Junctions with Ambipolar Charge Transport. *ADVANCED MATERIALS*. 2013, 25, 5762.
- [201] X. S. Liu, Y. J. Chen, H. Li, N. Huang, Q. Jin, K. F. Ren, J. Ji: Enhanced Retention and Cellular Uptake of Nanoparticles in Tumors by Controlling Their Aggregation Behavior. *ACS NANO*. 2013, 7, 6244.
- [202] X. S. Liu, J. M. Cao, H. Li, J. Y. Li, Q. Jin, K. F. Ren, J. Ji: Mussel-Inspired Polydopamine: A Biocompatible and Ultraplastable Coating for Nanoparticles in Vivo. *ACS NANO*. 2013, 7, 9384.
- [203] Y. Han, Z. Xu, C. Gao: Ultrathin Graphene Nanofiltration Membrane for Water Purification. *ADVANCED FUNCTIONAL MATERIALS*. 2013, 23, 3693.
- [204] H. C. Yang, Q. Y. Wu, L. S. Wan, Z. K. Xu: Polydopamine gradients by oxygen diffusion controlled autoxidation. *CHEMICAL COMMUNICATIONS*. 2013, 49, 10522.
- [205] Y. Wang, H. B. Wang, Y. J. Chen, X. S. Liu, Q. Jin, J. Ji: Biomimetic pseudopolyrotaxane prodrug micelles with high drug content for intracellular drug delivery. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7123.
- [206] X. J. Chen, X. Y. Shen, E. J. Guan, Y. Liu, A. J. Qin, J. Z. Sun, B. Z. Tang: A pyridinyl-functionalized tetraphenylethylene fluorogen for specific sensing of trivalent cations. *CHEMICAL COMMUNICATIONS*. 2013, 49, 1503.
- [207] W. W. Yu, M. Du, D. Z. Zhang, Y. Lin, Q. Zheng: Influence of Dangling Chains on Molecular Dynamics of Polyurethanes. *MACROMOLECULES*. 2013, 46, 7341.
- [208] F. M. Xu, H. B. Wang, J. Zhao, X. S. Liu, D. D. Li, C. J. Chen, J. Ji: Chiral Packing of Cholesteryl Group as an Effective Strategy To Get Low Molecular Weight Supramolecular Hydrogels in the Absence of Intermolecular Hydrogen Bond. *MACROMOLECULES*. 2013, 46, 4235.
- [209] R. J. Wei, X. H. Zhang, B. Y. Du, X. K. Sun, Z. Q. Fan, G. R. Qi: Highly Regioselective and Alternating Copolymerization of Racemic Styrene Oxide and Carbon Dioxide via Heterogeneous Double Metal Cyanide Complex Catalyst. *MACROMOLECULES*. 2013, 46, 3693.
- [210] M. Luo, X. H. Zhang, B. Y. Du, Q. Wang, Z. Q. Fan: Regioselective and Alternating Copolymerization of Carbonyl Sulfide with Racemic Propylene Oxide. *MACROMOLECULES*. 2013, 46, 5899.
- [211] Z. Liu, Z. Xu, X. Z. Hu, C. Gao: Lyotropic Liquid Crystal of Polyacrylonitrile-Grafted Graphene Oxide and Its Assembled Continuous Strong Nacre-Mimetic Fibers. *MACROMOLECULES*. 2013, 46, 6931.
- [212] J. O. Lin, W. L. Chen, Z. Q. Shen, J. Ling: Homo- and Block Copolymerizations of epsilon-Decalactone with L-Lactide Catalyzed by Lanthanum Compounds. *MACROMOLECULES*. 2013, 46, 7769.
- [213] H. K. Li, H. Q. Wu, E. G. Zhao, J. Li, J. Z. Sun, A. J. Qin, B. Z. Tang: Hyperbranched Poly(aryloxy-carbonyl-triazole)s: Metal-Free Click Polymerization, Light Refraction, Aggregation-Induced Emission, Explosive Detection, and Fluorescent Patterning. *MACROMOLECULES*. 2013, 46, 3907.
- [214] Q. F. An, Y. L. Ji, W. S. Hung, K. R. Lee, C. J. Gao: AMOC Positron Annihilation Study of Zwitterionic Nanofiltration Membranes: Correlation between Fine Structure and Ultrahigh Permeability. *MACROMOLECULES*. 2013, 46, 2228.
- [215] P. P. Yin, G. Wu, W. L. Qin, X. Q. Chen, M. Wang, H. Z. Chen: CYM and RGB colored electronic inks based on silica-coated organic pigments for full-color electrophoretic displays. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 843.
- [216] W. Lu, J. T. Zhou, K. Y. Liu, D. Chen, L. M. Jiang, Z. Q. Shen: A polymeric film probe with a turn-on fluorescence response to hydrogen sulfate ions in aqueous media. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 5014.
- [217] S. Y. Liu, M. M. Shi, J. C. Huang, Z. N. Jin, X. L. Hu, J. Y. Pan, H. Y. Li, A. K. Y. Jen, H. Z. Chen: C-H activation: making diketopyrrolopyrrole derivatives easily accessible. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 2795.
- [218] W. Y. Li, P. Zhang, K. Zheng, Q. L. Hu, Y. X. Wang: Redox-triggered intracellular dePEGylation based on diselenide-linked polyoxations for DNA delivery. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 6418.
- [219] J. J. Li, L. J. Zuo, H. B. Pan, H. Jiang, T. Liang, Y. Shi, H. Z. Chen, M. S. Xu: Texture design of electrodes for efficiency enhancement of organic solar cells. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 2379.
- [220] Y. L. Ji, Q. Zhao, Q. F. An, L. L. Shao, K. R. Lee, Z. K. Xu, C. J. Gao: Novel separation membranes based on zwitterionic colloid particles: tunable selectivity and enhanced antifouling property. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 12213.
- [221] M. R. Chen, W. F. Fu, M. M. Shi, X. L. Hu, J. Y. Pan, J. Ling, H. Y. Li, H. Z. Chen: An ester-functionalized diketopyrrolopyrrole molecule with appropriate energy levels for application in solution-processed organic solar cells. *JOURNAL OF MATERIALS CHEMISTRY A*. 2013, 1, 105.
- [222] J. H. Wang, K. W. Bayles: Programmed cell death in plants: lessons from bacteria. *TRENDS IN PLANT SCIENCE*. 2013, 18, 133.
- [223] Q. H. Wan, S. K. Pan, L. Hu, Y. Zhu, P. W. Xu, J. Q. Xia, H. Chen, G. Y. He, J. He, X. W. Ni, H. L. Hou, S. G. Liao, H. Q. Yang, Y. Chen, S. K. Gao, Y. F. Ge, C. C. Cao, P. F. Li, L. M. Fang, L. Liao, S. Z. Zhang, M. Z. Wang, W. Dong, S. G. Fang: Genome analysis and signature discovery for diving and sensory properties of the endangered Chinese alligator. *CELL RESEARCH*. 2013, 23, 1091.
- [224] J. S. Yang, B. Liu, D. F. Chen, Y. Q. Yu, F. Yang, H. Nagasawa, S. Tsuchida, Y. Fujiwara, W. J. Yang: When Did Decapods Invade Hydrothermal Vents? Clues from the Western Pacific and Indian Oceans. *MOLECULAR BIOLOGY AND EVOLUTION*. 2013, 30, 305.
- [225] J. Chang, X. Wu, Y. Wang, L. A. Meyerson, B. J. Gu, Y. Min, H. Xue, C. H. Peng, Y. Ge: Does growing vegetables in plastic greenhouses enhance regional ecosystem services beyond the food supply? *FRONTIERS IN ECOLOGY AND THE ENVIRONMENT*. 2013, 11, 43.
- [226] F. Z. Hu, G. J. Lei, Z. W. Wang, Y. Z. Shi, J. Braam, G. X. Li, S. J. Zheng: Coordination between Apoplastic and Symplastic Detoxification Confers Plant Aluminum Resistance. *PLANT PHYSIOLOGY*. 2013, 162, 1947.
- [227] J. M. Xu, J. Yang, Z. C. Wu, H. L. Liu, F. L. Huang, Y. R. Wu, C. Carrie, R. Narsai, M. Murcha, J. Whelan, P. Wu: Identification of a Dual-Targeted Protein Belonging to the Mitochondrial Carrier Family That Is Required for Early Leaf Development in Rice. *PLANT PHYSIOLOGY*. 2013, 161, 2056.
- [228] B. Kang, Z. C. Zhang, L. L. Wang, L. B. Zheng, W. H. Mao, M. F. Li, Y. R. Wu, P. Wu, X. R. Mo: OsCYP2, a chaperone involved in degradation of auxin-responsive proteins, plays crucial roles in rice lateral root initiation. *PLANT JOURNAL*. 2013, 74, 86.
- [229] Z. J. Ding, J. Y. Yan, X. Y. Xu, G. X. Li, S. J. Zheng: WRKY46 functions as a transcriptional repressor of ALMT1, regulating aluminum-induced malate secretion in Arabidopsis. *PLANT JOURNAL*. 2013, 76, 825.
- [230] X. A. Chen, J. Shi, X. Hao, H. L. Liu, J. H. Shi, Y. R. Wu, Z. C. Wu, M. X. Chen, P. Wu, C. Z. Mao: OsORC3 is required for lateral root development in rice. *PLANT JOURNAL*. 2013, 74, 339.
- [231] B. J. Gu, A. M. Leach, L. Ma, J. N. Galloway, S. X. Chang, Y. Ge, J. Chang: Nitrogen Footprint in China: Food, Energy, and Nonfood Goods. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 9217.
- [232] X. M. Mao, N. Sun, F. Wang, S. Luo, Z. Zhou, W. H. Feng, F. L. Huang, Y. Q. Li: Dual Positive Feedback Regulation of Protein Degradation of an Extra-cytoplasmic Function sigma Factor for Cell Differentiation in Streptomyces coelicolor. *JOURNAL OF BIOLOGICAL CHEMISTRY*. 2013, 288, 31217.
- [233] H. P. Yang, X. B. He, J. W. Yang, X. Y. Deng, Y. Liao, Z. F. Zhang, C. G. Zhu, Y. Shi, N. M. Zhou: Activation of cAMP-response element-binding protein is positively regulated by PKA and calcium-sensitive calcineurin and negatively by PKC in insect. *INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY*. 2013, 43, 1028.
- [234] L. He, P. F. Ji, J. W. Cheng, Y. B. Wang, H. Qian, W. Q. Li, X. G. Gong, Z. Y. Wang: Structural characterization and immunostimulatory activity of a novel protein-bound polysaccharide produced by *Hirsutiaria sinensis* Liu, Guo, Yu & Zeng. *FOOD CHEMISTRY*. 2013, 141, 946.
- [235] H. P. Zhao, A. Ontivero-Valencia, Y. N. Tang, B. O. Kim, Z. E. Ilhan, R. Krajmalnik-Brown, B. Rittmann: Using a Two-Stage Hydrogen-Based Membrane Biofilm Reactor (MBR) to Achieve Complete Perchlorate Reduction in the Presence of Nitrate and Sulfate. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 1565.
- [236] J. Ye, L. M. Wang, Z. J. Zhang, W. P. Liu: Enantioselective Physiological Effects of the Herbicide Diclofop on Cyanobacterium *Microcystis aeruginosa*. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 3893.
- [237] W. H. Wu, W. Jiang, W. D. Zhang, D. H. Lin, K. Yang: Influence of Functional Groups on Desorption of Organic Compounds from Carbon Nanotubes into Water: Insight into Desorption Hysteresis. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 8373.
- [238] C. Wang, H. H. Lu, D. Dong, H. Deng, P. J. Strong, H. L. Wang, W. X. Wu: Insight into the Effects of Biochar on Manure Composting: Evidence Supporting the Relationship between N₂O Emission and Denitrifying Community. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 7341.
- [239] C. Wang, Z. Y. Li, Q. Zhang, M. R. Zhao, W. P. Liu: Enantioselective Induction of Cytotoxicity by o,p'-DDD in PC12 Cells: Implications of Chirality in Risk Assessment of POPs Metabolites. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 3909.
- [240] L. B. Qian, B. L. Chen, D. F. Hu: Effective Alleviation of Aluminum Phytotoxicity by Manure-Derived Biochar. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 2737.
- [241] L. B. Qian, B. L. Chen: Dual Role of Biochars as Adsorbents for Aluminum: The Effects of Oxygen-Containing Organic Components and the Scattering of Silicate Particles. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 8759.
- [242] H. Y. Peng, P. M. H. Kroneck, H. Kupper: Toxicity and Deficiency of Copper in *Elsholtzia splendens* Affect Photosynthesis Biophysics, Pigments and Metal Accumulation. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 6120.
- [243] L. L. Niu, C. Xu, Y. J. Yao, K. Liu, F. X. Yang, M. L. Tang, W. P. Liu: Status, Influences and Risk Assessment of Hexachlorocyclohexanes in Agricultural Soils Across China. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 12140.
- [244] Q. L. Fang, B. L. Chen, S. L. Zhuang: Triplex Blue-shifting Hydrogen Bonds of ClO₄-center dot center dot center dot H-C in the Nanointerlayer of Montmorillonite Complexed with Cetyltrimethylammonium Cation from Hydrophilic to Hydrophobic Properties. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 11013.
- [245] H. Chen, M. M. Zhang: Effects of Advanced Treatment Systems on the Removal of Antibiotic Resistance Genes in Wastewater Treatment Plants from Hangzhou, China. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*. 2013, 47, 8157.
- [246] Q. F. Jing, Z. L. Yi, D. H. Lin, L. Z. Zhu, K. Yang: Enhanced sorption of naphthalene and p-nitrophenol by Nano-SiO₂ modified with a cationic surfactant. *WATER RESEARCH*. 2013, 47, 4006.
- [247] K. C. Xiao, J. M. Xu, C. X. Tang, J. B. Zhang, P. C. Brookes: Differences in carbon and nitrogen mineralization in soils of differing initial pH induced by electrokinesis and receiving crop residue amendments. *SOIL BIOLOGY & BIOCHEMISTRY*. 2013, 67, 70.
- [248] Y. He, N. Ding, J. C. Shi, M. Wu, H. Liao, J. M. Xu: Profiling of microbial PLFAs: Implications for interspecific interactions due to intercropping which increase phosphorus uptake in phosphorus limited acidic soils. *SOIL BIOLOGY & BIOCHEMISTRY*. 2013, 57, 625.
- [249] X. C. Cao, X. Y. Chen, X. Y. Li, L. Yuan, L. H. Wu, Y. H. Zhu: Rice uptake of soil adsorbed amino acids under sterilized environment. *SOIL BIOLOGY & BIOCHEMISTRY*. 2013, 62, 13.
- [250] L. L. Niu, F. X. Yang, C. Xu, H. Y. Yang, W. P. Liu: Status of metal accumulation in farmland soils across China: From distribution to risk assessment. *ENVIRONMENTAL POLLUTION*. 2013, 176, 55.
- [251] Y. Y. Lu, X. P. Xu, K. Yang, D. H. Lin: The effects of surfactants and solution chemistry on the transport of multivalenced carbon nanotubes in quartz sand-packed columns. *ENVIRONMENTAL POLLUTION*. 2013, 182, 269.
- [252] Z. Y. Liu, W. Demisic, M. K. Zhang: Simulated degradation of biochar and its potential environmental implications. *ENVIRONMENTAL POLLUTION*. 2013, 179, 146.

- [253] J. J. Lin, Y. Xu, P. C. Brookes, Y. He, J. M. Xu: Spatial and temporal variations in pentachlorophenol dissipation at the aerobic-anaerobic interfaces of flooded paddy soils. ENVIRONMENTAL POLLUTION. 2013, 178, 433.
- [254] W. Y. Li, X. Y. Zhu, Y. He, B. S. Xing, J. M. Xu, P. C. Brookes: Enhancement of water solubility and mobility of phenanthrene by natural soil nanoparticles. ENVIRONMENTAL POLLUTION. 2013, 176, 228.
- [255] T. Q. Li, Q. Tao, C. F. Liang, M. J. I. Shohag, X. E. Yang, D. L. Sparks: Complexation with dissolved organic matter and mobility control of heavy metals in the rhizosphere of hyperaccumulator *Sedum alfredii*. ENVIRONMENTAL POLLUTION. 2013, 182, 248.
- [256] M. Li, D. H. Lin, L. Z. Zhu: Effects of water chemistry on the dissolution of ZnO nanoparticles and their toxicity to *Escherichia coli*. ENVIRONMENTAL POLLUTION. 2013, 173, 97.
- [257] Y. Y. Wei, M. J. I. Shohag, F. Ying, X. E. Yang, C. Y. Wu, Y. Y. Wang: Effect of ferrous sulfate fortification in germinated brown rice on seed iron concentration and bioavailability. FOOD CHEMISTRY. 2013, 138, 1952.
- [258] C. W. Jin, Y. Liu, Q. Q. Mao, Q. Wang, S. T. Du: Mild Fe-deficiency improves biomass production and quality of hydroponic-cultivated spinach plants (*Spinacia oleracea* L.). FOOD CHEMISTRY. 2013, 138, 2188.
- [259] W. L. He, M. J. I. Shohag, Y. Y. Wei, Y. Feng, X. E. Yang: Iron concentration, bioavailability, and nutritional quality of polished rice affected by different forms of foliar iron fertilizers. FOOD CHEMISTRY. 2013, 141, 4122.
- [260] J. Zhang, S. L. Zhuang, C. L. Tong, W. P. Liu: Probing the Molecular Interaction of Triazole Fungicides with Human Serum Albumin by Multispectroscopic Techniques and Molecular Modeling. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 7203.
- [261] Xiao, WD Yang, XF He, ZL Rafiq, MT Hou, DD Li, TQ: Model for Evaluation of the Phytoavailability of Chromium (Cr) to Rice (*Oryza sativa* L.) in Representative Chinese Soils. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 2925.
- [262] J. Liu, D. D. Cheng, Y. Liu, Z. B. Wu: Adsorptive Removal of Carbon Dioxide Using Polyethyleneimine Supported on Propenesulfonic-Acid-Functionalized Mesoporous SBA-15. ENERGY & FUELS. 2013, 27, 5416.
- [263] J. S. Zheng, X. J. Hu, Y. M. Zhao, J. Yang, D. Li: Intake of fish and marine n-3 polyunsaturated fatty acids and risk of breast cancer: meta-analysis of data from 21 independent prospective cohort studies. BMJ-BRITISH MEDICAL JOURNAL. 2013, 346, f8706.
- [264] H. Zhang, M. Tasipalati, F. Que, F. Q. Feng: Microstructure characterization of a food-grade U-type microemulsion system by differential scanning calorimetry and electrical conductivity techniques. FOOD CHEMISTRY. 2013, 141, 3050.
- [265] R. R. Xu, Y. Zhang, X. Q. Ye, S. Xue, J. Shi, J. H. Pan, Q. P. Chen: Inhibition effects and induction of apoptosis of flavonoids on the prostate cancer cell line PC-3 in vitro. FOOD CHEMISTRY. 2013, 138, 48.
- [266] T. Wu, X. M. Qi, Y. Liu, J. Guo, R. Y. Zhu, W. Chen, X. D. Zheng, T. Yu: Dietary supplementation with purified mulberry (*Morus australis* Poir) anthocyanins suppresses body weight gain in high-fat diet fed C57BL/6 mice. FOOD CHEMISTRY. 2013, 141, 482.
- [267] Y. X. Wang, Z. Z. Ye, C. Y. Si, Y. B. Ying: Monitoring of *Escherichia coli* O157:H7 in food samples using lectin based surface plasmon resonance biosensor. FOOD CHEMISTRY. 2013, 136, 1303.
- [268] F. Shen, J. Wu, Y. B. Ying, B. B. Li, T. Jiang: Differentiation of Chinese rice wines from different wineries based on mineral elemental fingerprinting. FOOD CHEMISTRY. 2013, 141, 4026.
- [269] Y. Feng, M. Li, J. Liu, T. Y. Xu, R. S. Fang, Q. H. Chen, G. Q. He: A novel one-step microbial transformation of betulin to betulinic acid catalysed by *Cunninghamella blakesleana*. FOOD CHEMISTRY. 2013, 136, 73.
- [270] W. Chen, J. Zhuang, Y. Li, Y. Shen, X. D. Zheng: Myricitrin protects against peroxynitrite-mediated DNA damage and cytotoxicity in astrocytes. FOOD CHEMISTRY. 2013, 141, 927.
- [271] Y. M. Cao, W. G. Gu, J. J. Zhang, Y. Chu, X. Q. Ye, Y. Q. Hu, J. C. Chen: Effects of chitosan, aqueous extract of ginger, onion and garlic on quality and shelf life of stewed-pork during refrigerated storage. FOOD CHEMISTRY. 2013, 141, 1655.
- [272] K. Yang, D. Wu, X. Q. Ye, D. H. Liu, J. C. Chen, P. L. Sun: Characterization of Chemical Composition of Bee Pollen in China. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 708.
- [273] Y. S. Wang, Z. S. Luo, R. X. Du, Y. Liu, T. J. Ying, L. C. Mao: Effect of Nitric Oxide on Antioxidative Response and Proline Metabolism in Banana during Cold Storage. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 8880.
- [274] L. L. Liu, L. Y. Liu, B. Y. Lu, M. Q. Chen, Y. Zhang: Evaluation of Bamboo Shoot Peptide Preparation with Angiotensin Converting Enzyme Inhibitory and Antioxidant Abilities from Byproducts of Canned Bamboo Shoots. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 5526.
- [275] Y. Q. Fu, S. Hong, D. Li, S. B. Liu: Novel Chemical Synthesis of Ginkgolic Acid (13:0) and Evaluation of Its Tyrosinase Inhibitory Activity. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 5347.
- [276] W. W. Kong, C. Zhang, F. Liu, A. P. Gong, Y. He: Irradiation dose detection of irradiated milk powder using visible and near-infrared spectroscopy and chemometrics. JOURNAL OF DAIRY SCIENCE. 2013, 96, 4921.
- [277] Y. Shen, Y. J. Sun, L. P. Qiao, J. C. Chen, D. H. Liu, X. Q. Ye: Effect of UV-C treatments on phenolic compounds and antioxidant capacity of minimally processed Satsuma mandarin during refrigerated storage. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 76, 50.
- [278] L. F. Lu, H. P. Lu, C. Q. Wu, W. W. Fang, C. Yu, C. Z. Ye, Y. B. Shi, T. Yu, X. D. Zheng: Rhodospiridium paludigenum induces resistance and defense-related responses against *Penicillium digitatum* in citrus fruit. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 85, 196.
- [279] J. B. Li, X. Q. Rao, E. J. Wang, W. Wu, Y. B. Ying: Automatic detection of common surface defects on oranges using combined lighting transform and image ratio methods. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 82, 59.
- [280] J. W. Bu, Y. C. Yu, G. Aisikaer, T. J. Ying: Postharvest UV-C irradiation inhibits the production of ethylene and the activity of cell wall-degrading enzymes during softening of tomato (*Lycopersicon esculentum* L.) fruit. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 86, 337.
- [281] C. Q. Xie, X. L. Li, P. C. Nie, Y. He: APPLICATION OF TIME SERIES HYPERSPECTRAL IMAGING (TS-HSI) FOR DETERMINING WATER CONTENT WITHIN TEA LEAVES DURING DRYING. TRANSACTIONS OF THE ASABE. 2013, 56, 1431.
- [282] J. F. Ping, J. Wu, Y. B. Ying: DETERMINATION OF INORGANIC PHOSPHATE IN ENVIRONMENTAL WATER USING COBALT FILM MODIFIED IONIC LIQUID-CARBON PASTE ELECTRODE. TRANSACTIONS OF THE ASABE. 2013, 56, 779.
- [283] J. F. Ping, J. Wu, Y. B. Ying: SCREEN-PRINTED POTENTIOMETRIC STRIP FOR CALCIUM ION DETERMINATION IN WATER AND MILK. TRANSACTIONS OF THE ASABE. 2013, 56, 739.
- [284] K. Huang, L. Yu, L. Gai, J. Wang: COUPLED SIMULATIONS IN COLINEAR AND COAXIAL CONTINUOUS PULSED ELECTRIC FIELD TREATMENT CHAMBERS. TRANSACTIONS OF THE ASABE. 2013, 56, 1473.
- [285] J. F. Ping, Y. X. Wang, K. Fan, W. Z. Tang, J. Wu, Y. B. Ying: High-performance flexible potentiometric sensing devices using free-standing graphene paper. JOURNAL OF MATERIALS CHEMISTRY B. 2013, 1, 4781.
- [286] Y. Zhao, M. T. Gregory, C. Biermupfel, Y. J. Hua, F. Hanaoka, W. Yang: Mechanism of somatic hypermutation at the WA motif by human DNA polymerase ϵ . PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. 2013, 110, 8146.
- [287] J. Zhou, J. Wang, Y. Cheng, Y. J. Chi, B. F. Fan, J. Q. Yu, Z. X. Chen: NBR1-Mediated Selective Autophagy Targets Insoluble Ubiquitinated Protein Aggregates in Plant Stress Responses. PLOS GENETICS. 2013, 9, e1003196.
- [288] Y. J. Li, J. B. Zhang, C. Li, W. Wang, Z. Yang, H. Y. Wang, J. Gan, Q. F. Ye, X. Y. Xu, Z. Li: Stereoisomeric Isolation and Stereoselective Fate of Insecticide Paichongding in Flooded Paddy Soils. ENVIRONMENTAL SCIENCE & TECHNOLOGY. 2013, 47, 12768.
- [289] Q. G. Fu, J. B. Zhang, X. Y. Xu, H. Y. Wang, W. Wang, Q. F. Ye, Z. Li: Diastereoselective Metabolism of a Novel Cis-Nitromethylene Neonicotinoid Paichongding in Aerobic Soils. ENVIRONMENTAL SCIENCE & TECHNOLOGY. 2013, 47, 10389.
- [290] J. Xue, X. Q. Zhang, H. J. Xu, H. W. Fan, H. J. Huang, X. F. Ma, C. Y. Wang, J. G. Chen, J. A. Cheng, C. X. Zhang: Molecular characterization of the *lflg* gene in the wing-dimorphic planthopper, *Nilaparvata lugens*, and its evolution in Pancrustacea. INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY. 2013, 43, 433.
- [291] L. Wang, Q. Fang, C. Qian, F. Wang, X. Q. Yu, G. Y. Ye: Inhibition of host cell encapsulation through inhibiting immune gene expression by the parasitic wasp venom calreticulin. INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY. 2013, 43, 936.
- [292] J. B. Luan, M. Ghanim, S. S. Liu, H. Czosnek: Silencing the ecdysone synthesis and signaling pathway genes disrupts nymphal development in the whitefly. INSECT BIOCHEMISTRY AND MOLECULAR BIOLOGY. 2013, 43, 740.
- [293] J. Lin, P. Zhang, Z. Q. Pan, H. R. Xu, Y. P. Luo, X. C. Wang: Discrimination of oolong tea (*Camellia sinensis*) varieties based on feature extraction and selection from aromatic profiles analysed by HS-SPME/GC-MS. FOOD CHEMISTRY. 2013, 141, 259.
- [294] I. M. Ahmed, F. B. Cao, Y. Han, U. A. Nadira, G. P. Zhang, E. B. Wu: Differential changes in grain ultrastructure, amylase, protein and amino acid profiles between Tibetan wild and cultivated barleys under drought and salinity alone and combined stress. FOOD CHEMISTRY. 2013, 141, 2743.
- [295] J. H. Zhao, H. R. Cui, X. H. Xu, Y. Y. Tan, J. J. Fu, G. Z. Liu, Y. Poirier, Q. Y. Shu: Characterization of OsMIK in a rice mutant with reduced phytate content reveals an insertion of a rearranged retrotransposon. THEORETICAL AND APPLIED GENETICS. 2013, 126, 3009.
- [296] F. F. Xu, G. Zhang, C. Tong, X. Sun, H. Corke, M. Sun, J. S. Bao: Association Mapping of Starch Physicochemical Properties with Starch Biosynthesizing Genes in Waxy Rice (*Oryza sativa* L.). JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 10110.
- [297] Y. L. Li, N. Hussain, L. M. Zhang, X. Y. Chen, E. Ali, L. X. Jiang: Correlations between Tocopherol and Fatty Acid Components in Germplasm Collections of Brassica Oilseeds. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 34.
- [298] N. Hussain, F. Irshad, Z. Jabeen, U. H. Shamsi, Z. L. Li, L. X. Jiang: Biosynthesis, Structural, and Functional Attributes of Tocopherols in Planta: Past, Present, and Future Perspectives. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 6137.
- [299] Q. G. Fu, Y. C. Wang, J. B. Zhang, H. X. Zhang, C. Bai, J. Y. Li, W. Wang, H. Y. Wang, Q. F. Ye, Z. Li: Soil Microbial Effects on the Stereoselective Mineralization, Extractable Residue, Bound Residue, and Metabolism of a Novel Chiral Cis Neonicotinoid, Paichongding. JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY. 2013, 61, 7689.
- [300] X. R. Yin, Y. Zhang, B. Zhang, S. L. Yang, Y. N. Shi, L. B. Ferguson, K. S. Chen: Effects of acetylsalicylic acid on kiwifruit ethylene biosynthesis and signaling components. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 83, 27.
- [301] M. R. Ojaghian, A. A. Almonaefy, Z. Q. Cui, G. L. Xie, J. Z. Zhang, C. L. Shang, B. Li: Application of acetyl salicylic acid and chemically different chitosans against storage carrot rot. POSTHARVEST BIOLOGY AND TECHNOLOGY. 2013, 84, 51.
- [302] X. P. Zhou: Advances in Understanding Begomovirus Satellites. ANNUAL REVIEW OF PHYTOPATHOLOGY. VOL 51. 2013, 51, 357.
- [303] T. Tao, H. Shi, Y. H. Guan, D. L. Huang, Y. Chen, D. P. Lane, J. Chen, J. R. Peng: Def defines a conserved nucleolar pathway that leads p53 to proteasome-independent degradation. CELL RESEARCH. 2013, 23, 620.
- [304] J. W. Yang, H. S. Huang, H. P. Yang, X. B. He, X. Jiang, Y. Shi, D. Altanoglu, L. G. Shi, N. M. Zhou: Specific Activation of the G Protein-coupled Receptor BNGR-A21 by the Neuropeptide Corazonin from the Silkworm, *Bombyx mori*, Dually Couples to the G α_q and G α_i Signaling Cascades. JOURNAL OF BIOLOGICAL CHEMISTRY. 2013, 288, 11662.
- [305] C. Y. Cheng, J. S. Chen, C. Fang, Y. Xia, Y. Shan, Y. Liu, G. L. Wen, H. H. Song, W. H. Fang: *Listeria monocytogenes* agsA1, but Not agsA2, Encodes a Functional Arginine Deiminase BIOCHEMICAL CHARACTERIZATION OF ITS CATALYTIC PROPERTIES AND ROLES IN ACID TOLERANCE. JOURNAL OF BIOLOGICAL CHEMISTRY. 2013, 288, 26606.
- [306] W. Zhu, Y. Fu, B. Wang, C. Wang, J. A. Ye, Y. N. Wu, J. X. Liu: Effects of dietary forage sources on rumen microbial protein synthesis and milk performance in early lactating dairy cows. JOURNAL OF DAIRY SCIENCE. 2013, 96, 1727.
- [307] D. M. Wang, C. Wang, H. Y. Liu, J. X. Liu, J. D. Ferguson: Effects of rumen-protected gamma-aminobutyric acid on feed intake, lactation performance, and antioxidant status in early lactating dairy cows. JOURNAL OF DAIRY SCIENCE. 2013, 96, 3222.
- [308] F. F. Han, Y. H. Gao, C. Luan, Y. G. Xie, Y. F. Liu, Y. Z. Wang: Comparing bacterial membrane interactions and antimicrobial activity of porcine lactoferrin-derived peptides. JOURNAL OF DAIRY SCIENCE. 2013, 96, 3471.
- [309] T. Shan, Y. Ren, Y. Wang: Sirtuin 1 affects the transcriptional expression of adipose triglyceride lipase in porcine adipocytes. JOURNAL OF ANIMAL SCIENCE. 2013, 91, 1247.
- [310] H. L. Mao, H. I. Mao, J. K. Wang, J. X. Liu, I. Yoon: Effects of *Saccharomyces cerevisiae* fermentation product on in vitro fermentation and microbial communities of low-quality forages and mixed diets. JOURNAL OF ANIMAL SCIENCE. 2013, 91, 3291.
- [311] C. H. Hu, K. Xiao, Z. S. Luan, J. Song: Early weaning increases intestinal permeability, alters expression of cytokine and tight junction proteins, and activates mitogen-activated protein kinases in pigs. JOURNAL OF ANIMAL SCIENCE. 2013, 91, 1094.
- [312] Y. Gao, F. Han, X. Huang, Y. Rong, H. Yi, Y. Wang: Changes in gut microbial populations, intestinal morphology, expression of tight junction proteins, and cytokine production between two pig breeds after challenge with *Escherichia coli* K88: A comparative study. JOURNAL OF ANIMAL SCIENCE. 2013, 91, 5614.
- [313] X. Y. Dong, Y. M. Wang, H. H. Song, X. T. Zou: Effects of in ovo injection of carbohydrate solution on small intestine development in domestic pigeons (*Columba livia*). JOURNAL OF ANIMAL SCIENCE. 2013, 91, 3742.
- [314] J. J. Jiao, Y. Zhang: Transgenic Biosynthesis of Polyunsaturated Fatty Acids: A Sustainable Biochemical Engineering Approach for Making Essential Fatty Acids in Plants and Animals. CHEMICAL REVIEWS. 2013, 113, 3799.
- [315] M. Xia, J. Liu, X. H. Wu, S. X. Liu, G. Li, C. F. Han, L. J. Song, Z. Q. Li, Q. Q. Wang, J. L. Wang, T. Xu, X. T. Cao: Histone Methyltransferase Ash1I Suppresses Interleukin-6 Production and Inflammatory Autoimmune Diseases by Inducing the Ubiquitin-Editing Enzyme A20. IMMUNITY. 2013, 39, 470.
- [316] M. H. Shen, Y. Q. Cai, Y. H. Yang, X. Y. Yan, X. Q. Liu, T. H. Zhou: Centrosomal protein FOR20 is essential for S-phase progression by recruiting Plk1 to centrosomes. CELL RESEARCH. 2013, 23, 1284.
- [317] J. Jin, Q. Yu, C. F. Han, X. Hu, S. Xu, Q. Q. Wang, J. L. Wang, N. Li, X. T. Cao: LRRFP2 negatively regulates NLRP3 inflammasome activation in macrophages by promoting Flightless-I-mediated caspase-1 inhibition. NATURE COMMUNICATIONS. 2013, 4, 2075.
- [318] Y. Zhao, J. L. Ren, M. Y. Wang, S. T. Zhang, Y. Liu, M. Li, Y. B. Cao, H. Y. Zu, X. C. Chen, C. I. Wu, E. Nevo, X. Q. Chen, J. Z. Du: Codon 104 variation of p53 gene provides adaptive apoptotic responses to extreme environments in mammals of the Tibet plateau. PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA. 2013, 110, 20639.
- [319] C. S. Lin, X. G. Guo, S. Lange, J. Liu, K. F. Ouyang, X. Yin, L. J. Jiang, Y. B. Cai, Y. X. Mu, F. Sheikh, S. Ye, J. Chen, Y. H. Ke, H. Q. Cheng: Cypher/ZASP Is a Novel Arkinase Anchoring Protein. JOURNAL OF BIOLOGICAL CHEMISTRY. 2013, 288, 29403.
- [320] L. H. Lai, Y. J. Song, Y. Liu, Q. Y. Chen, Q. Han, W. L. Chen, T. Pan, Y. Y. Zhang, X. T. Cao, Q. Q. Wang: MicroRNA-92a Negatively Regulates Toll-like Receptor (TLR)-triggered Inflammatory Responses in Macrophages by Targeting MKK4 Kinase. JOURNAL OF BIOLOGICAL CHEMISTRY. 2013, 288, 7956.

- [321] W. J. Sun, X. Y. Shen, D. B. Lu, D. Q. Lu, H. Chiang: Superposition of an incoherent magnetic field inhibited LGF receptor clustering and phosphorylation induced by a 1.8 GHz pulse-modulated radiofrequency radiation. *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*. 2013, 89, 378.
- [322] L. Q. Pan, H. B. Wang, Z. M. Xie, Z. H. Li, X. J. Tang, Y. C. Xu, C. Zhang, H. Naramandura, S. Q. Chen: Novel Conjugation of Tumor-Necrosis-Factor-Related Apoptosis-Inducing Ligand (TRAIL) with Monomethyl Auristatin E for Efficient Antitumor Drug Delivery. *ADVANCED MATERIALS*. 2013, 25, 4718.
- [323] X. Li, Q. H. Zhao, L. Y. Qiu: Smart ligand: Aptamer-mediated targeted delivery of chemotherapeutic drugs and siRNA for cancer therapy. *JOURNAL OF CONTROLLED RELEASE*. 2013, 171, 152.
- [324] H. J. Zhu, N. N. Shao, T. Chen, H. B. Zou: Functionalized heterocyclic scaffolds derived from Morita-Baylis-Hillman Acetates. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7738.
- [325] X. Li, S. Zhang, J. Cao, N. Xie, T. Liu, B. Yang, Q. J. He, Y. Z. Hu: An ICT-based fluorescent switch-on probe for hydrogen sulfide in living cells. *CHEMICAL COMMUNICATIONS*. 2013, 49, 8656.
- [326] X. W. Dong, T. Liu, Y. Z. Hu, X. Y. Liu, C. M. Che: Urea postmodified in a metal-organic framework as a catalytically active hydrogen-bond-donating heterogeneous catalyst. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7681.
- [327] J. Li, K. Yao, X. N. Yu, X. R. Dong, L. S. Gan, C. Q. Luo, Y. L. Wu: Identification of a Novel Lipofuscin Pigment (isoA2E) in Retina and Its Effects in the Retinal Pigment Epithelial Cells. *JOURNAL OF BIOLOGICAL CHEMISTRY*. 2013, 288, 35671.
- [328] H. J. Shen, H. Shi, M. Xie, K. Ma, B. Li, S. Shen, X. S. Wang, Y. Jin: Biodegradable chitosan/alginate BSA-gel-capsules for pH-controlled loading and release of doxorubicin and treatment of pulmonary melanoma. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 3906.
- [329] Z. Li, B. Li, M. Wang, M. Xie, H. J. Shen, S. Shen, X. S. Wang, X. M. Guo, M. F. Yao, Y. Jin: The role of endosome evasion bypass in the reversal of multidrug resistance by lipid/nanoparticle assemblies. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 1466.
- [330] H. N. Gao, H. Z. Lu, B. Cao, B. Du, H. Shang, J. H. Gan, S. H. Lu, Y. D. Yang, Q. Fang, Y. Z. Shen, X. M. Xi, Q. Gu, X. M. Zhou, H. P. Qu, Z. Yan, F. M. Li, W. Zhao, Z. C. Gao, G. F. Wang, L. X. Ruan, W. H. Wang, J. Ye, H. F. Cao, X. W. Li, W. H. Zhang, X. C. Fang, J. He, W. F. Liang, J. Xie: Clinical Findings in 111 Cases of Influenza A (H7N9) Virus Infection. *NEW ENGLAND JOURNAL OF MEDICINE*. 2013, 368, 2277.
- [331] H. P. Yao, Y. Q. Zhou, R. W. Zhang, M. H. Wang: MSP-RON signalling in cancer: pathogenesis and therapeutic potential. *NATURE REVIEWS CANCER*. 2013, 13, 466.
- [332] Y. Chen, W. F. Liang, S. G. Yang, N. P. Wu, H. N. Gao, J. F. Sheng, H. P. Yao, J. N. Wo, Q. Fang, D. W. Cui, Y. C. Li, X. Yao, Y. T. Zhang, H. B. Wu, S. F. Zheng, H. Y. Diao, S. C. Xia, Y. J. Zhang, K. H. Chan, H. W. Tsou, J. L. L. Teng, W. J. Song, P. Wang, S. Y. Lau, M. Zheng, J. F. W. Chan, K. K. To: Human infections with the emerging avian influenza A H7N9 virus from wet market poultry: clinical analysis and characterisation of viral genome. *LANCET*. 2013, 381, 1916.
- [333] J. Jin, J. X. Wang, F. F. Chen, D. P. Wu, J. Hui, J. F. Zhou, J. D. Hu, J. M. Wang, J. Y. Li, X. J. Huang, J. Ma, C. Y. Ji, X. P. Xu, K. Yu, H. Y. Ren, Y. H. Zhou, Y. Tong, Y. J. Lou, W. M. Ni, H. Y. Tong, H. F. Wang, Y. C. Mi, X. Du, B. A. Chen, Y. Shen, Z. Chen, S. J. Chen: Homoharringtonine-based induction regimens for patients with de-novo acute myeloid leukaemia: a multicentre, open-label, randomised, controlled phase 3 trial. *LANCET ONCOLOGY*. 2013, 14, 599.
- [334] Q. X. Chen, K. Zhang, Y. Jin, T. Zhu, B. L. Cheng, Q. Shu, X. M. Fang: Triggering Receptor Expressed on Myeloid Cells-2 Protects against Polymicrobial Sepsis by Enhancing Bacterial Clearance. *AMERICAN JOURNAL OF RESPIRATORY AND CRITICAL CARE MEDICINE*. 2013, 188, 201.
- [335] Y. Ye, S. Yan, G. Jiang, L. Zhou, H. Xie, X. Xie, X. Yu, Y. Ding, J. Tian, Y. Dai, S. Zheng: Galectin-1 Prolongs Survival of Mouse Liver Allografts From Fh3L-Pre-treated Donors. *AMERICAN JOURNAL OF TRANSPLANTATION*. 2013, 13, 569.
- [336] Y. Yang, J. Z. Li, X. P. Pan, P. C. Zhou, X. P. Yu, H. C. Cao, Y. J. Wang, L. J. Li: Co-culture with mesenchymal stem cells enhances metabolic functions of liver cells in bioartificial liver system. *BIOTECHNOLOGY AND BIOENGINEERING*. 2013, 110, 958.
- [337] Z. Huang, X. D. Pan, P. G. Wu, Q. Chen, J. L. Han, X. H. Shen: Validation (in-house and collaborative) of the quantification method for ethyl carbamate in alcoholic beverages and soy sauce by GC-MS. *FOOD CHEMISTRY*. 2013, 141, 4161.
- [338] B. Zhang, M. Buva, Y. J. Qin, C. D. Sun, H. L. Cai, Q. P. Xie, B. Xu, Y. L. Wu: Anthocyanins from Chinese Bayberry Extract Activate Transcription Factor Nrf2 in beta Cells and Negatively Regulate Oxidative Stress-Induced Autophagy. *JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY*. 2013, 61, 8765.
- [339] X. T. Hu, X. B. Sui, L. L. Li, X. F. Huang, R. Rong, X. W. Su, Q. L. Shi, L. J. Mo, X. S. Shu, Y. Y. Kuang, Q. Tao, C. He: Protocadherin 17 acts as a tumour suppressor inducing tumour cell apoptosis and autophagy, and is frequently methylated in gastric and colorectal cancers. *JOURNAL OF PATHOLOGY*. 2013, 229, 62.
- [340] Y. Zhou, X. X. Guan, H. M. Wang, Z. L. Zhu, C. Q. Li, S. Wu, H. Y. Yu: Hypoxia induces osteogenic/angiogenic responses of bone marrow-derived mesenchymal stromal cells seeded on bone-derived scaffolds via ERK1/2 and p38 pathways. *BIOTECHNOLOGY AND BIOENGINEERING*. 2013, 110, 1794.
- [341] Y. Hu, D. B. Zhang, J. P. Ye, X. L. Li, X. F. He: Fast and Accurate Matrix Completion via Truncated Nuclear Norm Regularization. *IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE*. 2013, 35, 2117.
- [342] D. J. He, C. Chen, S. Chan, J. J. Bu, L. T. Yang: Security Analysis and Improvement of a Secure and Distributed Reprogramming Protocol for Wireless Sensor Networks. *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*. 2013, 60, 5348.
- [343] R. Wang, Y. C. Huo, Y. Z. Yuan, K. Zhang, W. Hua, H. J. Bao: GPU-based Out-of-Core Many-Lights Rendering. *ACM TRANSACTIONS ON GRAPHICS*. 2013, 32, 210.
- [344] X. Sun, K. Zhou, J. Guo, G. F. Xie, J. G. Pan, W. C. Wang, B. N. Guo: Line Segment Sampling with Blue-Noise Properties. *ACM TRANSACTIONS ON GRAPHICS*. 2013, 32, 127.
- [345] Z. R. Pan, J. Huang, Y. Y. Tong, C. X. Zheng, H. J. Bao: Interactive Localized Liquid Motion Editing. *ACM TRANSACTIONS ON GRAPHICS*. 2013, 32, 184.
- [346] M. L. Chai, L. Wang, Y. L. Weng, X. G. Jin, K. Zhou: Dynamic Hair Manipulation in Images and Videos. *ACM TRANSACTIONS ON GRAPHICS*. 2013, 32, 75.
- [347] C. Cao, Y. L. Weng, S. Lin, K. Zhou: 3D Shape Regression for Real-time Facial Animation. *ACM TRANSACTIONS ON GRAPHICS*. 2013, 32, 41.
- [348] Y. T. Qian, M. C. Ye, J. Zhou: Hyperspectral Image Classification Based on Structured Sparse Logistic Regression and Three-Dimensional Wafer Texture Features. *IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING*. 2013, 51, 2276.
- [349] P. Li, J. J. Bu, C. Chen, Z. Y. He, D. Cai: Relational Multimanifold Co-clustering. *IEEE TRANSACTIONS ON CYBERNETICS*. 2013, 43, 1871.
- [350] J. H. Dai, W. T. Wang, Q. Xu: An Uncertainty Measure for Incomplete Decision Tables and Its Applications. *IEEE TRANSACTIONS ON CYBERNETICS*. 2013, 43, 1277.
- [351] P. Cheng, F. Zhang, J. M. Chen, Y. X. Sun, X. Shen: A Distributed TDMA Scheduling Algorithm for Target Tracking in Ultrasonic Sensor Networks. *IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS*. 2013, 60, 3836.
- [352] Z. Ren, P. Cheng, J. M. Chen, L. Shi, Y. X. Sun: Optimal Periodic Sensor Schedule for Steady-State Estimation Under Average Transmission Energy Constraint. *IEEE TRANSACTIONS ON AUTOMATIC CONTROL*. 2013, 58, 3265.
- [353] J. P. Cai, C. Y. Wen, H. Y. Su, Z. T. Liu: Robust Adaptive Failure Compensation of Hysteretic Actuators for a Class of Uncertain Nonlinear Systems. *IEEE TRANSACTIONS ON AUTOMATIC CONTROL*. 2013, 58, 2388.
- [354] C. H. Zhao, Y. X. Sun, L. P. Zhao: Interindividual Glucose Dynamics in Different Frequency Bands for Online Prediction of Subcutaneous Glucose Concentration in Type 1 Diabetic Subjects. *AIChE JOURNAL*. 2013, 59, 4228.
- [355] C. H. Zhao, F. R. Gao, Y. X. Sun: Between-Phase Calibration Modeling and Transition Analysis for Phase-Based Quality Interpretation and Prediction. *AIChE JOURNAL*. 2013, 59, 108.
- [356] Z. Q. Ge, Z. H. Song, F. R. Gao: Incorporating Setting Information for Maintenance-Free Quality Modeling of Batch Processes. *AIChE JOURNAL*. 2013, 59, 772.
- [357] Z. Q. Ge, Z. H. Song: Bayesian Inference and Joint Probability Analysis for Batch Process Monitoring. *AIChE JOURNAL*. 2013, 59, 3702.
- [358] L. Cong, X. G. Liu, Y. X. Zhou, Y. X. Sun: Generalized Generic Model Control of High-purity Internal Thermally Coupled Distillation Column Based on Nonlinear Wave Theory. *AIChE JOURNAL*. 2013, 59, 4133.
- [359] Z. G. Wu, P. Shi, H. Y. Su, J. Chu: Stochastic Synchronization of Markovian Jump Neural Networks With Time-Varying Delay Using Sampled Data. *IEEE TRANSACTIONS ON CYBERNETICS*. 2013, 43, 1796.
- [360] Y. G. Ma, X. Guo, X. Q. Wu, L. Dai, L. M. Tong: Semiconductor nanowire lasers. *ADVANCES IN OPTICS AND PHOTONICS*. 2013, 5, 216.
- [361] J. B. Li, C. Meng, Y. Liu, X. Q. Wu, Y. Z. Lu, Y. Ye, L. Dai, L. M. Tong, X. Liu, Q. Yang: Wavelength Tunable CdSe Nanowire Lasers Based on the Absorption-Emission-Absorption Process. *ADVANCED MATERIALS*. 2013, 25, 835.
- [362] X. Q. Wu, Y. Xiao, C. Meng, X. N. Zhang, S. L. Yu, Y. P. Wang, C. X. Yang, X. Guo, C. Z. Ning, L. M. Tong: Hybrid Photon-Plasmon Nanowire Lasers. *NANO LETTERS*. 2013, 13, 5654.
- [363] Y. Zhang, J. Qian, D. Wang, Y. L. Wang, S. L. He: Multifunctional Gold Nanorods with Ultrahigh Stability and Tunability for In Vivo Fluorescence Imaging, SERS Detection, and Photodynamic Therapy. *ANGEWANDTE CHEMIE-INTERNATIONAL EDITION*. 2013, 52, 11448.
- [364] G. Y. Qu, Z. F. Hu, Y. P. Wang, Q. Yang, L. M. Tong: Synthesis of Optical-Quality Single-Crystal beta-Ba2O4 Microwires and Nanowires. *ADVANCED FUNCTIONAL MATERIALS*. 2013, 23, 1232.
- [365] R. M. Wu, L. Xu, P. Liu, Y. Q. Zhang, Z. R. Zheng, H. F. Li, X. Liu: Freeform illumination design: a nonlinear boundary problem for the elliptic Monge-Ampere equation. *OPTICS LETTERS*. 2013, 38, 229.
- [366] X. K. Wang, X. W. Guan, Q. S. Huang, J. J. Zheng, Y. C. Shi, D. X. Dai: Suspended ultra-small disk resonator on silicon for optical sensing. *OPTICS LETTERS*. 2013, 38, 5405.
- [367] P. Wang, Z. Y. Li, L. Zhang, L. M. Tong: Electron-beam-activated light-emitting polymer nanofibers. *OPTICS LETTERS*. 2013, 38, 1040.
- [368] J. Wang, D. Liang, Y. B. Tang, D. X. Dai, J. E. Bowers: Realization of an ultra-short silicon polarization beam splitter with an asymmetrical bent directional coupler. *OPTICS LETTERS*. 2013, 38, 4.
- [369] T. Ling, D. Liu, Y. Y. Yang, L. Sun, C. Tian, Y. B. Shen: Off-axis cyclic radial shearing interferometer for measurement of centrally blocked transient wavefront. *OPTICS LETTERS*. 2013, 38, 2493.
- [370] L. Jin, X. Fu, B. Yang, Y. C. Shi, D. X. Dai: Optical bistability in a high-Q racetrack resonator based on small SU-8 ridge waveguides. *OPTICS LETTERS*. 2013, 38, 2134.
- [371] X. X. Jiang, J. J. Ye, J. Zou, M. Y. Li, J. J. He: Cascaded silicon-on-insulator double-ring sensors operating in high-sensitivity transverse-magnetic mode. *OPTICS LETTERS*. 2013, 38, 1349.
- [372] X. Hao, C. F. Kuang, Y. H. Li, X. Liu: Evanescent-wave-induced frequency shift for optical super-resolution imaging. *OPTICS LETTERS*. 2013, 38, 2455.
- [373] X. Hao, C. F. Kuang, Z. T. Gu, S. A. Li, J. H. Ge, X. Liu: Optical super-resolution by subtraction of time-gated images. *OPTICS LETTERS*. 2013, 38, 1001.
- [374] X. W. Guan, H. Wu, Y. C. Shi, L. Wosinski, D. X. Dai: Ultracompact and broadband polarization beam splitter utilizing the evanescent coupling between a hybrid plasmonic waveguide and a silicon nanowire. *OPTICS LETTERS*. 2013, 38, 3005.
- [375] D. X. Dai, J. Wang, Y. C. Shi: Silicon mode (de)multiplexer enabling high capacity photonic networks-on-chip with a single-wavelength-carrier light. *OPTICS LETTERS*. 2013, 38, 1422.
- [376] X. X. Chen, H. M. Gong, S. W. Dai, D. Zhao, Y. Q. Yang, Q. Li, M. Qiu: Near-infrared broadband absorber with film-coupled multilayer nanorods. *OPTICS LETTERS*. 2013, 38, 2247.
- [377] H. S. Chen, B. Zheng, L. Shen, H. P. Wang, X. M. Zhang, N. I. Zheludev, B. L. Zhang: Ray-optics cloaking devices for large objects in incoherent natural light. *NATURE COMMUNICATIONS*. 2013, 4, 2652.
- [378] D. X. Ye, Z. Y. Wang, K. W. Xu, H. Li, J. T. Huangfu, Z. Wang, L. X. Ran: Ultrawideband Dispersion Control of a Metamaterial Surface for Perfectly-Matched-Layer-Like Absorption. *PHYSICAL REVIEW LETTERS*. 2013, 111, 187402.
- [379] K. J. Zhou, S. M. Pan, S. J. Liu, K. K. Hu: Fiber gyroscope with a double sensitivity employing a polarization splitters. *OPTICS LETTERS*. 2013, 38, 1337.
- [380] L. Z. Yang, T. Hu, R. Hao, C. Qiu, C. Xu, H. Yu, Y. Xu, X. Q. Jiang, Y. B. Li, J. Y. Yang: Low-chirp high-extinction-ratio modulator based on graphene-silicon waveguide. *OPTICS LETTERS*. 2013, 38, 2512.
- [381] Z. Y. Xiang, X. Dai, X. J. Gong: Noncentral catadioptric camera calibration using a generalized unified model. *OPTICS LETTERS*. 2013, 38, 1367.
- [382] H. Y. Qiu, G. M. Jiang, T. Hu, H. F. Shao, P. Yu, J. Y. Yang, X. Q. Jiang: FSR-free add-drop filter based on silicon grating-assisted contradirectional couplers. *OPTICS LETTERS*. 2013, 38, 1.
- [383] H. Chi, Y. Chen, Y. Mei, X. F. Jin, S. L. Zheng, X. M. Zhang: Microwave spectrum sensing based on photonic time stretch and compressive sampling. *OPTICS LETTERS*. 2013, 38, 136.
- [384] J. Y. Wang, X. Wang, Z. B. Zhu, J. T. Huangfu, C. Z. Li, L. X. Ran: 1-D Microwave Imaging of Human Cardiac Motion: An Ab-Initio Investigation. *IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES*. 2013, 61, 2101.
- [385] C. Z. Hua, X. D. Wu, N. Yang, W. Wu: Air-Filled Parallel-Plate Cylindrical Modified Luneberg Lens Antenna for Multiple-Beam Scanning at Millimeter-Wave Frequencies. *IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES*. 2013, 61, 436.
- [386] X. Lin, Y. Xu, A. A. Hakro, T. Hasan, R. Hao, B. L. Zhang, H. S. Chen: Ab initio optical study of graphene on hexagonal boron nitride and fluorographene substrates. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 1618.
- [387] X. Lin, S. S. Lin, Y. Xu, A. A. Hakro, T. Hasan, B. L. Zhang, B. Yu, J. K. Luo, E. Li, H. S. Chen: Ab initio study of electronic and optical behavior of two-dimensional silicon carbide. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 2131.
- [388] X. L. He, D. J. Li, J. Zhou, W. B. Wang, W. P. Xuan, S. R. Dong, H. Jin, J. K. Luo: High sensitivity humidity sensors using flexible surface acoustic wave devices made on nanocrystalline ZnO/polyimide substrates. *JOURNAL OF MATERIALS CHEMISTRY C*. 2013, 1, 6210.
- [389] W. Xiong, Z. Yang, H. L. Zhai, G. C. Wang, X. R. Xu, W. M. Ma, R. K. Tang: Alleviation of high light-induced photoinhibition in cyanobacteria by artificially conferred biosilica shells. *CHEMICAL COMMUNICATIONS*. 2013, 49, 7525.
- [390] L. F. Qi, W. J. Shao, D. L. Shi: JAM-2 siRNA intracellular delivery and real-time imaging by proton-sponge coated quantum dots. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 654.
- [391] X. Y. Chen, X. L. Sun, X. Y. Yang, L. Zhang, M. Lin, G. J. Yang, C. Y. Gao, Y. B. Feng, J. Yu, Z. B. Gou: Biomimetic preparation of trace element-codoped calcium phosphate for promoting osteoporotic bone defect repair. *JOURNAL OF MATERIALS CHEMISTRY B*. 2013, 1, 1316.