

- 1) Yang Zhong#, Gengling Liu#, Yang Su, Wangping Sheng, Lingyun Gong, Jiaqi Zhang, Licheng Tan*, **Yiwang Chen***, Diammonium Molecular Configuration-Induced Regulation of Crystal Orientation and Carrier Dynamics for Highly Efficient and Stable 2D/3D Perovskite Solar Cells, *Angew. Chem. Int. Ed.* **61** (5), e202114588 (1-10) (2022). 2022.01
- 2) Gengling Liu, Yang Zhong, Wenhui Feng, Meifang Yang, Guo Yang, Jun-Xing Zhong, Tian Tian, Jian-Bin Luo, Junlei Tao, Shaopeng Yang, Xu-Dong Wang, Licheng Tan, **Yiwang Chen***, Wu-Qiang Wu*, Multidentate Chelation Heals Structural Imperfections for Minimized Recombination Loss in Lead-Free Perovskite Solar Cells, *Angew. Chem. Int. Ed.* **61** (40), e202209464 (1-10) (2022). **ESI Highly Cited Paper**. 2022.10 (SYSU)
- 3) Jianquan Zhang#, Siwei Luo#, Heng Zhao, Xiaoyun Xu, Xinhui Zou, Ao Shang, Jiaen Liang, Fujin Bai, Yuzhong Chen, Kam Sing Wong, Zaifei Ma, Wei Ma, Huawei Hu*, **Yiwang Chen***, He Yan*, Precise Control of Selenium Functionalization in Non-Fullerene Acceptors Enabling High-Efficiency Organic Solar Cells, *Angew. Chem. Int. Ed.* **61** (46), e202206930 (1-9) (2022). 2022.11 (DHU)
- 4) Li Wang#, Mengke Peng#, Jierui Chen, Ting Hu, Kai Yuan*, and **Yiwang Chen***, Eliminating Micropore Confinement Effect of Carbonaceous Electrode for Promoting Zn-Ion Storage Capability, *Adv. Mater.* **34** (39), 2203744 (1-11) (2022). 2022.09
- 5) Siqi Liu#, Haojie Li#, Xueting Wu, Dong Chen, Lin Zhang*, Xiangchuan Meng, Licheng Tan, Xiaotian Hu*, and **Yiwang Chen***, Pseudo-Planar Heterojunction Organic Photovoltaics with Optimized Light Utilization for Printable Solar Windows, *Adv. Mater.* **34** (23), 2201604 (1-11) (2022). 2022.06
- 6) Baojin Fan, Jian Xiong, Yanyan Zhang, Chenxiang Gong, Feng Li, Xiangchuan Meng, Xiaotian Hu*, Zhongyi Yuan, Fuyi Wang, **Yiwang Chen***, A Bionic Interface to Suppressing the Coffee-ring Effect for Reliable and Flexible Perovskite Modules with a near 90% Yield Rate, *Adv. Mater.* **34** (29), 2201840 (1-12) (2022). 2022.07
- 7) Chenxiang Gong#, Baojin Fan#, Feng Li, Zhi Xing, Xiangchuan Meng, Ting Hu, Xiaotian Hu* and **Yiwang Chen***, An Enhanced Couette Flow Printing Strategy to Recover the Efficiency Losses by Area and Substrate Differences in Perovskite Solar Cells, *Energy Environ. Sci.* **15** (10), 4313-4322 (2022). 2022.10

- 8) Xunfan Liao#, Qian Xie#, Yaxiao Guo#, Qiannan He, Zeng Chen, Na Yu, Peipei Zhu, Yongjie Cui, Zaifei Ma, Xiaobao Xu, Haiming Zhu and **Yiwang Chen***, Inhibiting Excessive Molecular Aggregation to Achieve Highly Efficient and Stabilized Organic Solar Cells by Introducing Star-Shaped Nitrogen Heterocyclic-Ring Acceptor, *Energy Environ. Sci.* **15** (1), 384-394 (2022). 2022.01 (JXNU)
- 9) Haojie Li#, Siqi Liu#, Xueting Wu, Qingchun Qi, Haiyang Zhang, Xiangchuan Meng, Xiaotian Hu*, Long Ye*, and **Yiwang Chen***, A General Enlarging Shear Impulse Approach to Green Printing Large-area and Efficient Organic Photovoltaics, *Energy Environ. Sci.* **15** (5), 2130-2138 (2022). 2022.05
- 10) Zongcai Li#, Zhi Xing#, Haibin Peng, Xiangchuan Meng, Dengxue Li, Lu Huang, Xiaotian Hu, Ting Hu* and **Yiwang Chen***, Reactive Inhibition Strategy for Triple-cation Mixed-halide Perovskite Ink with Prolonged Shelf-life, *Adv. Energy Mater.* **12** (28), 2200650 (1-8) (2022). 2022.07
- 11) Jia Yang#, Wangping Sheng#, Ruiming Li#, Lingyun Gong, Yanyan Li, Licheng Tan*, Qianqian Lin*, and **Yiwang Chen***, Uncovering the Mechanism of Poly(ionic-liquid)s Multiple Inhibition of Ion Migration for Efficient and Stable Perovskite Solar Cells, *Adv. Energy Mater.* **12** (15), 2103652 (1-10) (2022). 2022.04
- 12) Jiaqi Zhang#, Jia Yang#, Runying Dai#, Wangping Sheng, Yang Su, Yang Zhong, Xiang Li, Licheng Tan*, **Yiwang Chen***, Elimination of Interfacial Lattice Mismatch and Detrimental Reaction by Self-Assembled Layer Dual-Passivation for Efficient and Stable Inverted Perovskite Solar Cells, *Adv. Energy Mater.* **12** (18), 2103674 (1-10) (2022). **ESI Highly Cited Paper**. 2022.05
- 13) Jiayou Zhang#, Lifu Zhang#*, Xinkang Wang, Zijun Xie, Lei Hu, Houdong Mao, Guodong Xu, Licheng Tan, **Yiwang Chen***, Reducing Photovoltaic Property Loss of Organic Solar Cells in Blade-coating by Optimizing Micro-nano Morphology via Non-halogenated Solvent, *Adv. Energy Mater.* **12** (14), 2200165 (1-8) (2022). 2022.04 (JXNU)
- 14) Xunfan Liao#, Wenchao Xie#, Zeyao Han#, Yongjie Cui, Xinxin Xia, Xueliang Shi, Zhaoyang Yao, Xiaobao Xu, Xinhui Lu and **Yiwang Chen***, NIR Photodetectors with Highly Efficient Detectivity Enabled by Two-Dimensional Fluorinated Dithienopicenocarbazole-Based Ultra-Narrow Bandgap Acceptors, *Adv. Funct. Mater.* **32** (36), 2204255 (1-11) (2022). 2022.09 (JXNU)

- 15) Feng Li#, Chenxiang Gong#, Baojin Fan, Zhi Xing, Xiangchuan Meng, Shaohua Zhang*, Xiaotian Hu* and **Yiwang Chen***, Three-dimensional Network-assisted Crystallization for Fully Printed Perovskite Solar Cells with Superior Irradiation Stability, *Adv. Funct. Mater.* **32** (39), 2206412 (1-11) (2022). 2022.09
- 16) Zhongyou Peng, Shulong Li, Yuting Huang, Junxi Guo, Licheng Tan*, **Yiwang Chen***, Sodium-intercalated Manganese Oxides for Achieving Ultra-Stable and Fast Charge Storage Kinetics in Wide-Voltage Aqueous Supercapacitors, *Adv. Funct. Mater.* **32** (46), 2206539 (1-11) (2022). 2022.11
- 17) Mengke Peng, Li Wang, Longbin Li, Xiannong Tang, Bingyu Huang, Ting Hu, Kai Yuan*, **Yiwang Chen***, Manipulating the Interlayer Spacing of 3D MXenes with Improved Stability and Zinc-Ion Storage Capability, *Adv. Funct. Mater.* **32** (7), 2109524 (1-10) (2022). 2022.02 (JXNU)
- 18) Lifu Zhang#, Lei Hu#, Xinkang Wang, Houdong Mao, Li Zeng, Licheng Tan*, Xiaodong Zhuang*, **Yiwang Chen***, Regulation of Crystallinity and Vertical Phase Separation Enables High-Efficiency Thick Organic Solar Cells with Reduced Voltage Loss, *Adv. Funct. Mater.* **32** (29), 2202103 (1-9) (2022). 2022.07
- 19) Yang Su#, Jia Yang#, Gengling Liu, Wangping Sheng, Jiaqi Zhang, Yang Zhong, Licheng Tan*, **Yiwang Chen***, Acetic Acid-Assisted Synergistic Modulation of Crystallization Kinetics and Inhibition of Sn²⁺ Oxidation in Tin-Based Perovskite Solar Cells, *Adv. Funct. Mater.* **32** (12), 2109631 (1-9) (2022). 2022.03
- 20) Xuexiang Huang#, Lifu Zhang#, Yujun Cheng#, Jiyeon Oh#, Chunquan Li, Bin Huang, Lin Zhao, Jiawei Deng, Youhui Zhang, Zuoji Liu, Feiyan Wu, Xiaotian Hu, Changduk Yang, Lie Chen*, **Yiwang Chen***, Novel Narrow Bandgap Terpolymer Donors Enables Record Performance for Semitransparent Organic Solar Cells Based on All-Narrow Bandgap Semiconductors, *Adv. Funct. Mater.* **32** (5), 2108634 (1-10) (2022). 2022.01
- 21) Ji Wan#, Li Zeng#, Xunfan Liao#*, Zeng Chen, Siqi Liu, Peipei Zhu, Haiming Zhu, and **Yiwang Chen***, All-Green Solvent-Processed Planar Heterojunction Organic Solar Cells with Outstanding Power Conversion Efficiency of 16%, *Adv. Funct. Mater.* **32** (5), 2107567 (1-8) (2022). 2022.01 (JXNU)
- 22) Jiaxuan Li#, Xiangchuan Meng#, Zengqi Huang, Runying Dai, Wangping Sheng, Chenxiang Gong, Licheng Tan*, **Yiwang Chen***, A Regularity-based Fullerene

- Interfacial Layer for Efficient and Stable Perovskite Solar Cells via Blade-Coating, *Adv. Funct. Mater.* **32** (1), 2105917 (1-10) (2022). 2022.01 (JXNU)
- 23) Jun Huang, Kai Yuan*, **Yiwang Chen***, Wide Voltage Aqueous Asymmetric Supercapacitors: Advances, Strategies and Challenges, *Adv. Funct. Mater.* **32** (4), 2108107 (1-68) (2022). 2022.01 (JXNU)
- 24) Zhi Xing#, Suyu Lin#, Xiangchuan Meng#, Ting Hu*, Dengxue Li, Baojin Fan, Yongjie Cui, Fengyu Li*, Xiaotian Hu, and **Yiwang Chen***, A Highly Tolerant Printing for Scalable and Flexible Perovskite Solar Cells, *Adv. Funct. Mater.* **31** (50), 2107726 (1-8) (2021). 2021.12
- 25) Xiangchuan Meng, Xiaotian Hu*, Yanyan Zhang, Zengqi Huang, Zhi Xing, Chenxiang Gong, Li Rao, Hongyu Wang, Fuyi Wang, Ting Hu, Licheng Tan, Yanlin Song, **Yiwang Chen***, Biomimetic Self-shield Interface for Flexible Perovskite Solar Cells with Negligible Lead Leakage, *Adv. Funct. Mater.* **31** (52), 2106460 (1-12) (2021). 2021.12 (Editor Choice Hot Topic)
- 26) Li Wang, Mengke Peng, Jierui Chen, Xiannong Tang, Longbin Li, Ting Hu, Kai Yuan*, and **Yiwang Chen***, High Energy and Power Zinc Ion Capacitors: A Dual-Ion Adsorption and Reversible Chemical Adsorption Coupling Mechanism, *ACS Nano* **16** (2), 2877-2888 (2022). ESI Highly Cited Paper. 2022.02
- 27) Xuanping Wang#, Longbin Li#, Mingzhu Shi, Yiqi Wang, Guodong Xu, Kai Yuan, Peipei Zhu*, Mengning Ding*, and **Yiwang Chen***, Understanding Electrocatalytic Mechanism of Self-Template Formation of Hierarchical Co₉S₈/Ni₃S₂ Heterojunctions for Highly Selective Electroreduction of Nitrobenzene, *Chem. Sci.* **13** (39), 11639-11647 (2022). 2022.10 (JXNU)
- 28) Longbin Li, Kai Yuan* and **Yiwang Chen***, Breaking the Scaling Relationship Limit: From Single-Atom to Dual-Atom Catalysts, *Acc. Mater. Res.* **3** (6), 584-596 (2022). Top 10 Most Downloaded article in 2022. 2022.06
- 29) Ting Hu#, Zhi Xing#, Lu Huang, Dengxue Li, Xiangchuan Meng, Xiaotian Hu, and **Yiwang Chen***, Patterned 2D Perovskite Film with Preferably Orientated 3D-like Phase for Efficient Perovskite Solar Cells, *Chem. Mater.* **34** (18), 8446-8455 (2022). 2022.09
- 30) Zhi Xing, Xiangchuan Meng, Dengxue Li, Ting Hu*, Xiaotian Hu and **Yiwang Chen***, Colloidal Chemistry in Perovskite Precursor Solution, *Sci. Bull.* **67** (6), 561-564 (2022). (views). 2022.03

- 31) Zhongyou Peng, Junxi Guo, Qichang He, Shulong Li, Licheng Tan*, **Yiwang Chen***, Hierarchically nitrogen-doped mesoporous carbon nanospheres with dual ion adsorption capability for superior rate and ultra-stable zinc ion hybrid supercapacitors, *Sci. China Mater.* **65** (9), 2401-2411 (2022). 2022.09
- 32) Lifu Zhang#, Houdong Mao#, Liqiang Huang, Lei Hu, Xinkang Wang, Licheng Tan* & **Yiwang Chen***, Achieving Improved Stability and Minimal Non-Radiative Recombination Loss for over 18% Binary Organic Photovoltaics via Versatile Interfacial Regulation Strategy, *Sci. China Chem.* **65** (8), 1623-1633 (2022). 2022.08
- 33) Dong Chen#, Siqi Liu#, Xiaotian Hu#, Feiyan Wu, Jiabin Liu, Kangkang Zhou, Long Ye, Lie Chen*, and **Yiwang Chen***, Printable and Stable All-Polymer Solar Cells Based on Non-Conjugated polymer Acceptors with Excellent Mechanical Robustness, *Sci. China Chem.* **65** (1), 182-189 (2022). **CNKI Highly PCSI Paper. CNKI Highly Cited Paper.** 2022.01
- 34) Li Zeng#, Lifu Zhang#, Liucheng Mao, Xiaotian Hu, Yen Wei, Licheng Tan* and **Yiwang Chen***, AIE Molecules UV-Filtering Effect Improves the Photostability of Organic Solar Cells, *Adv. Opt. Mater.* **10** (20), 2200968 (1-9) (2022). 2022.10
- 35) Xueting Wu#, Siqi Liu#, Haojie Li, Xiangchuan Meng, Xiaotian Hu*, Rui Guo*, and **Yiwang Chen***, High light-utilization-efficiency organic photovoltaic windows with over 40% transmittance enabled by a printable bionic photonic reflector, *Adv. Opt. Mater.* **10** (23), 2201803 (1-8) (2022). 2022.12
- 36) Lifu Zhang, Heng Zhao, Ming Hu, Xinkang Wang, Lei Hu, Houdong Mao, Zhongyi Yuan*, Wei Ma*, **Yiwang Chen***, Enhanced Efficiency and Excellent Thermostability in Organic Photovoltaics via Ternary Strategy with Twisted conjugated Compound, *Small* **17** (49), 2103537 (1-9) (2021). 2021.12
- 37) Longbin Li#, Senhe Huang#, Rui Cao#, Kai Yuan*, Chenbao Lu, Bingyu Huang, Xiannong Tang, Ting Hu, Xiaodong Zhuang*, **Yiwang Chen***, Optimizing Microenvironment of Asymmetric N,S-coordinated Single-Atom Fe via Axial Fifth Coordination towards Efficient Oxygen Electroreduction, *Small* **18** (2), 2105387 (1-12) (2022). **Most Downloaded Article in First 12 Months.** 2022.01
- 38) Yaoshuai Hong#, Longbin Li#, Bingyu Huang, Xiannong Tang, Weijuan Zhai, Ting Hu, Kai Yuan*, and **Yiwang Chen***, Deciphering the Precursor-Performance Relationship of Single-Atom Iron Oxygen Electroreduction Catalysts via Isomer Engineering, *Small* **18** (11), 2106122 (1-9) (2022). 2022.03

- 39) Weijuan Zhai#, Senhe Huang#, Chenbao Lu, Xiannong Tang, Longbin Li, Bingyu Huang, Ting Hu, Kai Yuan*, Xiaodong Zhuang*, and **Yiwang Chen***, Simultaneously Integrate Iron Single Atom and Nanocluster Triggered Tandem Effect for Boosting Oxygen Electroreduction, *Small* **18** (15), 2107225 (1-10) (2022). 2022.04
- 40) Dong Chen#, Siqi Liu# , Bin Huang#, Jiyeon Oh, Feiyan Wu, Jiabin Liu, Changduk Yang, Lie Chen*, and **Yiwang Chen***, Rational Regulation of the Molecular Aggregation Enables A Facile Blade-coating Process of Large-area All-polymer Solar Cells with Record Efficiency, *Small* **18** (20), 2200734 (1-9) (2022). 2022.05
- 41) Gengling Liu#, Yang Zhong#, Houdong Mao#, Jia Yang, Runying Dai, Xiaotian Hu, Zhi Xing, Wangping Sheng, Licheng Tan*, **Yiwang Chen***, Highly Efficient and Stable ZnO-based MA-free Perovskite Solar Cells via Overcoming Interfacial Mismatch and Deprotonation Reaction, *Chem. Eng. J.* **431**, 134235 (1-9) (2022). 2022.03 (JXNU)
- 42) Xunfan Liao, Hongqiao Pei, Heng Zhao, Yongjie Cui, Lei Li, Xueliang Shi, Peipei Zhu*, Wei Ma*, **Yiwang Chen*** and Alex K.-Y. Jen*, The Synergistic Effects of Central Core Size and End Group Engineering on Performance of Narrow Bandgap Nonfullerene Acceptors, *Chem. Eng. J.* **435**, 135020 (1-12) (2022). 2022.05 (JXNU)
- 43) Pachaiyappan Murugan, Ting Hu*, Xiaotian Hu, **Yiwang Chen***, Fused Ring A-DA'D-A (Y-Series) Non-Fullerene Acceptor: Recent Developments and Design Strategies for Organic Photovoltaic, *J. Mater. Chem. A* **10** (35), 17968-17987 (2022). 2022.09 (JXNU)
- 44) Pachaiyappan Murugan, Ting Hu*, Xiaotian Hu, **Yiwang Chen***, Advancements in Organic Small Molecule Hole-Transporting Materials for Perovskite Solar Cells: Past and Future, *J. Mater. Chem. A* **10** (10), 5044-5081 (2022). **ESI Highly Cited Paper**. 2022.03
- 45) Haiyan Fu, Jianliang Gong*, Hao Zhong, Bao Yang, Zuchang Long, Jiqing Zeng, Zhiyu Cheng, Jialin He, Bingang Xu, **Yiwang Chen***, Surface Microstructural Engineering of Silicone Elastomers for High Performance Adhesive Surface-Enabled Mechanical Energy Harvesters, *J. Mater. Chem. A* **10** (17), 9643-9654 (2022). 2022.05 (JXNU)

- 46) Shulong Li#, Zhongyou Peng#, Yuting Huang, Licheng Tan*, **Yiwang Chen***, Electrostatic Self-assembly of MXene and Carbon Nanotube@MnO₂ Multilevel Hybrids for Achieving Fast Charge Storage Kinetics in Aqueous Asymmetric Supercapacitors, *J. Mater. Chem. A* **10** (44), 23886-23895 (2022). 2022.11
- 47) Haiyan Fu, Zuchang Long, Mingxuan Lai, Junhao Cao, Rihui Zhou, Jianliang Gong*, **Yiwang Chen***, Quantum Dot Hybridization of Piezoelectric Polymer Films for Non-Transfer Integration of Flexible Biomechanical Energy Harvesters, *ACS Appl. Mater. Interfaces* **14** (26), 29934-29944 (2022). 2022.07 (JXNU)
- 48) Xiang Li#, Wangping Sheng#, Xiaopeng Duan, Zhuojia Lin, Jia Yang, Licheng Tan*, **Yiwang Chen***, Defect Passivation Effect of Chemical Groups on Perovskite Solar Cells, *ACS Appl. Mater. Interfaces* **14** (30), 34161-34170 (2022). (Forum Article) 2022.08
- 49) Deliang Cheng#, Min Lin#, Jiangwen Liu, Lichun Yang*, **Yiwang Chen***, and Min Zhu, N-doped carbon coated SnS/rGO composite with superior cyclic stability as anode for lithium-ion batteries, *Ind. Eng. Chem. Res.* **61** (12), 4339-4347 (2022). 2022.03 (JXNU)
- 50) Deliang Cheng*, Ankai Wei, Leyi Ye, Guodong Xu, Liang Tan, Bin Lu, **Yiwang Chen***, Interfacial Bonding of SnSb Alloy with Graphene Towards Ultrafast and Cycle-Stable Na-Ion Batteries Anode, *ACS Sustainable Chem. Eng.* **10** (37), 12177-12187 (2022). 2022.09 (JXNU)
- 51) Jiaxin Zhong#, Yongjie Cui#, Peipei Zhu, Ming Zhang, Wenchao Xie, Hengchen Liu, Qian Xie, Feng Liu, Xunfan Liao*, **Yiwang Chen***, Non-Fused Ring Electron Acceptors for Efficient Organic Solar Cells Enabled by Multiple Intramolecular Conformational Locks, *ACS Appl. Energy Mater.* **5** (4), 5136-5145 (2022). 2022.04 (DHU)
- 52) Xiannong Tang#, Yonggan Wu#, Weijuan Zhai#, Tinglin Chu, Longbin Li, Bingyu Huang, Ting Hu, Kai Yuan*, **Yiwang Chen***, Iron-Based Nanocomposites Implanting in N, P Co-doped Carbon Nanosheets as Efficient Oxygen Reduction Electrocatalysts for Zn-Air Batteries, *Compos. Commun.* **29**, 100994 (1-9) (2022). 2022.01
- 53) Yonggan Wu#, Xiannong Tang#, Fangjun Zhang, Longbin Li, Weijuan Zhai, Bingyu Huang, Ting Hu, Dirk Lützenkirchen-Hecht, Kai Yuan*, and **Yiwang Chen***, Manipulating electronic configuration of Fe-N₄ sites by electron-

- withdrawing/donating strategy with improved oxygen electroreduction performance, *Mater. Chem. Front.* **6** (9), 1209-1217 (2022). 2022.05
- 54) Qian Xie#, Yongjie Cui#, Zeng Chen#, Ming Zhang, Chao Liu, Haiming Zhu, Feng Liu, Christoph J. Brabec, Xunfan Liao* and **Yiwang Chen***, Achieving Efficient and Stabilized Organic Solar Cells by Precisely Controlling the Proportion of Copolymerized Units in Electron-rich Polymers, *Nanoscale* **14** (47), 17714-17724 (2022). 2022.12 (**JAS**)
- 55) Qichang He#, Zhongyou Peng#, Shulong Li, Licheng Tan*, **Yiwang Chen***, High-Energy Aqueous Asymmetric Supercapacitors via Synergistic Design of Electrodes Derived from Hierarchical Vanadium Dioxide Nanocomposites, *ChemElectroChem* **9** (2), e202101576 (1-8) (2022). 2022.01
- 56) Jing Wang, Liang Liu, Feiyan Wu*, Zuoji Liu, Zhiping Fan, Lie Chen*, **Yiwang Chen***, The recent development of n-type organic thermoelectric materials: focus on the influence of structure modification on molecule arrangement and solution processing, *ChemSusChem* **15** (4), e202102420 (1-18) (2022). 2022.02
- 57) Yahui Liu, Bowen Liu, Chang-Qi Ma*, Fei Huang, Guitao Feng, Hongzheng Chen, Jianhui Hou, Lingpeng Yan, Qingya Wei, Qun Luo*, Qinye Bao*, Wei Ma*, Wei Liu, Weiwei Li, Xiangjian Wan, Xiaotian Hu*, Yanchun Han*, Yaowen Li*, Yinhua Zhou*, Yingping Zou, **Yiwang Chen***, Yuqiang Liu*, Lei Meng*, Yongfang Li*, Yongsheng Chen, Zheng Tang*, Zhicheng Hu, Zhi-Guo Zhang, Zhishan Bo*, Recent progress in organic solar cells (Part II device engineering), *Sci. China Chem.* **65** (8), 1457-1497 (2022). **ESI Highly Cited Paper. ESI Hot Paper. CNKI Highly PCSI Paper.** 2022.08
- 58) Lei Wang#, Ming Hu#, Youdi Zhang#, Zhongyi Yuan*, Yu Hu*, Xiaohong Zhao, **Yiwang Chen***, High molecular weight polymeric acceptors based on semi-perfluoroalkylated perylene diimides for pseudo-planar heterojunction all-polymer organic solar cells, *Polymer* **255**, 125114 (1-9) (2022). 2022.08
- 59) Yahui Liu, Bowen Liu, Chang-Qi Ma, Fei Huang*, Guitao Feng, Hongzheng Chen*, Jianhui Hou*, Lingpeng Yan, Qingya Wei, Qun Luo, Qinye Bao, Wei Ma, Wei Liu, Weiwei Li*, Xiangjian Wan*, Xiaotian Hu, Yanchun Han, Yaowen Li, Yinhua Zhou, Yingping Zou*, **Yiwang Chen**, Yongfang Li*, Yongsheng Chen*, Zheng Tang, Zhicheng Hu, Zhi-Guo Zhang*, Zhishan Bo*, Recent progress in organic solar cells (Part I material science), *Sci. China Chem.* **65** (2), 224-268 (2022). (Reviews). **ESI Highly Cited Paper. ESI Hot Paper.** 2022.02

- 60) Yujun Cheng#, Bin Huang#, Xuexiang Huang#, Lifu Zhang#, Seoyoung Kim, Qian Xie, Chao Liu, Thomas Heumüller, Zuoji Liu, Youhui Zhang, Feiyan Wu, Changduk Yang, Christoph J. Brabec, **Yiwang Chen**, Lie Chen*, Oligomer-assisted Photoactive Layers Enable >18% Efficiency of Organic Solar Cells, *Angew. Chem. Int. Ed.* **61** (21), e202200329 (1-12) (2022). 2022.05
- 61) Jiawei Deng, Bin Huang, Wenhao Li, Lifu Zhang, Sang Young Jeong, Shaorong Huang, Shijing Zhang, Feiyan Wu, Xiaoli Xu, Guifu Zou, Han Young Woo, **Yiwang Chen**, and Lie Chen*, Ferroelectric Polymer Drives Performance Enhancement of Non-fullerene Organic Solar Cells, *Angew. Chem. Int. Ed.* **61** (25), e202202177 (1-11) (2022). 2022.06
- 62) Lei Wang#, Tingting Wang#, Jiyeon Oh#, Zhongyi Yuan*, Changduk Yang*, Yu Hu, Xiaohong Zhao*, **Yiwang Chen**, Halogen-free donor polymers based on dicyanobenzotriazole for additive-free organic solar cells, *Chem. Eng. J.* **442**, 136068 (1-8) (2022). 2022.08