

A.Prof. Xiaolan Zhong

School of Physics

Beihang University, China

Mobile Phone: 13811181528

Email: zhongxl@buaa.edu.cn

Home page: http://shi.buaa.edu.cn/zhongxiaolan/zh_CN/index.htm

Google Scholar: <https://0-scholar-google-com.brum.beds.ac.uk/citations?user=hwwm-tEAAAJ&hl=en>



Education

Ph.D., Key Laboratory of Optical Physics, Institute of Physics, Chinese Academy of Sciences, Beijing, China

Major: Optic

Supervisor: Prof. *Zhiyuan Li*

Sep 2011 – Jan 2014

Visiting Scholar, Laser Microprocessing Laboratory, Department of Electrical & Computer Engineering, National University of Singapore, Singapore

Prof. *Minghui Hong*

Apr 2013 – Oct 2013

M.Sc., Department of Physics, Capital Normal University, Beijing, China

Major: Optics

Supervisor: Prof. *Yunsong Zhou*

Sep 2008 – Jul 2011

B. Sc., Department of Physics, Capital Normal University, Beijing, China

Sep 2004 – Jul 2008

Employment History

Beihang University, Associate Professor

Jun 2017 – Now

Department of Applied Physics, School of Physics

University of Strasbourg, Postdoctoral Research Fellow

Jan 2014 – May 2017

Institut de Science et d’Ingeniere Supramoleculaires

Prof. *Thomas. W. Ebbesen*

Research Achievements and Contributions

She has published 74 SCI articles, including *Nature Nanotechnology*, *Angewandte Chemie International Edition*, *ACS Nano*, *Nano Energy*, *Journal of Materials Chemistry A*, *Physical Review Series*, and so on, with a total of 3062 citations in Google Scholar, an h-index of 29, and a maximum of 442 citations per article. The first/responding authors articles include 31 articles. She received more than 10 funding supports, including 2 National Natural Science Foundation of China, 1 Beijing Natural Science Foundation of China and several horizontal funding supports. She received the second prize of Science and Technology of Chinese Photoreceptor Society (ranking: 3/6, 2021). Her current research interests include nanophotonics, plasmonics, electrochromic/photochromic materials, and so on.

Professional Activities

- Youth Director of China Photoreceptor Society
- Young member of the Electrochromic Branch of the Photoreceptor Society of China
- Youth Editorial Board of *Journal of Inorganic Materials*

Invited talks

- Invited presentation for “中国感光学会第三十一届科技年会”, Kunming, China, 2023
- Invited presentation for “第五届有机光电材料与器件发展研讨会”, Shenzhen, China, 2023
- Invited presentation for “纳米光电材料与半导体器件发展论坛”, Beijing, China, 2022
- Invited presentation for “第五届全国电致变色会议”, Hangzhou, China, 2022
- Invited presentation for “中国科协第 378 次青年科学家论坛—光电材料的合成方法与功能”, Jilin, China, 2019
- Invited presentation for “The International Symposium on Plasmonics and Nanophotonics”, Zhejiang, China, 2018
- Invited presentation for “QED-M2 “New QED Landscapes for Molecules and Materials””, Paris, France, 2018

Research support income

- 2021: National Natural Science Foundation of China (62075004)
基于氧化钨电致/光致变色材料的智能光电转换与储能一体化器件研究, 60万
- 2021: Beijing Natural Science Foundation of China (4212051)
基于超材料的电致变色智能调控研究, 20万
- 2019: National Natural Science Foundation of China (11804018)
基于光与物质强耦合条件下的非辐射能量转移特性的研究, 29万
- 2017: 北京航空航天大学青年拔尖 100万
- 2017: 北京航空航天大学卓越百人计划, 50万

Refereed Journal Articles

Leading author works

1. *Solar Energy Materials and Solar Cells* (2023) – Tian, M.[†]; Liu, X.[†]; Diao, X.; **Zhong, X.*** High Performance PANI/MnO₂ Coral-like Nanocomposite Anode for Flexible and Robust Electrochromic Energy Storage Device., 253, 112239. [IF:7.305 Q1]
2. *Chemical Engineering Journal* (2023) – Su, Y.; Wang, Y.; Lu, Z.; Tian, M.; Wang, F.; Wang, M.; Diao, X.; **Zhong, X.*** A Dual-Function Device with High Coloring Efficiency Based on a Highly Stable Electrochromic Nanocomposite Material., 456, 141075. [IF:16.744 Q1]
3. *Front. Phys.* (2023) – Li, Z.; Li, X.; Zhang, G. **Zhong, X.*** Realizing Strong Photon blockade at Exceptional points in 1 weak coupling regime. 11, 1168372. [IF:3.9 Q2]
4. *Opt. Express* (2023) – Song, J.; Liu, B.; Shan, X.*; Wang, F.; **Zhong, X.*** Multi-functional dual-path self-aligned polarization interference lithography. 31(11) 17629-17644. [IF:3.833 Q2]
5. *Opt. Express* (2023) – Li, Z.; Li, X.; **Zhong, X.*** Optomechanical entanglement affected by exceptional point in a WGM resonator system. *Opt. Express* **2023** *30* 31, 19382. [IF:3.833 Q2]
6. *Opt. Express* (2023) – Zhu, H.; Li, X.; Li, Z.; Wang, F.; **Zhong, X.*** Strong antibunching effect under the combination of conventional and unconventional photon blockade. 31, 22030. [IF:3.833 Q2]
7. *Chinese Phys. B* (2023) – Li, X; Liu F.; Li, Z.; Zhu, H.; Wang F.; **Zhong, X.*** <https://doi.org/10.1088/1674-1056/acd7d2>
8. *J. Mater. Chem. A* (2022) – Wang, Y.; **Zhong, X.***; Liu, X.; Lu, Z.; Su, Y.; Wang, M.; Diao, X. A Fast Self-Charging and Temperature Adaptive Electrochromic Energy Storage Device. 10 (8), 3944–3952.. [IF:14.511 Q1 **published as a cover paper**]
9. *J. Phys. Chem. Lett.* (2021) – Tian, M.; Li, X.; Li, Z.; **Zhong, X.*** Analysis of the Forward and Reverse Strongly Coupled States on the Nonradiative Energy Transfer Effect. 12 (20), 4944–4950.. [IF:6.888 Q1]
10. *Phys. Rev. A* (2021) – Li, Z.; Li, X.; **Zhong, X.*** Strong Photon Blockade in an All-Fiber Emitter-Cavity Quantum Electrodynamics System. 103 (4), 043724. [IF:2.971 Q2]
11. *Journal of Inorganic Materials* (2021) – **Zhong, X.**; Liu, X.; Diao, X.* Electrochromic Devices Based on Tungsten Oxide and Nickel Oxide: a Review. 36 (2), 128. [IF:1.292 Q3 **published as a invited cover paper**]
12. *Phys. Chem. Chem. Phys.* (2021) – Lu, Z.; **Zhong, X.***; Liu, X.; Wang, J.; Diao, X.* Energy Storage Electrochromic Devices in the Era of Intelligent Automation. 23 (26), 14126–14145. [IF:3.945 Q1]
13. *Eur. Phys. J. Spec. Top.* (2021) – Zhu, H.; Li, X.; Li, Z.; **Zhong, X.*** A Robust and Flexible High-Order Photon Blocking Effect Based on Drive Ratio Analysis. 231, 735-742. [IF:2.891 Q2]
14. *Solar Energy Materials and Solar Cells* (2020) – He, Y.; Jones, T. W.; Anderson, K. F.; Duffy, N. W.; Wang, M.; Dong, G.; **Zhong, X.***; Wilson, G. J.*; Diao, X.* An Extensible and Tunable Full-Opaque Cascade Smart Electrochromic Device. 218, 110740. [IF:7.305 Q1]
15. *J. Phys. Chem. C* (2020) – Li, X.; Liu, F.; Tian, M.; **Zhong, X.*** Tunable Multimode Plasmon–Exciton Coupling for Absorption-Induced Transparency and Strong Coupling. 124 (43), 23888–23894. [IF:4.177 Q2]

16. *Electrochimica Acta* (2020) – Yu, H.; Guo, J.; Wang, C.; Zhang, J.; Liu, J.; Dong, G.; **Zhong, X.***; Diao, X.* Essential Role of Oxygen Vacancy in Electrochromic Performance and Stability for WO_{3-y} Films Induced by Atmosphere Annealing. 332, 135504. [IF:7.336 Q1]
17. *Electrochimica Acta* (2019) – Yu, H.; Guo, J.; Wang, C.; Zhang, J.; Liu, J.; **Zhong, X.***; Dong, G.; Diao, X.* High Performance in Electrochromic Amorphous WO_x Film with Long-Term Stability and Tunable Switching Times via Al/Li-Ions Intercalation/Deintercalation. 318, 644–650. [IF:7.336 Q1]
18. *Electrochimica Acta* (2019) – He, Y.; Li, T.; **Zhong, X.***; Zhou, M.*; Dong, G.; Diao, X.* Lattice and Electronic Structure Variations in Critical Lithium Doped Nickel Oxide Thin Film for Superior Anode Electrochromism. 316, 143–151. [IF:7.336 Q1]
19. *Nano Energy* (2019) – Liu, L.; Du, K.; He, Z.; Wang, T.; **Zhong, X.***; Ma, T.; Yang, J.; He, Y.; Dong, G.; Wang, S.; Diao, X.* High-Temperature Adaptive and Robust Ultra-Thin Inorganic All-Solid-State Smart Electrochromic Energy Storage Devices. 62, 46–54. [IF:19.069 Q1]
20. *J. Mater. Chem. A* (2019) – Li, Y.†*; **Zhong, X.**†; Luo, K.; Shao, Z.* A Hydrophobic Polymer Stabilized P-Cu₂O Nanocrystal Photocathode for Highly Efficient Solar Water Splitting. 7 (26), 15593–15598. [IF:14.511 Q1]
21. *Electrochimica Acta* (2018) – He, Y.; Zhang, F.; Zhang, Q.; Dong, G.; **Zhong, X.***; Diao, X.* High Capacity and Performance Lithium Based Electrochromic Device via Amorphous Tantalum Oxide Protective Layer. 280, 163–170. [IF:7.336 Q1]
22. *Angew. Chem. Int. Ed.* (2017) – **Zhong, X.**; Chervy, T.; Zhang, L.; Thomas, A.; George, J.; Genet, C.; Hutchison, J. A.; Ebbesen, T. W.* Energy Transfer between Spatially Separated Entangled Molecules. 56 (31), 9034–9038. [IF:16.823 Q1 **ESI high citation paper**]
23. *Angew. Chem. Int. Ed.* (2016) – **Zhong, X.**; Chervy, T.; Wang, S.; George, J.; Thomas, A.; Hutchison, J. A.; Devaux, E.; Genet, C.; Ebbesen, T. W.* Non-Radiative Energy Transfer Mediated by Hybrid Light-Matter States. 55 (21), 6202–6206. [IF:16.823 Q1 **published as a hot paper**]
24. *ACS Nano* (2016) – **Zhong, X.**; Rodrigo, S. G.; Zhang, L.; Samorì, P.; Genet, C.; Martín-Moreno, L.; Hutchison, J. A.*; Ebbesen, T. W. Waveguide and Plasmonic Absorption-Induced Transparency. 10 (4), 4570–4578.
25. *Chin. Opt. Lett.* (2014) – **Zhong, X.**; Liu, J.; Li, Z.* Highly Enhanced Broadband Infrared Absorption of Germanium by Multi-Layer Plasmonic Nano-Antenna. 12 (9), 092401–092404.
26. *Appl. Phys. A* (2014) – **Zhong, X.**; Hong, M.; Li, Z.* Spaser in Plasmonic Nano-Antenna Evaluated by an Analytical Theory. 115 (1), 5–11.
27. *Phys. Rev. B* (2013) – **Zhong, X.**; Li, Z.* All-Analytical Semiclassical Theory of Spaser Performance in a Plasmonic Nanocavity. 88 (8), 085101.
28. *J. Opt.* (2012) – **Zhong, X.**; Li, Z.* Plasmon Enhanced Light Amplification in Metal–Insulator–Metal Waveguides with Gain. 14 (5), 055002.
29. *Journal of Modern Optics* (2012) – **Zhong, X.**; Li, Z.*; Meng, Z.; Zhou, Y. Mode Analysis for Periodically Modulated Metal Slits. 59 (9), 830–838.
30. *J. Phys. Chem. C* (2012) – **Zhong, X.**; Li, Z.* Giant Enhancement of Near-Ultraviolet Light Absorption by TiO₂ via a Three-Dimensional Aluminum Plasmonic Nano Funnel-Antenna. 116 (40), 21547–21555.
31. *Journal of Applied Physics* (2011) – **Zhong, X.**; Li, Z.*; Wang, C.; Zhou, Y. Analytical Single-Mode Model for Subwavelength Metallic Bragg Waveguides. 109 (9), 093115.

Collaborative works

32. *Opt. Express* (2023) – Wang, D.; Liu, B.; Song, J.; Wang, Y.; Shan, X.; **Zhong, X.**; Wang, F. Dual-Mode Adaptive-SVD Ghost Imaging. 31 (9), 14225.
33. *Adv Materials Inter* (2022) – Ding, Y.; Wang, M.; Mei, Z.; Liu, L.; Yang, J.; **Zhong, X.**; Wang, M.; Diao, X. Electrochromic Adaptability of NiO_x Films Modified by Substrate Temperature in Aqueous and Non-Aqueous Electrolytes. 9 (17), 2102223.
34. *Vacuum* (2022) – Ding, Y.; Wang, M.; Mei, Z.; Liu, L.; **Zhong, X.**; Wang, M.; Diao, X. Enhanced Electrochromic Performance on Novel W@NiO Doped Composite Electrode via Pre-Annealing. 201, 111070.

35. *Nano Lett.* (2022) – Chen, C.; Ding, L.; Liu, B.; Du, Z.; Liu, Y.; Di, X.; Shan, X.; Lin, C.; Zhang, M.; Xu, X.; **Zhong, X.**; Wang, J.; Chang, L.; Halkon, B.; Chen, X.; Cheng, F.; Wang, F. Exploiting Dynamic Nonlinearity in Upconversion Nanoparticles for Super-Resolution Imaging. 22 (17), 7136–7143.
36. *Chemical Engineering Journal* (2021) – Liu, L.; Wang, T.; He, Z.; Yi, Y.; Wang, M.; Luo, Z.; Liu, Q.; Huang, J.; **Zhong, X.**; Du, K.; Diao, X. All-Solid-State Electrochromic Li-Ion Hybrid Supercapacitors for Intelligent and Wide-Temperature Energy Storage. 414, 128892.
37. *Energy Technol.* (2021) – Che, X.; Guo, J.; Wang, M.; Wang, M.; **Zhong, X.**; Liu, Q.; Dong, G.; Wang, X.; Yang, J.; Diao, X. Thickness Dependence of WO_3 and NiO_x Thin Films in All-Solid-State Complementary Electrochromic Devices. 9 (12), 2100656.
38. *Journal of Alloys and Compounds* (2020) – Wang, C.; Dong, G.; Zhao, Y.; He, Y.; Ding, Y.; Du, X.; **Zhong, X.**; Wang, M.; Diao, X. Enhanced Electrochromic Performance on Anodic Nickel Oxide Inorganic Device via Lithium and Aluminum Co-Doping. 821, 153365.
39. *ACS Appl. Mater. Interfaces* (2020) – Du, L.; Sun, N.; Chen, Z.; Li, Y.; Liu, X.; **Zhong, X.**; Wu, X.; Xie, Y.; Liu, Q. Depletion-Mediated Uniform Deposition of Nanorods with Patterned, Multiplexed Assembly. 12 (43), 49200–49209.
40. *Energy Storage Materials* (2020) – Liu, L.; Diao, X.; He, Z.; Yi, Y.; Wang, T.; Wang, M.; Huang, J.; He, X.; **Zhong, X.**; Du, K. High-Performance All-Inorganic Portable Electrochromic Li-Ion Hybrid Supercapacitors toward Safe and Smart Energy Storage. 33, 258–267.
41. *ACS Nano* (2019) – Li, S.-L.; Zhang, L.; **Zhong, X.**; Gobbi, M.; Bertolazzi, S.; Guo, W.; Wu, B.; Liu, Y.; Xu, N.; Niu, W.; Hao, Y.; Orgiu, E.; Samorì, P. Nano-Subsidence-Assisted Precise Integration of Patterned Two-Dimensional Materials for High-Performance Photodetector Arrays. 13 (2) 2654–2662.
42. *Electrochimica Acta* (2019) – Wang, M.; Barnabé, A.; Thimont, Y.; Wang, J.; He, Y.; Liu, Q.; **Zhong, X.**; Dong, G.; Yang, J.; Diao, X. Optimized Properties of Innovative ElectroChromic Device Using ITO / Ag / ITO Electrodes. 301, 200–208.
43. *J. Mater. Chem. A* (2019) – Liu, L.; Zhang, Q.; Du, K.; He, Z.; Wang, T.; Yi, Y.; Wang, M.; **Zhong, X.**; Dong, G.; Diao, X. An Intelligent and Portable Power Storage Device Able to Visualize the Energy Status. 7 (40), 23028–23037.
44. *Nanoscale* (2019) – Squillaci, M. A.; **Zhong, X.**; Peyruchat, L.; Genet, C.; Ebbesen, T. W.; Samorì, P. 2D Hybrid Networks of Gold Nanoparticles: Mechanoresponsive Optical Humidity Sensors. 11 (41), 19315–19318.
45. *Electrochimica Acta* (2018) – Xiao, Y.; **Zhong, X.**; Guo, J.; Zhou, C.; Zuo, H.; Liu, Q.; Huang, Q.; Zhang, Q.; Diao, X. The Role of Interface between LiPON Solid Electrolyte and Electrode in Inorganic Monolithic Electrochromic Devices. 260, 254–263.
46. *J. Mater. Chem. C* (2018) – Liu, Q.; Chen, Q.; Zhang, Q.; Xiao, Y.; **Zhong, X.**; Dong, G.; Delplancke-Ogletree, M.-P.; Terryn, H.; Baert, K.; Reniers, F.; Diao, X. *In Situ* Electrochromic Efficiency of a Nickel Oxide Thin Film: Origin of Electrochemical Process and Electrochromic Degradation. 6 (3), 646–653.
47. *Electrochimica Acta* (2018) – Liu, Q.; Chen, Q.; Zhang, Q.; Dong, G.; **Zhong, X.**; Xiao, Y.; Delplancke-Ogletree, M.-P.; Reniers, F.; Diao, X. Dynamic Behaviors of Inorganic All-Solid-State Electrochromic Device: Role of Potential. 269, 617–623.
48. *Solar Energy Materials and Solar Cells* (2018) – Xiao, Y.; Dong, G.; Guo, J.; Liu, Q.; Huang, Q.; Zhang, Q.; **Zhong, X.**; Diao, X. Thickness Dependent Surface Roughness of Sputtered $\text{Li}_{2.5}\text{TaO}_x$ Ion Conductor and Its Effect on Electro-Optical Performance of Inorganic Monolithic Electrochromic Device. 179, 319–327.
49. *Adv. Mater.* (2018) – Zhang, L.; Pastukhova, N.; Yao, Y.; **Zhong, X.**; Pavlica, E.; Bratina, G.; Orgiu, E.; Samorì, P. Self-Suspended Nanomesh Scaffold for Ultrafast Flexible Photodetectors Based on Organic Semiconducting Crystals. 30 (28), 1801181.
50. *J. Am. Chem. Soc.* (2017) – Zhang, L.; Li, S.; Squillaci, M. A.; **Zhong, X.**; Yao, Y.; Orgiu, E.; Samorì, P. Supramolecular Self-Assembly in a Sub-Micrometer Electrode Cavity: Fabrication of Heat-Reversible π -Gel Memristor. 139 (41), 14406–14411.

51. *Adv. Mater.* (2017) – Zhang, L.; Pavlica, E.; **Zhong, X.**; Liscio, F.; Li, S.; Bratina, G.; Orgiu, E.; Samorì, P. Fast-Response Photonic Device Based on Organic-Crystal Heterojunctions Assembled into a Vertical-Yet-Open Asymmetric Architecture. 29 (11), 1605760.
52. *Nature Nanotech.* (2016) – Zhang, L.; **Zhong, X.**; Pavlica, E.; Li, S.; Klekachev, A.; Bratina, G.; Ebbesen, T. W.; Orgiu, E.; Samorì, P. A Nanomesh Scaffold for Supramolecular Nanowire Optoelectronic Devices. 11 (10), 900–906.
53. *Angew. Chem. Int. Ed.* (2016) – Thomas, A.; George, J.; Shalabney, A.; Dryzhakov, M.; Varma, S. J.; Moran, J.; Chervy, T.; **Zhong, X.**; Devaux, E.; Genet, C.; Hutchison, J. A.; Ebbesen, T. W. Ground-State Chemical Reactivity under Vibrational Coupling to the Vacuum Electromagnetic Field. 55 (38), 11462–11466.
54. *J. Mater. Chem. C* (2014) – Liao, Q.; Xu, Z.; **Zhong, X.**; Dang, W.; Shi, Q.; Zhang, C.; Weng, Y.; Li, Z.; Fu, H. An Organic Nanowire Waveguide Exciton–Polariton Sub-Microlaser and Its Photonic Application. 2 (15), 2773–2778.
55. *Photonics and Nanostructures - Fundamentals and Applications* (2014) – Meng, Z.-M.; Hu, Y.-H.; Wang, C.; **Zhong, X.**; Ding, W.; Li, Z.-Y. Design of High-Q Silicon-Polymer Hybrid Photonic Crystal Nanobeam Microcavities for Low-Power and Ultrafast All-Optical Switching. 12 (1), 83–92.
56. *Chinese Phys. B* (2014) – Liu, J.; **Zhong, X.**; Li, Z.-Y. Enhanced Light Absorption of Silicon in the Near-Infrared Band by Designed Gold Nanostructures. 23 (4), 047306.
57. *Journal of Applied Physics* (2014) – Meng, Z.-M.; Hu, Y.-H.; Ju, G.-F.; **Zhong, X.**; Ding, W.; Li, Z.-Y. Numerical Investigation of Optical Tamm States in Two-Dimensional Hybrid Plasmonic-Photonic Crystal Nanobeams. 116 (4), 043106.
58. *Small* (2014) – Yang, Y.; **Zhong, X.**; Zhang, Q.; Blackstad, L. G.; Fu, Z.-W.; Li, Z.-Y.; Qin, D. The Role of Etching in the Formation of Ag Nanoplates with Straight, Curved and Wavy Edges and Comparison of Their SERS Properties. 10 (7), 1430–1437.
59. *Part. Part. Syst. Charact.* (2013) – Zheng, Y.; **Zhong, X.**; Li, Z.; Xia, Y. Successive, Seed-Mediated Growth for the Synthesis of Single-Crystal Gold Nanospheres with Uniform Diameters Controlled in the Range of 5–150 nm. 31 (2), 266–273.
60. *Chinese Phys. Lett.* (2013) – Ren, M.-L.; **Zhong, X.**; Chen, B.-Q.; Li, Z.-Y. An All-Optical Diode Based on Plasmonic Attenuation and Nonlinear Frequency Conversion. 30 (9), 097301.
61. *CrystEngComm* (2013) – Kim, D. Y.; Choi, K. W.; **Zhong, X.**; Li, Z.-Y.; Im, S. H.; Park, O. O. Au@Pd Core–Shell Nanocubes with Finely-Controlled Sizes. DOI: 10.1039/c3ce40175h.
62. *Small* (2013) – Li, Q.; Jiang, Y.; Han, R.; **Zhong, X.**; Liu, S.; Li, Z.-Y.; Sha, Y.; Xu, D. High Surface-Enhanced Raman Scattering Performance of Individual Gold Nanoflowers and Their Application in Live Cell Imaging. 9 (6), 927–932.
63. *ChemSusChem* (2013) – Laskar, M.; **Zhong, X.**; Li, Z.-Y.; Skrabalak, S. E. Manipulating the Kinetics of Seeded Growth for Edge-Selective Metal Deposition and the Formation of Concave Au Nanocrystals. 6 (10), 1959–1965.
64. *CrystEngComm* (2013) – Choi, K. W.; Kim, D. Y.; **Zhong, X.**; Li, Z.-Y.; Im, S. H.; Park, O. O. Robust Synthesis of Gold Rhombic Dodecahedra with Well-Controlled Sizes and Their Optical Properties. 15 (2), 252–258.
65. *Chem. Asian J.* (2013) – Zheng, Y.; Ma, Y.; Zeng, J.; **Zhong, X.**; Jin, M.; Li, Z.-Y.; Xia, Y. Seed-Mediated Synthesis of Single-Crystal Gold Nanospheres with Controlled Diameters in the Range 5–30 nm and Their Self-Assembly upon Dilution. 8 (4), 792–799.
66. *ACS Nano* (2012) – Jin, M.; Zhang, H.; Wang, J.; **Zhong, X.**; Lu, N.; Li, Z.; Xie, Z.; Kim, M. J.; Xia, Y. Copper Can Still Be Epitaxially Deposited on Palladium Nanocrystals To Generate Core–Shell Nanocubes Despite Their Large Lattice Mismatch. 6 (3), 2566–2573.
67. *Chin. Opt. Lett.* (2012) – Ziming Meng, Z. M.; **Zhong, X.**, X. Z.; Chen Wang, C. W.; Zhiyuan Li, Z. L. Fabrication of Air-Bridged Kerr Nonlinear Polymer Photonic Crystal Slab Structures in near-Infrared Region. 10 (11), 112202–112204.
68. *Opt. Express* (2012) – Qin, F.; Meng, Z.-M.; **Zhong, X.**; Liu, Y.; Li, Z.-Y. Fabrication of Semiconductor-Polymer Compound Nonlinear Photonic Crystal Slab with Highly Uniform Infiltration Based on Nano-Imprint Lithography Technique. 20 (12), 13091.

69. *Small* (2012) – Li, B.; Long, R.; **Zhong, X.**; Bai, Y.; Zhu, Z.; Zhang, X.; Zhi, M.; He, J.; Wang, C.; Li, Z.-Y.; Xiong, Y. Investigation of Size-Dependent Plasmonic and Catalytic Properties of Metallic Nanocrystals Enabled by Size Control with HCl Oxidative Etching. 8 (11), 1710–1716.
70. *Sci Rep.* (2012) – Wang, C.; **Zhong, X.**; Li, Z.-Y. Linear and Passive Silicon Optical Isolator. 2 (1), 674.
71. *Nanotechnology* (2012) – Ling, L.; Guo, H.-L.; **Zhong, X.**; Huang, L.; Li, J.-F.; Gan, L.; Li, Z.-Y. Manipulation of Gold Nanorods with Dual-Optical Tweezers for Surface Plasmon Resonance Control. 23 (21), 215302.
72. *EPL* (2012) – Meng, Z.-M.; **Zhong, X.**; Wang, C.; Li, Z.-Y. Numerical Investigation of High-Contrast Ultrafast All-Optical Switching in Low-Refractive-Index Polymeric Photonic Crystal Nanobeam Microcavities. 98 (5), 54002.
73. *Advances in materials Research* (2012) – Do Youb Kim; Kyeong Woo Choi; Sang Hyuk Im; O Ok Park; **Zhong, X.**; Zhi-Yuan Li. One-Pot Synthesis of Gold Trisoctahedra with High-Index Facets. 1 (1), 1–12.
74. *Nanoscale* (2012) – Xiong, Y.; Long, R.; Liu, D.; **Zhong, X.**; Wang, C.; Li, Z.-Y.; Xie, Y. Solar Energy Conversion with Tunable Plasmonic Nanostructures for Thermoelectric Devices. 4 (15), 4416.