



# Curriculum Vitae



## Zuoli He

Shandong Key Laboratory of Water Pollution Control and Resource Reuse, School of Environmental Science and Engineering, Shandong University, Qingdao 266237, China

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### Education

<i>Visiting Scholar</i>	Supramolecular and Coordination chemistry	Department of Chemistry, University of Utah, Nov. 2013 ~ Nov. 2014
<i>Ph.D.</i>	Electronic Science & Technology	Xi'an Jiaotong University, Sep. 2011 ~ Jul. 2015
<i>M.S.</i>	Material Engineering	Shaanxi University of Science and Technology, Sep. 2008 ~ Jul. 2011
<i>B.S.</i>	Inorganic Materials and Engineering	Qilu University of Technology, Sep. 2004 ~ Jul. 2008

### Working Experience

<i>Researcher</i>	Environmental Science & Engineering	School of Environmental Science and Engineering, Shandong University, Jun. 2019 ~
<i>Senior Researcher</i>	Functional Composites	Functional Composites Department, Composites Research Division, Korea Institute of Materials Science (KIMS), Oct. 2017 ~ Jul. 2019
<i>Postdoctoral Researcher</i>	Environmental Science & Engineering	School of Environmental Science & Engineering, Pohang University of Science and Technology (POSTECH), Aug. 2015 ~ Aug. 2017

### Current Research Interests

- ✚ Mesoporous materials for Photocatalytic environmental remediation;
- ✚ 1D/2D heterogeneous materials for Artificial photosynthesis;
- ✚ Wearable fabric or electronic skin for human motion monitoring;

### Summary of Academic Achievements

- > 50 research articles published in SCI journals
- Google Scholar citation > 1300, H-index 21 (2020/10)
- Reviewer of *JACS*, *Energy Environ. Sci.*, *Adv. Mater.*, *Adv. Funct. Mater.*, *Small*, *Appl. Catal. B*, *ACS Appl. Mater. Interface*, *Chem. Eng. J.*, *Nanoscale*, *Carbon*, *Composite Sci. Tech.*, *Chem. Commun.*, *J Hazard. Mater.*, *Phys. Chem. Chem. Phys.*, *Dalton Trans.*, *ChemplusChem*, *J. Alloy. Compd.*, *RSC Adv.*, *Mater. Lett.*, ...
- Editorial Board Memberships



- 1) Editorial Board Members of SCIREA Journal of Physics from April 2017.
- 2) Editorial Board Members of SCIREA Journal of Materials from April 2017.
- 3) Editorial Board Members of SCIREA Journal of Chemical Engineering from April 2017.
- 4) Editorial Board Members of Coatings from January 2021
- 5) Review Editor of Carbon-Based Materials (specialty section of Frontiers in Materials) from December 2020

### Book & Book Chapter:

First published in <Titanium Dioxide: Applications, Synthesis and Toxicity> (Editors: Prafulla K. Jha) as Chapter 1 ~ 2. Republished as Chapter 65 – 66 in <Chemistry Research Summaries > (Editor: Lucille M. Cacioppo), Volume 17, 2015 in Nova Science publisher.

1. Chapter 1. Titanium Dioxide: Structure, Properties and Applications (Zuoli He\*, Wenxiu Que, Haixia Xie) Nova Science publisher, pp. 1-36
2. Chapter 2. Titanium Dioxide: Synthesis and Toxicity of TiO<sub>2</sub> nanostructures (Zuoli He\*, Wenxiu Que, Haixia Xie) Nova Science publisher, pp. 37-58

### Selected Publications:

1. H Yu, M Dai, J Zhang, W Chen, Q Jin, S Wang,\* **Z He**,\* Interface Engineering in 2D/2D Heterogeneous Photocatalysts, *Small*, 2023, 19, 2205767.
2. **Z He**, G Zhou, Y Oh, BM Jung, MK Um, SK Lee, JI Song, JH Byun, TW Chou, Ultrafast, highly sensitive, flexible textile-based humidity sensors made of nanocomposite filaments, *Mater. Today Nano*, 2022, 18, 100214.
3. M Dai, **Z He**,\* P Zhang, X Li,\* S Wang,\* ZnWO<sub>4</sub>-ZnIn<sub>2</sub>S<sub>4</sub> S-scheme heterojunction for enhanced photocatalytic H<sub>2</sub> evolution, *J. Mater. Sci. Technol.*, 2022, 122 231-242.
4. J Zhang, M Dai, \* S Zhang, M Dai, P Zhang, \* S Wang, \* **Z He**,\* Recent Progress on Carbon - Nanotube - Based Materials for Photocatalytic Applications: A Review, *Solar RRL*, 2022, 6, 2200243.
5. S Zhang, **Z He**,\* S Xu, X Li, J Zhang, X Zhan,\* M Dai,\* S Wang,\* In Situ Liquid-Phase Growth Strategies of g-C<sub>3</sub>N<sub>4</sub> Solar-Driven Heterogeneous Catalysts for Environmental Applications, *Solar RRL*, 2021,5, 2100233.
6. L Xiao, X Li, J Zhang, **Z He**,\* MgB<sub>4</sub> MXene-like nanosheets for photocatalytic hydrogen evolution, *ACS Appl. Nano Materials*, 2021, 4 (11), 12779-12787.
7. **Z He**,\* J Zhang, X Li, SN Guan, MC Dai,\* SG Wang,\* 1D/2D heterostructured photocatalysts: From design and unique properties to their environmental applications, *Small*, 2020, 16, 2005051.
8. S Zhang, **Z He**,\* G Zhou, BM Jung,\* TH Kim,\* BJ Park, JH Byun, TW Chou, High conductive free-written thermoplastic polyurethane composite fibers utilized as weight-strain sensors, *Compos. Sci. Technol.*, 2020, 189, 108011.
9. **Z He**, GH Zhou\*, JH Byun\*, SK Lee\*, MK Um, BJ Park, TH Kim, SB Lee, TW Chou, Highly Stretchable Multi-Walled Carbon Nanotube/Thermoplastic Polyurethane Composite Fibers for Ultrasensitive, Wearable Strain Sensors, *Nanoscale*, 2019, 11, 5884-5890.
10. **Z He**, JH Byun\*, GH Zhou, BJ Park, TH Kim, SB Lee\*, JW Yi, MK Um, TW Chou, Effect of MWCNT Content on Mechanical and Strain-Sensing Performance of Thermoplastic Polyurethane Composite Fibers, *Carbon*, 2019, 146, 701-708.
11. **Z He**, C Kim, TH Jeon, W Choi\*, Hydrogenated Heterojunction of Boron Nitride and Titania Enables the Photocatalytic Generation of H<sub>2</sub> in the Absence of Noble Metal Catalysts, *Appl. Catal. B: Environ.* 2018, 237, 772-782.
12. **Z He**, C Kim, LH Lin, TH Jeon, S Lin, XC Wang\*, W Choi\*, Formation of Heterostructures via Direct Growth CN on h-BN Porous Nanosheets for Metal-free Photocatalysis, *Nano Energy*, 2017, 42, 58-68.
13. **Z He**\*, WX Que\*, Molybdenum Disulfide Nanomaterials: Structures, Properties, Synthesis and Recent Progress on Hydrogen Evolution Reaction, *Appl. Mater. Today*, 2016, 3, 23-56.
14. **Z He**, WX Que\*, P Sun, JB Ren, Double-layer Electrodes Based on TiO<sub>2</sub> Nanotubes Arrays for Enhancing Conversion Efficiency in Dye-Sensitized Solar Cells, *ACS. Appl. Mater. Inter.*, 2013, 5, 12779-127831.
15. **Z He**, WX Que\*, J Chen, XT Yin, YC He, JB Ren. Photocatalytic Degradation of Methyl Orange over Nitrogen – Fluorine Codoped TiO<sub>2</sub> Nanobelts Prepared by Solvothermal Synthesis, *ACS Appl. Mater. Inter.*, 2012, 4: 6816-6826



## Full Publications List:

### 2023

1. H Yu, M Dai, J Zhang, W Chen, Q Jin, S Wang, \* **Z He**,\* Interface engineering in 2D/2D heterogeneous photocatalysts, *Small*, 2023, 19, 2205767.
2. H Liu, **Z He**, J Li, S Zhao,\* Well-dispersed cobalt nanoparticles encapsulated on ZIF-8-derived N-doped porous carbon as an excellent peroxymonosulfate activator for sulfamethoxazole degradation, *Chem. Eng. J.*, 2023, 451, 138597.

### 2022

3. **Z He**, G Zhou, Y Oh, BM Jung, MK Um, SK Lee, JI Song, JH Byun, TW Chou, Ultrafast, highly sensitive, flexible textile-based humidity sensors made of nanocomposite filaments, *Mater. Today Nano*, 2022, 18, 100214.
4. M Dai, **Z He**,\* P Zhang, X Li,\* S Wang,\* ZnWO<sub>4</sub>-ZnIn<sub>2</sub>S<sub>4</sub> S-scheme heterojunction for enhanced photocatalytic H<sub>2</sub> evolution, *J. Mater. Sci. Technol.*, 2022, 122, 231-242.
5. H Yu, S. Xu, S Zhang, S Wang, **Z He**,\* In-situ construction of core-shell structured TiB<sub>2</sub>-TiO<sub>2</sub>@g-C<sub>3</sub>N<sub>4</sub> for efficient photocatalytic degradation, *Appl. Surf. Sci.*, 2022, 579, 152201.
6. J Zhang, M Dai,\* S Zhang, M Dai, P Zhang,\* S Wang,\* **Z He**,\* Recent progress on carbon-nanotube-based materials for photocatalytic applications: A review, *Solar RRL*, 2022, 6, 2200243.
7. W Zhao, D Zhai, C Liu,\* D Zheng, H Wu, L Sun, Z Li, T Yu, W Zhou, X Fang, S Zhai, K Han, **Z He**, W Deng,\* Unblocked intramolecular charge transfer for enhanced CO<sub>2</sub> photoreduction enabled by an imidazolium-based ionic conjugated microporous polymer, *Appl. Catal. B: Environ.*, 2022, 300, 120719
8. J Zhang, X Li, J Guo, G Zhou, L Xiang, S Wang, **Z He**,\* Novel TiO<sub>2</sub>/TPU composite fiber-based smart textiles for photocatalytic applications, *Mater. Adv.*, 2022, 1518-1526.
9. Z Dong, Y Wang, H Wu, X Zhang, Y Sun, Y Li, J Chang,\* **Z He**,\* J Hong,\* A design methodology of large-scale metal hydride reactor based on schematization for hydrogen storage, *J Energy Storage*, 2022, 49, 104047.
10. S Fang, M Dai, R Chen, **Z He**,\* G Zhang,\* Y Ding, Diaza-substitution on dibenzothiophene sulfone-based linear conjugated polymers for highly efficient visible-light photo-catalytic hydrogen evolution via substituted-position optimization, *Dyes Pigm.*, 2022, 206, 110645.
11. Q Jin, M Dai,\* X Zhan,\* S Wang, **Z He**,\* Carbon nanotubes and graphene composites used in Cr(VI) detection techniques: A review, *J. Alloy. Compd.*, 2022, 922, 166268.
12. KA Qu, W Chen, J Guo, **Z He**,\* A mini-review on preparation of functional composite fibers and their based devices, *Coatings*, 2022, 12, 473.
13. S Zhang, M Dai, J Guo, G Wang,\* S Wang,\* **Z He**,\* Stable Ti<sup>3+</sup> in B-TiO<sub>2</sub>/BN based hybrids for efficient photocatalytic reduction, *Chem. Eng. J. Adv.*, 2022, 11, 100333.

### 2021

1. S Zhang, **Z He**,\* S Xu, X Li, J Zhang, X Zhan,\* M Dai,\* SG Wang,\* In situ liquid-phase growth strategies of g-C<sub>3</sub>N<sub>4</sub> solar-driven heterogeneous catalysts for environmental applications, *Solar RRL*, 2021, 2100233.
2. X Li, S Zhang, L Xiao, XG Wu, **Z He**,\* Microcystis@TiO<sub>2</sub> Nanoparticles for Photocatalytic Reduction Reactions: Nitrogen Fixation and Hydrogen Evolution, *Catalysts*, 2021, 11, 1443.
3. L Xiao, X Li, J Zhang, **Z He**,\* MgB<sub>4</sub> MXene-like nanosheets for photocatalytic hydrogen evolution, *ACS Applied Nano Materials*, 2021, 4 (11), 12779-12787.
4. X Li, J Zhang, S Zhang, X Wu,\* **Z He**,\* Hexagonal boron nitride composite photocatalysts for hydrogen production, *J. Alloy. Compd.*, 2021, 864, 158153

### 2020

5. **Z He**,\* J Zhang, X Li, SN Guan, MC Dai,\* SG Wang,\* 1D/2D heterostructured photocatalysts: From design and unique properties to their environmental applications, *Small*, 2020, 16, 2005051
6. S Zhang, **Z He**,\* X Li, J Zhang, QH Zang, SG Wang,\* Building heterogeneous nanostructures for photocatalytic ammonia decomposition, *Nanoscale Adv.*, 2020, 2(9), 3610-3623.
7. S Zhang, **Z He**,\* G Zhou, BM Jung,\* TH Kim,\* BJ Park, JH Byun, TW Chou, High conductive free-written thermoplastic polyurethane composite fibers utilized as weight-strain sensors, *Compos. Sci. Technol.*, 2020, 189, 108011.

### 2019

8. **Z. He**, GH Zhou\*, JH Byun\*, SK Lee\*, MK Um, BJ Park, TH Kim, SB Lee, TW Chou, Highly Stretchable Multi-Walled Carbon Nanotube/Thermoplastic Polyurethane Composite Fibers for Ultrasensitive, Wearable Strain Sensors, *Nanoscale*, 2019, 11, 5884-5890.
9. **Z. He**, JH Byun\*, GH Zhou, BJ Park, TH Kim, SB Lee\*, JW Yi, MK Um, TW Chou, Effect of MWCNT Content on Mechanical and Strain-Sensing Performance of Thermoplastic Polyurethane Composite Fibers, *Carbon*, 2019, 146, 701-708

### 2018

10. **Z. He**, C Kim, TH Jeon, W Choi\*, Hydrogenated Heterojunction of Boron Nitride and Titania Enables the Photocatalytic Generation of H<sub>2</sub> in the Absence of Noble Metal Catalysts, *Appl. Catal. B: Environ.* 2018, 237, 772-782
11. YB Feng, Y. Du, MX Du, ZF Li, **Z. He**, K Yang, X Lv, N Jiang, Y Liu, Facile constructing novel 3D porous g-C<sub>3</sub>N<sub>4</sub>/BiOBr<sub>0.2</sub>I<sub>0.8</sub> hybrids: Efficient charge separation for visible-light photocatalysis, *J. Alloy. Compd.*, 2018, 767, 241-252.





## 2017

12. **Z. He**, C Kim, LH Lin, TH Jeon, S Lin, XC Wang\*, WY Choi\*, Formation of Heterostructures via Direct Growth CN on h-BN Porous Nanosheets for Metal-free Photocatalysis, *Nano Energy*, 2017, 42, 58-68
13. **Z. He\***, M Li, WX Que\* and PJ Stang\*. Self-assembly of Metal-ion-responsive Supramolecular Coordination Complexes and Their Photophysical Properties, *Dalton Trans.*, 2017 46 (10), 3120-3124.
14. XB Liu, WX Que\*, P Chen, YP Tian, J Liu, Jie; **Z. He**, HF Zhou, LB Kong. Facile Preparation of Protonated Hexaniobate Nanosheets and Its Enhanced Photocatalytic Activity", *Nanotech.*, 2017, 28, 235702.
15. QH Que, YL Xing, **Z. He**, YW Yang, XT Yin, WX Que, Bi<sub>2</sub>O<sub>3</sub>/Carbon Quantum Dots Heterostructured Photocatalysts with Enhanced Photocatalytic Activity, *Mater. Lett.*, 2017, 209, 220-223.

## 2016

16. **Z. He\***, WX Que\*. Molybdenum Disulfide Nanomaterials: Structures, Properties, Synthesis and Recent Progress on Hydrogen Evolution Reaction, *Appl. Mater. Today*, 2016, 3, 23-56.
17. **Z. He**, ZQ Hou, YL Xing, XB Liu, XT Yin, MD Que, JY Shao, WX Que, PJ Stang. Enhanced Conversion Efficiencies in DSSCs Achieved through Self-Assembled Platinum(II) Metallacages, *Sci. Rep.*, 2016, 6, 29476.
18. **Z. He\***, WX Que\*, YL Xing, XB Liu. Reporting Performance in Bilayer and Heterojunction Films based Dye-Sensitized Photovoltaic Devices, *J. Alloy. Compd.*, 2016, 672, 481-488.
19. YL Xing, **Z. He**, WX Que\*. Synthesis and Characterization of ZnO Nanospheres Sensitized BiOBr Plates with Enhanced Photocatalytic Performances, *Mater. Lett.*, 2016, 182, 210-213.
20. YL Xing, WX Que\*, XT Yin, **Z. He**, XB Liu, YW Yang, et al. In<sub>2</sub>O<sub>3</sub>/Bi<sub>2</sub>Sn<sub>2</sub>O<sub>7</sub> Heterostructured Nanoparticles with Enhanced Photocatalytic Activity. *Appl. Surf. Sci.*, 2016, 387, 36-44.
21. XB Liu, WX Que\*, **Z. He**, YL Xing, YC He, XT Yin, et al. New AgNbO<sub>4-δ</sub> Compound with High Visible Light Photocatalytic Activity, *Mater. Lett.*, 2016, 183 (2016): 97-100.

## 2015

22. D Zhang, Y Nie, ML Saha, **Z. He**, L Jiang, ZX Zhou, PJ Stang,. Photoreversible [2] Catenane via the Host-Guest Interactions between a Palladium Metallacycle and β-Cyclodextrin. *Inorg. Chem.*, 2015, 54 (24), 11807-11812.
23. XB Liu, WX Que, YL Xing, **Z. He**, YC He, Facile Method to Prepare Copper-Doped LiNbO<sub>3</sub> Nanocrystals, *Micro Nano Lett.*, 2015, 10, 307-309.

## 2014

24. **Z. He**, WX Que\*, XT Yin, YC He, Hydrogen Titanium Oxide Hydrate: Excellent Performance on Degradation of Methyl Blue in Aqueous Solutions, *RSC Adv.*, 2014, 4, 39678-39683.
25. **Z. He**, WX Que\*, YH Dang, YC He, ZQ Hou. Characterization and Adsorption Characteristics of Mesoporous Molybdenum Sulfide Microspheres, *Mater. Lett.*, 2014, 120: 58-61.
26. **Z. He**, WX Que\*, YC He. Enhanced Photocatalytic Performance of Sensitized Mesoporous TiO<sub>2</sub> Nanoparticles by Carbon Mesoporous Structures, *RSC Adv.* 2014, 4, 3332-3339.
27. FY Zhou,\* SJ Li,\* TR. Cook, **Z. He**, Peter J. Stang\*. Saccharide-functionalized Organoplatinum(II) Metallacycles, *Organometallics*, 2014, 33 (24), 7019-7022.
28. YL Xing, WX Que, XB Liu, HMA Javed, **Z. He**, YC He, T Zhou, Bi<sub>2</sub>Sn<sub>2</sub>O<sub>7</sub>-TiO<sub>2</sub> Nanocomposites for Enhancing Visible Light Photocatalytic Activity, *RSC Adv.*, 2014, 4, 49900-49907.
29. J Chen, WX Que, **Z. He**, XH Zhang, PDMS-Modified CaO-SiO<sub>2</sub> Hybrids Derived by a Sol-gel Process for Biomedical Applications, *Polym. Composite.*, 2014, 35, 6, 1193-1197.
30. HMA Javed, WX Que, **Z. He**. Anatase TiO<sub>2</sub> Nanotubes as Photoanode for Dye-Sensitized Solar Cells, *J. Nanosci. Nanotech.*, 2014, 14, 1085-1098.
31. ZF Zhu, JQ Zhou, XF Wang, **Z. He**, H Liu. Effect of pH on Photocatalytic Activity of SnO<sub>2</sub> Microspheres via Microwave Solvothermal Route. *Mater. Res. Innov.*, 2014, 18 (1), 8-13.

## 2013

32. **Z. He**, WX Que\*, P Sun, JB Ren, Double-layer Electrodes Based on TiO<sub>2</sub> Nanotubes Arrays for Enhancing Conversion Efficiency in Dye-Sensitized Solar Cells, *ACS. Appl. Mater. Inter.*, 2013, 5, 12779-127831.
33. **Z. He**, WX Que\*. Surface Scattering and Reflecting: Effect on Light Absorption or Photocatalytic Activity of TiO<sub>2</sub> Scattering Microspheres, *Phys. Chem. Chem. Phys.*, 2013, 15, 16768-16773.
34. **Z. He**, WX Que\*, YC He. Synthesis and Characterization of Bioinspired Hierarchical Mesoporous TiO<sub>2</sub> Photocatalysts, *Mater. Lett.* 2013, 94: 136-139.
35. **Z. He**, WX Que\*, YC He, J Chen, JX Hu, HMA Javed, Y Ji, XN Li, D Fei, Electrochemical Behavior and Photocatalytic Performance of Nitrogen-doped TiO<sub>2</sub> Nanotubes Arrays Powders Prepared by Combining Anodization with Solvothermal Process, *Ceram. Int.*, 2013, 39, 5545-5552.
36. **Z. He**, WX Que\*, J Chen, YC He, GF Wang. Surface Chemical Analysis on the Carbon-Doped Mesoporous TiO<sub>2</sub> Nanoparticles after Post-thermal Treatment: XPS and FTIR Characterization, *J. Phys. Chem. Solids*, 2013, 74, 924-928.
37. **Z. He\***, JQ Zhou. Synthesis, Characterization, and Activity of Tin Oxide Nanoparticles: Influence of Solvothermal Time on Photocatalytic Degradation of Rhodamine B, *Mod. Res. Catal.*, 2013, 2, 13-18.
38. XT Yin, WX Que, D Fei, HX Xie, **Z. He**, GF Wang, Strategies to Prepare An Efficient Photoanode for ZnO



- Nanowires-based CdS–CdSe Co-sensitized Solar Cells, *Electrochimica Acta*, 2013, 89, 561-570.
39. XT Yin, WX Que, D Fei, HX Xie, **Z. He**, Effect of TiO<sub>2</sub> Shell Layer Prepared by Wet-chemical Method on The Photovoltaic Performance of ZnO Nanowires Arrays-based Quantum Dot Sensitized Solar Cells, *Electrochimica Acta*, 2013, 99, 204-210.
40. HX Xie, WX Que, **Z. He**, P Zhong, YL Liao, Preparation and Photocatalytic Activities of Sb<sub>2</sub>S<sub>3</sub>/TiO<sub>2</sub> Nanotube Coaxial Heterogeneous Structure Arrays via an Ion Exchange Adsorption Method, *J. Alloy. Compd.*, 2013, 550, 314-319.

## 2012

41. **Z. He**, WX Que\*, J Chen, XT Yin, YC He, JB Ren. Photocatalytic Degradation of Methyl Orange over Nitrogen – Fluorine Codoped TiO<sub>2</sub> Nanobelts Prepared by Solvothermal Synthesis, *ACS Appl. Mater. Inter.*, 2012, 4: 6816-6826
42. **Z. He**, WX Que\*, HX Xie, J Chen, Y Yuan, P Sun. Facile Synthesis of Self-Sensitized TiO<sub>2</sub> photocatalysts and Their Higher Photocatalytic Activity. *J. Am. Ceram. Soc.*, 2012, 95(12), 3941-3946.
43. **Z. He\***, WX Que\*, YC He, J Chen, HX Xie, GF Wang, Nanosphere Assembled Mesoporous Titanium Dioxide with Advanced Photocatalytic Activity Using Absorbent Cotton as Template, *J. Mater. Sci.*, 2012, 47: 7210-7216.
44. **Z. He**, WX Que\*. Enhanced Photocatalytic Activity of N-Cetyl-N,N,N-Trimethyl Ammonium Bromide-Assisted Solvothermal Grown Fluff-Like ZnO Nanoparticles. *J. Nanoeng. Nanomanuf.*, 2012, 2, 17-21.
45. ZF Zhu\*, JQ Zhou, **Z. He**. Effects of Heat Treatment Scheme on Luminescence Properties and Photocatalytic Activity of Mo<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> Nanowire Prepared via Solvothermal Method. *J. Nanoeng. Nanomanuf.*, 2012, 2, 80-84.
46. ZF Zhu\*, HG Yu, JQ Li, **Z. He**, J Du. Broom-like Bi<sub>2</sub>Mo<sub>0.5</sub>W<sub>0.5</sub>O<sub>6</sub> Solid Solution Synthesised via One Step Template-free Hydrothermal Process and Enhanced Visible Light Driven Photocatalytic Activities. *Mater. Res. Innov.*, 2012, 16, 38-46.
47. ZF Zhu\*, JQ Zhou, H Liu, **Z. He**, XF Wang, Enhanced Photocatalytic Activity of Polyvinylpyrrolidone Assisted Microwave Hydrothermal Grown Tin Oxide Photocatalysts. *J. Nanomater. Mol. Nanotechnol.*, 2012, 1, 2.
48. ZF Zhu\*, JQ Zhou, **Z. He**, Effects of Heat Treatment Scheme on Luminescence Properties and Photocatalytic Activity of Mo<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub> Nanowire Prepared via Solvothermal Method, *J. Nanoeng. Nanomanuf.*, 2012, 2, 80-84.

## Before 2011

49. **Z. He\***, ZF Zhu, JQ Li, N Wei, JQ Zhou. Characterization and Activity of Mesoporous Titanium Dioxide beads with High Surface Areas and Controllable Pore Sizes. *J. Hazard. Mater.*, 2011, 190, 133-139.
50. ZF Zhu\*, **Z. He**, JQ Li, JQ Zhou, N Wei, DG Liu. Two-Step Template-Free Route for Synthesis of TiO<sub>2</sub> Hollow Spheres. *J. Mater. Sci.*, 2011, 04, 931-937.
51. JQ Li\*, **Z. He**, LY Guo, ZF Zhu, Synthesis and Characterization of Size-controlled TiO<sub>2</sub> Microspheres with Wormhole Mesoporous Structure, *Mater. Manuf. Processes*, 2010, 25, 990-993.
52. ZF Zhu, JQ Zhou, **Z. He\***, JQ Li, H Liu. Preparation, Characterization and Activity of TiO<sub>2-x</sub>F<sub>x</sub> Spherical Photocatalyst: Influence of Sodium Fluoride on Methyl Orange Degradation. *Mater. Res. Innov.*, 2011, (15)2, 78-82.
53. JQ Li\*, DF Wang, H Liu, **Z. He**, ZF Zhu. Synthesis of Fluorinated TiO<sub>2</sub> Hollow Microspheres and Their Photocatalytic Activity under Visible Light, *Appl. Surf. Sci.*, 2011, 257, 5879-5884.
54. ZF Zhu\*, N Wei, H Liu, **Z. He**. Microwave-assisted Hydrothermal Synthesis of Ni(OH)<sub>2</sub> Architectures and Their in-situ Thermal Conversion to NiO. *Adv. Powder Tech.*, 2011, 22(3), 422-426.
55. ZF Zhu\*, JQ Zhou, **Z. He**, JQ Li, H Liu. Synthesis and Visible Light Photocatalytic Activity of Mo–N Codoped TiO<sub>2</sub> Nanowires Prepared by Amorphous Titania Spheres via Hydrothermal Process, *Mater. Res. Innov.*, 2011, (15)4, 254-259.
56. ZF Zhu\*, **Z. He**, J Li, D Liu, N Wei. Synthesis and Characterization of Fluorinated TiO<sub>2</sub> Microspheres with Novel Structure by Sonochemical-Microwave Hydrothermal Treatment, *Mater. Res. Innov.*, 2010, 5, 426-430.