

# Hui Wei

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## PROFESSIONAL POSITIONS

2013-present	Department of Biomedical Engineering, Nanjing University	Professor
2011-2013	Department of Biomedical Engineering, Emory University <i>Advisor:</i> Professor Shuming Nie	Research Associate
2009-2011	Department of Chemistry, University of Illinois <i>Advisor:</i> Professor Yi Lu	Postdoctoral Researcher

## EDUCATION

2008	Changchun Institute of Applied Chemistry, CAS <i>Advisor:</i> Professor Erkang Wang (Academician, CAS)	<b>Ph.D.</b> in Chemistry
2003	Department of Chemistry, Nanjing University <i>Advisor:</i> Professor Xinghua Xia	<b>B.S.</b> in Chemistry

## AWARDS AND HONORS

2015	Fellow of the Royal Society of Chemistry
2014	The Shuangchuang Program Award, Jiangsu Province
2012	The Thousand Talents Program Award for Young Researchers
2008	The Excellent Prize of the President Scholarship of Chinese Academy of Sciences
2008	Excellent Graduate Student in the Graduate School of CAS (top 5%)
2007	Excellent Student in the Graduate School of CAS (top 15%)
2003	Excellent Graduate Student in Nanjing University

## RESEARCH INTERESTS

Nanozymes

Bioanalysis in living systems

*In vitro* diagnostics and precision medicine

Biomolecules directed approaches to functional nanomaterials

## PROFESSIONAL ACTIVITIES

Editorial Board Member

*Scientific Reports* (2014-now)

Special Issue Editor

*Molecules* (Special Issue "Nanozymes and Beyond", 2016)

Facilitator for Conferee Networking Session of Pittcon 2016

*Nanozymes in Analytical Chemistry and Beyond Session*

Membership

*American Chemical Society*

*Biomedical Engineering Society*

*Biophysical Society of China*

*Chinese Chemical Society*

*Royal Society of Chemistry*

Independent Journal Reviewer for

*ACS Applied Materials & Interfaces*

*ACS Biomaterials Science & Engineering*

*ACS Nano*

*Advances in Polymer Technology*

*Aerosol and Air Quality Research*

*Analyst*

*Analytica Chimica Acta*

*Analytical Biochemistry*

*Analytical Chemistry*

*Analytical Methods*

*Angewandte Chemie International Edition*

*Biomaterials Science*

*Biosensors and Bioelectronics*

*Carbon*

*Catalysis Letters*

*ChemElectroChem*

*Chemical Communications*

*Chemical Science*

*Chemistry-A European Journal*

*ChemNanoMat*

*Dalton Transactions*

*Electrochemistry Communications*

*IEEE Transactions on Biomedical Engineering*

*Inorganic Chemistry*

*Ionic*

*Israel Journal of Chemistry*

*Journal of Electroanalytical Chemistry*

*Journal of Materials Chemistry B*

*Journal of the American Chemical Society*

*Metallomics*

*Microchimica Acta*

*Molecules*

*Nano Research*

*Nanoscale*

*New Journal of Chemistry*

*Physical Chemistry Chemical Physics*

*RSC Advances*

*Science Bulletin*

*Scientia Sinica Chimica*

*Sensors & Actuators: B. Chemical*

**JOURNALS**

57. Yihui Hu, Hanjun Cheng, Xiaozhi Zhao, Jiangjiexing Wu, Faheem Muhammad, Shichao Lin, Jian He, Liqi Zhou, Chengping Zhang, Yu Deng, Peng Wang, Zhengyang Zhou, Shuming Nie, Hui Wei, “Surface-Enhanced Raman Scattering Active Gold Nanoparticles with Enzyme-Mimicking Activities for Measuring Glucose and Lactate in Living Tissues” *ACS Nano*, **2017**, 11, 5558-5566.
56. Wenjing Guo, Yihui Hu, Hui Wei, “Enzymatically activated reduction-caged SERS reporters for versatile bioassays” *Analyst*, **2017**, 142, 2322-2326.
55. Leilei Shi, Xin Li, Min Zhou, Faheem Muhammad, Yubin Ding, Hui Wei, “An arylboronate locked fluorescent probe for hypochlorite” *Analyst*, **2017**, 142, 2104-2108.
54. Xiaoyu Wang, Wen Cao, Li Qin, Tingsheng Lin, Wei Chen, Shichao Lin, Jia Yao, Xiaozhi Zhao, Min Zhou, Cheng Hang, Hui Wei, “Boosting the Peroxidase-Like Activity of Nanostructured Nickel by Inducing Its 3+ Oxidation State in LaNiO<sub>3</sub> Perovskite and Its Application for Biomedical Assays” *Theranostics*, **2017**, 7, 2277-2286.
- [Invited paper for Special Issue “Biomolecular and biomimetic materials for theranostics”](#).
53. Hanjun Cheng, Shichao Lin, Faheem Muhammad, Ying-Wu Lin, Hui Wei, “Rationally modulate the oxidase-like activity of nanoceria for self-regulated bioassays” *ACS Sensors*, **2016**, 1, 1336-1343.
52. Yihui Hu, Wenjing Guo, Yubin Ding, Hanjun Cheng, Hui Wei, “Modulating luminescence of Tb<sup>3+</sup> with biomolecules for sensing heparin and its contaminant OSCS” *Biosensors and Bioelectronics*, **2016**, 86, 858-863.
51. Hanjun Cheng, Lei Zhang, Jian He, Wenjing Guo, Zhengyang Zhou, Xuejin Zhang, Shuming Nie, Hui Wei, “Integrated nanozymes with nanoscale proximity for *in vivo* neurochemical monitoring in living brains” *Analytical Chemistry*, **2016**, 88, 5489-5497.
- [Highlighted in \*phys.org\*: Integrated nanozymes for brain chemistry.](#)
  - [Highlighted in \*Essential Science Indicators\*<sup>SM</sup>: Highly cited paper.](#)

- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Research Front.
50. Shicao Lin, Hanjun Cheng, Qiran Ouyang, Hui Wei, “Deciphering the quenching mechanism of 2D MnO<sub>2</sub> nanosheet towards Au nanocluster fluorescence to design effective glutathione biosensor” *Analytical Methods*, **2016**, 8, 3935-3940.
- Highlighted in *phys.org*: Quenching mechanism of 2D MnO<sub>2</sub> nanosheet towards Au nanocluster fluorescence clarified.
49. Hanjun Cheng, Xuefeng Qiu, Xiaozhi Zhao, Wei Meng, Da Huo, Hui Wei, “Functional nucleic acid probe for parallel monitoring K<sup>+</sup> and protoporphyrin IX in living organisms” *Analytical Chemistry*, **2016**, 88, 2937-2943.
48. Xiaoyu Wang, Yihui Hu, Hui Wei, “Nanozymes in bionanotechnology: from sensing to therapeutics and beyond” *Inorganic Chemistry Frontiers*, **2016**, 3, 41-60.
- Invited paper for the inaugural “*Emerging Investigators*” themed collection.
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
47. Yubin Ding, Leilei Shi, Hui Wei, “A “turn on” fluorescent probe for heparin and its oversulfated chondroitin sulfate contaminant” *Chemical Science*, **2015**, 6, 6361-6366.
- Highlighted in *Chemistry World* (7<sup>th</sup> August, 2015): Simple probe for heparin quality control.
  - Highlighted in *Scientific American* (12<sup>th</sup> August, 2015): Simple Test Makes Blood-Clot-Busting Drug Safer.
  - Highlighted in *Xtalks News* (14<sup>th</sup> August, 2015): Fluorescent Probe Makes Heparin Use Safer.
46. Hanjun Cheng, Xiaoyu Wang, Hui Wei, “Ratiometric electrochemical sensor for effective and reliable detection of ascorbic acid in living brains” *Analytical Chemistry*, **2015**, 87, 8889-8895.
45. Yihui Hu, Wenjing Guo, Hui Wei, “Protein- and peptide-directed approaches to fluorescent metal nanoclusters” *Israel Journal of Chemistry*, **2015**, 55, 682-697.
- Invited paper for Special Issue “*Functional Peptide and Protein Nanostructures*”.
44. Yubin Ding, Leilei Shi, Hui Wei, “Protein-directed approaches to functional nanomaterials: a case study of lysozyme” *Journal of Materials Chemistry B*, **2014**, 2, 8268-8291.

- Highlighted as a Feature Article.
  - Highlighted as a Cover paper.
43. Hening Wang, Hongfang Sun, Hui Wei, Peng Xi, Shuming Nie, Qiushi Ren, “Biocompatible hyaluronic acid polymer-coated quantum dots for CD44<sup>+</sup> cancer cell-targeted imaging” *Journal of Nanoparticle Research*, **2014**, 16, 2621.
42. Shuyu Zhang, Yubin Ding, Hui Wei, “Ruthenium polypyridine complexes combined with oligonucleotides for bioanalysis: a review” *Molecules*, **2014**, 19, 11933-11987.
- Invited paper for Special Issue "*Practical Applications of Metal Complexes*".
41. Hui Wei, Stephen House, Jiangjiexing Wu, Jiong Zhang, Zidong Wang, Ying He, Yi-Gui Gao, Howard Robinson, Wei Li, Jian-Min Zuo, Ian M. Robertson, Yi Lu, “Enhanced and tunable fluorescent quantum dots within a single crystal of protein” *Nano Research*, **2013**, 6, 627-634.
- Highlighted as a Cover paper.
40. Hui Wei, Erkang Wang, “Nanomaterials with enzyme-like characteristics (Nanozymes): next-generation artificial enzymes” *Chemical Society Reviews*, **2013**, 42, 6060-6093.
- Highlighted as a Cover paper.
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Research Front.
  - Cited over 300 times.
39. Hui Wei, Yi Lu, “Catalysis of gold nanoparticles within lysozyme single crystals” *Chemistry-An Asian Journal*, **2012**, 7, 680-683.
- Highlighted as a Cover paper.
  - Highlighted as *Research of the Day* by Asian Chemical Editorial Society (February, 2012).
  - The Top Ten most accessed articles in June 2012 (the 8<sup>th</sup> one).
38. Hui Wei, Zidong Wang, Jiong Zhang, Stephen House, Yi-Gui Gao, Limin Yang, Howard Robinson, Changjun Hou, Ian Robertson, Jian-Min Zuo, Yi Lu, “Time-dependent, protein-directed growth of gold nanoparticles within a single crystal of lysozyme” *Nature*

*Nanotechnology*, **2011**, 6, 93-97.

- Highlighted in *Nature Nanotechnology* (Issue 2, 2011): Gold nanoparticles: Grown in a crystal.

37. Hui Wei, Erkang Wang, “Electrochemiluminescence of tris(2,2'-bipyridyl)ruthenium and its applications in bioanalysis: a review” *Luminescence*, **2011**, 26, 77-85.

- Highlighted as a Cover and Special Feature paper.
- The Top Ten most accessed articles in 2012 (the 4<sup>th</sup> one).
- The Top Ten most cited articles (articles published 2011-2012) (the 2<sup>nd</sup> one).

36. Hui Wei, Zidong Wang, Limin Yang, Shiliang Tian, Changjun Hou, Yi Lu, “Lysozyme-stabilized gold Fluorescent cluster: synthesis and its application in Hg<sup>2+</sup> sensor” *Analyst*, **2010**, 135, 1406-1410.

- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Research Front.
- Cited over 200 times.

35. Libing Zhang, Hui Wei, Jing Li, Tao Li, Dan Li, Yunhui Li, Erkang Wang, “A carbon nanotubes based ATP apta-sensing platform and its application in cellular assay” *Biosensors and Bioelectronics*, **2010**, 25, 1897-1901.

34. Zhaozi Lv, Hui Wei, Bingling Li, Erkang Wang, “Colorimetric recognition of the coralyne-poly(dA) interaction using unmodified gold nanoparticle probes, and further detection of coralyne based upon this recognition system” *Analyst*, **2009**, 134, 1647-1651.

33. Jing Li, Jichao Zhang, Hui Wei, Erkang Wang, “Combining chemical reduction with an electrochemical technique for the simultaneous detection of Cr(VI), Pb(II) and Cd(II)” *Analyst*, **2009**, 134, 273-277.

32. Jing Li, Hui Wei, Shaojun Guo, Erkang Wang, “Selective, peroxidase substrate based “signal-on” colorimetric assay for the detection of chromium (VI)” *Analytica Chimica Acta*, **2008**, 630, 181-185.

31. Lanyun Fang, Zhaozi Lv, Hui Wei, Erkang Wang, “A electrochemiluminescence aptasensor for detection of thrombin incorporating the capture aptamer labeled with gold nanoparticles

- immobilized onto the thio-silanized ITO electrode” *Analytica Chimica Acta*, **2008**, 628, 80-86.
30. Jianguo Bai, Hui Wei, Bingling Li, Lihua Song, Lanyun Fang, Zhaozi Lv, Weihong Zhou, Erkang Wang, “[Ru(bpy)<sub>2</sub>(dcbpy)NHS] Labeling/Aptamer-Based Biosensor for the Detection of Lysozyme by Increasing Sensitivity with Gold Nanoparticle Amplification” *Chemistry-An Asian Journal*, **2008**, 3, 1935-1941.
29. Hui Wei, Chaogui Chen, Bingyan Han, Erkang Wang, “Enzyme colorimetric assay using unmodified silver nanoparticles” *Analytical Chemistry*, **2008**, 80, 7051-7055.
- Cited over 100 times.
28. Hui Wei, Erkang Wang, “Solid-state electrochemiluminescence of tris(2,2'-bipyridyl) ruthenium” *TrAC Trends in Analytical Chemistry*, **2008**, 27, 447-459.
- Cited over 100 times.
27. Hui Wei, Jianyuan Yin, Erkang Wang, “Bis(2,2'-bipyridine)(5,6-epoxy-5,6-dihydro-[1,10] phenanthroline)ruthenium: Synthesis and Electrochemical and Electrochemiluminescence Characterization” *Analytical Chemistry*, **2008**, 80, 5635-5639.
26. Yan Du, Bingling Li, Hui Wei, Yuling Wang, Erkang Wang, “Multifunctional Label-Free Electrochemical Biosensor Based on an Integrated Aptamer” *Analytical Chemistry*, **2008**, 80, 5110-5117.
- Cited over 100 times.
25. Lanyun Fang, Zhaozi Lv, Hui Wei, Erkang Wang, “Quantitative electrochemiluminescence detection of proteins: Avidin-based sensor and tris(2,2'-bipyridine) ruthenium(II) label” *Biosensors and Bioelectronics*, **2008**, 23, 1645-1651.
24. Hui Wei, Lingling Zhou, Jing Li, Jifeng Liu, Erkang Wang, “Electrochemical and electrochemiluminescence study of Ru(bpy)<sub>3</sub><sup>2+</sup>-doped silica nanoparticles with covalently grafted biomacromolecules” *Journal of Colloid and Interface Science*, **2008**, 321, 310-314.
23. Hui Wei, Jifeng Liu, Lingling Zhou, Jing Li, Xiue Jiang, Jianzhen Kang, Xiurong Yang, Shaojun Dong, Erkang Wang, “[Ru(bpy)<sub>3</sub>]<sup>2+</sup>-Doped Silica Nanoparticles within Layer-by-Layer Biomolecular Coatings and Their Application as a Biocompatible Electrochemiluminescent Tag Material” *Chemistry-A European Journal*, **2008**, 14, 3687-3693.
22. Hui Wei, Bingling Li, Jing Li, Shaojun Dong, Erkang Wang, “DNAzyme-based colorimetric

sensing of lead ( $\text{Pb}^{2+}$ ) using unmodified gold nanoparticle probes” *Nanotechnology*, **2008**, 19, 095501.

21. Hui Wei, Erkang Wang, “ $\text{Fe}_3\text{O}_4$  Magnetic Nanoparticles as Peroxidase Mimetics and Their Applications in  $\text{H}_2\text{O}_2$  and Glucose Detection” *Analytical Chemistry*, **2008**, 80, 2250-2254.
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Research Front.
  - Cited over 400 times.
20. Bingling Li, Yuling Wang, Hui Wei, Shaojun Dong, “Amplified electrochemical aptasensor taking AuNPs based sandwich sensing platform as a model” *Biosensors and Bioelectronics*, **2008**, 23, 965-970.
19. Yuling Wang, Hui Wei, Bingling Li, Wen Ren, Shaojun Guo, Shaojun Dong, Erkang Wang, “SERS opens a new way in aptasensor for protein recognition with high sensitivity and selectivity” *Chemical Communications*, **2007**, 5220-5222.
  - Selected for inclusion in *Virtual Journal Chemical Biology* (Issue 1, 2008).
  - Cited over 100 times.
18. Hui Wei, Bingling Li, Jing Li, Erkang Wang, Shaojun Dong, “Simple and sensitive aptamer-based colorimetric sensing of protein using unmodified gold nanoparticle probes” *Chemical Communications*, **2007**, 3735-3737.
  - Highlighted in *Chemical Technology* (Issue 9, 2007): Protein detection made simple.
  - Selected for inclusion in *Virtual Journal Chemical Biology* (Issue 10, 2007).
  - The Top Ten most accessed articles from *Virtual Journal Chemical Biology* Research Articles in September 2007 (the 1<sup>st</sup> one).
  - Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
  - Cited over 300 times.
17. Jing Li, Minghua Huang, Xiaoqing Liu, Hui Wei, Yuanhong Xu, Guobao Xu, Erkang Wang, “Enhance electrochemiluminescence sensor from tris(2,2'-bipyridyl)ruthenium(II) incorporated into MCM-41 and an ionic liquid-based carbon paste electrode” *Analyst*, **2007**, 132, 687-691.



16. Bingling Li, Yan Du, Hui Wei, Shaojun Dong, “Reusable, label-free electrochemical aptasensor for sensitive detection of small molecules” *Chemical Communications*, **2007**, 3780-3782.
  - Highlighted in *Nature China* (8 August 2007): Sensors: A snappy detector.
15. Bingling Li, Hui Wei, Shaojun Dong, “Sensitive detection of protein by an aptamer-based label-free fluorescing molecular switch” *Chemical Communications*, **2007**, 73-75.
  - Selected for inclusion in *Virtual Journal Chemical Biology* (Issue 1, 2007).
  - Cited over 100 times.
14. Cunlan Guo, Yonghai Song, Hui Wei, Peicai Li, Li Wang, Lanlan Sun, Yujing Sun, Zhuang Li, “Room temperature ionic liquid doped DNA network immobilized horseradish peroxidase biosensor for amperometric determination of hydrogen peroxide” *Analytical and Bioanalytical Chemistry*, **2007**, 389, 527-532.
13. Hui Wei, Yan Du, Jianzhen Kang, Erkang Wang, “Label free electrochemiluminescence protocol for sensitive DNA detection with a tris(2,2'-bipyridyl)ruthenium(II) modified electrode based on nucleic acid oxidation” *Electrochemistry Communications*, **2007**, 9, 1474-1479.
12. Hui Wei, Erkang Wang, “Submicrometre scale single-crystalline gold plates of nanometre thickness: synthesis through a nucleobase process and growth mechanism” *Nanotechnology*, **2007**, 18, 295603.
11. Jing Li, Yuanhong Xu, Hui Wei, Ting Huo, Erkang Wang, “Electrochemiluminescence Sensor Based on Partial Sulfonation of Polystyrene with Carbon Nanotubes” *Analytical Chemistry*, **2007**, 79, 5439-5443.
10. Hui Wei, Bingling Li, Yan Du, Shaojun Dong, Erkang Wang, “Nucleobase-metal hybrid materials: preparation of submicrometer-scale, spherical colloidal particles of adenine-gold(III) via a supramolecular hierarchical self-assembly approach” *Chemistry of Materials*, **2007**, 19, 2987-2993.
9. Hui Wei, Jing Li, Yuling Wang, Erkang Wang, “Silver nanoparticles coated with adenine: preparation, self-assembly and application in surface-enhanced Raman scattering” *Nanotechnology*, **2007**, 18, 175610.
8. Jianzhen Kang, Hui Wei, Weiwei Guo, Erkang Wang, “Electrochemiluminescence in the  $S_2O_8^{2-}$

system: Pt-Cd electrodes” *Electrochemistry Communications*, **2007**, 9, 465-468.

7. Hui Wei, Yan Du, Jianzhen Kang, Guobao Xu, Erkang Wang, “Tris(2,2'-bipyridyl) ruthenium(II) doped silica film modified indium tin oxide electrode and its electrochemiluminescent properties” *Chinese Journal of Chemistry*, **2007**, 25, 159-163.
6. Hui Wei, Erkang Wang, “Electrochemiluminescence-based DNA detection using guanine oxidation at electrostatic self-assembly of Ru(bpy)<sub>3</sub><sup>2+</sup> doped silica nanoparticles on indium tin oxide electrode” *Chemistry Letters*, **2007**, 36, 210-211.
5. Jipei Yuan, Hui Wei, Wenrui Jin, Xiurong Yang, Erkang Wang, “Kinetic study of paracetamol on prolidase activity in erythrocytes by capillary electrophoresis with Ru(bpy)<sub>3</sub><sup>2+</sup> electrochemiluminescence detection” *Electrophoresis*, **2006**, 27, 4047-4051.
4. Yuanhong Xu, Ying Gao, Hui Wei, Yan Du, Erkang Wang, “Field-amplified sample stacking capillary electrophoresis with electrochemiluminescence applied to the determination of illicit drugs on banknotes” *Journal of Chromatography A*, **2006**, 1115, 260-266.
3. Yan Du, Hui Wei, Jianzhen Kang, Jilin Yan, Xuebo Yin, Xiurong Yang, Erkang Wang, “Microchip capillary electrophoresis with solid-state electrochemiluminescence detector” *Analytical Chemistry*, **2005**, 77, 7993-7997.
2. Kang Wang, Jingjuan Xu, Dacheng Sun, Hui Wei, Xinghua Xia, “Selective glucose detection based on the concept of electrochemical depletion of electroactive species in diffusion layer” *Biosensors and Bioelectronics*, **2005**, 20, 1366-1372.
1. Kang Wang, Hui Wei, Xinghua Xia, “Electrochemical depletion of ascorbic acid in the detection of hydrogen peroxide-An investigation using SECM” *Acta Chimica Sinica*, **2004**, 62, 1339-1343. (In Chinese)

## BOOKS AND CHAPTERS

6. Shichao Lin, Jiangjiexing Wu, Jia Yao, Wen Cao, Faheem Muhammad, Hui Wei, “*Nanozymes for biomedical sensing applications: from in vitro to living systems (Chapter 7)*” in “Biomedical Applications of Functionalized Nanomaterials” (Ed.: Bruno Sarmento, Jose das Neves), 2017, Elsevier.
5. Hanjun Cheng, Xiaoyu Wang, Hui Wei, “*Artificial Enzymes: The Next Wave (Chapter 71)*” in

- “Encyclopedia of Physical Organic Chemistry” (Ed.: Zerong Wang), 2017, John Wiley and Sons.
4. Xiaoyu Wang, Wenjing Guo, Yihui Hu, Jiangjiexing Wu, Hui Wei, *Nanozymes: next wave of artificial enzymes*, 2016, Springer.
  3. Erkang Wang, Yubin Ding, Hui Wei, “*Bionanosensing platforms for in vitro detection and diagnostics (Chapter 1)*” in “Nanomaterials: emerging characteristics and biomedical applications” (Ed.: Xiyun Yan), 2014, Science Press (in Chinese).
    - Selected for inclusion in *the Collection of Nano Science and Technology*.
    - Funded by the National Publishing Foundation (to X. Yan).
  2. Bingling Li, Hui Wei, Shaojun Dong, “*Strategy for use of smart routes to prepare label-free aptasensors for bioassay using different techniques (Chapter 12)*” in “Aptamers in Bioanalysis” (Ed.: Macro Mascini), 2009, John Wiley and Sons.
    - Highlighted in *Book Reviews of Journal of the American Chemical Society*.
  1. Hui Wei, Erkang Wang, “*Electrochemiluminescent sensors: fabrications and applications*” in “Biosensors: Properties, Materials and Applications” (Ed.: Rafael Comeaux, Pablo Novotny), 2009, Nova Science Publishers, Inc.

## PATENTS

5. Hui Wei, Hanjun Cheng, “Nanozymes based colorimetric assays for enzymes, proteins, and their inhibitors”, 2016108522013.
4. Hui Wei, Hanjun Cheng, “Nucleic acid technology-based detection methods for biologically active small molecules in living systems”, CN 105651751 A.
3. Hui Wei, Hanjun Cheng, “A detection solution containing DNA and organic dyes and its applications”, CN 105717081 A.
2. Hui Wei, Yubin Ding, Leilei Shi, Min Zhou, “A highly sensitive fluorescent probe: its synthetic method and applications”, CN 105154066 A.
1. Hui Wei, Chaogui Chen, Bingyan Han, Erkang Wang, “A label free colorimetric method for enzyme determination with silver nanoprobess”, CN 101358926 B.

## CONFERENCES

30. Hui Wei, “Rational Design of High Performance Nanozymes for Bioanalytical and Biomedical Applications” (Poster Presentations), *The 12<sup>th</sup> Sino-US symposium on Nanoscale Science and Technology*, 2017-May-25—2017-May-28, Beijing, China.
29. Hui Wei, “Self-assembly Approach to Integrated Nanozymes: Rational Design and Biomedical Applications” (Invited Oral Presentations), *The International Congress on Analytical Sciences 2017 (ICAS2017)*, 2017-May-05—2017-May-08, Haikou, China.
28. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited & Oral Presentations), *The 13<sup>th</sup> National Conference on Electroanalytical Chemistry*, 2017-April-14—2017-April-16, Nanchang, China.
27. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Oral Presentations), *2016 National Conference on Analytical Chemistry for Life Science*, 2016-December-17—2016-December-19, Nanjing, China.
26. Hui Wei, “Self-assembly Approach to Integrated Nanozymes: Rational Design and Biomedical Applications” (Oral Presentations), *2016 World Science Life Conference*, 2016-November-01—2016-November-03, Beijing, China.
25. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Poster presentations), *ACS Publications Symposium: Innovation in Molecular Science*, 2016-October-23—2016-October-25, Beijing, China.
24. Hui Wei, “Nanozymes: next wave of artificial enzymes” (Oral Presentations), *NanoBio 2016*, 2016-October-17—2016-October-19, Nanjing, China.
23. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Poster Presentations), *The Biomedical Engineering Society 2016 Annual Meeting*, 2016-October-05—2016-October-08, Minneapolis, USA.
22. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Oral Presentations, No. 03-I-037), *The 30<sup>th</sup> Chinese Chemical Society Congress*, 2016-July-01—2016-July-04, Dalian, China.
21. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Poster Presentations), *The 11<sup>th</sup> Sino-US symposium on Nanoscale Science and Technology & Nano Research Award Symposium*, 2016-June-18—2016-June-20, Nanjing, China.

20. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Poster Presentations), *2016 International Symposium on Analytical Chemistry Frontiers & China-US Analytical Chemistry Workshop*, 2016-June-03—2016-June-06, Xiamen, China.
  - [Selected as the Best Poster Award.](#)
19. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited Presentations), *The 7th International Symposium on Bioanalysis, Biomedical Engineering and Nanotechnology*, 2016-May-27—2016-May-29, Changsha, China.
18. Hui Wei, “Self-assembly Approach to Integrated Nanozymes: Rational Design and Biomedical Applications” (Oral Presentations), *Pittcon 2016*, 2016-March-06—2016-March-10, Atlanta, USA.
17. Hui Wei, “Biosensing based on functional nucleic acids and peptides” (Oral Presentations), *CBME' 2015*, 2015-October-16—2015-October-19, Nanjing, China.
16. Hui Wei, “A Ratiometric Sensor for Monitoring Cerebral Species” (Invited & Oral Presentations, I-137), *The 15<sup>th</sup> International Symposium on Electroanalytical Chemistry*, 2015-August-13—2015-August-16, Changchun, China.
15. Hui Wei, “Self-assembly approach to integrated nanozymes: rational design and biomedical applications” (Poster Presentations), *Gordon Research Conference: Cancer Nanotechnology (Nanomedicines from Laboratory to Clinical Reality)*, 2015-June-28—2015-July-03, West Dover, USA.
14. Hui Wei, “A ratiometric electrochemical biosensor for effective and reliable detection of ascorbic acid in living brains” (Invited & Oral Presentations), *Workshop on Forssmann Translational Medicine (The 11<sup>th</sup> International Stroke Summit)*, 2015-June-12—2015-June-14, Nanjing, China.
13. Hui Wei, “Self-assembly approach to integrated nanozymes: rational design and biomedical applications” (Poster Presentations), *Gordon Research Conference: Self-Assembly & Supramolecular Chemistry (From Molecular Information to Function)*, 2015-May-17—2015-May-22, Lucca, Italy.
12. Hui Wei, “Self-assembly approach to integrated nanozymes: rational design and biomedical applications” (Invited & Oral Presentations), *Workshop on Nanozyme (ABA2015)*, 2015-May-09—2015-May-12, Shangyu, China.
11. Hui Wei, “Rational design of integrated nanozymes for in vivo measuring cerebral species in

- living rats” (Poster Presentations), *Gordon Research Conference: RNA Nanotechnology (Converging Disciplines for the Advancement of Inter-RNA Interactions)*, 2015-February-01—2015-February-06, Ventura, USA.
10. Hui Wei, “Nanozymes and functional nanomaterials” (Invited & Oral Presentations), *Special Academic Forum for Outstanding Young and Middle-aged Researchers in Analytical Chemistry (NSFC)*, 2014- November-22—2014-November-23, Guangzhou, China.
  9. Hui Wei, “Biomolecule-directed approaches to functional nanomaterials: lysozyme as a model protein” (Invited & Oral Presentations), *Taishan Academic Forum (Qingdao University)*, 2014-October-10, Qingdao, China.
  8. Hui Wei, “Self-assembly approach to integrated nanozymes: rational design and biomedical applications” (Poster Presentations), *Gordon Research Conference: Bioanalytical Sensors (Twenty First Century Technologies for Probing Biological Systems)*, 2014-June-22—2014-June-27, Newport, USA.
  7. Hui Wei, “Biomolecule-directed approaches to functional nanomaterials: lysozyme as a model protein” (Invited & Oral Presentations), *The Batsheva de Rothschild Seminar on Functional Peptide and Protein Nanostructures (Research Workshop of the Israel Science Foundation)*, 2014-May-25—2014-May-28, Kibbutz Tzuba, Israel.
  6. Hui Wei, “Protein directed approach to functional nanomaterials and their applications” (Poster Presentations), *The 12<sup>th</sup> National Conference on Electroanalytical Chemistry*, 2014-April-10—2014-April-13, Guilin, China.
  5. Hui Wei, “Protein-directed Approaches to Functional Bionanomaterials” (Invited & Oral Presentations, I&O-39), *The 14<sup>th</sup> International Symposium on Electroanalytical Chemistry*, 2013-August-18—2013-August-20, Changchun, China.
  4. Hui Wei, Ximei Qian, Shuming Nie, “SERS on a Bead: New Approaches to Cardiovascular Disease Biomarkers Diagnosis” (Poster Presentations, P-Th-A-227), *The Biomedical Engineering Society 2012 Annual Meeting*, 2012-October-24—2012-October-27, Atlanta, USA.
  3. Hui Wei, Zidong Wang, Jiong Zhang, Stephen House, Yi-Gui Gao, Limin Yang, Howard Robinson, Li Huey Tan, Hang Xing, Changjun Hou, Ian M. Robertson, Jian-Min Zuo, Yi Lu, “Time-dependent and Protein-directed In Situ Growth of Gold Nanoparticles in a Single Crystal of Lysozyme” (Poster Presentations), *Imaging without Boundaries: Exploring the Science, Technology, and Applications of Imaging and Visualization*,

2010-October-14—2010-October-15, Urbana, USA.

2. Hui Wei, Binging Li, Jing Li, Erkang Wang, “Simple, Sensitive and Label-free DNAzyme-based Colorimetric Sensing of Lead ( $Pb^{2+}$ ) Using Unmodified Gold Nanoparticle Probes” (Poster Presentations, P132), *The 11<sup>th</sup> International and the 1<sup>st</sup> Sino-Japan Bilateral Symposium on Electroanalytical Chemistry*, 2007-August-16—2007-August-19, Changchun, China.
1. Hui Wei, Erkang Wang, “Tris(2,2’-bipyridine) ruthenium(II) doped silica films modified indium tin oxide electrode and its photophysical and electrochemiluminescent properties” (Oral Presentations, No. 12-O-033), *The 25<sup>th</sup> Chinese Chemical Society Congress*, 2006-July-11—2006-July-14, Changchun, China.

## GRANTS

- 2017 Open Funds of the State Key Laboratory of Analytical Chemistry for Life Science
- 2015 The Shuangchuang Program of Jiangsu Province for Research Teams (co-PI)
- 2015 National Natural Science Foundation of China for Young Researchers
- 2015 Open Funds of the State Key Laboratory of Electroanalytical Chemistry
- 2015 973 Program for Young Researchers (co-PI)
- 2014 The Shuangchuang Program of Jiangsu Province for Individual Researchers
- 2014 The Six Talents Summit Program of Jiangsu Province (Class A)
- 2013 Natural Science Foundation of Jiangsu Province for Young Researchers
- 2012 Thousand Talents Program for Young Researchers
- 985 Program of Nanjing University
- Priority Academic Program Development of Jiangsu Higher Education Institutions (PAPD)

## INVITED SEMINARS

18. 04/2017, Soochow University, Suzhou, China
17. 04/2017, Jiangxi Normal University, Nanchang, China
16. 04/2017, Nanchang University, Nanchang, China
15. 06/2016, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China

14. 06/2016, University of Georgia, Athens, USA
13. 05/2016, Nanjing University, Nanjing, China
12. 02/2016, University of Massachusetts, Amherst, USA
11. 12/2015, Institute of Chemistry, Chinese Academy of Sciences, Beijing, China
10. 11/2015, Northwestern University, Xi'an, China
9. 08/2015, Shaanxi Normal University, Xi'an, China
8. 08/2015, Xi'an Jiaotong University, Xi'an, China
7. 04/2015, University of South China, Hengyang, China
6. 04/2014, Nanjing University, Nanjing, China
5. 11/2013, Nanjing University of Posts and Telecommunications, Nanjing, China
4. 05/2013, Nanjing University, Nanjing, China
3. 05/2013, Nankai University, Tianjin, China
2. 06/2012, Beijing Institute of Technology, Beijing, China
1. 06/2012, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China

## TEACHING

Bioelectronics for Biomedical Applications (Spring 2014, Spring 2015, Fall 2016).

Progress in Materials Science and Engineering (one lecture/course) (Fall 2013, Fall 2014, Fall 2015).

## CURRENT GROUP MEMBERS

### Staff

*Dr. Jiangjiexing Wu (2015-now)*

*Min Zhou (2014-now)*

### PostD

*Dr. Faheem Muhammad (2015-now)*

### Graduate

*Yihui Hu (2014-now)*

*Leilei Shi (2014-now)*

*Wenjing Guo (2014-now)*

*Xiaoyu Wang (2014-now)*



## Hui Wei

*Wen Cao (2015-now)*

*Shichao Lin (2015-now)*

*Jia Yao (2015-now)*

*Sirong Li (2016-now)*

*Zhangping Lou (2016-now)*

*Li Qin (2016-now)*

*Sheng Zhao (2016-now)*

### Undergraduate

*Jiarui Liu (2014-now)*

*Dan Yuan (2014-now)*

*YanJun Huang (2015-now)*

*Yifan Ni (2015-now)*

*Guopo Shen (2015-now)*

*Yuchen Zhang (2015-now)*

## PREVIOUS GROUP MEMBERS

### Staff

*Dr. Hanjun Cheng (2013-2016) (now PostD at University of California, Los Angeles)*

*Dr. Yubin Ding (2013-2016) (now Associate Professor at Nanjing Agricultural University)*

*Lu Xing (2013-2014) (now at GenScript, Nanjing)*

### Graduate

*Shuyu Zhang (2013-2014) (now at the 26th Research Institute of China Electronics Technology Group Corporation)*

### Undergraduate

*Ning Wang (2016-2017) (now at Nanjing University)*

*Siyuan Chen (2016-2017) (now at Nanjing University)*

*Li Qin (2015-2016) (now at Nanjing University)*

*Yuting Huang (2015) (now at Nanjing University)*

*Shichao Lin (2015) (now at Nanjing University)*

*Jia Yao (2015) (now at Nanjing University)*

*Huiying Yang (2015) (now at National University of Singapore)*

*Wenrui Wang (2014-2015) (now at Nanjing University)*

*Xie Chen (2014-2014) (now at Renmin University)*

*Wenjing Guo (2014-2014) (now at Nanjing University)*

*Qiran Ouyang (2014-2014) (now at Nanjing University of Technology)*

*Leilei Shi (2014-2014) (now at Nanjing University)*

*Changyu Wang (2014-2014) (now at Nanjing University)*

*Shengqin Yang (2014-2014) (now at Imperial College London)*

## GRANTS OF GROUP MEMBERS

- 2016 Natural Science Foundation of Jiangsu Province for Young Researchers  
(Dr. Jiangjiexing Wu)
- 2016 China Postdoctoral Science Foundation  
(Dr. Jiangjiexing Wu)
- 2016 Open Funds of the State Key Laboratory of Coordination Chemistry  
(Dr. Jiangjiexing Wu)
- 2016 National Natural Science Foundation of China for International Young Scientists  
(Dr. Faheem Muhammad)
- 2015 China Postdoctoral Science Foundation  
(Dr. Faheem Muhammad)
- 2015 National Undergraduate Innovation and Entrepreneurship Training Program  
(Dan Yuan, Jiarui Liu, Wenrui Wang)
- 2015 National Natural Science Foundation of China for Young Researchers  
(Dr. Hanjun Cheng)
- 2015 Open Funds of the State Key Laboratory for Chemo/Biosensing and Chemometrics  
(Dr. Yubin Ding)
- 2015 Open Funds of the State Key Laboratory of Analytical Chemistry for Life Science  
(Dr. Hanjun Cheng)
- 2014 Natural Science Foundation of Jiangsu Province for Young Researchers  
(Dr. Yubin Ding)

## AWARDS AND HONORS OF GROUP MEMBERS

- 2017 Best Oral Presentation Award, *The 5<sup>th</sup> Biomedical Magnetic Nanotechnology & The 6<sup>th</sup> Doctoral Forum of Biological and Medical Nanotechnology*, 2017-May-20—2017-May-22, Suzhou, China. (Yihui Hu)
- 2017 Best Poster Presentation Award, *The 5<sup>th</sup> Biomedical Magnetic Nanotechnology & The 6<sup>th</sup> Doctoral Forum of Biological and Medical Nanotechnology*, 2017-May-20—2017-May-22, Suzhou, China. (Li Qin)
- 2016 Gordon F. Kirkbright Bursary Award (Dr. Jiangjiexing Wu)

Hui Wei

- 2016 The National Scholarship for Graduate Students (Yihui Hu)
- 2016 Talent Scholarship (Shichao Lin)
- 2016 The College Scholarship (Xiaoyu Wang)
- 2015 Gordon F. Kirkbright Bursary Award (Dr. Yubin Ding)
- 2015 The College Scholarship (Leilei Shi, Xiaoyu Wang)