

# Hui Wei

---

Department of Biomedical Engineering

+86-25-89683272 (tel)

Nanjing University

[weilab.nju.edu.cn](http://weilab.nju.edu.cn) (web)

163 Xianlin Ave., Nanjing, Jiangsu, 210023, P. R. China

[weihui@nju.edu.cn](mailto:weihui@nju.edu.cn) (e-mail)

## PROFESSIONAL POSITIONS

2013-present	Department of Biomedical Engineering, Nanjing University	Professor
2019-present	Chemistry and Biomedicine Innovation Center (ChemBIC) Nanjing University	PI
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

2009	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

2022	Elsevier Most Cited Chinese Researchers (2021)
2021	Elsevier Most Cited Chinese Researchers (2020)
2020	Elsevier Most Cited Chinese Researchers (2019)
2019	Nanoscale Horizons 2018 Outstanding Paper Awards
2017	Winner of the National Natural Science Fund of China for Excellent Young Scholars
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

Hui Wei

- 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

Associate Editor

*Chinese Journal of Chemistry* (2022-now)

Editorial Board Member

*Scientific Reports* (2014-2021)

Special Issue Co-Editor

*Advanced Materials* (Special Issue "Nanozymes", 2022)

Special Issue Editor

*ChemBioChem* and *European Journal of Inorganic Chemistry* (Special Collections "Inorganic Enzyme Mimics", 2020)

Special Issue Co-Editor

*Theranostics* (Special Issue "Noble-metal Nanostructures for Theranostics", 2020)

Special Issue Editor

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

Session Chair for 3<sup>rd</sup> Conference on Biomotors, Virus Assembly, and Nanobiotechnology 2021

*Nanozymes: The Next Generation of Artificial Enzymes*

Session Chair for 260<sup>th</sup> ACS National Meeting 2020

*Nanozymes for Bioanalysis & Beyond*

Session Chair for 258<sup>th</sup> ACS National Meeting 2019

*Nanozymes for Bioanalysis & Beyond*

Session Chair for 256<sup>th</sup> ACS National Meeting 2018

*Nanozymes for Bioanalysis*

Session Co-Chair for 15<sup>th</sup> Chinese Biophysics Congress 2017

*Biomimetic Nanocatalysis*

Hui Wei

Facilitator for Conferee Networking Session of Pittcon 2016

*Nanozymes in Analytical Chemistry and Beyond Session*

Membership

*American Chemical Society*

*(council member)*

*Biomedical Engineering Society*

*Royal Society of Chemistry*

*Biophysical Society of China*

*Chinese Chemical Society*

*Jiangsu Society of Biomedical Engineering*

Independent Journal Reviewer for

*ACS Applied Bio Materials*

*Bioconjugate Chemistry*

*ACS Applied Materials & Interfaces*

*Biomaterials*

*ACS Applied Nano Materials*

*Biomaterials Science*

*ACS Biomaterials Science & Engineering*

*Biophysics Reports*

*ACS Catalysis*

*Biosensors and Bioelectronics*

*ACS Nano*

*British Journal of Pharmacology*

*ACS Omega*

*Carbon*

*ACS Sensors*

*Catalysis Communications*

*ACS Sustainable Chemistry & Engineering*

*Catalysis Letters*

*Acta Biomaterialia*

*Catalysis Science & Technology*

*Acta Chimica Sinica*

*CCS Chemistry*

*Advanced Functional Materials*

*ChemBioChem*

*Advanced Healthcare Materials*

*ChemCatChem*

*Advanced Materials*

*ChemElectroChem*

*Advances in Polymer Technology*

*Chemical Communications*

*Aerosol and Air Quality Research*

*Chemical Engineering Journal*

*Analyst*

*Chemical Reviews*

*Analytica Chimica Acta*

*Chemical Science*

*Analytical Biochemistry*

*Chemical Society Reviews*

*Analytical and Bioanalytical Chemistry*

*Chemistry-A European Journal*

*Analytical Chemistry*

*Chemistry-An Asian Journal*

*Analytical Methods*

*ChemistrySelect*

*Angewandte Chemie International Edition*

*ChemNanoMat*

*APL Materials*

*Chinese Chemical Letters*

*Applied Catalysis B: Environmental*

*Chinese Journal of Analytical Chemistry*

*Applied Materials Today*

*Chinese Journal of Chemical Engineering*

*Applied Surface Science*

*Chinese Journal of Chemistry*

*Chinese Journal of Inorganic Chemistry*  
*Colloid and Polymer Science*  
*Colloids and Surfaces B: Biointerfaces*  
*Comprehensive Reviews in Food Science and Food Safety*  
*Coordination Chemistry Reviews*  
*CrystEngComm*  
*Current Opinion in Biotechnology*  
*Current Opinion in Food Science*  
*Dalton Transactions*  
*Electroanalysis*  
*Electrochemistry Communications*  
*Electrochimica Acta*  
*Environmental Science: Nano*  
*Environmental Science & Technology Exploration*  
*Green Chemistry*  
*IEEE Transactions on Biomedical Engineering*  
*Industrial & Engineering Chemistry Research*  
*Inorganic Chemistry*  
*Inorganic Chemistry Communications*  
*International Journal of Smart and Nano Materials*  
*Ionics*  
*iScience*  
*Israel Journal of Chemistry*  
*IUBMB Life*  
*Journal of Agricultural and Food Chemistry*  
*Journal of Alloys and Compounds*  
*Journal of Analysis and Testing*  
*Journal of Colloid and Interface Science*  
*Journal of Controlled Release*  
*Journal of Electroanalytical Chemistry*  
*Journal of Electrochemistry*  
*Journal of Hazardous Materials*  
*Journal of Materials Chemistry B*  
*Journal of Materials Research*  
*Journal of Materials Science*  
*Journal of the American Chemical Society*  
*Journal of the Taiwan Institute of Chemical Engineers*  
*Langmuir*  
*Materials Advances*  
*Materials Horizons*  
*Materials Science & Engineering C*  
*Materials Today Chemistry*  
*Materials Today Nano*  
*Metallomics*  
*Microchemical Journal*  
*Microchimica Acta*  
*Molecules*  
*Nano Energy*  
*Nano Letters*  
*Nano Research*  
*Nano Select*  
*Nano Today*  
*Nanoscale*  
*Nanotheranostics*  
*National Science Review*  
*Nature Catalysis*  
*Nature Chemistry*  
*Nature Communications*  
*Nature Nanotechnology*  
*New Journal of Chemistry*  
*Particle & Particle Systems Characterization*  
*Particuology*  
*Pesticide Biochemistry and Physiology*  
*Physical Chemistry Chemical Physics*  
*Polymer Chemistry*  
*Progress in Biochemistry and Biophysics*  
*Pure and Applied Chemistry Research*  
*RSC Advances*  
*Science Advances*

*Science Bulletin**SCIENCE CHINA Life Sciences**Scientia Sinica Chimica**Scientia Sinica Vitae**Sensors & Actuators: B. Chemical**Small**Small Methods**Spectrochimica Acta Part A**Spectroscopy Letters**Talanta**Theranostics**Trends in Chemistry**WIREs Nanomedicine & Nanobiotechnology***JOURNALS**

125. Xianzhi Zhang,<sup>#</sup> Shichao Lin,<sup>#</sup> Rui Huang, Aarohi Gupta, Stefano Fedeli, Roberto Cao-Milán, David C. Luther, Yuanchang Liu, Mingdi Jiang, Gengtian Li, Brayán Rondon, Hui Wei, Vincent M. Rotello,\* “Degradable ZnS-supported bioorthogonal nanozymes with enhanced catalytic activity for intracellular activation of therapeutics” *Journal of the American Chemical Society*, 2022, 144, in press.
124. Quan Wang, Xiaoyu Wang, Hui Wei,\* “Spinel oxide-based laccase mimics for the identification and differentiation of phenolic pollutants” *Analytical Chemistry*, 2022, 94, in press.
123. Anqi Lin, Quanyi Liu, Yihong Zhang, Quan Wang, Sirong Li, Bijun Zhu, Leiying Miao, Yan Du, Sheng Zhao,\* Hui Wei,\* “A universal assay for catalase and catalase-like nanozymes” *Analytical Chemistry*, 2022, 94, in press.
- [Highlighted as a Cover paper.](#)
122. Mengyao Wen, Juanmin Li, Wencheng Zhong, Jie Xu, Shaohua Qu, Hui Wei, Li Shang,\* “High-throughput Colorimetric Analysis of Nanoparticle–Protein Interactions based on the Enzyme-mimic Properties of Nanoparticles” *Analytical Chemistry*, 2022, 94, 8783-8791.
121. Quan Wang, Chaoqun Cheng, Sheng Zhao, Quanyi Liu, Yihong Zhang, Wanling Liu, Xiaozhi Zhao, He Zhang, Jun Pu, Shuo Zhang, Huigang Zhang, Yan Du, Hui Wei,\* “A Valence-Engineered Self-Cascading Antioxidant Nanozyme for the Therapy of Inflammatory Bowel Disease” *Angewandte Chemie International Edition*, **2022**, 61, e202201101.
120. Chong-Bo Ma, Yaping Xu, Lixin Wu, Quan Wang, Jia-Jia Zheng, Guoxi Ren, Xiaoyu Wang, Xingfa Gao, Ming Zhou,\* Ming Wang,\* Hui Wei,\* “Guided Synthesis of a Mo/Zn Dual Single-Atom Nanozyme with Synergistic Effect and Peroxidase-like Activity” *Angewandte*

*Chemie International Edition*, **2022**, 61, e202116170.

119. Paul W. Bohn, Xiangkun Elvis Cao, Shuai Chang, Dongfei Chen, Samuel Confederat, Dominik Duleba, E Peisan, Martin A. Edwards, Andrew Ewing, Luke Gundry, Jin He, Ali Reza Kamali, Frédéric Kanoufi, Seung-Ryong Kwon, Ndrina Limani, Steven Linfield, Xu Liu, Yi-Tao Long, Si-Min Lu, Bing-Wei Mao, Shelley Minter, Popular Pandey, Hang Ren, Ashley Ross, Ben Slater, Patrick Unwin, Swathi Naidu Vakamulla Raghu, Jill Venton, Alain Walcarius, Hui Wei, Yanfang Wu, Li Xiao, Weilin Xu, Yi-Lun Ying, Ping Yu, Zhu Zhang, “Advanced nanoelectrochemistry implementation: from concept to application: general discussion” *Faraday Discussions*, **2022**, 233, 354-373.
118. Tim Albrecht, Xiangkun Elvis Cao, Dongfei Chen, Manuel Corva, Martin A. Edwards, Andrew Ewing, Stefano Fornasaro, J. Justin Gooding, Luke Gundry, Ayumi Hirano-Iwata, Grant Jeffcoat, Ali Reza Kamali, Frédéric Kanoufi, Serge G. Lemay, Ndrina Limani, Steven Linfield, Xu Liu, Si-Min Lu, Gabriel N. Meloni, Zhongqun Tian, Kristina Tschulik, Swathi Naidu Vakamulla Raghu, Hui Wei, Yi-Lun Ying, “Electrochemical data mining: from information to knowledge: general discussion” *Faraday Discussions*, **2022**, 233, 58-76.
117. Xiaoyu Wang, Shaojun Dong,\* Hui Wei,\* “Recent advances on nanozyme-based electrochemical biosensors” *Electroanalysis*, **2022**, 34, in press.
116. Yijun Yu,# Sheng Zhao,# Deao Gu, Bijun Zhu, Hanxiao Liu, Wenlei Wu, Jiangjiexing Wu,\* Hui Wei,\* Leiying Miao,\* “Cerium oxide nanozyme attenuates periodontal bone destruction by inhibiting ROS-NFκB pathway” *Nanoscale*, **2022**, 14, 2628-2637.
- [Invited paper for “Nanoscale 2022 Emerging Investigators” \(to Jiangjiexing Wu\).](#)
  - [Highlighted as an outside back cover.](#)
115. Anqi Lin,# Ziying Sun,# Xingquan Xu, Sheng Zhao, Jiawei Li, Heng Sun, Quan Wang, Qing Jiang, Hui Wei,\* Dongquan Shi,\* “Self-cascade nanozyme as uricase/catalase mimics for alleviating acute gout” *Nano Letters*, **2022**, 22, 508-516.
114. Chaoqun Cheng,# Yuan Cheng,# Sheng Zhao, Quan Wang, Sirong Li, Xiwen Chen, Xiaohan Yang, Hui Wei,\* “Multifunctional nanozyme hydrogel with mucosal healing activity for single-dose ulcerative colitis therapy” *Bioconjugate Chemistry*, **2022**, 33, 248-259.
113. Quanyi Liu, Sheng Zhao, Yihong Zhang, Xueying An, Quan Wang, Sirong Li, Anqi Lin, Yan

Du,\* Hui Wei,\* “Biochar Nanozyme from Silkworm Excrement for Scavenging Vapor-phase Free Radicals in Cigarette Smoke” *ACS Applied Bio Materials*, **2022**, 5, 1831-1838.

- Invited paper for “*Early Career Forum*”.
- Highlighted as a Cover paper.

112. Sirong Li,# Yihong Zhang,# Quan Wang,# Anqi Lin,# Hui Wei,\* “Nanozyme-enabled analytical chemistry” *Analytical Chemistry*, **2022**, 94, 312-323.

- Invited paper for “*Fundamental and Applied Reviews in Analytical Chemistry 2022*”.

111. Sirong Li, Zijun Zhou, Zuoxiu Tie, Bing Wang, Meng Ye, Lei Du, Ran Cui, Wei Liu, Cuihong Wan, Quanyi Liu, Sheng Zhao, Quan Wang, Yihong Zhang, Shuo Zhang, Huigang Zhang, Yan Du, Hui Wei,\* “Data-informed discovery of hydrolytic nanozymes” *Nature Communications*, **2022**, 13, 827.

110. Shuangshuang Ren, Yi Zhou, Kai Zheng, Xuanwen Xu, Jie Yang, Xiaoyu Wang, Leiying Miao,\* Hui Wei,\* Yan Xu,\* “Cerium oxide nanoparticles loaded nanofibrous membranes promote bone regeneration for periodontal tissue engineering” *Bioactive Materials*, **2022**, 7, 242-253.

109. Zhenzhen Wang,# Jiangjiexing Wu,# Jia-Jia Zheng, Xiaomei Shen, Liang Yan, Hui Wei, Xingfa Gao,\* Yuliang Zhao, “Accelerated discovery of superoxide-dismutase nanozymes via high-throughput computational screening” *Nature Communications*, **2021**, 12, 6866.

108. Yufeng Liu, Xiaoyu Wang, Quan Wang, Yihong Zhang, Quanyi Liu, Shujie Liu, Sirong Li, Yan Du, Hui Wei,\* “Structurally engineered light-responsive nanozymes for enhanced substrate specificity” *Analytical Chemistry*, **2021**, 93, 15150-15158.

107. Hui Wei,# Lizeng Gao,# Kelong Fan,# Juewen Liu, Jiuyang He, Xiaogang Qu, Shaojun Dong, Erkang Wang,\* Xiyun Yan,\* “Nanozymes: a clear definition with fuzzy edges” *Nano Today*, **2021**, 40, 101269.

106. Yuan Cheng,# Chaoqun Cheng,# Jia Yao, Yijun Yu, Yufeng Liu, He Zhang, Leiying Miao, Hui Wei,\* “Mn<sub>3</sub>O<sub>4</sub> nanozyme for inflammatory bowel disease therapy” *Advanced Therapeutics*, **2021**, 4, 2100081.

105. Xiaoli Liu,# Jiangjiexing Wu,#,\* Quanyi Liu, Anqi Lin, Sirong Li, Yihong Zhang, Quan Wang, Tong Li, Xueying An, Zijun Zhou, Ming Yang,\* Hui Wei,\* “Synthesis-temperature-regulated

multi-enzyme-mimicking activities of ceria nanozymes” *Journal of Materials Chemistry B*, **2021**, 9, 7238-7245.

- Invited paper for “2021 Emerging Investigators themed issue” (to Jiangjiexing Wu).

104. Chaoqun Cheng, Sheng Zhao, Yuan Cheng, Yufeng Liu, Hui Wei,\* “Design of nanozymes for inflammatory bowel disease therapy” *Science China Life Sciences*, **2021**, 64, 1368-1371.

103. Xiaoqian Jiang,# Xiaoyu Wang,# Anqi Lin, Hui Wei,\* “In situ exsolution of noble-metal nanoparticles on perovskites as enhanced peroxidase mimics for bioanalysis” *Analytical Chemistry*, **2021**, 93, 5954-5962.

102. Yihong Zhang, Faheem Muhammad, Hui Wei,\* “Inorganic Enzyme Mimics” *ChemBioChem*, **2021**, 22, 1496-1498.

- Editorial on Special Collection in *ChemBioChem* and *European Journal of Inorganic Chemistry*.

101. Yufeng Liu, Yihong Zhang, Quanyi Liu, Quan Wang, Anqi Lin, Jie Luo, Yan Du, Ying-Wu Lin, Hui Wei,\* “In vitro measurement of superoxide dismutase-like nanozyme activity: a comparative study” *Analyst*, **2021**, 146, 1872-1879.

- Highlighted as “Analyst Recent HOT articles”.

100. Jiangjiexing Wu, Hui Wei,\* “Efficient design strategies for nanozymes” *Progress in Chemistry*, **2021**, 33, 42-51.

- Highlighted as a Cover paper.

99. Jiangjiexing Wu,# Zhenzhen Wang,# Xin Jin, Shuo Zhang, Tong Li, Yihong Zhang, Hang Xing, Yang Yu, Huigang Zhang, Xingfa Gao,\* Hui Wei,\* “Hammett relationship in oxidase-mimicking metal–organic frameworks revealed through a protein-engineering-inspired strategy” *Advanced Materials*, **2021**, 33, 2005024.

98. Min Zhou, Xiaoyu Wang, Shichao Lin, Yufeng Liu, Junshu Lin, Bo Jiang, Xiaozhi Zhao, Hui Wei,\* “Combining photothermal therapy-induced immunogenic cell death and hypoxia relief-benefited M1-phenotype macrophage polarization for cancer immunotherapy” *Advanced Therapeutics*, **2021**, 4, 2000191.

- Included in Hot Topic of Chemistry European: Gold.



97. Jiangjiexing Wu,<sup>#</sup> Yijun Yu,<sup>#</sup> Yuan Cheng,<sup>#</sup> Chaoqun Cheng, Yihong Zhang, Bo Jiang, Xiaozhi Zhao, Leiying Miao, Hui Wei,\* “Ligand-dependent activity engineering of glutathione peroxidase-mimicking MIL-47(V) metal–organic framework nanozyme for therapy” *Angewandte Chemie International Edition*, **2021**, 60, 1227-1234.
- Highlighted in [ChemistryViews.org](https://chemistryviews.org): Glutathione Peroxidase-Mimicking Nanozymes.
  - Selected as a “Hot Paper”.
  - Highlighted as an inside back cover.
96. Lizeng Gao,<sup>#</sup> Minmin Liang,<sup>#</sup> Tao Wen,<sup>#</sup> Hui Wei, Yu Zhang, Kelong Fan, Xiaogang Qu, Ning Gu, Daiwen Pang, Haiyan Xu,\* Xiyun Yan,\* “Standardization of vocabulary for nanozyme” *China Terminology*, **2020**, 22, 21-24.
95. He Zhang,<sup>#</sup> Sirong Li,<sup>#</sup> Yufeng Liu, Yijun Yu, Shichao Lin, Quan Wang, Leiying Miao,\* Hui Wei,\* Weibin Sun,\* “Fe<sub>3</sub>O<sub>4</sub>@GO magnetic nanocomposites protect mesenchymal stem cells and promote osteogenic differentiation of rat bone marrow mesenchymal stem cells” *Biomaterials Science*, **2020**, 8, 5984-5993.
- Invited paper for “2021 Emerging Investigators themed issue”.
94. Sheng Zhao, Yixuan Li, Quanyi Liu, Sirong Li, Yuan Cheng, Chaoqun Cheng, Ziyang Sun, Yan Du, Christopher J. Butch,\* Hui Wei,\* “An orally administered CeO<sub>2</sub>@montmorillonite nanozyme targets inflammation for inflammatory bowel disease therapy” *Advanced Functional Materials*, **2020**, 30, 2004692.
93. Lizeng Gao, Hui Wei, Xiaogang Qu,\* “Current developments and trends in nanobiocatalysis” *Scientia Sinica Vitae*, **2020**, 50, 682-697.
92. Yufeng Liu,<sup>#</sup> Yuan Cheng,<sup>#</sup> He Zhang, Min Zhou, Yijun Yu, Shichao Lin, Bo Jiang, Xiaozhi Zhao, Leiying Miao, Chuan-Wan Wei, Quanyi Liu, Ying-Wu Lin, Yan Du, Christopher J. Butch,\* Hui Wei,\* “Integrated cascade nanozyme catalyzes in vivo ROS scavenging for anti-inflammatory therapy” *Science Advances*, **2020**, 6, eabb2695.
91. Min Zhou, Xiaoyu Wang, Shichao Lin, Yuan Cheng, Sheng Zhao, Junshu Lin, Zhuoyao Fang, Zhangping Lou, Li Qin, Hui Wei,\* “Multifunctional STING-activating Mn<sub>3</sub>O<sub>4</sub>@Au-dsDNA/DOX nanoparticle for antitumor immunotherapy” *Advanced Healthcare Materials*, **2020**, 9, 2000064.

90. Yunyao Zhu,<sup>#</sup> Jiangjiexing Wu,<sup>#</sup> Lijun Han, Xiaoyu Wang, Wei Li, Hongchao Guo,<sup>\*</sup> Hui Wei,<sup>\*</sup> “Nanozyme sensor arrays based on heteroatom-doped graphene for detecting pesticides” *Analytical Chemistry*, **2020**, 92, 7444-7452.
- Highlighted in [ChemistryViews.org](https://chemistryviews.org): Colorimetric Nanozyme Sensors for Detecting Pesticides.
89. Xiaoyu Wang, Xiaoqian Jiang, Hui Wei,<sup>\*</sup> “Phosphate-responsive 2D-metal–organic-framework-nanozymes for colorimetric detection of alkaline phosphatase” *Journal of Materials Chemistry B*, **2020**, 8, 6905-6911.
- Invited paper for “2020 Emerging Investigators themed issue”.
88. Yufeng Liu, Xiaoyu Wang, Hui Wei,<sup>\*</sup> “Light-responsive nanozymes for biosensing” *Analyst*, **2020**, 145, 4388-4397.
- Invited paper for “a themed collection on analytical nanoscience”.
87. Junshu Lin, Quan Wang, Xiaoyu Wang, Yunyao Zhu, Xi Zhou,<sup>\*</sup> Hui Wei,<sup>\*</sup> “Gold alloy-based nanozyme sensor arrays for biothiol detection” *Analyst*, **2020**, 145, 3916-3921.
86. Xiaowei Mu, Yufeng Liu, Xueping Zhang, Hui Wei, Ping He,<sup>\*</sup> Haoshen Zhou,<sup>\*</sup> “Using a Heme-Based Nanozyme as Bifunctional Redox Mediator for Li–O<sub>2</sub> Batteries”, *Batteries & Supercaps*, **2020**, 3, 336-340.
- Invited paper for “Special Collections on Electrolytes for Electrochemical Energy Storage”.
  - Selected as a “Very Important Paper”.
85. Xiaoyu Wang, Hui Wei,<sup>\*</sup> “Peroxidase-like nanozyme sensing arrays for versatile analytes” *Journal of Nanoparticle Research*, **2020**, 22, 22.
- Invited paper for “Topical Collection on Nanoparticles in Biotechnology and Medicine”.
84. Shichao Lin,<sup>#</sup> Yuan Cheng,<sup>#</sup> He Zhang,<sup>#</sup> Xiaoyu Wang, Yuye Zhang, Yuanjian Zhang, Leiying Miao, Xiaozhi Zhao, Hui Wei,<sup>\*</sup> “Copper tannic acid coordination nanosheet: a potent nanozyme for scavenging ROS from cigarette smoke” *Small*, **2020**, 16, 1902123.
- Invited paper for Special Issue “Artificial Biology–Molecular Design and Cell

*Mimicry*.

83. Yixuan Li,<sup>#</sup> Sheng Zhao,<sup>#</sup> Sirong Li, Yuxiang Ge, Rongliang Wang, Liming Zheng, Jiankun Xu, Minghui Sun, Qing Jiang,<sup>\*</sup> Yifeng Zhang,<sup>\*</sup> Hui Wei,<sup>\*</sup> “Surface Engineering of Biodegradable Magnesium Alloys for Enhanced Orthopedic Implants” *Small*, **2019**, 15, 1904486.
82. Zhangping Lou, Sheng Zhao, Quan Wang, Hui Wei,<sup>\*</sup> “N-doped carbon as peroxidase-like nanozymes for total antioxidant capacity assay” *Analytical Chemistry*, **2019**, 91, 15267-15274.
81. Xiaoyu Wang, Li Qin, Minjie Lin, Hang Xing, Hui Wei,<sup>\*</sup> “Fluorescent Graphitic Carbon Nitride-Based Nanozymes with Peroxidase-like Activities for Ratiometric Biosensing” *Analytical Chemistry*, **2019**, 91, 10648-10656.
80. Hang Yu,<sup>#</sup> Tingsheng Lin,<sup>#</sup> Wei Chen, Wenmin Cao, Chengwei Zhang, Tianwei Wang, Meng Ding, Sheng Zhao, Hui Wei,<sup>\*</sup> Hongqian Guo,<sup>\*</sup> Xiaozhi Zhao,<sup>\*</sup> “Size and Temporal-Dependent Efficacy of Oltipraz-loaded PLGA Nanoparticles for Treatment of Acute Kidney Injury and Fibrosis” *Biomaterials*, **2019**, 219, 119368.
79. Wen Cao,<sup>#</sup> Junshu Lin,<sup>#</sup> Faheem Muhammad,<sup>#</sup> Quan Wang, Xiaoyu Wang, Zhangping Lou, Hui Wei,<sup>\*</sup> “Porous ruthenium selenide nanoparticle as a peroxidase mimic for glucose bioassay” *Journal of Analysis and Testing*, **2019**, 3, 253-259.
- Invited paper for Special Issue “*Nanozyme-based analysis and testing*”.
78. Yufeng Liu, Min Zhou, Wen Cao, Xiaoyu Wang, Quan Wang, Sirong Li, Hui Wei,<sup>\*</sup> “Light-Responsive Metal-Organic Framework as an Oxidase Mimic for Cellular Glutathione Detection” *Analytical Chemistry*, **2019**, 91, 8170-8175.
77. Huiling Zhang, Li Lu, Xiaopeng Zhao, Sheng Zhao, Xueyuan Gu, Wenchao Du, Hui Wei, Rong Ji,<sup>\*</sup> Lijuan Zhao,<sup>\*</sup> “Metabolomics Reveal the “Invisible” Responses of Spinach Plants Exposed to CeO<sub>2</sub> Nanoparticles” *Environmental Science & Technology*, **2019**, 53, 6007-6017.
76. Shichao Lin, Hui Wei,<sup>\*</sup> “Design of high performance nanozymes: a single-atom strategy” *Science China Life Sciences*, **2019**, 62, 62, 710-712.
75. Xiaoyu Wang,<sup>#</sup> Xuejiao J. Gao,<sup>#</sup> Li Qin, Changda Wang, Li Song, Yong-Ning Zhou, Guoyin Zhu, Wen Cao, Shichao Lin, Liqi Zhou, Kang Wang, Huigang Zhang, Zhong Jin, Peng Wang, Xingfa Gao, Hui Wei,<sup>\*</sup> “*e<sub>g</sub>* occupancy as an effective descriptor for the catalytic activity of

perovskite oxide-based peroxidase mimics” *Nature Communications*, **2019**, 10, 704.

- Selected as Nature Communications Editors’ Highlights.
- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.
- Highlighted in *phys.org*: Design principles for peroxidase-mimicking nanozymes.

74. Shichao Lin, Yihong Zhang, Wen Cao, Xiaoyu Wang, Li Qin, Min Zhou, Hui Wei,\* “Nucleobase-mediated synthesis of nitrogen-doped carbon nanozymes as efficient peroxidase mimics” *Dalton Transactions*, **2019**, 48, 1993-1999.

73. Wenjing Guo,<sup>#</sup> Mian Zhang,<sup>#</sup> Zhangping Lou,<sup>#</sup> Min Zhou, Peng Wang,\* Hui Wei,\* “Engineering nanoceria for enhanced peroxidase mimics: a solid solution strategy” *ChemCatChem*, **2019**, 11, 737-743.

72. Jiangjiexing Wu, Xiaoyu Wang, Quan Wang,<sup>#</sup> Zhangping Lou,<sup>#</sup> Sirong Li,<sup>#</sup> Yunyao Zhu,<sup>#</sup> Li Qin, Hui Wei,\* “Nanomaterials with enzyme-like characteristics (nanozymes): next-generation artificial enzymes (II)” *Chemical Society Reviews*, **2019**, 48, 1004-1076.

- 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.
- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Hot paper.
- Cited over 600 times.

71. Xiaoyu Wang,<sup>#</sup> Li Qin,<sup>#</sup> Min Zhou, Zhangping Lou, Hui Wei,\* “Nanozyme Sensor Arrays for Detecting Versatile Analytes from Small Molecules to Proteins and Cells” *Analytical Chemistry*, **2018**, 90, 11696-11702.

70. Wen Cao, Faheem Muhammad, Yuan Cheng, Min Zhou, Qian Wang, Zhangping Lou, Zhe Li, Hui Wei,\* “Acid susceptible ultrathin mesoporous silica coated on layered double hydroxide nanoplates for pH responsive cancer therapy” *ACS Applied Bio Materials*, **2018**, 1, 928-935.

69. Yihui Hu,<sup>#</sup> Xuejiao J. Gao,<sup>#</sup> Yunyao Zhu, Faheem Muhammad, Shihua Tan, Wen Cao, Shichao Lin, Zhong Jin, Xingfa Gao,\* Hui Wei,\* “Nitrogen-doped carbon nanomaterials as highly active and specific peroxidase mimics” *Chemistry of Materials*, **2018**, 30, 6431-6439.

68. Li Qin,<sup>#</sup> Xiaoyu Wang,<sup>#</sup> Yufeng Liu, Hui Wei,\* “2D-metal-organic-framework-nanozyme

sensor arrays for probing phosphates and their enzymatic hydrolysis” *Analytical Chemistry*, **2018**, 90, 9983-9989.

67. Qingqing Wang, Hui Wei, Zhiquan Zhang, Erkang Wang, Shaojun Dong,\* “Nanozyme: an emerging alternative to natural enzyme for biosensing and immunoassay” *TrAC Trends in Analytical Chemistry*, **2018**, 105, 218-224.

- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.

66. Jiangjiexing Wu, Sirong Li, Hui Wei,\* “Multifunctional Nanozymes: Enzyme-like Catalytic Activity Combined with Magnetism and Surface Plasmon Resonance” *Nanoscale Horizons*, **2018**, 3, 367-382.

65. Jiangjiexing Wu, Kang Qin, Dan Yuan, Jun Tan, Li Qin, Xuejin Zhang, Hui Wei,\* “Rational Design of Au@Pt Multibranching Nanostructures as Bifunctional Nanozymes” *ACS Applied Materials & Interfaces*, **2018**, 10, 12954-12959.

64. Jiangjiexing Wu,<sup>#</sup> Sirong Li,<sup>#</sup> Hui Wei,\* “Integrated nanozymes: facile preparation and biomedical applications” *Chemical Communications*, **2018**, 54, 6520-6530.

- Invited Feature Article for Special Issue “*Emerging Investigators Issue 2018*”.

63. Jia Yao, Yuan Cheng, Min Zhou, Sheng Zhao, Shichao Lin, Xiaoyu Wang, Jiangjiexing Wu, Sirong Li, Hui Wei,\* “ROS scavenging Mn<sub>3</sub>O<sub>4</sub> nanozymes for *in vivo* anti-inflammation” *Chemical Science*, **2018**, 9, 2927-2933.

- Highlighted in *Medical Xpress*: ROS-scavenging nanozymes for anti-inflammation therapeutics.
- Highlighted in *RSC China Quarterly Newsletter*.
- Highlighted in *Scientia Sinica Vitae*: Mn<sub>3</sub>O<sub>4</sub> nanoscale enzyme used in the treatment of living body inflammation. (In Chinese)
- Highlighted in *RSC*: Most Impactful Nanoscience Articles.
- Highlighted in *RSC*: Most popular 2018-2019 analytical chemistry articles.
- Highlighted in *Essential Science Indicators*<sup>SM</sup>: Highly cited paper.

62. Sirong Li,<sup>#</sup> Yenchun Huang,<sup>#</sup> Jiarui Liu,<sup>#</sup> Erkang Wang,\* Hui Wei,\* “Nanozymes in analytical chemistry: from *in vitro* detection to live bioassays” *Progress in Biochemistry and Biophysics*,

2018, 45, 129-147.

- [Invited review for Special Issue “Nanozymes”](#).

61. Leilei Shi,<sup>#</sup> Yufeng Liu,<sup>#</sup> Qian Wang, Tiankuo Wang, Yubin Ding, Yi Cao, Zhe Li, Hui Wei,\* “A pH responsive AIE probe for enzyme assays” *Analyst*, **2018**, 143, 741-746.

60. Tingsheng Lin,<sup>#</sup> Xiaozhi Zhao,<sup>#</sup> Sheng Zhao, Hang Yu, Wenmin Cao, Wei Chen, Hui Wei,\* Hongqian Guo,\* “O<sub>2</sub>-generating MnO<sub>2</sub> nanoparticles for enhanced photodynamic therapy of bladder cancer by ameliorating hypoxia” *Theranostics*, **2018**, 8, 990-1004.

- [Highlighted in \*Essential Science Indicators\*<sup>SM</sup>: Highly cited paper](#).

59. Hanjun Cheng, Yufeng Liu, Yihui Hu, Yubin Ding, Shichao Lin, Wen Cao, Qian Wang, Jiangjiexing Wu, Faheem Muhammad, Xiaozhi Zhao, Dan Zhao, Zhe Li, Hang Xing,\* Hui Wei,\* “Monitoring of Heparin Activity in Live Rats Using Metal-organic Framework Nanosheets as Peroxidase Mimics” *Analytical Chemistry*, **2017**, 89, 11552-11559.

- [Highlighted in \*Essential Science Indicators\*<sup>SM</sup>: Highly cited paper](#).

58. Yubin Ding,\* Min Zhou, Hui Wei,\* “A supercharged fluorescent protein based FRET sensing platform for detection of heparin contamination” *Analytical Methods*, **2017**, 9, 5593-5597.

- [Selected for inclusion in the themed collection: Recent HOT articles](#).

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.

- [Highlighted in \*Essential Science Indicators\*<sup>SM</sup>: Highly cited paper](#).

- [Cited over 200 times](#).

56. Wenjing Guo, Yihui Hu, Hui Wei,\* “Enzymatically activated reduction-caged SERS reporters for versatile bioassays” *Analyst*, **2017**, 142, 2322-2326.

55. Leilei Shi,<sup>#</sup> Xin Li,<sup>#</sup> 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.](#)
- [Selected as high-impact research by ACS Axial.](#)

50. Shichao Lin,<sup>#</sup> Hanjun Cheng,<sup>#</sup> 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.
  - Cited over 300 times.
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.
- Cited over 1500 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.
  - Cited over 300 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 200 times.
28. Hui Wei, Erkang Wang,\* “Solid-state electrochemiluminescence of tris(2,2'-bipyridyl) ruthenium” *TrAC Trends in Analytical Chemistry*, **2008**, 27, 447-459.
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.
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 (Pb<sup>2+</sup>) using unmodified gold nanoparticle probes” *Nanotechnology*, **2008**, 19, 095501.
21. Hui Wei, Erkang Wang,\* “Fe<sub>3</sub>O<sub>4</sub> Magnetic Nanoparticles as Peroxidase Mimetics and Their Applications in H<sub>2</sub>O<sub>2</sub> and Glucose Detection” *Analytical Chemistry*, **2008**, 80, 2250-2254.
- [Cited over 1000 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 \(Issue 1, 2008\).](#)
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).
  - Cited over 400 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).
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  $Ru(bpy)_3^{2+}$  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  $Ru(bpy)_3^{2+}$  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

11. Xiaoyu Wang,\* Hui Wei,\* “*Rational Design of Peroxidase Nanozymes (Chapter 16)*” in “*Nanozymes: Advances and Applications*” (Ed.: Sundaram Gunasekaran), 2022, CRC Press.
10. Lizeng Gao, Hui Wei, Xiyun Yan and Xiaogang Qu,\* “*Nanozymology: Perspective and Challenges (Chapter 18)*” in “*Nanozymology: Connecting Biology and Nanotechnology*” (Ed.: Xiyun Yan), 2020, Springer.
9. Sheng Zhao,# Sirong Li,# Hui Wei,\* “*Beyond: Novel Applications of Nanozymes (Chapter 17)*” in “*Nanozymology: Connecting Biology and Nanotechnology*” (Ed.: Xiyun Yan), 2020, Springer.
8. Wen Cao, Zhangping Lou, Wenjing Guo, Hui Wei,\* “*Nanozymes for Therapeutics (Chapter 14)*” in “*Nanozymology: Connecting Biology and Nanotechnology*” (Ed.: Xiyun Yan), 2020, Springer.
7. Li Qin, Yihui Hu, Hui Wei,\* “*Nanozymes: Preparation and Characterization (Chapter 4)*” in “*Nanozymology: Connecting Biology and Nanotechnology*” (Ed.: Xiyun Yan), 2020, Springer.
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: Concepts, Development and Clinical Translation*” (Ed.: Bruno Sarmento, Jose das Neves), 2018, 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 Fund (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

4. Hui Wei, Xiaoyu Wang, Li Qin, “Preparation and application of highly active nanozymes based on transition metal oxides and their derivatives”, CN109806877B.
3. Hui Wei, Shichao Lin, “Preparation and application of nitrogen-doped carbon material-based nanozymes from nucleic acid bases and their derivatives”, CN109799313B.
2. Hui Wei, Hanjun Cheng, “Nanozymes based colorimetric assays for enzymes, proteins, and their inhibitors”, CN106399457B.
1. Hui Wei, Chaogui Chen, Bingyan Han, Erkang Wang, “A label free colorimetric method for enzyme determination with silver nanoprobess”, CN101358926B.

## CONFERENCES

67. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited Presentations), *15th Conference on Bioinorganic Chemistry & Metal Chemical Biology*, 2021-October-22—2021-October-24, Taiyuan, China.
66. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited oral presentations), *The 32<sup>nd</sup> Chinese Chemical Society Congress*, 2021-April-19—2021-April-22, Zhuhai, China.
65. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Oral Presentations), *China Analytic & Laboratory Equipment Expo & Conference (China Lab 2021)*, 2021-March-31—2021-April-02, Guangzhou, China.

64. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Oral Presentations), *The Annual Conference of the Material Biology and Intelligent Medicine Branch, Biophysical Society of China for Young Scientists & 2020 Young Scientist Forum on Biomedical Materials and Technology*, 2020-December-26—2020-December-28, Ningbo, China.
63. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Poster Presentations), *18<sup>th</sup> Chinese Biophysics Congress*, 2020-November-15—2020-November-18, Guangzhou, China.
62. Hui Wei, “Nanozymes: rational design and biomedical applications” (Oral Presentations), *2020 China POCT Annual Conference*, 2020-November-12—2020-November-14, Chongqing, China.
61. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Oral Presentations), *The Innovation Conference on Micro-Nano Technology for Medical and Health & The 4<sup>th</sup> Innovation Conference on Micro-Nano Technology for Applications (Chinese Society of Micro-Nano Technology)*, 2020-October-24—2020-October-26, Xiamen, China.
60. Hui Wei, “Nanozymes: from rational design to sensing applications” (ANYL Broadcast Presentations), *ACS Fall 2020 Virtual Meeting & Exposition (The 260<sup>th</sup> ACS National Meeting & Exposition)*, 2020-August-17—2020-August-20, San Francisco, USA.
59. Hui Wei, “Cascade nanozyme for inflammatory bowel disease therapy” (On Demand Oral Presentations), *ACS Fall 2020 Virtual Meeting & Exposition (The 260<sup>th</sup> ACS National Meeting & Exposition)*, 2020-August-17—2020-August-20, San Francisco, USA.
58. Hui Wei, “Rational Design of Peroxidase-like Nanozymes” (Oral Presentations), *NJU-Wiley Joint Conference on Microstructured Materials and Advanced Applications*, 2019-November-30—2019-December-01, Nanjing, China.
57. Hui Wei, “Peroxidase-like Nanozymes: rational design and bioanalytical applications” (Oral Presentations), *Materials Science Youth Forum*, 2019-November-15—2019-November-17, Shanghai, China.
56. Hui Wei, “Electrochemistry-directed design of SOD-like nanozyme for scavenging ROS from cigarette smoke” (Invited Oral Presentations), *The 20<sup>th</sup> National Electrochemistry Meeting*, 2019-October-25—2019-October-28, Changsha, China.
55. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited Oral Presentations), *The 6<sup>th</sup> National Conference on Biophysical Chemistry, NCBPC6*, 2019-October-23—2019-October-26, Hengyang, China.



54. Hui Wei, "Peroxidase-like Nanozymes: rational design and bioanalytical applications" (Oral Presentations), *China Association for Science and Technology 383<sup>rd</sup> Young Scientists Forum: Artificial Enzyme and Directed Evolution*, 2019-October-20—2019-October-21, Beijing, China.
53. Hui Wei, "e<sub>g</sub> occupancy as an activity descriptor for guiding the design of transitional oxide-based peroxidase mimics" (Oral Presentations), *The 258<sup>th</sup> ACS National Meeting & Exposition*, 2019-August-25—2019-August-29, San Diego, USA.
52. Hui Wei, "Design principles for transition metal oxides-based peroxidase mimics" (Rapid Fire Presentations), *Nature Conferences: Biomimetics in Bioengineering*, 2019-August-04—2019-August-06, Brisbane, Australia.
51. Hui Wei, "Rational Design of Transition Metal Oxides-based Peroxidase Mimics" (Invited Oral Presentations), *2<sup>nd</sup> Conference on Biomotors, Virus Assembly, and Nanobiotechnology Applications*, 2019-July-29—2019-July-31, Columbus, USA.
50. Hui Wei, "Nanozymes: their catalysis, mechanisms, and future directions", *Symposium on Development Strategy of Nanobiology Discipline*, 2018-November-02—2018-November-03, Kunshan, China.
49. Hui Wei, "Nanozymes and their applications", *Workshop on Nanozymes*, 2018-November-01—2018-November-02, Kunshan, China.
48. Hui Wei, "Nanozymes for in vitro and in vivo bioanalysis" (Invited presentations), *The 9<sup>th</sup> Asian Conference on Nanoscience and Nanotechnology*, 2018-October-18—2018-October-21, Qingdao, China.
47. Hui Wei, "Nanozymes: next generation of artificial enzymes" (Invited presentations), *The 14<sup>th</sup> National Conference on Bioinorganic Chemistry*, 2018-October-18—2018-October-21, Nanjing, China.
46. Hui Wei, "Nanozymes for in vitro detection and live bioassays" (Invited presentations), *The 256<sup>th</sup> ACS National Meeting & Exposition*, 2018-August-19—2018-August-23, Boston, USA.
45. Hui Wei, "Nanozymes for in vitro and in vivo bioanalysis" (Invited presentations), *The 3<sup>rd</sup> Sino-American Nanomedicine Symposium*, 2018-July-28—2018-July-30, Nanjing, China.
44. Hui Wei, "Nanozymes for in vitro and in vivo bioanalysis" (Invited presentations), *The 6<sup>th</sup> Biomedical Magnetic Nanotechnology & The 7<sup>th</sup> Doctoral Forum of Biological and Medical Nanotechnology*, 2018-June-30—2018-July-01, Xi'an, China.

43. Hui Wei, “Nanozymes for in vitro and in vivo bioanalysis” (Invited presentations), *The 8<sup>th</sup> International Symposium on Bioanalysis, Biomedical Engineering*, 2018-May-25—2018-May-27, Changsha, China.
42. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited oral presentations), *The 31<sup>st</sup> Chinese Chemical Society Congress*, 2018-May-05—2018-May-08, Hangzhou, China.
41. Hui Wei, “Nanozymes: Next Generation of Artificial Enzymes” (Invited Presentations), First Electroanalytical Chemistry Symposium & CAS One Belt and One Road International Collaboration Workshop, 2018-May-2—2018-May-4, Ningbo, China.
40. Hui Wei, Invited Attendee, Forum on frontiers of science & technology for “Nanotechnology in the post-genomic era”, 2018-April-7—2018-April-8, Wuyuan, China.
39. Hui Wei, “Nanozymes for analytical chemistry: from in vitro detection to live bioassays” (Invited Presentations), 2018 Annual Meeting of Nanobiology Branch of Biophysical Society of China, 2018-April-6—2018-April-8, Wuyuan, China.
38. Hui Wei, “Nanozymes: Next Generation of Artificial Enzymes” (Invited Presentations), The 2<sup>nd</sup> Youth Scientists Forum on Nanoscience and Technology, 2017-October-29—2017-October-31, Beijing, China.
37. Hui Wei, “Nanozymes for live bioassays” (Oral Presentations), Xiangshan Science Conferences (No. 606), 2017-October-12—2017-October-13, Beijing, China.
36. Hui Wei, “Nanozymes: Next Generation of Artificial Enzymes” (Oral Presentations), The 17<sup>th</sup> Beijing Conference and Exhibition on Instrumental Analysis (BCEIA2017), 2017-October-09—2017-October-11, Beijing, China.
35. Hui Wei, “Nanozymes for Bioanalytical and Biomedical Applications” (Poster Presentations), The 6<sup>th</sup> International Conference on DNA Nanotechnology, 2017-August-26—2017-August-28, Beijing, China.
34. Hui Wei, “Nanozymes: Next Generation of Artificial Enzymes” (Invited Oral Presentations), *First Conference on Biomotors, Virus Assembly, and Nanobiotechnology Applications*, 2017-August-16—2017-August-19, Columbus, USA.
33. Hui Wei, “Integrated Nanozymes for Living Bioassays” (Invited Oral Presentations), *Annual Meeting for Division of Nanomedicine, Jiangsu Society of Biomedical Engineering*, 2017-June-27, Nanjing, China.
32. 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.
31. Hui Wei, “Nanozymes: next generation of artificial enzymes” (Invited Oral Presentations for Special Session on Nanozymes), *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.
  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 7<sup>th</sup> 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<sup>2+</sup>) 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.

## INVITED SEMINARS

64. 05/2022, Jining Medical University, Online, China
63. 12/2021, Northwest Normal University, Lanzhou, China
62. 12/2021, Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Lanzhou, China
61. 11/2021, Shanghai University, Online, China
60. 10/2021, Shanxi University, Taiyuan, China
59. 07/2021, Shandong University of Science and Technology, Qingdao, China
58. 07/2021, Qingdao University, Qingdao, China
57. 07/2021, RSC Desktop Seminar: Biomaterials Science, Online
56. 04/2021, Minnan Normal University, Online, China
55. 04/2021, Nanjing Tech University, Nanjing, China
54. 03/2021, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China
53. 01/2021, Korea Advanced Institute of Science and Technology (KAIST), Online, South Korea
52. 12/2020, Nanjing University of Posts and Telecommunications, Nanjing, China

Hui Wei

51. 12/2020, Qingdao Agricultural University, Online, China
50. 11/2020, South China University of Technology, Guangzhou, China
49. 10/2020, Xiamen University, Xiamen, China
48. 10/2020, Wuhan University, Wuhan, China
47. 11/2019, Nanjing University, Nanjing, China
46. 10/2019, Beijing Normal University, Beijing, China
45. 09/2019, Tianjin University of Science and Technology, Tianjin, China
44. 09/2019, Tianjin University, Tianjin, China
43. 08/2019, China Pharmaceutical University, Nanjing, China
42. 08/2019, RMIT, Melbourne, Australia
41. 08/2019, Monash University, Melbourne, Australia
40. 06/2019, Changchun University of Science and Technology, Changchun, China
39. 06/2019, Jilin University, Changchun, China
38. 06/2019, Northeast Normal University, Changchun, China
37. 06/2019, Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, Changchun, China
36. 05/2019, Zhejiang University, Hangzhou, China
35. 04/2019, Nanjing University, Nanjing, China
34. 12/2018, East China University of Science and Technology, Shanghai, China
33. 11/2018, Central China Normal University, Wuhan, China
32. 10/2018, Jiangsu University, Zhenjiang, China
31. 08/2018, Southwest Jiaotong University, Xi'an, China
30. 07/2018, Xi'an Jiaotong University, Xi'an, China
29. 06/2018, Northwestern Polytechnical University, Xi'an, China
28. 06/2018, Central South University, Changsha, China
27. 06/2018, Hunan University, Changsha, China
26. 05/2018, Nanjing University, Nanjing, China

## Hui Wei

25. 04/2018, Southwest University, Chongqing, China
24. 03/2018, Wuhan University, Wuhan, China
23. 12/2017, Nanjing University, Nanjing, China
22. 11/2017, Nanjing Agricultural University, Nanjing, China
21. 10/2017, Jiangnan University, Wuxi, China
20. 09/2017, Nanjing Medical University, Nanjing, China
19. 08/2017, Tsinghua University, Beijing, China
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, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021).

Progress in Biomedical Engineering (one lecture/course) (Fall 2016, Fall 2017, Fall 2018).

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

Introduction to Biomedicine (one lecture/course, Medical School of Nanjing University) (Fall 2017).

Methodology and Principles of Healthcare Engineering (two lectures/course) (Spring 2021, Spring 2022).

Progress in Modern Engineering (one lecture/course) (Fall 2021).

## **AWARDS AND HONORS OF GROUP MEMBERS**

- 2022 The 2022 Steers Bursary Award (Xiaoyu Wang)
- 2021 The Youth & Undergraduate Entrepreneurship Competition of Jianye District, Nanjing, Jiangsu Province (3<sup>rd</sup> Prize) (Sirong Li, Sheng Zhao, Anqi Lin)
- 2021 The Excellent Graduate Student Award (Zijun Zhou)
- 2021 RSC PreDoc Symposium 2021: Poster Presentation Prize (Silver Prize) (Xiaoyu Wang)
- 2021 RSC PreDoc Symposium 2021: Oral Presentation Prize (2<sup>nd</sup> Prize) (Sirong Li)
- 2021 Talent Scholarship (Chaoqun Cheng)
- 2021 The Merit Award for the Second Undergraduate Biomedical Engineering Innovation Design Competition of Jiangsu Province (Yuting Wang, Jiyuan Yu)
- 2020 The Merit Award for the First Undergraduate Biomedical Engineering Innovation Design Competition of Jiangsu Province (Xiwen Chen, Lin Lin, Yuting Wang)
- 2020 The Excellent Graduate Student Award (Sirong Li)
- 2020 The Excellent Graduate Student Award (Min Zhou)
- 2020 Talent Scholarship (Sirong Li)
- 2020 Talent Scholarship (Min Zhou)
- 2020 Best Flash Talk for Graduates at 2020 ChemBIC Symposium (Yufeng Liu)

Hui Wei

- 2020 Nanoscale Horizons Community Board (Jiangjiexing Wu)
- 2019 The Excellent Graduate Student Pacemaker Award (Shichao Lin)
- 2019 The Excellent Graduate Student Award (Yufeng Liu)
- 2019 Wiley Best Poster Prize (*NJU-Wiley Joint Conference on Microstructured Materials and Advanced Applications*, 2019-November-30—2019-December-01, Nanjing, China) (Xiaoyu Wang)
- 2019 Talent Scholarship (Shichao Lin)
- 2019 2019 Baxter China Young Investigator Awards (Second Tier) (Shichao Lin)
- 2019 2019 Baxter China Young Investigator Awards (Second Tier) (Yufeng Liu)
- 2019 The National Scholarship for Graduate Students (Yufeng Liu)
- 2019 Best Oral Presentation Award, *The 7<sup>th</sup> Biomedical Magnetic Nanotechnology & The 8<sup>th</sup> Doctoral Forum of Biological and Medical Nanotechnology*, 2019-September-15—2019-September-16, Nanjing, China (Yufeng Liu)
- 2019 Excellent Graduate Student in Nanjing University (Xiaoyu Wang)
- 2019 Excellent Graduate Student in Nanjing University (Li Qin)
- 2019 Student Travel Award of Nano Today 2019 (Xiaoyu Wang)
- 2018 2018 Baxter China Young Investigator Awards (Second Tier) (Xiaoyu Wang)
- 2018 The National Scholarship for Graduate Students (Xiaoyu Wang)
- 2018 The National Scholarship for Graduate Students (Li Qin)
- 2018 The Excellent Graduate Student Pacemaker Award (Xiaoyu Wang)
- 2018 The Excellent Graduate Student Award (Li Qin)
- 2018 The Special Presidential Doctoral Scholarship (Anqi Lin)
- 2018 The Excellent Bachelor Dissertation Award (Second Tier) (Anqi Lin)
- 2017 Dongliang Scholarship (Xiaoyu Wang)
- 2017 Hainan Airlines Scholarship (Xiaoyu Wang)
- 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)

Hui Wei

- 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)
- 2016 The National Scholarship for Graduate Students (Yihui Hu)
- 2016 The Excellent Graduate Student Pacemaker Award (Yihui Hu)
- 2016 Talent Scholarship (Shichao Lin)
- 2016 The College Scholarship (Xiaoyu Wang)
- 2016 The First Prize for Undergraduate Scientific Work Exhibition of Nanjing University (Dan Yuan, Jiarui Liu)
- 2015 Gordon F. Kirkbright Bursary Award (Dr. Yubin Ding)
- 2015 The College Scholarship (Xiaoyu Wang)
- 2015 The College Scholarship (Leilei Shi)