Curriculum Vitae

ZHEN GU, PH.D.

Qiushi Distinguished Chair Professor and Dean College of Pharmaceutical Sciences

College of Pharmaceutical Sciences Zhejiang University Email: guzhen@zju.edu.cn Phone: +86-571-88208417 Fax: +86-571-88208417 Website: https://imedicationlab.net

EDUCATION AND TRAINING

Massachusetts Institute of Technology (MIT) Harvard Medical School (HMS)	Cambridge, MA
Postdoctoral Fellow, Advisor: Robert S. Langer	2010-2012
Koch Institute for Integrative Cancer Research, Department of Chemical Engineering, MI	
Children's Hospital Boston, HMS	
University of California, Los Angeles (UCLA) Dh. D. Chamiaal / Diamalaaular Engineering, Negatiatashuslagu, Advisory Vi Tang	Los Angeles, CA
Pn.D., Chemical /Biomolecular Engineering, Nanoplotechnology, Advisor: 11 lang	2006-2010
Department of Chemical and Biomolecular Engineering Department of Mechanical and Aerospace Eng	ineering
School of Engineering and Applied Science (2010/12/10)	Noniina China
 Nanjing University (NJU) M S. Bolymor Chamistry and Diverse. Advisor: Oundang Shan 	Nanjing, Unina
M.S., Polymer Chemistry and Physics, Advisor, Quindong Shen Department of Polymer Science and Engineering, School of Chemistry and Chemical Engineering (2006	2003-2000
Anapiing University (N III)	Naniina China
B S Chemistry Advisors: Oundong Shen Changzheng Yang	1000-2003
Department of Chemistry, School of Chemistry and Chemical Engineering (2003/07/01)	1555-2005
Department of Onemistry, Centor of Onemistry and Onemical Engineering (2000/01/01)	
POSITIONS AND EMPLOYMENT	
Qiushi Distinguished Chair Professor and Dean	2020-
College of Pharmaceutical Sciences	
Zhejiang University	
Adjunct Professor	2020-
Department of Bioengineering	
University of California, Los Angeles (UCLA)	
Full Professor	2018-2020
Department of Bioengineering	
Jonsson Comprehensive Cancer Center	
California NanoSystems Institute	
Center for Minimally Invasive Therapeutics	
University of California, Los Angeles (UCLA)	
Director	2019-2020
NIH Biotechnology Training in Biomedical Sciences and Engineering Program	
University of California, Los Angeles (UCLA)	
Founding Director	2016-2018
Biomedical Engineering Translational Innovation (BME-TraIn) Practice Master of Science Program	
University of North Carolina at Chapel Hill North Carolina State University	
 Endowed Chair Associate Professor 	2017-2018
Associate Professor	2016-2017
Assistant Professor	2012-2016
Joint Department of Biomedical Engineering, Pharmacoengineering Program	
University of North Carolina at Chapel Hill North Carolina State University	
(Joint Position) Division of Molecular Pharmaceutics and Center for Nanotechnology in Drug Delivery	
Eshelman School of Pharmacy	
(Joint Position) Department of Medicine, Division of Endocrinology and Metabolism	
University of North Carolina at Chapel Hill	

PROFESSIONAL ACTIVITIES

• Controlled Release Society (CRS) Ambassador to China, 2019-Present

 Inaugural Focus Group Chair Bioinspired and Biomimetic Delivery (BBD), Controlled Release Society (CRS), 2017-2019 Academic Membership Controlled Release Society (CRS) American Diabetes Association (ADA) American Association for the Advancement of Science (AAAS) **Biomedical Engineering Society (BMES)** Materials Research Society (MRS) American Chemical Society (ACS) Editorships Associate Editor Nano Research, 2017-Present Regenerative Biomaterials, 2021-Present Science Advances, 2019-Present Guest Editor Advanced Drug Delivery Reviews, Drug Delivery and Translational Research, Bioengineering and Translational Medicine, Advanced Healthcare Materials, Journal of Diabetes Technology **Editorial Board** ACS Applied Polymer Materials Advanced Biosystems Advanced Science Advanced Therapeutics **Bioactive Materials Biomacromolecules** Journal of Controlled Release Medicine in Drug Discovery Nanotheranostics Progress of Chemistry **Chinese Biomedical Instruments** • Judge 35 Innovators under 35 (TR35), MIT Technology Reviews, 2018-Present Grants Reviewer Panelist National Institutes of Health (NIH), USA National Science Foundation (NSF), USA Juvenile Diabetes Research Foundation (JDRF/Innovation Grants), USA National Natural Science Foundation of China (NSFC), China SMART Innovation Center, Singapore Agency for Science, Research & Technology (A*STAR), Singapore Conference/Symposium Chairs/Co-Chairs 5th Symposium of the Chinese American Society of Nanomedicine and Nanobiotechnology (CASNN), Guangzhou, 2021 Translational Biomedical Engineering Track, Biomedical Engineering Society (BMES) Annual Meeting, 2020 5th Bioengineering & Translational Medicine Conference, AIChE, Los Angeles, 2020 "Nanomedicine: Fundamental and Translation", 256th ACS Annual Spring Meeting, Boston, 2018 "Biomaterials for Immunotherapy", 253rd ACS Annual Spring Meeting, San Francisco, 2017 "Nanomedicines: Targeting and Clearance", 251st ACS Annual Spring Meeting, San Diego, 2016 "Nanomaterials in Translational Medicine", MRS Annual Spring Meeting, San Francisco, 2015 HONORS AND AWARDS Fellow, International Academy for Medical and Biological Engineering (AIMBE), 2021

- Felix Franks Medal, Royal Society of Chemistry, 2020
- Highly Cited Researcher, Web of Science Group, 2019, 2020
- Materials Today Rising Star Award, 2020
- Fellow, American Institute for Medical and Biological Engineering (AIMBE), 2019
- Small Young Innovator Award, 2019
- Biomaterials Science Lectureship Award, 2018
- Jackson Family Distinguished Professorship of Biomedical Engineering, UNC/NC State, 2018 (relinquished)

- Young Investigator Award, Controlled Release Society (CRS), 2017
- Research Achievement Award, ALCOA Foundation, 2017
- Runner-up of APEC Science Prize for Innovation, Research, and Education (ASPIRE), U.S. Dept. State, 2017
- Annual Health Care Hero, Triangle Business Journal, 2017
- Sloan Research Fellow, Alfred P. Sloan Foundation, 2016
- National Academy of Engineering (NAE) Frontiers in Engineering Invitee, 2016
- GOOD 100- "100 Global Creative Individuals", GOOD Magazine, 2016
- University Faculty Scholar Award, NC State, 2016
- NC TraCS 4D (Drugs, Devices and Diagnostics Development) Research Award, 2016
- TR35-Global Top Innovator under 35 (Pioneer in Biomedicine and Materials), MIT Technology Review, 2015
- Top 10 Science Images in Science Magazine, 2015
- ACCLAIM Fellow, Program of Academic Career Leadership Academy in Medicine at UNC, 2015
- Young Innovator Award of Cellular and Molecular Bioengineering (CMBE), Biomedical Engineering Society (BMES), 2015
- The First Prize of Surgery-Engineering Speed Dating Award, UNC, 2015
- "Young Talents in Polymer Science" Highlight, Macromolecular Chemistry and Physics, 2015
- Pathway Award, American Diabetes Association, 2015
- Young Faculty Research Award, Sigma Xi Chapter of the Scientific Research Society, 2014
- Junior Faculty Award, American Diabetes Association, 2014
- NC State Research Innovative Award, 2013, 2015
- NC TraCS \$50K Translational Science Pilot Award, UNC, 2013, 2015
- NC State Faculty Research and Professional Development Award, 2013
- Specially-Appointed Full Professor in Jiangsu Province, Nanjing University, China, 2012 (relinquished)
- Excellent Publication Award of Key Laboratory of Mesoscopic Chemistry, China, 2011
- Chinese Government Award for Outstanding Ph.D. Students Abroad, Los Angeles, 2010
- Fellowship of "Functional Engineered Nano Architectonics" (FENA), UCLA, 2008
- Distinguished Graduate Student, NJU, 2006
- Finalist for DSM Business Course-"2006-ZHUO", Shanghai, 2006
- Scholarship of National Distinguished Graduate Student, China, 2005
- Dai An-Bang Scholarship for Excellent Experimental Abilities, China, 2003
- Distinguished Youth Leadership Award in Jiangsu Province, China, 2003
- Distinguished Student of NJU, 2002
- GuangHua Scholarship for Outstanding Undergraduate Students, China, 2002
- The First Prize of People's Scholarship for Distinguished Students in NJU, 2002
- The First Prize of People's Scholarship for Distinguished Students in NJU, 2001
- The First Prize of 6th Academic Paper Contest in NJU, 2001
- The First Prize of 10th Youth Creativity Contest in Jiangsu Province, China, 1999

PUBLICATIONS

JOURNAL PAPERS

(*: corresponding author; †: equal contribution; ⊙: non-refereed publications)

1. Zhaowei Chen+, Hongjun Li+, Yijie Bian, Zejun Wang, Guojun Chen, Xudong Zhang, Yimin Miao, Di Wen, Jinqiang Wang, Gang Wan, Yi Zeng, Peter Abdou, Jun Fang, Song Li, Cheng-Jun Sun, <u>Zhen Gu*</u>, "Bioorthogonal Catalytic Patch", *Nature Nanotechnology*, in press, 2021

2. Hongjun Li, Zejun Wang, Zhaowei Chen, Tianyuan Ci, Guojun Chen, Di Wen, Ruoxin Li, Jinqiang Wang, Huan Meng, Richard Bell, Zhifeng Gu, Gianpietro Dotti, <u>Zhen Gu*</u>, Disrupting tumour vasculature and recruitment of aPDL1-loaded platelets control tumour metastasis, *Nature Communications*, in press, 2021

3. Quanyin Hu+, Hongjun Li+, Edikan Ogunnaike, Qian Chen, Huitong Ruan, Sarah Ahn, Elena Dukhovlinova, Kang Yang, Di Wen, Gianpietro Dotti, <u>Zhen Gu*</u>, "Cell Delivery Reservoir Promotes CAR-T Cell Antitumor Activity", **Nature Biomedical Engineering**, in press, 2021.

4. Zejun Wang, Jinqiang Wang, Hongjun Li, Jicheng Yu, Guojun Chen, Anna R. Kahkoska, Valerie Wu, Yi Zeng, Di Wen, Jayson R. Miedema, John B. Buse, <u>Zhen Gu*</u>, "Dual self-regulated delivery of insulin and glucagon by a hybrid patch", **Proceedings of the National Academy of Sciences U.S.A. (PNAS)**, 117(29512), 2020.

5. Hongjun Li, Zhen Gu*, "DNA nanodevice for cancer vaccine", Nature Materials, 20, 286–287(2021). (News&Views) ⊙

6. Tianyuan Ci+, Hongjun Li+, Guojun Chen, Zejun Wang, Jinqiang Wang, Peter Abdou, Yiming Tu, Gianpietro Dotti, <u>Zhen</u> <u>Gu*</u>, "Cryo-shocked cancer cells for targeted drug delivery and vaccination", **Science Advances**, 6(eabc3013), 2020.

7. Jinqiang Wang, Zejun Wang, Guojun Chen, Yanfang Wang, Tianyuan Ci, Hongjun Li, Xiangsheng Liu, Daojia Zhou, Anna Kahkoska, Zhuxian Zhou, Huan Meng, John Buse, Zhen Gu*, "Injectable Biodegradable Polymeric Complex for Glucose-Responsive Insulin Delivery", ACS Nano, 15, 4294-4304, 2021

8. Ruxing Fu+, Hongjun Li+, Ruoxin Li, Kyle McGrath, Gianpietro Dotti, and Zhen Gu*, "Delivery Techniques for Enhancing CAR T-Cell Therapy against Solid Tumors". Advanced Functional Materials, 202009489, 2021.

9. Yujie Cai, Wei Bing*, Xiao Xu, Yugi Zhang, Zhaowei Chen, Zhen Gu*, "Topographical nanostructures for physical sterilization", Drug Delivery and Translational Research, in press, 2021.

10. Xing Jiang, Li Ren, Peyton Tebon, Canran Wang, Xingwu Zhou, Moyuan Qu, Jixiang Zhu, Haonan Ling, Shiming Zhang, Yumeng Xue, Qingzhi Wu, Praveen Bandaru, Junmin Lee, Han-Jun Kim, Samad Ahadian, Nureddin Ashammakhi, Mehmet R. Dokmeci, Jinhui Wu, Zhen Gu, Wujin Sun*, Ali Khademhosseini*, "Cancer-on-a-chip for modeling immune checkpoint inhibitor and tumor interactions", Small, 17(e2004282), 2021.

11. Xiuli Hu, Huijuan Zhang, Zejun Wang, Chin Ying Angela Shiu, Zhen Gu*, "Microneedle array patches integrated with nanoparticles for therapy and diagnosis", Small Structures, 2000097, 2021.

12. Feng-Qin Luo+, Guojun Chen+, Wei Xu, Daojia Zhou, Jia-Xian Li, Yong-Cong Huang, Run Lin*, Zhen Gu*, Jin-Zhi Du*, "Microneedle-array patch with pH-sensitive formulation for glucose-responsive insulin delivery", Nano Research, in press, 2021.

13. Zejun Wang, Jinqiang Wang, Anna R. Kahkoska, John B. Buse*, Zhen Gu*, "Developing Insulin Delivery Devices with Glucose-Responsiveness", Trends in Pharmacological Sciences, 1(31), 2021.

14. Yuqi Zhang, Jicheng Yu, Zhen Gu*, "Cyborg Vessel", *Matter*, 5(1393), 2020.

15. Xingwu Zhou, Xing Jiang, Moyuan Qu, George Aninwene II, Vadim Jucaud, James J. Moon, Zhen Gu, Wujin Sun*, Ali Khademhosseini*, "Engineering Antiviral Vaccines", ACS Nano, 10(12370), 2020.

16. Xuexiang Zhang, Tae-Hyung Kim, Timothy J, Thauland, Hongiun Li, Fatemeh Sadat Maiedi, Chau Lv, Zhen Gu, Manish J. Butte, Amy C. Rowat, Song Li*, "Unraveling the Mechanobiology of Immune Cells", Current Opinion in Biotechnology, 66(236), 2020.

17. Jicheng Yu, Jingiang Wang, Yuqi Zhang, Guojun Chen, Weiwei Mao, Yangi Ye, Anna R. Kahkoska, John B. Buse, Robert Langer and Zhen Gu*, "Glucose-responsive insulin patch for blood glucose regulation in mice and minipigs", Nature Biomedical Engineering, 4(499), 2020. (Cover Feature)

18. Guojun Chen+, Zhitong Chen+, Di Wen, Zejun Wang, Hongjun Li, Yi Zeng, Gianpietro Dotti, Richard Wirz*, Zhen Gu*, "Transdermal Cold Atmospheric Plasma-Mediated Immune Checkpoint Blockade Therapy", Proceedings of the National Academy of Sciences U.S.A. (PNAS), 7(3687), 2020.

19. Qian Chen, Chao Wang, Xudong Zhang, Guojun Chen, Quanyin Hu, Hongjun Li, Jinqiang Wang, Di Wen, Yuqi Zhang, Guang Yang, Yifei Lu, Chen Jiang, Gianpietro Dotti, Jun Wang, Zhen Gu*, "In situ Sprayed Bioresponsive Immunotherapeutic Gel for Post-Surgical Cancer Treatment", Nature Nanotechnology, 14(89), 2019. (Cover Feature)

20. Jingiang Wang, Jicheng Yu, Yugi Zhang, Anna R.Kahkoska, Zejun Wang, Jun Fang, Julian P. Whitelegge, Song Li, John B. Buse, and Zhen Gu*, "Glucose Transporter Inhibitor-Modified Insulin Mitigates Hypoglycemia", Proceedings of the National Academy of Sciences U.S.A. (PNAS), 22(10744), 2019.

21. Quan Zhou+, Shiqun Shao+, Jinqiang Wang, Changhuo Xu, Jiajia Xiang, Ying Piao, Zhuxian Zhou, Qingsong Yu, Jianbin Tang, Xiangrui Liu, Zhihua Gan, Ran Mo, Zhen Gu*, and Youqing Shen*, "Enzyme-Activatable Polymer-Drug Conjugate Augments Tumour Penetration and Treatment Efficacy", Nature Nanotechnology, 14(799), 2019.

22. Jingiang Wang+, Jicheng Yu+, Yugi Zhang, Xudong Zhang, Anna R. Kahkoska, Guojun Chen, Zejun Wang, Wujin Sun, Lulu Cai, Zhaowei Chen, Chenggen Qian, Qundong Shen, Ali Khademhosseini, John B. Buse, and Zhen Gu*, "Charge-Switchable Polymeric Complex for Glucose-Responsive Insulin Delivery in Mice and Pigs", Science Advances, 5(eaaw4357), 2019.

23. Yi Zeng, Jingiang Wang, Zejun Wang, Guojun Chen, Jicheng Yu, Sen Li, Qiwei Li, Hongjun Li, Di Wen, Zhongze Gu*, and <u>Zhen Gu*</u>, "Colloidal crystal microneedle patch for glucose monitoring", **Nano Today**, 35(100984), 2020. 24. Jinhua Li*, Xinquan Jiang, Hongjun Li, Michael Gelinsky, and <u>Zhen Gu*</u>, "Tailoring Materials for Modulation of

Macrophage Fate", Advanced Materials, 33(2004172), 2020.

25. Xiao Han, Hongjun Li, Daojia Zhou, Zhaowei Chen*, Zhen Gu*, "Local and Targeted Delivery of Immune Checkpoint Blockade Therapeutics", Accounts of Chemical Research, 11(2521), 2020.

26. Qingle Ma, Qin Fan, Jialu Xu, Jinyu Bai, Xiao Han, Ziliang Dong, Xiaozhong Zhou, Zhuang Liu, Zhen Gu*, and Chao Wang*, "Calming Cytokine Storm in Pneumonia by Targeted Delivery of TPCA-1 Using Platelet-Derived Extracellular Vesicles", Matter, 3(1), 2020.

27. Lauren R. Richter, Qianfen Wan, Di Wen, Yugi Zhang, Junjie Yu, Jin ku Kang, Changyu Zhu, Elizabeth L. McKinnon, Zhen Gu*, Li Qiang*, and Utpal B. Pajvani*, "Targeted Delivery of Notch Inhibitor Attenuates Obesity-induced Glucose Intolerance and Liver Fibrosis", ACS Nano, 6(6878), 2020.

28. Guojun Chen, Zhen Gu*, "A prophylactic and a therapeutic against AML", Nature Biomedical Engineering, 4(4), 2020. (News&Views) •

29. Jie Gao, <u>Zhen Gu*</u>, "Toward nanoscopic cellular imaging by X-ray", **National Science Review**, nwaa206, 2020. 30. Guang Yang*, Guojun Chen, <u>Zhen Gu*</u>, "Transdermal drug delivery for hair regrowth", **Molecular Pharmaceutics**, 2(483), 2020.

31. Xudong Zhang, Yang Kang, Jinqiang Wang, Junjie Yan, Qian Chen, Hao Cheng*, Peng Huang*, and <u>Zhen Gu*</u>, "PD-L1-Expressing Platelets Reverse New-Onset Type 1 Diabetes", **Advanced Materials**, 26(1907692), 2020.

32. Tingxizi Liang, Di Wen, Xintong Zhong, Jun-Jie Zhu*, <u>Zhen Gu*</u>, "Therapeutic Potential of Adipose Tissue", **Science Bulletin**, 20(1702), 2020.

33. Moyuan Qu, Han-Jun Kim, Xingwu Zhou, Canran Wang, Xing Jiang, Jixiang Zhu, Yumeng Xue, Peyton Tebon, Shima A. Sarabi, Samad Ahadian, Mehmet R. Dokmeci, Songsong Zhu, <u>Zhen Gu</u>, Wujin Sun,* and Ali Khademhosseini*, "Biodegradable Microneedle Patch for Transdermal Gene Delivery", **Nanoscale**, 12(16724), 2020.

34. Rezvan Jamaledin+, Cynthia K.Y. Yiu+, Ehsan N. Zare+, Li-na Niu, Raffaele Vecchione, Guojun Chen, <u>Zhen Gu</u>, Franklin R. Tay*, Pooyan Makvandi*, "Advances in antimicrobial microneedle patches for combating infections", *Advanced Materials*, 33(2002129), 2020.

35. Xingwu Zhou, Zhimin Luo, Avijit Baidya, Hanjun Kim, Canran Wang, Xing Jiang, Moyuan Qu, Jixiang Zhu, Li Ren, Fereshteh Vajhadin, Peyton Tebon, Niyuan Zhang, Yumeng Xue, Yudi Feng, Chengbin Xue, Yi Chen, KangJu Lee, Junmin Lee, Shiming Zhang, Chun Xu, Nureddin Ashammakhi, Samad Ahadian, Mehmet Remzi Dokmeci, <u>Zhen Gu</u>, Wujin Sun*, Ali Khademhosseini*, "Biodegradable beta-cyclodextrin conjugated gelatin methacryloyl microneedle for delivery of water-insoluble drug", *Advanced Healthcare Materials*, 26(1907692), 2020.

36. Wujin Sun*, Jinqiang Wang, Quanyin Hu, Xingwu Zhou, Ali Khademhosseini, <u>Zhen Gu*</u>, "CRISPR-Cas12a delivery by DNA-mediated bio-responsive editing for cholesterol regulation", **Science Advances**, 21(eaba2983), 2020.

37. Peter Abdou, Zejun Wang, Qian Chen*, Amanda Chan, Daojia Rosie Zhou, Vivienne Gunadhi, <u>Zhen Gu*</u>, "Advances in Engineering Local Drug Delivery Systems for Cancer Immunotherapy", *WIREs Nanomedicine & Nanobiotechnology*, 5(e1632), 2020.

38. Zhaowei Chen*, Di Wen, <u>Zhen Gu*</u>, "Cargo-Encapsulated Cells for Drug Delivery", **Science China Life Sciences**, 63(599), 2020.

39. Rajesh Paul, Emily Ostermann, <u>Zhen Gu</u>, Jean B. Ristaino, Qingshan Wei*, "DNA Extraction from Plant Leaves Using a Microneedle Patch", *Current Protocols in Plant Biology*, 1(e20104), 2020.

40. Jixiang Zhu, Xingwu Zhou, Han-Jun Kim, Moyuan Qu, Xing Jiang, KangJu Lee, Li Ren, Qingzhi Wu, Canran Wang, Xunmin Zhu, Peyton Tebon, Shiming Zhang, Junmin Lee, Nureddin Ashammakhi, Samad Ahadian, Mehmet Remzi Dokmeci, <u>Zhen Gu</u>, Wujin Sun* and Ali Khademhosseini*, "Gelatin methacryloyl microneedle patches for minimally-invasive extraction of skin interstitial fluid", **Small**, 16(1905910), 2020.

41. Jun Fang, Yuan-Yu Hsueh, Jennifer Soto, Wujin Sun, Jinqiang Wang, <u>Zhen Gu</u>, Ali Khademhosseini, Song Li*, "Engineering Biomaterials with Micro/Nano Technologies for Cell Reprogramming", **ACS Nano**, 14(1296), 2020.

42. Tianyue Jiang, Guo Xu, Guojun Chen, Yu Zheng, Bingfang He* and <u>Zhen Gu*</u>, "Progress in Transdermal Drug Delivery Systems for Cancer Therapy", **Nano Research**, 13(1810), 2020.

43. Zejun Wang+, Hongjun Li+, Jinqiang Wang, Zhaowei Chen, Guojun Chen, Di Wen, Amanda Chan, <u>Zhen Gu*</u>, "Transdermal Colorimetric Patch for Hyperglycemia Sensing in Diabetic Mice", **Biomaterials**, 237(119782), 2020.

44. Di Wen, Jinqiang Wang, George Van Den Driessche, Qian Chen, Yuqi Zhang, Guojun Chen, Hongjun Li, Jennifer Soto, Ming Liu, Masao Ohashi, Zejun Wang, Peter Abdou, Quanyin Hu, Gianpietro Dotti, Song Li, Denis Fourches, and <u>Zhen Gu*</u>, "Leverage Lipid Metabolism for Anticancer Drug Delivery", *Matter*, 5(1203), 2019.

45. Jian Jiang, Na Shen, Tianyuan Ci, Zhaohui Tang*, <u>Zhen Gu*</u>, Gao Li, and Xuesi Chen*, "Combretastatin A4 nanodrug-induced MMP9-amplification boosts tumor-selective release doxorubicin prodrug", **Advanced Materials**, 44(1904278), 2019.

46. Xiao Han, Shufang Shen, Qin Fan, Guojun Chen, Edikan Archibong, Gianpietro Dotti, Zhuang Liu*, <u>Zhen Gu*</u>, and Chao Wang*, "Red Blood Cell-Derived Nanoerythrosome for Antigen Delivery with Enhanced Cancer Immunotherapy", **Science** *Advances*, 10(eaaw6870), 2019.

47. Hon S. Leong, Kimberly S. Butler, C. Jeffrey Brinker, May Azzawi, Steve Conlan, Christine Dufès, Andrew Owen, Steve Rannard, Chris Scott, Chunying Chen, Marina A. Dobrovolskaia, Serguei V. Kozlov, Adriele Prina-Mello, Ruth Schmid, Peter Wick, Fanny Caputo, Patrick Boisseau, Rachael M. Crist, Scott E. McNeil, Bengt Fadeel, Lang Tran, Steffen Foss Hansen, Nanna B. Hartmann, Lauge P. W. Clausen, Lars M. Skjolding, Anders Baun, Marlene Ågerstrand, <u>Zhen Gu</u>, Dimitrios A. Lamprou, Clare Hoskins, Leaf Huang, Wantong Song, Huiliang Cao, Xuanyong Liu, Klaus D. Jandt, Wen Jiang, Betty Y. S. Kim, Korin E. Wheeler, Andrew J. Chetwynd, Iseult Lynch, Sayed Moein Moghimi, André Nel, Tian Xia, Paul S. Weiss, Bruno Sarmento, José das Neves, Hélder A. Santos, Luis Santos, Samir Mitragotri, Steve Little, Dan Peer, Mansoor M. Amiji, Maria José Alonso, Alke Petri-Fink, Sandor Balog, Aaron Lee, Barbara Drasler, Barbara Rothen-Rutishauser, Stefan Wilhelm, Handan Acar, Roger G. Harrison, Chuanbin Mao, Priyabrata Mukherjee, Rajagopal Ramesh, Lacey R. McNally, Sara Busatto, Joy Wolfram, Paolo Bergese, Mauro Ferrari, Ronnie H. Fang, Liangfang Zhang, Jie Zheng, Chuangi Peng,

Bujie Du, Mengxiao Yu, Danielle M. Charron, Gang Zheng & Chiara Pastore*, "On the issue of transparency and reproducibility in nanomedicine", *Nature Nanotechnology*, 14(629), 2019. (Editorial) •

48. Jinqiang Wang, Zejun Wang, Jicheng Yu, Yuqi Zhang, Anna R. Kahkoska, John B. Buse, and <u>Zhen Gu*</u>, "A Forskolin-Conjugated Insulin Analog Targeting Endogenous Glucose-Transporter for Glucose-Responsive Insulin Delivery", **Biomaterials Science**, 7(4508), 2019.

49. Da Huo, Jianfeng Zhu, Guojun Chen, Qian Chen, Chao Zhang, Xingyu Luo, Wei Jiang, Xiqun Jiang*, <u>Zhen Gu*</u>, Yong Hu*, "Eradication of Unresectable Liver Metastasis Through Induction of Tumour Specific Energy Depletion", *Nature Communications*, 10(3051), 2019.

50. Tingxizi Liang, Zhaowei Chen, Zejun Wang, Jun-Jie Zhu and <u>Zhen Gu*</u>, "Nanotechnology against Diabetes", **Journal of** *Physics D: Applied Physics*, 30(1), 2020.

51. KangJu Lee, Marcus J. Goudie, Peyton Tebon, Wujin Sun, Zhimin Luo, Junmin Lee, Shiming Zhang, Kirsten Fetah, Han-Jun Kim, Yumeng Xue, Mohammad Ali Darabi, Samad Ahadian, Einollah Sarikhani, WonHyoung Ryu, <u>Zhen Gu</u>, Paul S. Weiss, Mehmet R. Dokmeci, Nureddin Ashammakhi*, Ali Khademhosseini*, "Non-transdermal Microneedles for Advanced Drug Delivery", *Advanced Drug Delivery Reviews*, 165(41), 2020.

52. Cong-Fei Xu+, Guo-Jun Chen+, Ying-Li Luo, Yue Zhang, Gui Zhao, Zi-Dong Lu, Anna Czarnah, <u>Zhen Gu*</u>, Jun Wang*, "Rational designs of in vivo CRISPR-Cas delivery systems", **Advanced Drug Delivery Reviews**, 168(3), 2020.

53. Yi Zeng, Jinqiang Wang*, Zhongze Gu, and <u>Zhen Gu*</u>, "Engineering Glucose-Responsive Insulin", *Medicine in Drug Discovery*, 3(100010), 2019.

54. Shuangjiang Yu*, Zhaowei Chen, Xuan Zeng, Xuesi Chen*, and <u>Zhen Gu*</u>, "Advances in nanomedicine for cancer starvation therapy", *Theranostics*, 26(8026), 2019.

55. Xiao Xu+, Teng Li+, Shiyang Shen, Jinqiang Wang, Peter Abdou, <u>Zhen Gu*</u>, Ran Mo*, "Advances in Engineering Cells for Cancer Immunotherapy", *Theranostics*, 25(7889), 2019.

56. Qian Chen, Quanyin Hu, Elena Dukhovlinova, Guojun Chen, Sarah Ahn, Chao Wang, Edikan Ogunnaike, Frances S. Ligler, Gianpietro Dotti^{*}, <u>Zhen Gu^{*}</u>, "Photothermal Therapy Promotes Tumor Infiltration and Antitumor Activity of CAR T Cells", *Advanced Materials*, 23(1900192), 2019.

57. Huitong Ruan, Quanyin Hu, Di Wen, Qian Chen, Guojun Chen, Yifei Lu, Jinqiang Wang, Hao Cheng, Weiyue Lu*, and <u>Zhen Gu*</u>, "A Dual-Bioresponsive Drug Delivery Depot for Combination of Epigenetic Modulation and Immune Checkpoint Blockade, *Advanced Materials*, 17(1806957), 2019. (Cover Feature)

58. Chao Wang*, Qin Fan, <u>Zhen Gu*</u>, Zhuang Liu*, "Application of nanotechnology in cancers prevention, diagnose and treatment", **Science and Technology Review**, 22(96), 2019.

59. Qian Chen, Tianyuan Ci, <u>Zhen Gu*</u>, "Sprayable Gel for Post-surgical Immunotherapy", **Immuno-Oncology Technology**, 2(11), 2019.

60. Jianpei Xu, Xiaoqi Wang, Haoyuan Yin, Xiang Cao, Quanyin Hu, Wei Lv, Qunwei Xu, <u>Zhen Gu*</u>, Hongliang Xin*, "Sequentially Site-Specific Delivery of Thrombolytic and Neuroprotectant for Enhanced Treatment of Ischemic Stroke Based on Bioengineered Nanoplatelet", **ACS Nano**, 8(8577), 2019.

61. Qian Chen, Guojun Chen, Jiawen Chen, Jingjing Shen, Xudong Zhang, Jinqiang Wang, Amanda Chan, <u>Zhen Gu</u>, "Bioresponsive Protein Complex of aPD1 and aCD47 Antibodies for Enhanced Immunotherapy", **Nano Letters**, 8(4879), 2019.

62. Jianlong Ji, Mangmang Li, Zhaowei Chen, Hongwang Wang, Xiaoning Jiang, Kai Zhuo, Ying Liu, Xing Yang, <u>Zhen Gu</u>, Shengbo Sang*, and Yang Shu*, "In situ fabrication of organic electrochemical transistors on a microfluidic chip", **Nano** *Research*, 8(1943), 2019.

63. Ali Khademhosseini, Andre E. Nel, Holly Bunje, Christopher J. DeSantis, Anne M. Andrews, Rita A. Blaik, <u>Zhen G</u>u, Huan Meng, Aydogan Ozcan, Sarah H. Tolbert, Tian Xia, Jeffrey I. Zink, and Paul S. Weiss*, "Nanoscience and Nanotechnology at UCLA", *ACS Nano*, 13(6127), 2019.

64. Jinqiang Wang+, Zejun Wang+, Jicheng Yu, Anna R. Kahkoska, John B. Buse, and <u>Zhen Gu*</u>, "Glucose-responsive insulin and delivery systems: innovation and translation", **Advanced Materials**, 13(1902004), 2020.

65. <u>Zhen Gu*</u>, "Tailoring Biomaterials for Metabolic Diseases", **Advanced Healthcare Materials**, 12(1900632), 2019. (Editorial) ⊙

66. Rajesh Paul, Amanda C. Saville, Jeana C. Hansel, Yanqi Ye, Carmin Ball, Alyssa Williams, Xinyuan Chang, Guojun Chen, <u>Zhen Gu*</u>, Jean B. Ristaino*, Qingshan Wei*, "Extraction of Plant DNA by Microneedle Patch for Rapid Detection of Plant Diseases", **ACS Nano**, 6(6540), 2019. (Cover Feature)

67. Lin-Lin Bu, Junjie Yan, Zejun Wang, Huitong Ruan, Qian Chen, Vivienne Gunadhi, R. Bryan Bell, and <u>Zhen Gu*</u> "Advances in Drug Delivery for Post-Surgical Cancer Treatment", *Biomaterials*, 219(119182), 2019.

68. Zhaowei Chen, Zejun Wang, and <u>Zhen Gu*</u>, "Bioinspired and Biomimetic Nanomedicines", *Accounts of Chemical Research*, 5(1255), 2019.

69. Guang Yang, Qian Chen, Di Wen, Zhaowei Chen, Jinqiang Wang, Guojun Chen, Zejun Wang, Xudong Zhang, Yuqi Zhang, Quanyin Hu, Liang Zhang*, <u>Zhen Gu*</u>, "A Therapeutic Microneedle Patch Made from Hair-Derived Keratin for Promoting Hair Regrowth", **ACS Nano**, 4(4354), 2019.

70. Jiawei Li, Guojun Chen, Xingquan Xu, Peter Abdou, Qing Jiang, Dongquan Shi*, <u>Zhen Gu*</u>, "Advances of Injectable Hydrogel-based Scaffolds for Cartilage Regeneration", **Regenerative Biomaterials**, 2(129), 2019. (Cover Feature)

71. Di Wen, Guojun Chen, Qian Chen, Peter Y. Li, Hao Cheng*, and <u>Zhen Gu*</u>, "Engineering Protein Delivery Depots for Cancer Immunotherapy", **Bioconjugate Chemistry**, 3(515), 2019.

72. Shuangjiang Yu, Shu Wei, Liang Liu, Desheng Qi, Jiayu Wang, Guojun Chen, Wanying He, Chaoliang He*, Xuesi Chen, <u>Zhen Gu*</u>, "Enhanced local cancer therapy by CA4P and CDDP co-loaded polypeptide gel depot", **Biomaterials Science**, 7(860), 2019. (Cover Feature)

73. Linlin Bu+, Lang Rao+, Guangtao Yu, Lei Chen, Weiwei Deng, Jianfeng Liu, Hao Wu, Qianfang Meng, Shishang Guo, Xingzhong Zhao, Wenfeng Zhang, Guojun Chen, <u>Zhen Gu</u>, Wei Liu*, Zhijun Sun*, "Cancer Stem Cell-Platelet Hybrid Membrane-Coated Magnetic Nanoparticles for Enhanced Photothermal Therapy of Head and Neck Squamous Cell Carcinoma", *Advanced Functional Materials*, 10(1807733), 2019.

74. Yifei Lu, Quanyin Hu, Chen Jiang*, <u>Zhen Gu*</u>, "Platelet for Drug Delivery", **Current Opinion in Biotechnology**, 58(81), 2019.

75. Huitong Ruan, Linlin Bu, Quanyin Hu, Weiyue Lu*, <u>Zhen Gu*</u>, "Strategies of combination drug delivery for immune checkpoint blockade", *Advanced Healthcare Materials*, 4(1801099), 2019.

76. Yuqi Zhang, Jicheng Yu, Anna R. Kahkoska, Jinqiang Wang, John B. Buse, <u>Zhen Gu*</u>, "Advances in Transdermal Insulin Delivery", *Advanced Drug Delivery Reviews*, 139(51), 2019.

77. Quanyin Hu, Wujin Sun, Jinqiang Wang, Huitong Ruan, Yanqi Ye, Chao Wang, Weiyue Lu, Ke Cheng, Gianpietro Dotti, Joshua F. Zeidner, Jun Wang, <u>Zhen Gu*</u>, "Conjugation of Haematopoietic Stem Cells and Platelets Decorated with Anti-PD-1 Antibodies Augments Anti-Leukemia Efficacy", **Nature Biomedical Engineering**, 2(831), 2018.

78. Jicheng Yu, Yuqi Zhang, Jinqiang Wang, Di Wen, Anna R. Kahkoska, John B. Buse, <u>Zhen Gu*</u>, "Glucose-responsive oral insulin delivery for postprandial glycemic regulation", **Nano Research**, 7(1539), 2019. (Cover Feature)

79. Junnan Tang, Jinqiang Wang, Ke Huang, Yanqi Ye, Teng Su, Li Qiao, Michael Taylor Hensley, Thomas George Caranasos, Jinying Zhang, <u>Zhen Gu*</u>, Ke Cheng*, "Cardiac Cell-Integrated Microneedle Patch for Treating Myocardial Infarction", **Science Advances**, 11(eaat9365), 2018.

80. <u>Zhen Gu*</u>, Hongjie Dai*, "The Inaugural Nano Research Young Innovators (NR45) Award in Nanobiotechnology", **Nano Research**, 10(4931), 2018. **(Editorial)** ⊙

81. Zhimin Luo, Wujin Sun*, Jun Fang, KangJu Lee, Song Li, <u>Zhen Gu</u>, Mehmet R. Dokmeci, and Ali Khademhosseini*, "Biodegradable Gelatin Methacryloyl Microneedles for Transdermal Drug Delivery", **Advanced Healthcare Materials**, 3(1801054), 2019.

82. Bhanu B. Neupane*, Tao Jin, <u>Zhen Gu</u>, Frances S. Ligler, Gufeng Wang, "Polybrominated diphenyl ethers perturb axonal growth and actin distribution", **BIBECHANA**, 16(64), 2019.

83. Junjie Yan, Xudong Zhang, Yang Liu, Yanqi Ye, Jicheng Yu, Qian Chen, Jinqiang Wang, Yuqi Zhang, Quanyin Hu, Yang Kang, Min Yang,* <u>Zhen Gu*</u>, "Shape-Controlled Synthesis of Liquid Metal Nanodroplets for Photothermal Therapy", **Nano Research**, 3(1313), 2019

84. Ya-Nan Fan, Min Li, Ying-Li Luo, Qian Chen, Li Wang, Hou-Bing Zhang, Song Shen, <u>Zhen Gu*</u>, Jun Wang*, "Cationic lipid-assisted nanoparticles for delivery of mRNA cancer vaccine", **Biomaterials Science**, 11(3009), 2018.

85. Penghe Zhao, Zhaokui Jin, Qian Chen, Tian Yang, Danyang Chen, Jin Meng, Xifeng Lu, <u>Zhen Gu*</u>, Qianjun He*, "Local generation of hydrogen for enhanced photothermal therapy", **Nature Communications**, 9(4241), 2018.

86. Peng Xue, Lei Zhang, Zhigang Xu, Junjie Yan, <u>Zhen Gu*</u>, Yuejun Kang*, "Blood sampling using microneedles as a minimally invasive platform for biomedical diagnostics", **Applied Materials Today**, 13(144), 2018.

87. Cong-Fei Xu, ZiDong Lu, Ying-Li Luo, Yang Liu, Zhiting Cao, Song Shen, Hong-Jun Li, Jing Liu, Kaige Chen, Zhiyao Chen, Xianzhu Yang, <u>Zhen Gu</u>, and Jun Wang* "Targeting of NLRP3 inflammasome with gene editing for the amelioration of inflammatory diseases", *Nature Communications*, 9(4092), 2018.

88. Xudong Zhang, Jinqiang Wang, Zhaowei Chen, Quanyin Hu, Chao Wang, Junjie Yan, Gianpietro Dotti, Peng Huang*, <u>Zhen Gu*</u>, "Engineering PD-1-Presenting Platelets for Cancer Immunotherapy", **Nano Letters**, 18(9), 2018.

89. Chao Wang+, Jinqiang Wang+, Xudong Zhang, Shuangjiang Yu, Di Wen, Quanyin Hu, Yanqi Ye, Hunter Bomba, Xiuli Hu, Zhuang Liu, Gianpietro Dotti, <u>Zhen Gu*</u>, "*In Situ* Formed Reactive Oxygen Species-Responsive Scaffold with Gemcitabine and Checkpoint Inhibitor for Combination Therapy", **Science Translational Medicine**, 10(eaan3682), 2018.

90. Zhaowei Chen, Jinqiang Wang, Wujin Sun, Edikan Archibong, Anna R. Kahkoska, Xudong Zhang, Yue Lu, Frances S. Ligler, John B. Buse, <u>Zhen Gu*</u>, "Synthetic β -cells for Fusion-Mediated Dynamic Insulin Secretion", **Nature Chemical Biology**, 14(86), 2018.

91. Shuangjiang Yu, Chao Wang, Jicheng Yu, Jinqiang Wang, Yue Lu, Yuqi Zhang, Xudong Zhang, Quanyin Hu, Wujin Sun, Chaoliang He*, Xuesi Chen*, <u>Zhen Gu*</u>, "Injectable Bioresponsive Gel Depot for Enhanced Immune Checkpoint Blockade", *Advanced Materials*, 1801527, 2018.

92. Jinqiang Wang, Yanqi Ye, Jicheng Yu, Anna R. Kahkoska, Xudong Zhang, Chao Wang, Wujin Sun, Ria D. Corder, Zhaowei Chen, Saad A. Khan, John B. Buse, <u>Zhen Gu*</u>, "Core-Shell Microneedle Gel for Self-Regulated Insulin Delivery", **ACS Nano**, 12(2466), 2018.

93. Junnan Tang, Teng Su, Ke Huang, Phuong-Uyen Dinh, Zegen Wang, Adam Vandergriff, Michael T. Hensley, Jhon Cores, Tyler Allen, Taosheng Li, Erin Sproul, Emily Mihalko, Leonard J. Lobo, Laura Ruterbories, Alex Lynch, Ashely Brown, Thomas George Caranasos, Deliang Shen, George Andrew Stouffer, <u>Zhen Gu</u>, Jinying Zhang, Ke Cheng^{*}, "Targeted Repair of Heart Injury by Stem Cells Fused with Platelet Nanovesicles", **Nature Biomedical Engineering**, 2(17), 2018.

94. <u>Zhen Gu*</u>, Xiaoyuan Chen*, "Towards Enhancing Skin Drug Delivery", **Advanced Drug Delivery Reviews**, 17(1), 2018. (Editorial) **O**

95. Quanyin Hu, Qian Chen, <u>Zhen Gu*</u>, "Advances in transformable drug delivery systems", **Biomaterials**, 178(546), 2018. 96. Xudong Zhang, Chao Wang, Jinqiang Wang, Quanyin Hu, Benjamin Langworthy, Yanqi Ye, Wujin Sun, Jing Lin, Tianfu Wang, Jason Fine, Hao Cheng, Gianpietro Dotti, Peng Huang*, <u>Zhen Gu*</u>, "PD-1 Blockade Cellular Vesicles for Cancer Immunotherapy", **Advanced Materials**, 30(1707112), 2018.

97. Qian Chen, Chao Wang, Guojun Chen, Quanyin Hu, <u>Zhen Gu*</u>, "Delivery Strategy for Immune Checkpoint Blockade", *Advanced Healthcare Materials*, 1800424, 2018.

98. Guojun Chen, Jicheng Yu, <u>Zhen Gu*</u>, "Glucose-Responsive Microneedle Patches for Diabetes Treatment", **Journal of Diabetes Science and Technology**, 1(41), 2018

99. Meng Liu, Shiyang Shen, Di Wen, Mengru Li, Teng Li, Xiaojie Chen, <u>Zhen Gu*</u>, Ran Mo*, "Hierarchical Nanoassemblies-Assisted Combinational Delivery of Cytotoxic Protein and Antibiotic for Cancer Treatment", **Nano Letters**, 18 (2294), 2018

100. Wenfei Chen, Ying Wang, Ming Qin, Xudong Zhang, Zhirong Zhang, Xun Sun*, <u>Zhen Gu</u>, "Bacteria-Driven Hypoxia Targeting for Combined Biotherapy and Photothermal Therapy", **ACS Nano**, 6(5995), 2018

101. Yuqi Zhang, Peijian Feng, Jicheng Yu, Jia Yang, Jiacheng Zhao, Jinqiang Wang*, Qundong Shen*, <u>Zhen Gu*</u>, "ROS-Responsive Microneedle Patch for Acne Vulgaris Treatment", *Advanced Therapeutics*, 1800035, 2018.

102. Zhaowei Chen+, Quanyin Hu+, <u>Zhen Gu*</u>, "Leveraging Engineering of Cells for Drug Delivery", **Accounts of Chemical Research**, 51(668), 2018.

103. Jicheng Yu, Yuqi Zhang, <u>Zhen Gu*</u>, "Advances in Bioresponsive Closed-loop Drug Delivery Systems", *International Journal of Pharmaceutics*, 544(350), 2018.

104. Junjie Yan, Yue Lu, Min Yang*, <u>Zhen Gu*</u>, "Advances in Liquid Metals for Biomedical Applications", **Chemical Society** *Reviews*, 47(2518), 2018.

105. Yanqi Ye, Jicheng Yu, Di Wen, Anna R. Kahkoska, <u>Zhen Gu*</u>, "Polymeric Microneedles for Transdermal Protein Delivery", *Advanced Drug Delivery Reviews*, 127(106), 2018.

106. Guang Yang*, Yuqi Zhang, <u>Zhen Gu*</u>, "Punching and Electroporation for Enhanced Transdermal Drug Delivery", *Theranostics*, 13 (3688), 2018. (News&Views) ⊙

107. Yingli Luo, Congfei Xu, Hongjun Li, Zhiting Cao, Jing Liu, Jilong Wang, Xiaojiao Du, Xianzhu Yang*, <u>Zhen Gu</u>, Jun Wang*, "Macrophage-Specific in Vivo Gene Editing Using Cationic Lipid-Assisted Polymeric Nanoparticles", **ACS Nano**, 12(994), 2018.

108. Yuqi Zhang, Jinqiang Wang*, Anna R. Kahkoska, John B. Buse, <u>Zhen Gu*</u>, "Bioresponsive Microneedles with a Sheath Structure for H₂O₂ and pH Cascade-Triggered Insulin Delivery", **Small**, 14(1704181), 2018.

109. Yuqi Zhang, Jicheng Yu, Di Wen, Guojun Chen, <u>Zhen Gu*</u>, "The Potential of a Microneedle Patch for Reducing Obesity", *Expert Opinion on Drug Delivery*, 15(431), 2018

110. Yuqi Zhang, Jicheng Yu, Li Qiang*, <u>Zhen Gu*</u>, "Nanomedicine for Obesity Treatment", **Science China Life Sciences**, 64(373), 2018.

111. Lulu Cai, Zhipeng Gu, Jian Zhong, Di Wen, Guojun Chen, Lin He, Jun Wu*, <u>Zhen Gu*</u>, "Advances in Glycosylation-Mediated Cancer-Targeted Drug Delivery", *Drug Discovery Today*, 23(1126), 2018.

112. Shuangjiang Yu, Dianliang Zhang, Chaoliang He^{*}, Wujin Sun, Rangjuan Cao, Shusen Cui, Mingxiao Deng, <u>Zhen Gu^{*}</u>, Xuesi Chen^{*}, "Injectable Thermo-Sensitive Polypeptide-based CDDP-Complexed Hydrogel for Improving Localized Antitumor Efficacy", **Biomacromolecules**, 18(4341), 2017.

113. Naveed Bakh, Mabel Cortinas, Michael Weiss, Robert Langer, Daniel Anderson, <u>Zhen Gu</u>, Sanjoy Dutta, Michael Strano*, "Glucose-Responsive Insulin by Molecular and physical Design", *Nature Chemistry*, 9(937), 2017.

114. Junjie Yan, Jicheng Yu, Chao Wang, <u>Zhen Gu*</u>, "Red Blood Cells for Drug Delivery", **Small Methods**, 1700270, 2017. 115. Jinqiang Wang, Yuqi Zhang, Edikan Archibong, Frances S. Ligler*, <u>Zhen Gu*</u>, "Leveraging H₂O₂ Levels for Biomedical Applications", *Advanced Biosystems*, 1(1700084), 2017.

116. Chao Wang, Di Wen, <u>Zhen Gu*</u>, "Cellular Bioparticulates with Therapeutics for Cancer Immunotherapy", **Bioconjugate Chemistry**, 29(702), 2017.

117. Guang Yang, Yue Lu, Hunter N. Bomba, <u>Zhen Gu*</u>, "Cysteine-rich Proteins for Drug Delivery and Diagnosis", *Current Medicinal Chemistry*, 24, 2017.

118. Yuqi Zhang, Qiongming Liu, Jicheng Yu, Shuangjiang Yu, Jinqiang Wang, Li Qiang, <u>Zhen Gu*</u>, "Locally-Induced Adipose Tissue Browning by Microneedle Patch for Obesity Treatment", **ACS Nano**, 11(9223), 2017.

119. Yue Lu, Zhen Gu*, "Kidney: a Size "Bandpass" Filter", Nature Nanotechnology, 12(2013), 2017. (News&Views) 👁

120. Chunfang Gu, Hoai-Nghia Nguyen, Douglas Ganini, Zhaowei Chen, Henning J Jessen, <u>Zhen Gu</u>, Huanchen Wang, Stephen B Shears, "Knockout of 5-InsP7 Kinase Activity Transforms the HCT116 Colon Cancer Cell line into a Hypermetabolic, Growth-Inhibited Phenotype", *Proceedings of the National Academy of Sciences U.S.A. (PNAS)*, 114(11968), 2017.

121. Wujin Sun, Wenyan Ji, Quanyin Hu, <u>Zhen Gu*</u>, "Leveraging Physiology for Precision Drug Delivery", **Physiological** *Reviews*, 97(189), 2017.

122. Yuqi Zhang, Jicheng Yu, Hunter Bomba, Yong Zhu, Zhen Gu*, "Mechanical Force-Triggered Drug Delivery", *Chemical Reviews*, 116(19), 2016.

123. Jicheng Yu, Yuqi Zhang, Anna R. Kahkoska, <u>Zhen Gu*</u>, "Bioresponsive Transcutaneous Patches", **Current Opinion in** *Biotechnology*, 48(28), 2017

124. Chao Wang, Yanqi Ye, Wujin Sun, Jicheng Yu, Jinqiang Wang, David Lawrence, John Buse, <u>Zhen Gu*</u>, "Red Blood Cells for Glucose-Responsive Insulin Delivery", *Advanced Materials*, 29(1606617), 2017.

125. Yuqi Zhang, Jicheng Yu, Jinqiang Wang, Nicholas J. Hanne, Zheng Cui, Chenggen Qian, Chao Wang, Hongliang Xin, Jacqueline H. Cole, Caterina M. Gallippi*, Yong Zhu*, <u>Zhen Gu*</u>, "Thrombin-Responsive Transcutaneous Patch for Auto-Anticoagulant Regulation", *Advanced Materials*, 29(1604043), 2017. (Cover Feature)

126. Chao Wang, Wujin Sun, Yanqi Ye, Hunter Bomba, <u>Zhen Gu*, "In situ</u> Activation of Platelets with Checkpoint Inhibitors for Post-Surgical Cancer Immunotherapy", **Nature Biomedical Engineering**, 1(0017), 2017.

127. Quanyin Hu, Wujin Sun, Chenggen Qian, Hunter N. Bomba, Hongliang Xin, <u>Zhen Gu*</u>, "Relay Drug Delivery for Amplifying Targeting Signal and Enhancing Anticancer Efficacy", *Advanced Materials*, 29(1605803), 2017.

128. Yanqi Ye, Jinqiang Wang, Quanyin Hu, Gabrielle M. Hochu, Hongliang Xin, Chao Wang^{*}, <u>Zhen Gu^{*}</u>, "Synergistically Transcutaneous Immunotherapy Enhances Antitumor Immune Responses through Blockade of PD1 and IDO", **ACS Nano**, 10(8956), 2016.

129. Chao Wang, Yanqi Ye, Quanyin Hu, Adriano Bellotti, <u>Zhen Gu*</u>, "Tailoring Biomaterials for Cancer Immunotherapy: Emerging Trends and Future Outlook", **Advanced Materials**, 29(1606036), 2017.

130. Yue Lu, Yiliang Lin, Zhaowei Chen, Yang Liu, Shuangjiang Yu, Wei Gao, Michael D. Dickey, <u>Zhen Gu*</u>, "Enhanced Endosomal Escape by Light-fueled Liquid- metal Transformer", **Nano Letters**, 17(2138), 2017.

131. Yanqi Ye, Chao Wang, Xudong Zhang, Quanyin Hu, Yuqi Zhang, Qi Liu, Di Wen, Joshua Milligan, Adriano Bellotti, Leaf Huang, Gianpietro Dotti, <u>Zhen Gu*</u>, "A Melanin-Mediated Cancer Immunotherapy Patch", **Science Immunology**, 2(eaan5692), 2017.

132. Xiuli Hu, Yuqi Zhang, Zhigang Xie, Xiabin Jing, Adriano Bellotti, <u>Zhen Gu</u>*, "Stimuli-Responsive Polymersomes for Biomedical Applications", **Biomacromolecules**, 18(649), 2017.

133. Jin Di, Jicheng Yu, Qun Wang, Shanshan Yao, Dingjie Suo, Yanqi Ye, Matthew Pless, Yong Zhu, Yun Jing, <u>Zhen Gu*</u>, Ultrasound-Triggered Noninvasive Regulation of Blood Glucose Levels Using Microgels Integrated with Insulin Nanocapsules, **Nano Research**, 10(1393), 2017.

134. Chenggen Qian, Jicheng Yu, Yulei Chen, Quanyin Hu, Xuanzhong Xiao, Wujin Sun, Chao Wang, Qun-Dong Shen, <u>Zhen Gu*</u>, "Light-Activated Hypoxia-Responsive Nanocarriers for Enhanced Anticancer Therapy", **Advanced Materials**, 28(3313), 2016. **(Cover Feature)**

135. Yanqi Ye, Jicheng Yu, Chao Wang, Nhu-Y Nguyen, John B. Buse, <u>Zhen Gu*</u>, "Microneedles Integrated with Pancreatic Cells and Synthetic Glucose-Signal Amplifiers for Smart Insulin Delivery", *Advanced Materials*, 28(3115), 2016. (Cover Feature)

136. Jicheng Yu, Chenggen Qian, Yuqi Zhang, Zhen Cui, Yong Zhu, Qun-Dong Shen, Frances Ligler, John Buse, <u>Zhen Gu*</u>, "Hypoxia and H₂O₂ Dual-Sensitive Vesicles for Enhanced Glucose-Responsive Insulin Delivery", **Nano Letters**, 17(733), 2017.

137. Chenggen Qian, Peijian Feng, Jicheng Yu, Yulei Chen, Qundong Shen*, <u>Zhen Gu*</u>, "Anaerobe-Inspired Anticancer Nanovesicles", *Angewandte Chemie International Edition*, 56(2588), 2017. (VIP Paper; Cover Feature)

138. Xiuli Hu, Jicheng Yu, Chenggen Qian, Yue Lu, Anna R. Kahkoska, Zhigang Xie, Xiabin Jing, John B. Buse, <u>Zhen Gu*</u>, "H₂O₂-Responsive Vesicles Integrated with Transcutaneous Patches for Glucose-Mediated Insulin Delivery", **ACS Nano**, 11(613), 2017. 139. Ping'an Ma, Haihua Xiao, Chang Yu, Jianhua Liu, Ziyong Cheng, Haiqin Song, Xinyang Zhang, Chunxia Li, Jinqiang Wang, <u>Zhen Gu*</u>, Jun Lin*, "Enhanced Cisplatin Chemotherapy by Iron Oxide Nanocarriers-Mediated Generation of Highly Toxic Reactive Oxygen Species", **Nano Letters**, 17(928), 2017.

140. Chao Wang, Wujin Sun, Yanqi Ye, Hunter N. Bomba, <u>Zhen Gu*</u>, "Bioengineering of Artificial Antigen Presenting Cells and Lymphoid Organs", *Theranostics*, 7(3504), 2017.

141. Yuqi Zhang, Jicheng Yu, Anna Kahkoska, Zhen Gu*, "Photoacoustic Drug Delivery", Sensors, 17(1400), 2017.

142. Jicheng Yu, Yuqi Zhang, Wujin Sun, Anna R. Kahkoska, Jinqiang Wang, John B. Buse, <u>Zhen Gu*</u>, "Insulin-Responsive Glucagon Delivery for Prevention of Hypoglycemia", **Small**, 13(1603028), 2017. (Cover Feature)

143. Chenggen Qian, Yulei Chen, Peijian Feng, Xuanzhong Xiao, Mei Dong, Jicheng Yu, Quanyin Hu, Qundong Shen, <u>Zhen Gu*</u> "Conjugated Polymer Nanomaterials for Theranostics", **Acta Pharmacologica Sinica**, 38(764), 2017.

144. Yue Lu, Alex Aimetti, Robert Langer*, <u>Zhen Gu*</u>, "Bioresponsive Materials", **Nature Reviews Materials**, 1(16075), 2016.

145. Chao Wang, Yanqi Ye, Gabrielle M. Hochu, <u>Zhen Gu*</u>, "Enhanced Cancer Immunotherapy by Microneedle Patch-Assisted Delivery of Anti-PD1 Antibody", **Nano Letters**, 16(2334), 2016.

146. Quanyin Hu, Chenggen Qian, Wujin Sun, Jinqiang Wang, Zhaowei Chen, Hunter N. Bomba, Hongliang Xin, Qundong Shen, <u>Zhen Gu*</u>, "Engineered Nano-platelets for Enhanced Treatment of Multiple Myeloma and Thrombus", *Advanced Materials*, 28(9573), 2016.

147. Quanyin Hu, Wujin Sun, Hunter Bomba, <u>Zhen Gu*</u>, "Tumor Microenvironment-Mediated Construction and Deconstruction of Depots for Enhanced Anticancer Efficacy", **Nano Letters**, 16(1118), 2016.

148. Chao Wang, Wujin Sun, Yanqi Ye, Grace Wright, Andrew Wang, <u>Zhen Gu*</u>, "Inflammation-Triggered Cancer Immunotherapy by Programmed Delivery", *Advanced Materials*, 28(8912), 2016.

149. Dongquan Shi, Xingquan Xu, Yanqi Ye, Kai Song, Yixiang Cheng, Jin Di, Quanyin Hu, Jianxin Li, Huangxian Ju, Qing Jiang*, <u>Zhen Gu*</u>, "Photo-Crosslinked Scaffold with Kartogenin-Encapsulated Nanoparticles for Cartilage Regeneration", **ACS Nano**, 10(1292), 2016.

150. <u>Zhen Gu*</u>, "Intorduction to Special Issue- Responsive Materials and Systems: Toward Smart and Precision Medications", **Bioengineering and Translational Medicine**, 1(235), 2016. (Editorial) ⊙

151. Quanyin Hu, <u>Zhen Gu*</u>, "Engineering Platelet-Mimicking Drug Delivery Vehicles", *Frontiers of Chemical Sciences* and Engineering, 1, 2016.

152. Jicheng Yu, Xiuli Hu, <u>Zhen Gu*</u>, "Stimuli-Responsive Delivery of Therapeutics for Diabetes Treatment", **Bioengineering and Translational Medicine**, 1(323), 2016.

153. Wujin Sun, <u>Zhen Gu*</u>, "Tailoring Non-Viral Delivery Vehicles for Transporting Genome-Editing Tools", **Science China** *Materials*, 60(511), 2016.

154. Lingyan Lv, Xin Liu, Baoyan Wang, Yan Jian, Wei Lv, Yue Zhao, Huihui Shi, Quanyin Hu, Hongliang Xin, Qunwei Xu*, <u>Zhen Gu</u>, "Enhanced Antiglioblastoma Efficacy of Neovasculature and Glioma Cells Dual Targeted Nanoparticles", *Molecular Pharmaceutics*, 13(3506), 2016.

155. Xudong Zhang, Xin Liang, Jianjun Gu, Danfeng Chang, Jinxie Zhang, Zhaowei Chen, Yanqi Ye, Chao Wang, Wei Tao, Xiaowei Zeng, Gan Liu, Yongjun Zhang*, Lin Mei*, <u>Zhen Gu*</u>, "Investigation and Intervention of Autophagy to Guide Cancer Treatment with Nanogels", **Nanoscale**, 9(150), 2016.

156. Chao Wang*, Yanqi Ye, <u>Zhen Gu*</u>, "Local Delivery of Checkpoints Antibodies", *Human Vaccines & Immunotherapeutics*, 13(245), 2016

157. Chenggen Qian, Yulei Chen, Sha Zhu, Jicheng Yu, Lei Zhang, Peijian Feng, Xin Tang, Xuanzhong Xiao, Qun-Dong Shen, <u>Zhen Gu*</u>, "ATP-Responsive and Near-Infrared-Emissive Nanocarriers for Anticancer Drug Delivery and Real-Time Imaging", *Theranostics*, 6(1053), 2016.

158. Jicheng Yu, Yuqi Zhang, Xiuli Hu, Wujin Sun, Chao Wang, Yanqi Ye, <u>Zhen Gu*</u>, "Internalized Compartments-Encapsulated Nanogel for Targeted Drug Delivery", **Nanoscale**, 8(9178), 2016.

159. Wujin Sun, Wenyan Ji, Quanyin Hu, Jicheng Yu, Chao Wang, Chenggen Qian, Gabrielle Hochu, <u>Zhen Gu*</u>, "Transformable Nanocarriers for Membrane Targeted Delivery of Cytokines", **Biomaterials**, 96(1), 2016.

160. Yue Zhao, Yan Jiang, Wei Lv, Zhongyuan Wang, Lingyan Lv, Baoyan Wang, Xin Liu, Yang Liu, Quanyin Hu, Wujin Sun, Qunwei Xu, Hongliang Xin*, <u>Zhen Gu</u>, "Dual Targeted Nanocarrier for Brain Ischemic Stroke Treatment", **Journal of Controlled Release**, 233(64), 2016.

161. Wujin Sun, <u>Zhen Gu*</u>, "ATP-Responsive Drug Delivery Systems", *Expert Opinion on Drug Delivery*, 13(311), 2016. 162. Yuqi Zhang, Yong Zhu*, <u>Zhen Gu*</u>, "Elastic Drug Delivery: could treatments be triggered by patient movement?" *Nanomedicine*, 11(323), 2016.

163. Jicheng Yu, <u>Zhen Gu*</u>, "Hypoxia-Sensitive Materials for Biomedical Applications", **Annals of Biomedical Engineering**. 44(1931), 2016. (Invited Article for special issue on "Biomaterials")

164. Jicheng Yu, Yuqi Zhang, Yanqi Ye, Rocco DiSanto, Wujin Sun, Davis Ranson, Frances Ligler, John Buse, <u>Zhen Gu*</u>, "Microneedle-Array Patches Loaded with Hypoxia-Sensitive Vesicles Provide Fast Glucose-Responsive Insulin Delivery", **Proceedings of the National Academy of Sciences U.S.A. (PNAS)**, 112(8260), 2015.

165. Yue Lu, Quanyin Hu, Yiliang Lin, Dennis B. Pacardo, Chao Wang, Wujin Sun, Frances S. Ligler, Michael D. Dickey, <u>Zhen Gu*</u>, "Transformable Liquid-Metal Nanomedicine", **Nature Communications**, 6(10066), 2015.

166. Samir Mitragotri*, Daniel G. Anderson, Shawn X. Chen, Edward K. Chow, Dean Ho, Alexander V. Kabanov, Jeffrey M. Karp, Kazunori Kataoka, Chad A. Mirkin, Sarah Hurst. Petrosko, Jinjun Shi, Molly M. Stevens, Shouheng Sun, Sweehin Teoh, Subbu S. Venkatraman, Younan Xia, Shutao Wang, <u>Zhen Gu*</u>, Chenjie Xu*, "Accelerating the Translation of Nanomaterials in Biomedicine", **ACS Nano**, 9(6644), 2015.

167. Quanyin Hu, Chenggen Qian, Yanqi Ye, Chao Wang, <u>Zhen Gu*</u>, "Anticancer Platelet-Mimicking Nanovehicles", *Advanced Materials*, 27(7043), 2015. (VIP Paper; Cover Feature)

168. Wujin Sun, Wenyan Ji, Jordan M. Hall, Quanyin Hu, Chao Wang, Chase L. Beisel, <u>Zhen Gu*</u>, "Efficient Delivery of CRISPR-Cas9 for Genome Editing via Self-Assembled DNA Nanoclews", **Angewandte Chemie International Edition**, 127(12197), 2015. (Hot Paper; Cover Feature)

169. Jin Di, Shanshan Yao, Yanqi Ye, Zheng Cui, Jicheng Yu, Tushar K. Ghosh, Young Zhu*, <u>Zhen Gu</u>*, "Stretch-Triggered Drug Delivery from Wearable Elastomer Films Containing Therapeutic Depots", **ACS Nano**, 9(9407), 2015.

170. Ran Mo, <u>Zhen Gu*</u>, "Tumor microenvironment and intracellular signal-activated nanomaterials for anticancer drug delivery", *Materials Today*, 19(274), 2015.

171. Quanyin Hu, Wujin Sun, <u>Zhen Gu*</u>, "Recent advances of cocktail chemotherapy by combination drug delivery systems", *Advanced Drug Delivery Reviews*, 98(19), 2015. (Invited Article)

172. Wujin Sun, Tianyue Jiang, Yue Lu, Margaret Reiff, Ran Mo, <u>Zhen Gu*</u>, "Cocoon-Like Self-Degradable DNA-Nanoclew for Anticancer Drug Delivery", **Journal of the American Chemical Society**, 136(14722), 2014.

173. Muxun Zhao, Yarong Liu, Renee Hsieh, Nova Wang, Kye-II Joo, Pin Wang, <u>Zhen Gu</u>, Yi Tang*, "Clickable Protein Nanocapsules for Targeted Delivery of Recombinant p53 Protein" *Journal of the American Chemical Society*, 136(15319), 2014.

174. Ran Mo, Tianyue Jiang, <u>Zhen Gu*</u>, "Enhanced Anticancer Efficacy by ATP-Mediated Liposomal Drug Delivery", *Angewandte Chemie International Edition*, 53(5810), 2014.

175. Wujin Sun, Yue Lu, <u>Zhen Gu*</u>, "Rolling Circle Amplification (RCA) for Engineering Drug Delivery Carriers" **Therapeutic Delivery**, 6(765), 2015.

176. Tianyue Jiang, Wujin Sun, Nancy A. Burns, Saad A. Khan, Ran Mo, <u>Zhen Gu*</u>, "Furin-Mediated Sequential Delivery of Anticancer Cytokine and Small-Molecule Drug Shuttled by Graphene", *Advanced Materials*, 27(1021), 2015. (Cover Feature)

177. Jin Di, Jinwook Kim, Quanyin Hu, Xiaoning Jiang*, <u>Zhen Gu*</u>, "Spatiotemporal Drug Delivery Using Laser-Generated-Focused Ultrasound System", **Journal of Controlled Release**, 220(592), 2015.

178. Xiaohui Li, Jicheng Yu, Naiyan Lu, Weidong Zhang, Zhijun Hu, Yuqiang Ma, Yuyan Weng*, <u>Zhen Gu*</u>, "Confinement-induced Nanocrystals Alignment under the Soft-Stamped Nanoimprint Lithography", *Chinese Physics B*, 24(104215), 2015.

179. Jin Di⁺, Jicheng Yu⁺, Yanqi Ye, Davis Ranson, Abby Jindal, Zhen Gu^{*}, "Engineering Synthetic Insulin-Secreting Cells Using Hyaluronic Acid Microgels Integrated with Glucose-Responsive Nanoparticles" *Cellular and Molecular Bioengineering*, 8(445), 2015. (Cover Feature; Young Innovators Special Issue).

180. Yanqi Ye, Jicheng Yu, <u>Zhen Gu*</u>, "*In Situ* Preparation of Stimuli-Responsive Protein Nanogels", *Macromolecular Chemistry and Physics*, 217(333), 2015. (Invited Article; "Young Talents in Polymer Science" Specific Issue)

181. Dennis B. Pacardo, Bhanu Neupane, S. Michaela Rikard, Yue Lu, Ran Mo, Sumeet R. Mishra, Joseph B. Tracy, Gufeng Wang, Frances S. Ligler* and <u>Zhen Gu*</u>, "A dual wavelength-activatable gold nanorod complex for synergistic cancer treatment", *Nanoscale*, 7(12096), 2015.

182. Wenyan Ji, Wujin Sun, Jinmei Feng, Tianshun Song, Dalu Zhang, Pingkai Ouyang, <u>Zhen Gu</u>, Jingjing Xie*, "Characterization of a Novel *N*-Acetylneuraminic Acid Lyase Favoring *N*-Acetylneuraminic Acid Aynthesis", **Scientific Reports**, 5(9341), 2015.

183. Bingxi Yan, Boyi Li, Forest Kunecke, <u>Zhen Gu</u>, Liang Guo*, "Polypyrrole-Based Implantable Electroactive Pump for Controlled Drug Microinjection", **ACS Applied Materials & Interfaces**, 7(14563), 2015.

184. Dennis Pacardo, Frances Ligler*, <u>Zhen Gu*</u>, "Programmable Nanomedicine: Synergistic and Sequential Drug Delivery Systems", **Nanoscale**, 7(3381), 2015.

185. Wujin Sun, <u>Zhen Gu*</u>, "Engineering DNA-Scaffolds for Delivery of Anticancer Therapeutics", **Biomaterials Science**, 3(1018), 2015. (Invited Article for "*Polymeric Biomaterials in Cancer Nanotechnology Special Issue*")

186. Ran Mo, Tianyue Jiang, Wujin Sun, <u>Zhen Gu*</u>, "ATP-Responsive DNA/Graphene Nanoaggretes for Enhanced Control Drug Delivery", **Biomaterials**, 50(67), 2015.

187. Ran Mo, Tianyue Jiang, Rocco DiSanto, Wanyi Tai, <u>Zhen Gu*</u>, "ATP-Triggered Anticancer Drug Delivery", **Nature Communications**, 5(3364), 2014.

188. Wanyi Tai, Ran Mo, Jin Di, Vinayak Subramanian, Xiao Gu, John Buse, <u>Zhen Gu*</u>, "Bio-Inspired Synthetic Nanovesicles for Glucose-Responsive Release of Insulin", *Biomacromolecules*, 15(3495), 2014.

189. Yue Lu, Ran Mo, Wanyi Tai, Wujin Sun, Dennis Pacardo, Frances Ligler, <u>Zhen Gu*</u>, "Self-Folded Redox/pH Dual-Responsive Nanocarriers for Anticancer Drug Delivery", **Chemical Communications**, 50(15105), 2014.

190. Yuqi Zhang, Jicheng Yu, Qundong Shen, <u>Zhen Gu*</u>, "Glucose-Responsive Synthetic Closed-Loop Insulin Delivery Systems", **Progress in Chemistry**, 1(11), 2015.

191. Ran Mo, Tianyue Jiang, Jin Di, Wanyi Tai, <u>Zhen Gu*</u>, "Emerging Micro- and Nanotechnology Based Synthetic Approaches for Insulin Delivery", **Chemical Society Reviews**, 43(3595), 2014. (**Invited Review**)

192. Yue Lu, Wujin Sun, <u>Zhen Gu*</u>, "Stimuli-Responsive Nanomaterials for Therapeutic Protein Delivery", *Journal of Controlled Release*, 194(1), 2014.

193. Quanyin Hu, Prateek Katti, <u>Zhen Gu*</u>, "Enzyme-Responsive Nanomaterials for Controlled Drug Delivery", **Nanoscale**, 6(12273), 2014.

194. Wujin Sun, Yue Lu, <u>Zhen Gu*</u>, "Advances in Anticancer Protein Delivery Using Micro- Nanoparticles", **Particle**, 31(1204), 2014. (**Invited Article** for "the Particles for Healthcare Applications Special Issue")

195. Rocco DiSanto, Vinayak Subramanian, <u>Zhen Gu*</u>, "Recent advances in nanotechnology for diabetes treatment", *WIREs Nanomedicine & Nanobiotechnology*, 7(548), 2015.

196. Dennis Pacardo, Bhanu Nupane, Gufeng Wang, <u>Zhen Gu</u>, Glenn Walker, Frances Ligler*, A Temperature Microsensor for Measuring Laser-Induced Heating in Gold Nanorods, **Analytical & Bioanalytical Chemistry**, 407(719), 2014.

197. Jicheng Yu, Yu-Lei Chen, Yu-Qi Zhang, Xi-Kuang Yao, Cheng-Gen Qian, Jun Huang, Sha Zhu, Xi-Qun Jiang, Qun-Dong Shen, <u>Zhen Gu*</u>, "pH-Responsive and Near-Infrared-Emissive Polymer Nanoparticles for Simultaneous Delivery, Release, and Fluorescence Tracking of Doxorubicin *in vivo*", *Chemical Communications*, 50(4699), 2014.

198. Wanyi Tai, Ran Mo, Yue Lu, Tianyue Jiang, <u>Zhen Gu*</u>, "Folding Drug-Pending Segment into Nanocarriers for Co-Delivery of Anticancer Drugs", **Biomaterials**, 35(7194), 2014.

199. Yizhou Dong, Ahmed A. Eltoukhy, Christopher A. Alabi, Omar F. Khan, Omid Veiseh, J. Robert Dorkin, Sasilada Sirirungruang, Hao Yin, Benjamin C. Tang, Jeisa M. Pelet, Delai Chen, <u>Zhen Gu</u>, Yuan Xue, Robert Langer, Daniel G. Anderson*, "Lipid-Like Nanomaterials for Simultaneous Gene Expression and Silencing *In Vivo*", *Advanced Healthcare Materials*, 3(1392), 2014.

200. Tianyue Jiang[†], Ran Mo[†], Adriano Bellotti, Jianping Zhou, <u>Zhen Gu^{*}</u>, "Gel-Liposome-Mediated Co-Delivery of Anticancer Membrane-Associated Proteins and Small-Molecule Drugs for Enhanced Therapeutic Efficacy" *Advanced Functional Materials*, 24(2295), 2014. (Cover Feature)

201. Jin Di, Jennifer Price, Xiao Gu, Xiaoning Jiang, Yun Jing, <u>Zhen Gu*</u>, "Ultrasound-Triggered Regulation of Blood Glucose Levels Using Injectable Nano-Network", **Advanced Healthcare Materials**, 3(811), 2014. (Cover Feature)

202. Ran Mo, Tianyue Jiang, <u>Zhen Gu*</u>, "How Recent Progress in Multi-Drug Delivery to Cancer Cells by Liposomes", *Nanomedicine*, 9(1117), 2014. (Editorial) ⊙

203. Ying Chen, Jingya Nan, Yue Lu, Chunpeng Wang, Fuxiang Chu, <u>Zhen Gu*</u>, "Hybrid Fe3O4-Poly (Acrylic Acid) Nanogels for Theranostic Cancer Treatment", **Journal of Biomedical Nanotechnology**, 11(5), 2014.

204. Yunlong Zhang, Jeisa M Pelet, Daniel A Heller, Jasmine Wallas, Yizhou Dong, <u>Zhen Gu</u>, Robert Langer, Daniel G. Anderson*, "Developing Lipid-Modified Aminoglycosides Derivatives for *in vivo* siRNA Delivery", **Advanced Materials**, 25(4641), 2013. (Cover Feature)

205. <u>Zhen Gu</u>, Tram Dang, Minglin Ma, Yunlong Zhang, Robert Langer, Daniel Anderson*, "Microgels Integrated with Enzyme Nanocapsules for Intelligent Insulin Delivery", **ACS Nano**, 7(6758), 2013.

206. <u>Zhen Gu</u>, Alex Aimetti, Tram Dang, Yunlong Zhang, Omid Veiseh, Hao Cheng, Robert Langer, Daniel Anderson*, "Injectable Nano-Network for Glucose-Mediated Insulin Delivery", **ACS Nano**, 7(4194), 2013. (Cover Feature)

207. Qun Wang*, <u>Zhen Gu</u>, Syed Jamal, Michael S. Detamoreand Cory Berkland, "Hydroxyapatite and PLGA Nanoparticles Blends as Cohesive Colloidal Gels to Seeding Human Umbilical Cord Mesenchymal Stem Cells for Bone", *Tissue Engineering, Part A*, 19(2586), 2013.

208. Tram T. Dang, Anh V. Thai, Jeremy E. Slosberg, Joshua Cohen, Minglin Ma, Joshua Doloff, Jennifer Hollister-Lock, <u>Zhen Gu</u>, Hao Cheng, Gordon Weir, Robert Langer, Daniel G. Anderson, "Reduction of fibrosis by anti-inflammatory drug for improved efficacy of encapsulated islets in diabetes therapy", **Biomaterials**, 34 (5792), 2013.

209. Muxun Zhao, Biliang Hu, <u>Zhen Gu</u>, Kye-II Joo, Pin Wang, Yi Tang*, "Degradable Polymeric Nanocapsule for Efficient Intracellular Delivery of a High Molecular Weight Tumor-Selective Protein Complex", **Nano Today**, 8 (11), 2013.

210. Muxun Zhao, Anuradha Biswas, Biliang Hu, Kye-II Joo, Pin Wang, <u>Zhen Gu</u>*, Yi Tang*, "Redox-responsive Protein Nanocapsules for Intracellular Protein Delivery", **Biomaterials**, 32 (5223), 2011.

211. <u>Zhen Gu</u>*, Anuradha Biswas, Muxun Zhao, Yi Tang, "Tailoring Nanocarriers for Intracellular Protein Delivery", **Chemical Society Reviews**, 40 (3638), 2011.

212. Kye-II Joo, Yun Fang, Yarong Liu, Liang Xiao, <u>Zhen Gu</u>, April Tai, Chi-Lin Lee, Yi Tang, Pin Wang^{*}, "Enhanced Real-Time Monitoring of Adeno-Associated Virus Trafficking by Virus-Quantum Dot Conjugates", **ACS Nano**, 5 (3523) 2011.

213. <u>Zhen Gu</u>*, Muxun Zhao, Yuewei Sheng, Laurent A. Bentolila, Yi Tang*, "Detection of Mercury Ion by Infrared Fluorescent Protein and Its Hydrogel-Based Paper Assay", **Analytical Chemistry**, 83 (2324) 2011.

214. Anuradha Biswas, Kye-II Joo, Jing Liu, Muxun Zhao, Guoping Fan, Pin Wang, <u>Zhen Gu</u>*, Yi Tang*, "Endoprotease-mediated Intracellular Protein Delivery Using Nanocapsule", **ACS Nano**, 5 (1385), 2011.

215. Bin Sun, Min-Jie Sun, <u>Zhen Gu</u>, Qun-Dong Shen*, Shao-Jun Jiang, Yu Wang, "Conjugated Polymer Fluorescence Probe for Intracellular Imaging of Magnetic Nanoparticles", **Macromolecules**, 43 (10348), 2010.

216. <u>Zhen Gu</u>, Anuradha Biswas, Kye-II Joo, Biliang Hu, Pin Wang, Yi Tang*, "Probing Protease Activity by Single-Fluorescent-Protein Nanocapsules", **Chemical Communications**, 46 (6467), 2010.

217. <u>Zhen Gu</u>*, Yi Tang*, "Enzyme-Assisted Photolithography for Spatial Functionalization of Hydrogels", *Lab on a Chip*, 10 (1946), 2010. (Cover Feature)

218. <u>Zhen Gu</u>, Xiao-Yuan Chen, Qun-Dong Shen*, Hai-Xiong Ge, Hai-Hua Xu, "Hybrid Nanocomposites of Semiconductor Nanoparticles and Conjugated Polyelectrolytes and Their Application as Fluorescence Biosensors", **Polymer**, 51 (902), 2010.

219. Ming Yan[†], Juanjuan Du[†], <u>Zhen Gu</u>, Min Liang, Yufang Hu, Wenjun Zhang, Tatiana Segura^{*}, Zheng Liu^{*}, Yi Tang^{*}, Yunfeng Lu^{*}, "Novel Intracellular Protein Delivery Platform Based on Single-Protein Nanocapsules", **Nature Nanotechnology**, 5 (48), 2010.

220. <u>Zhen Gu</u>, Ming Yan, Biliang Hu, Kye-II Joo, Anuradha Biswas, Yu Huang, Yunfeng Lu, Pin Wang, Yi Tang, "Protein Nanocapsule Weaved with Enzymatically Degradable Polymeric Network" **Nano Letters**, 12(4533), 2009.

221. <u>Zhen Gu*</u>, Suxian Huang, Yong Chen*, "Biomolecular Nanopatterning by Magnetic Electric Lithography", **Angewandte Chemie International Edition**, 48(952), 2009. (Cover Feature)

222. Lei Zhang*, <u>Zhen Gu</u>, Zhiping Yu, Xiangqing He, Yong Chen, "A CMOS Microarray with On-chip Decoder/Amplifier and Its Integration with Bio-Nano-System", *Journal of Semiconductors*, 29(10) (1947), 2008.

223. Qianxi Lai, Zhiyong Li, Lei Zhang, Xuema Li, William F. Stickle, Zuhua Zhu, <u>Zhen Gu</u>, Theodore I. Kamins, R. Stanley Williams, Yong Chen* "An Organic/Si Nanowire Hybrid Field Configurable Transistor", **Nano Letters**, 3 (876), 2008.

224. <u>Zhen Gu</u>, Qun-Dong Shen*, Juan Zhang, Chang-Zheng Yang, "Dual Electroluminescence from a Single-Component Light-emitting Electrochemical Cell Based on Water-Soluble Conjugated Polymer", *Journal of Applied Polymer Science*, 100 (2930), 2006.

225. <u>Zhen Gu</u>, Yong-Jun Bao, Yang Zhang, Mu Wang, Qun-Dong Shen* "Enhanced Photoluminescence and Dual Electroluminescence of Anionic Water-Soluble Poly(Phenylene Vinylene) Alternating Copolymer", *Macromolecules*, 39 (3125), 2006.

BOOK CHAPTERS

1. <u>Zhen Gu*</u>, Yi Tang, Yong Chen. "Fabrication of Biomolecular Nanopatterns" Chapter in: F. Columbus "*Advances in Nanotechnology*". NOVA Scientific Publisher. 2010.

2. Yuyan Weng, Yue Lu, <u>Zhen Gu*</u> "Hydrogels for Drug Delivery" Chapter in: J. Chan, C. Xu "**Perspectives in Micro and Nanotechnology for Biomedical Applications**". Imperial College Press, UK, 2014.

3. Wanyi Tai, <u>Zhen Gu*</u> "Enzyme Nanocapsules for Glucose Sensing and Insulin Delivery" Chapter in: P. Grunwald "*Biocatalysis and Nanotechnology*". PanStanford Publishing, Singapore, 2014.

4. Wujin Sun, <u>Zhen Gu*</u> "RCA-generated self-degradable DNA nanoclews for pH-responsive delivery of anticancer drugs" Chapter in: V. Demidov "*Rolling Circle Amplification*". Springer, 2016.

5. Dennis B. Pacardo, Frances Ligler*, <u>Zhen Gu*</u> "Dual-Wavelength-Triggered Gold Nanorods for Anticancer Treatment" Chapter in: S. H. Petrosko et al. "**Biomedical Nanotechnology: Methods and Protocols**". Springer Press, 2016.

6. Yuqi Zhang, Jicheng Yu, <u>Zhen Gu*</u> "Hypoxia-Sensitive Vesicles for Glucose-Responsive Insulin Delivery" Chapter in: S. H. Petrosko et al. "*Biomedical Nanotechnology: Methods and Protocols*". Springer Press, 2016.

7. Yanqi Ye, Jinqiang Wang, Wujin Sun, Hunter Bomba, <u>Zhen Gu*</u> "Topical and Transdermal Nanomedicines for Cancer Therapy" Chapter in "*Nanotheranostics for Cancer Applications*", Springer Press, 2019.

• ISSUED PATENTS (total applications: >120; >100 are licensed to companies)

- 1. <u>Zhen Gu</u>, Chao Wang, Yanqi Ye, "Enhanced Cancer Immunotherapy by Microneedle Patch-Assisted Delivery", **Patent Number: 3422945**, Date of Patent: 12/09/2020.
- <u>Zhen Gu</u>, Jicheng Yu, "Glucose-Responsive Insulin Delivery System Using Hypoxia-Sensitive Nanocomposites", *Patent Number: 3285750*, Date of Patent: 10/21/2020
- 3. <u>Zhen Gu</u>, Jicheng Yu, "Glucose-Responsive Insulin Delivery System Using Hypoxia-Sensitive Nanocomposites", *Patent Number:* 2719584, Date of Patent: 04/21/2020

- 4. <u>Zhen Gu</u>, Wanyi Tai, "Methods of folding a graft copolymer with dual anticancer drugs and related applications", **Patent Number: 10,653,709**, Date of Patent: 05/19/2020.
- 5. <u>Zhen Gu</u>, Quanyin Hu, "Platelet membrane-coated drug delivery system", *Patent Number: 10,363,226*, Date of Patent: 07/30/2019.
- <u>Zhen Gu</u>, Ran Mo, Tianyue Jiang, "Methods and constructs for compound delivery", *Patent Number: 9,919,002*, Date of Patent: 03/20/2018.
- Robert S. Langer, Daniel G. Anderson, <u>Zhen Gu</u>, Alex Arthur Aimetti, "Self-regulated peptide hydrogel for insulin delivery", *Patent Number:* 9,994,615, Date of Patent: 06/12/2018.
- Daniel G. Anderson, <u>Zhen Gu</u>, Robert S. Langer, "Glucose-responsive microgels for closed loop insulin delivery", *Patent Number:* 9,339,529, Date of Patent: 05/17/2016.
- 9. Yi Tang, <u>Zhen Gu</u>, Yunfeng Lu, Ming Yan, Anuradha Biswas, Guoping Fan, "Methods for protease assisted protein delivery", **Patent Number: 9,283,194**, Date of Patent: 03/15/2016.

INVITED TALKS AND NAMED LECTURES

1. <u>Zhen Gu</u> "Cell Trojan for Drug Delivery", **Gordon Research Conference (GRC) on Drug Carriers in Medicine and Biology**, Aug. 4, 2020, Vest Dover, VT, USA. (rescheduled due to COVID-19 crisis)

2. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Soft Materials Structures and Devices Seminar Series at MIT**, Apr. 30, 2020, Cambridge, MA, USA. (rescheduled due to COVID-19 crisis)

3. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", *Harvard Topics in Bioengineering (TIB) at Harvard University*, Jan. 21, 2021, Cambridge, MA, USA.

4. Zhen Gu "Bioresponsive Drug Delivery", Felix Franks Award Online Award Ceremony, Jan. 15, 2021, USA.

5. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **2**nd **Shenzhen Annual Conference for Biomedical Materials**, Jan. 8, 2021, Shenzhen, China. (Plenary Speaker)

6. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Annual Meeting for China Biophysics Society, Biomaterials Chapter**, Dec. 27, 2020, Ningbo, China. (Plenary Speaker)

7. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **2020** Annual Meeting for Nanobiotechnology and CCL Nano-Biomaterials, Dec. 26, 2020, Chengdu, China.

8. <u>Zhen Gu</u> "Formulation Strategies for Fighting COVID-19", **2020** Annual Meeting of Nanjing University Biomedical Alumni Union, Dec. 19, 2020, Shanghai, China.

9. Zhen Gu "Bioresponsive Drug Delivery", Materials Today Rising Star Online Award Ceremony, Dec. 10, 2020, USA.

10. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **EBMS/IEEE Maco and Nanotechnologies Annual Meeting**, Dec. 9, 2020, USA.

11. <u>Zhen Gu</u> "Bioresponsive Biomimetic Drug Delivery", **2020** Jiangsu Graduate Students Innovation Forum of Advanced Polymeric Materials, Nov. 28, 2020, Nanjing, China.

12. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **2020** Annual Meeting of Imaging Chapter of China Biomedical Technology **Society**, Nov. 28, 2020, Guangzhou, China.

13. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **College of Pharmaceutical Sciences at Zhejiang University**, Nov. 27, 2020, Hangzhou, China.

14. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Annual Meeting for China Youth Biomaterials Society**, Nov. 6, 2020, Beijing, China. **(Plenary Speaker)**

15. <u>Zhen Gu</u> "Bioresponsive Smart Drug Delivery", **Conference for Intelligent Biomedical Technologies**, Oct. 30, 2020, Qingdao, China.

16. Zhen Gu "Bioresponsive Drug Delivery", OMTA2020, Oct. 21, 2020, Nanjing, China.

17. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **School of Pharmacy and School of Medicine at Zhangzhou University**, Oct. 10, 2020, Changzhou, China.

18. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Biomedical Materials Webinar Series at Institute of Materials Research and Engineering (IMRE), A*STAR**, Aug. 28, 2020, Singapore.

19. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Special Talk for the Centennial Celebration of Chemistry at Nanjing University**, Jul. 3, 2020, Nanjing, China.

20. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *Materials Science & Engineering weekly Colloquium at Stanford University*, Apr. 24, 2020, Stanford, CA, USA.

21. <u>Zhen Gu</u> "Glucose-Responsive Insulin and Delivery Systems", **2020 MRS Spring Meeting**, Apr. 15, 2020, Phoenix, AZ, USA. (rescheduled due to COVID-19 crisis)

22. <u>Zhen Gu</u> "Glucose-Responsive Insulin and Delivery Systems", **2020 ACS Spring Meeting**, Mar. 24, 2020, Philadelphia, PA, USA. (rescheduled due to COVID-19 crisis)

23. "Glucose-Responsive Insulin Delivery", **2020** *Queenstown Molecular Biology Meetings in Shanghai*, Mar. 19, 2020, Shanghai, China. (Keynote Speaker) (rescheduled due to COVID-19 crisis)

24. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Center of Cellular and Molecular Diagnosis at Tulane University**, Mar. 16, 2020, New Orleans, LA, USA. (rescheduled due to COVID-19 crisis)

25. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Princess Margaret Cancer Centre- University Health Network**, Feb. 23, 2020, Toronto, ON, Canada.

26. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **UCI 2019-2020 Immunology Seminar Series**, Jan. 23, 2020, Irvine, CA, USA.

27. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", *Winter Enrichment Program (WEP) 2020 at KAUST*, Jan. 14, 2020, Thuwal, Saudi Arabia.

28. <u>Zhen Gu</u> "Glucose-Responsive Smart Insulin Patch", **15th US-Japan Drug Delivery Symposium**, Dec. 16, 2019, Maui, HI, USA. (Plenary Speaker)

29. <u>Zhen Gu</u> "Glucose-Responsive Insulin and Delivery Systems", **2019 MRS Fall Meeting**, Dec. 5, 2019, Boston, MA, USA. 30. <u>Zhen Gu</u> "Bioresponsive Cancer Immunotherapy", **2019 MRS Fall Meeting**, Dec. 3, 2019, Boston, MA, USA.

31. <u>Zhen Gu</u> "Glucose-Responsive Insulin and Delivery Systems", **UCLA Jonsson Comprehensive Cancer Center**, Nov. 21, 2019, Los Angeles, CA, USA.

32. Zhen Gu "Smart Drug Delivery", College of Health, University of West of Florida, Nov. 14, 2019, Pensacola, FL, USA.

33. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Cardiovascular Nanomedicine Sixth Annual International Meeting**, Nov. 13, 2019, Houston, TX, USA

34. <u>Zhen Gu</u> "Glucose-Responsive Insulin and Delivery Systems", **Combined Endocrine Grand Rounds of UCLA**, Oct. 23, 2019, Los Angeles, CA, USA.

35. <u>Zhen Gu</u> "Bioinspired Drug Delivery", *International Molecular Imaging Summit*, Oct. 19, 2019, Xiamen, China. (Keynote Speaker)

36. Zhen Gu "Bioresponsive Drug Delivery", "Nangiang Forum" of Xiamen University, Oct. 18, 2019, Xiamen, China.

37. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **School of Chemistry and Chemical Engineering of Hebei University**, Oct. 14, 2019, Baoding, China.

38. Zhen Gu "Bioresponsive Drug Delivery", Chinese Pharmaceutical Annual Meeting, Oct. 13, 2019, Yantai, China.

39. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **30**th **European Conference on Biomaterials**, Sep. 10, 2019, Dresden, Germany. **(Keynote Speaker)**

40. Zhen Gu "Platelet-delivered Immunotherapies", 2019 ACS Fall Meeting, Aug. 27, 2017, San Diego, CA, USA.

41. Zhen Gu "Synthetic Closed-Loop Smart Insulin Patch", 2019 ACS Fall Meeting, Aug. 25, 2017, San Diego, CA, USA.

42. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **China Biomaterials Society Annual Meeting**, Aug. 24, 2019, Dalian, China. **(Keynote Speaker)**

43. "Bioresponsive Drug Delivery", 4th symposium of the Chinese American Society of Nanomedicine and Nanobiotechnology (CASNN), Jul. 22, 2019, Hangzhou, China. (Keynote Speaker)

44. Zhen Gu "Bioresponsive Drug Delivery", ChinaNANO 2019, Aug. 19, 2019, Beijing, China.

45. Zhen Gu "Bioresponsive Drug Delivery", Institute of Bioengineering at EPFL, Jul. 19, 2019, Switzerland.

46. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", **2019** International Forum on Innovative Pharmaceutical Research and Development, Jul. 13, 2019, Tianjin, China. (Plenary Speaker)

47. <u>Zhen Gu</u> "Bioresponsive Drug Delivery", *Micro- and Nanotechnologies for Medicine Workshop*, Jul. 8, 2019, Los Angeles, CA, USA.

48. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **10th International Conference on Materials for Advanced Technologies (ICMAT)**, Jun. 27, 2019, Singapore.

49. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Chemical and Biomedical Engineering**, **Nanyang Technological University**, Jun. 26, 2019, Singapore.

50. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", 6th Nano Today Conference, Jun. 17, 2019, Lisbon, Portugal.

51. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **3**rd **Renji International Forum on State-Of-The-Art Joint Knee Arthroplasty**, Jun. 15, 2019, Shanghai, China.

52. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Precision Drug Delivery", **Drug Delivery West (DDW)**, May. 7, 2019, San Francisco, CA, USA. (Keynote Speaker)

53. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Capital Medical University**, May. 27, 2019, San Francisco, CA, USA.

54. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Nanomedicine, Houston Methodist**, Mar. 26, 2019, Houston, TA, USA.

55. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *Iowa State University*, Mar. 6, 2019, Ames, IA, USA. 56. <u>Zhen Gu</u> "Platelet for Drug Delivery", *Gordon Research Conference (GRC) on the Cell Biology of Megakaryocytes*

and Platelets, Feb. 24, 2019, Galveston, TX, USA. 57. <u>Zhen Gu</u> "Platelet for Drug Delivery", **Gordon Research Symposium (GRS) on the Cell Biology of Megakaryocytes** and Platelets, Feb. 22, 2019, Galveston, TX, USA.

58. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *University of Colorado Skaggs School of Pharmacy and Pharmaceutical Sciences*, Feb. 20, 2019, Denver, CO, USA.

59. <u>Zhen Gu</u> "Bioresponsive Smart Drug Delivery", **Research Day in the Department of Bioengineering at UCLA**, Feb. 8, 2019, Los Angeles, CA, USA. (Plenary Speaker)

60. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Pharmacy, Fudan University**, Dec. 14, 2018, Shanghai, China.

61. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Chemistry, Fudan University**, Dec. 13, 2018, Shanghai, China.

62. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Shanghai Renji Hospital**, Dec. 12, 2018, Shanghai, China.

63. Zhen Gu "Leverage Physiology for Bioresponsive Drug Delivery", Wuhan University, Dec. 10, 2018, Shanghai, China.

64. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Sun Yat-Sen University**, Dec. 9, 2018, Guangzhou, China.

65. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Croucher and HKUST Joint Workshop on Synthetic Biology and Living Soft Functional Mater**, Dec. 6, 2018, Hong Kong, China. **(Keynote Speaker)**

66. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Biodesign Institute**, **Arizona State University**, Nov. 29, 2018, Tempe, AZ, USA.

67. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Materials Science and Engineering**, **University of Wisconsin-Madison**, Nov. 15, 2018, Madison, WI, USA.

68. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Chemistry, University of Chicago**, Nov. 13, 2018, Chicago, IL, USA.

69. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Chemistry**, **East China Normal University**, Nov. 7, 2018, Shanghai, China.

70. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *4th International Symposium on Molecular Imaging and Nanomedicine*, Nov. 6, 2018, Suzhou, China. (Keynote Speaker)

71. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **The Functional Nano & Soft Materials Laboratory**, **Soochow University**, Nov. 5, 2018, Suzhou, China.

72. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Chemistry and Chemical Engineering**, **Nanjing University**, Nov. 2, 2018, Nanjing, China.

73. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **2018 World Life Science Conference**, Oct. 27, 2018, Beijing, China.

74. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **3**rd **ChinaNanomedicine Conference**, Oct. 15, 2018, Shanghai, China. (Plenary Speaker)

75. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **29**th **European Conference on Biomaterials**, Sep. 11, 2018, Maastricht, Netherlands. (Keynote Speaker)

76. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *4th International Biomaterials Symposium*, Aug. 25-26, 2018, Changchun, China.

77. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **2018 ACS Fall Meeting**, Aug. 19-23, 2017, Boston, MA, USA.

78. <u>Zhen Gu</u> "Bioresponsive Transdermal Patches", **The 45th Annual Meeting of the Controlled Release Society**, Jul. 24, 2018, New York, USA.

79. <u>Zhen Gu</u> "Bioresponsive Transdermal Patches", *Micro- and Nanotechnologies for Medicine Workshop*, Jul. 15, 2018, Los Angeles, CA, USA.

80. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Nanjing University of Posts and** *Telecommunications*, Jul. 12, 2018, Nanjing, China.

81. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **2nd China International Immunology & Gene Therapy Forum**, Jul. 6, 2018, Beijing, China.

82. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Institute of Chemistry Chinese Academy of Sciences**, Jul. 6, 2018, Beijing, China.

83. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **South China University of Technology**, Jul. 4, 2018, Guangzhou, China.

84. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **West China School of Pharmacy Sichuan University**, Jul. 3, 2018, Chengdu, China.

85. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **US-China Nano Research Symposium**, Jul. 1, 2018, Chengdu, China.

86. Zhen Gu "Leverage Physiology for Bioresponsive Drug Delivery", Nano 2018, Jun. 26, 2018, Hong Kong, China.

87. <u>Zhen Gu</u> "Synthetic Pancreatic Beta Cells", **Gordon Research Conference (GRC) on Biointerface Science**, Jun. 17, 2018, Lucca, Italy.

88. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **The 34**th **Annual Meeting of the Canadian Biomaterials Society**, May. 18, 2018, Victoria, Canada. (Keynote Speaker)

89. <u>Zhen Gu</u> "Glucose-Responsive Insulin Delivery", *IPITA 2018 Opinion Leaders Meeting on Stem Cell Derived Beta Cells*, May. 7, 2018, Boston, MA, USA.

90. <u>Zhen Gu</u> "Glucose-Responsive Insulin Delivery", *International Diabetes and Immunology Conference, Xiangya Hospital*, Apr. 21, 2018, Changsha, China.

91. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *International Advanced Drug Delivery Symposium, National Tsing Hua University*, Apr. 12, 2018, Hsinchu, Taiwan.

92. Zhen Gu "Smart Drug Delivery", sPark Program, NC State, Apr. 7, 2018, Raleigh, NC, USA.

93. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Charles F. Erhart Lecture, Pfizer**, Apr. 6, 2018, Sanford, NC, USA.

94. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *Earle A. Chiles Research Institute*, Mar. 16, 2018, Portland, OR, USA.

95. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Pharmacy, University of Georgia**, Feb. 26, 2018, Atlanta, GA, USA.

96. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Chemistry, Central Michigan University**, Jan. 29, 2018, Mount Pleasant, MI, USA.

97. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Bioengineering, University of California, Los Angeles**, Jan. 18, 2018, Los Angeles, CA, USA.

98. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Medicine, Wayne State University**, Dec. 6, 2017, Detroit, MI, USA.

99. <u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Chemistry, University of Georgia**, Nov. 8, 2017, Atlanta, GA, USA.

100. Zhen Gu "Smart Insulin Delivery", the 17th Annual Diabetes Technology Meeting (DTM), Nov. 4, 2017, D.C., USA.

101. Zhen Gu "Bioresponsive Patches", Beijing Symposium in Biomaterials 2017, Oct. 31, 2017, Soochow, China.

102.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *China Controlled Release Society Annual Meeting*, Oct. 29, 2017, Shanghai, China. (Keynote Speaker)

103.<u>Zhen Gu</u> "Bioresponsive Drug Delivery", *China Biomaterials Society Annual Meeting*, Oct. 28, 2017, Nanchang, China. (Keynote Speaker)

104.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *Pharmacoengineering Seminar, University of North Carolina*, Sep. 22, 2017, Raleigh, NC, USA.

105.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Division of Hematology/Oncology, University of North Carolina at Chapel Hill**, Sep. 21, 2017, Chapel Hill, NC, USA.

106.<u>Zhen Gu</u> "Smart Insulin Delivery", **10**th International Meeting of Pediatric Endocrinology, Sep. 16, 2017, D.C., USA. 107.<u>Zhen Gu</u> "Small and Smart Bioresponsive Patches", *Wiley Small Science Symposium* **2017**, Aug. 30, 2017, Beijing, China.

108.Zhen Gu "Leverage Physiology for Bioresponsive Drug Delivery", ChinaNANO 2017, Aug. 29, 2017, Beijing, China.

109.<u>Zhen Gu</u> "Local/Targeted Delivery of Immune Checkpoint Inhibitors", Workshop on Advances in Nanomedicine, National Cancer Institute (NCI), Aug. 26, 2017, D.C., USA.

110. <u>Zhen Gu</u> "Photoacoustic Drug Delivery", **17th IEEE International Conference on Nanotechnology**, Jul. 27, 2017, Pittsburgh, PA, USA.

111.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *JHU Center for Nanomedicine, Johns Hopkins University*, Jul. 26, 2017, Baltimore, MD, USA.

112. <u>Zhen Gu</u> "Liquid-Metal Nanomedicine", **The 39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'17)**, Jul. 13, 2017, Jeju Island, Korea. 113.<u>Zhen Gu</u> "Bioresponsive Drug Delivery", **Workshop on Advanced Materials, Nanyang Technological University**, Jun. 23, 2017, Singapore.

114.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", 9th International Conference on Materials for Advanced Technologies (ICMAT), Jun. 19, 2017, Singapore.

115.<u>Zhen Gu</u> "Smart Drug Delivery", **APEC Science Prize for Innovation, Research, and Education (ASPIRE) Competition Award Ceremony, U.S. Department of State**, Jun. 12, 2017, D.C., USA.

116. Zhen Gu "Smart Insulin Delivery", 77th ADA Annual Meeting, Jun. 10, 2017, San Diego, CA, USA.

117.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Nanoengineering, UCSD**, Jun. 8, 2017, San Diego, CA, USA.

118.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Pharmacy, Fudan University**, June 1, 2017, Shanghai, China.

119.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Shanghai Institute of Organic Chemistry, CAS,** May 31, 2017, Changchun, China.

120.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", *Changchun Institute of Applied Chemistry, CAS,* May 28, 2017, Changchun, China.

121. Zhen Gu "Leverage Physiology for Smart Drug Delivery", Luye Pharma. Inc., May 25, 2017, Yantai, China.

122.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **School of Medicine, Shenzhen University**, May 17, 2017, Shenzhen, China.

123.<u>Zhen Gu</u> "Bioresponsive Drug Delivery", **School of Medicine, Shenzhen University, Hepalink**, May 16, 2017, Shenzhen, China.

124.<u>Zhen Gu</u> "Bioresponsive Drug Delivery", *The 10th Congress of Chinese Association of Orthopaedic Surgeons*, May. 12, 2017, Guangzhou, China.

125.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **National Center for Nanoscience and Nanotechnology**, May. 11, 2017, Beijing, China.

126.<u>Zhen Gu</u> "Leverage Physiology for Bioresponsive Drug Delivery", **Department of Chemistry, Pecking University**, May. 9, 2017, Beijing, China.

127. "Smart Insulin Delivery-an Update", Sanofi, April. 13, 2017, Frankfurt, Germany.

128. "Local Delivery of Immune Checkpoint Inhibitors", 2017 ACS Spring Meeting, Apr. 2-6, 2017, San Francisco, CA, USA.

129. "Leverage Physiology for Smart Drug Delivery", **Department of Chemistry, University of Texas at Dallas**, Mar. 31, 2017, Dallas, TX, USA.

130. "Leverage Physiology for Smart Drug Delivery", IBM, Mar. 10, 2017, Syracuse, NY, USA.

131. "Leverage Physiology for Smart Drug Delivery", *Department of Textile Engineering, NC State University*, Feb. 15, 2017, Raleigh, NC, USA.

132. "Bio-Responsive Smart Drug Delivery", *Department of Biomedical Engineering, Duke University*, Feb. 9, 2017, Durham, NC, USA.

133. "Leverage Physiology for Bio-Responsive Drug Delivery", *JDRF Mission Summit Conference*, Jan. 25-27, 2017, San Francisco, CA, USA.

134. "Leverage Physiology for Bio-Responsive Drug Delivery", **2**nd International Symposium on Translational Nanomedicine, Jan. 4-7, 2017, Guangzhou, China.

135. "Leverage Physiology for Precision Medications", University of Hong Kong, Jan. 4, 2017, Hong Kong, China.

136. "Leverage Physiology for Precision Medications", Hong Kong City University, Jan. 3, 2017, Hong Kong, China.

137. "Bio-Responsive Drug Delivery", School of Medicine, Shanghai Jiaotong University, Dec. 29, 2016, Shanghai, China.

138. "Bio-Responsive Drug Delivery", School of Medicine, Shanghai Tongji University, Dec. 28, 2016, Shanghai, China.

139. "Bio-Responsive Drug Delivery", Nanjing Tech University, Dec. 26, 2016, Nanjing, China

140. "Bio-Responsive Drug Delivery", *Duke University*, Nov. 18, 2016, Durham, NC, USA.

141. "Leverage Physiology for Precision Medications", University of Connecticut, Nov. 11, 2016, Storrs, CT, USA.

142. "Bio-Responsive Drug Delivery", **Toxicology Program Seminar, NC State University**, Nov. 8, 2016, Raleigh, NC, USA 143. "Leverage Physiology for Precision Medications", **2**nd **China Nanomedicine International Conference**, Oct. 17-19, 2016. Wuhan, China.

144. "Bioresponsive Microneedle Patches", 6th International Nanobio Conference and 1st Symposium on Minimally Invasive and Image Guided Surgery, Oct. 17-18, 2016, Nanjing, China.

145. "Leverage Physiology for Precision Drug Delivery", *Leading Edge Technologies on Crystallization Engineering and Clinical Therapeutic Development International Conference*, Oct. 15-16, 2016, Tianjin, China. (Plenary Speaker) 146. "Bioresponsive Drug Delivery", *Nankai University*, Oct. 14, 2016, Tianjin, China.

147. "Stretch-Triggered Drug Delivery", **Surgery Grand Rounds at UNC Chapel Hill**, Sep. 24, 2016, Chapel Hill, NC, USA. 148. "Bio-Responsive Microneedles", **43**rd **Controlled Release Society Annual Meeting**, Jul. 16-18, 2016, Seattle, WA, USA.

149. "Leverage Physiology for Precision Medications", Sun Yat-Sen University, Jul. 14, 2016, Guangzhou, China.

150. "Leverage Physiology for Precision Drug Delivery", 1st symposium of the Chinese American Society of Nanomedicine and Nanobiotechnology (CASNN), Jul. 10-12, 2016, Beijing, China. (Keynote Speaker)

151. "Leverage Physiology for Precision Medications", *National Center for Nanoscience and Nanotechnology*, Jul. 7, 2016, Beijing, China.

152. "Leverage Physiology for Precision Medications", Tsinghua University, Jul. 7, 2016, Beijing, China.

153. "Leverage Physiology for Precision Medications", *Beijing University of Chemical Technology*, Jul. 6, 2016, Beijing, China.

154. "Leverage Physiology for Precision Medications", *School of Chemistry and Chemical Engineering, Peking University*, Jul. 6, 2016, Beijing, China.

155. "Leverage Physiology for Precision Medications", School of Pharmacy, Peking University, Jul. 5, 2016, Beijing, China.

156. "Leverage Physiology for Precision Medications", Longjin Pharmaceutical Company, Jul. 1, 2016, Kunming, China.

157. "Leverage Physiology for Precision Medications", **School of Chemistry and Chemical Engineering, Nanjing University**, Jun. 29, 2016, Nanjing, China.

158. "Leverage Physiology for Precision Medications", *University of Science and Technology of China*, Jun. 28, 2016, Hefei, China.

159. "Leverage Physiology for Precision Medications", China Pharmaceutical University, Jun. 21, 2016, Nanjing, China.

160. "Smart Insulin Delivery", Jiangsu Province People's Hospital, Jun. 19, 2016, Nanjing, China.

161. "Leverage Physiology for Precision Medications", *Functional Nano & Soft Materials Laboratory, Soochow University*, Jun. 24, 2016, Suzhou, China.

162. "Leverage Physiology for Precision Drug Delivery", 4th Biomaterials and Biomedical Devices Innovation Conference, Jun. 23, 2016, Suzhou, China. (Keynote Speaker)

163. "Smart Nano-Carriers for Drug Delivery", **11**th **Sino-US symposium on Nanoscale Science and Technology**, Jun. 17-19, 2016, Nanjing, China.

164. "Leveraging Physiology for Precision Drug Delivery", **2016 ACS Spring Meeting**, Mar. 13-17, 2016, San Diego, CA, USA.

165. "Leveraging Physiology for Precision Drug Delivery", **2016** Nano-Formulation Workshop, Mar. 14-16, 2016, Chapel Hill, NC, USA.

166. "Leveraging Physiology for Precision Drug Delivery", *ASME 5th NanoEngineering for Medicine and Biology Conference*, Feb. 21-24, 2016, Houston, TX, USA. (Keynote Speaker)

167. "Small Insulin Delivery: Opportunities and Challenges", **1st Therapeutic Peptides Symposium**, Feb. 4, 2016, Paris, France.

168. "Smart Insulin Delivery", EmTech, MIT Technology Review Symposium, Nov. 2, 2016, Boston, MA, USA.

169. "Small & Smart Drug Delivery", Surgery Grand Rounds at UNC Chapel Hill, Jul. 22, 2015, Chapel Hill, NC, USA.

170. "Leveraging Physiology for Precise Drug Delivery", Sigma Aldrich Webinar, Jun. 22, 2015.

171. "Leveraging Physiology for Precise Drug Delivery", **17th International Drug Delivery Symposium**, Jun. 15, 2015, Salt Lake City, USA.

172. "Smart Insulin Delivery- Inspired by Nature", 75th ADA Annual Meeting, Jun. 4, 2015, Boston, USA.

173. "Smart Insulin Delivery", *Eli Lilly*, Jun. 2, 2015, Indianapolis, USA.

174. "Programmed Drug Delivery", "Nanotechnology Workshop" at Duke University, Apr. 17, 2015, Durham, USA.

175. "Programmed Drug Delivery", *Chemistry Department at University of North Carolina at Charlotte*, Apr. 16, 2015, Charlotte, USA.

176. "Leveraging Physiology for Precise Drug Delivery" 2015 ACS Spring Meeting, Mar. 22-26, 2015, Denver, CO, USA.

177. "Small but Smart Delivery", Seminar of MRS Student Chapter at NC State, Oct. 27, 2014, Raleigh, USA.

178. "Small but Smart Delivery", *American-Chinese Biotechnology Forum at North Carolina*, Oct. 26, 2014, Research Triangle Park, USA.

179. "Smart Insulin Delivery", Sanofi, Sep. 4, 2014, Frankfurt, Germany.

180. "Physiological Signals-Triggered Controlled Drug Delivery", **School of Pharmacy, Huazhong University of Science** and Technology, Jul. 10, 2014, Wuhan, China.

181. "Physiological Signals-Triggered Controlled Drug Delivery", **School of Pharmacy, Nanjing Medical University**, Jul. 8, 2014, Nanjing, China.

182. "Physiological Signals-Triggered Controlled Drug Delivery", **School of Advanced Materials, Nanjing Tech University**, Jul. 8, 2014, Nanjing, China.

183. "Physiological Signals-Triggered Controlled Drug Delivery", School of Chemistry and Chemical Engineering, Nanjing University, Jul. 7, 2014, Nanjing, China.

184. "Physiological Signals-Triggered Controlled Drug Delivery", **Technical Institute of Physics and Chemistry, CAS**, Jul. 4, 2014, Beijing, China. "Young Scientists Forum"

185. "Physiological Signals-Triggered Controlled Drug Delivery", *National Center for Nanoscience and Nanotechnology*, Jul. 2, 2014, Beijing, China. "Young Scientists Forum in Nanotechnology"

186. "Physiological Signals-Triggered Controlled Drug Delivery", *Department of Pharmacy, Tsinghua University*, Jul. 3, 2014, Beijing, China.

187. "Physiological Signals-Triggered Controlled Drug Delivery", *Molecular Pharmaceutics Division, UNC-CH*, Mar. 7, 2014, Chapel Hill, NC, USA.

188. "Physiological Signals-Triggered Controlled Drug Delivery", *Chemistry Department, UCLA*, Feb. 28, 2014, Los Angeles, CA, USA.

189. "Small But Smart Drug Delivery", *RTP* 180°, Feb. 20, 2014, Research Triangle Park, NC, USA.

190. "Smart Insulin Delivery", Carolina Science Cafe series, NC Science Festival, Dec. 4, 2013, Chapel Hill, NC, USA.

191. "Smart Protein Gels", **Department of Pharmaceutical Science at Campbell University**, Nov. 20, 2013, Buies Creek, NC, USA.

192. "Smart Insulin Gels", the 13th Annual Diabetes Technology Meeting (DTM), Nov. 1, 2013, San Francisco, CA, USA.

193. "Smart Protein Gels", Seminar for Department of Chemical and Biomolecular Engineering, North Carolina State University, Sep. 10, 2013, Raleigh, NC, USA.

194. "Smart Insulin Gels", **Special Seminar for Department of Endocrinology**, **University of North Carolina at Chapel Hill**, Jun. 27, 2013, Chapel Hill, NC, USA.

195. "Positioning Proteins into Gels for Therapeutics and Diagnostics", **Special Seminar for Graduate Students in Soochow University**, Jun. 4, 2013, Soochow, Jiangsu, China.

196. "Positioning Proteins into Gels for Therapeutics and Diagnostics", **Special Seminar in Subei People's Hospital and Yangzhou University**, May. 30, 2013, Yangzhou, Jiangsu, China.

197. "Positioning Proteins into Gels for Therapeutics and Diagnostics", **College of Bioscience and Biomedical Engineering, Southeast University**, May. 29, 2013, Nanjing, Jiangsu, China.

198. "Proteins Gels for Therapeutics and Diagnostics", **School of Biomedical Engineering, Nanyang Technological University**, May. 24, 2013, Singapore.

199. "Positioning Proteins into Gels for Therapeutics and Diagnostics", *the Pharmaceutical Expert Lecture Series in China Pharmaceutical University*, May. 22, 2013, Nanjing, Jiangsu, China.

200. "Proteins Gels for Therapeutics and Diagnostics", **Special Seminar in College of Chemistry and Chemical Engineering, Nanjing University of Technology**, May. 20, 2013, Nanjing, Jiangsu, China.

201. "Positioning Proteins into Gels for Therapeutics and Diagnostics", *Langer Lab Seminar Series in Massachusetts Institute of Technology*, Apr. 11, 2012, Cambridge, MA, USA.

202. "Positioning Proteins into Gels for Therapeutics and Diagnostics", *the Lindbergh Lecture Series in University of Wisconsin-Madison*, Mar. 22, 2012, Madison, WI, USA.

203. "Positioning Proteins into Gels for Therapeutics and Diagnostics", **Special Seminar for the Joint Biomedical** *Engineering Department at University of North Carolina at Chapel Hill and North Carolina State University*, Mar. 12, 2012, Chapel Hill-Raleigh, NC, USA.

204.Hydrogel Based Protein Patterning, Encapsulation and Delivery" *Special Seminar for Graduate Students in Nanjing University*, Sep. 16, 2011, Nanjing, Jiangsu, China.

205. "At the Interface of Bio and Nano", **2010 Nagoya University and UCLA Collaboration Conference**, Mar. 4-5, 2010, Los Angeles, CA, USA.

TEACHING EXPERIENCE

- 2019- Fall/Winter, Instructor, UCLA Biomedical Measurements: from Molecules to Tissues (BE188)
- 2019- Spring, Instructor, UCLA Drug Delivery Devices: Innovation and Translation (BE298)
- 2015-2018 Spring, Instructor, UNC-CH/NC State Lecture: Advanced Drug Delivery Systems (BME590)
- 2013-2017 Fall, Instructor, UNC-CH/NC State

Lecture and lab course: Biomedical Engineering Measurements (BME204)

- 2007 Spring, Teaching Assistant, UCLA Lecture course: Nanoscience and Biotechnology
 2007 Winter, 2008 Winter, Teaching Assistant, UCLA
- 2007 Winter, 2008 Winter, Teaching Assistant, UCLA Lab course: Nanoscale Fabrication, Characterization, and Biodetection Lab
- 2004 Spring, Teaching Assistant, Nanjing University Lecture course: Introduction to Polymer Science and Engineering