

刘庄，教授、博导、国家杰出青年基金获得者

苏州大学功能纳米与软物质研究院

电话：0512-65882036

Email：[zliu@suda.edu.cn](mailto:zliu@suda.edu.cn)

网页：<http://nano.suda.edu.cn/lz>



### 学习工作经历：

- 2009 年起 苏州大学功能纳米与软物质研究院，教授，博士生导师
- 2008 年-2009 年 斯坦福大学化学系及医学院从事博士后研究
- 2004 年-2008 年 斯坦福大学获得化学博士学位
- 2000 年-2004 年 北京大学化学与分子工程学院获理学学士学位

### 主要学术成就：

近年来在生物材料与肿瘤纳米技术领域从事研究，围绕肿瘤诊疗中的若干挑战性问题，发展了一系列新型纳米探针用于体外生物检测与活体分子影像，并探索了多种基于纳米技术和生物材料的肿瘤光学治疗、放射治疗、与免疫治疗新策略。共发表学术论文 320 余篇，论文总引用超过 55,000 次，SCI H-index = 127。2014 年起连续入选爱斯维尔出版社 (Elsevier) 发布的“中国高被引用学者榜单 (材料科学)”；2015 年起连续入选美国科睿唯安 (原汤森路透集团) 公布的“全球高被引科学家名录” (Highly Cited Researchers) (化学、材料)。获国家杰出青年基金资助，担任生物材料领域国际著名期刊 Biomaterials 杂志副主编和多个国际主流期刊编委。

### 所获主要奖励：

- 
- 2020 年获第十六届中国青年科技奖
  - 2019 年获第七届中国化学会-英国皇家化学会青年化学奖
  - 2019 年获高等学校科学研究优秀成果奖（科学技术）青年科学奖
  - 2019 年入选“美国生物医学工程学会会士”(Fellow of American Institute for Medical and Biological Engineering)
  - 2018 年获江苏省十大青年科技之星
  - 2018 年被授予“江苏优秀归国留学人员”称号
  - 2018 年获 Nano Research Young Innovator Awards
  - 2018 年入选 Periodic Table of Younger Chemists-IUPAC
  - 2018 年入选教育部“长江学者”特聘教授
  - 2018 年入选中组部万人计划“中青年科技创新领军人才”
  - 2017 年获 Biomaterials Science Lectureship
  - 2017 年获江苏省科学技术一等奖
  - 2016 年入选江苏特聘教授
  - 2016 年入选科技部“中青年科技创新领军人才”
  - 2015 年获教育部自然科学二等奖
  - 2015 年获国家杰出青年基金资助
  - 2015 年受邀成为“英国皇家化学会会士”(Fellow of the Royal Society of Chemistry)
  - 2015 年入选中组部万人计划“青年拔尖人才”
  - 2014 年获“纳米化学新锐奖”
  - 2014 年获“霍英东青年教师奖”
  - 2014 年获“中国化学会青年化学奖”

- 2013 年获江苏省杰出青年基金资助
- 2013 年入选国家百千万人才工程
- 2013 年在新加坡 15th Asian Chemistry Congress 获'Asian Rising Stars'
- 2012 年获国家优秀青年基金资助
- 2012 年获 SCOPUS“寻找青年科学之星”银奖（材料类）
- 2011 年获国家人力资源和社会保障部“高层次留学人才回国”资助
- 2011 年入选江苏省“333 高层次人才培养计划”第二层次

#### 国际学术期刊兼职：

- Associate Editor, Biomaterials (2014-)
- Editorial Board Member, Advanced NanoBiomed Research (2020-)
- Editorial Board Member, Drug Delivery and Translational Research (2019-)
- Editorial Board Member, Acta Chimica Sinica (2018-)
- Editorial Board Member, Particle & Particle Systems Characterization (2018-)
- Editorial Board Member, Advanced Healthcare Materials (2018-)
- Editorial Board Member, Science China Chemistry (2017-)
- Editorial Board Member, Frontiers in Chemistry (2017-)
- Editorial Board Member, Journal of Interdisciplinary Nanomedicine (2017-)
- Editorial Board Member, ChemMedChem (2017- )
- Editorial Board Member, Advanced Therapeutics (2017-)
- Editorial Board Member, Nano Research (2014-)
- Editorial Board Member, Scientific Reports (2013-)
- Editorial Board Member, American Journal of Nuclear Medicine and Molecular Imaging (2012- )
- Guest Editor, Nano Research (2018)
- Guest Editor, Nanoscale (2016)
- Guest Editor, Carbon (2015)
- Guest Editor, Advanced Healthcare Materials (2014)
- Guest Editor, Theranostics (2012)

#### 论文列表：

代表性论文：

- [64] J. Xu, J. Lv, Q. Zhuang, Z.J. Yang, Z.Q. Cao, L.G. Xu, P. Pei, C.Y. Wang, H.F. Wu, Z.L. Dong, Y. Chao, C. Wang, K. Yang, R. Peng\*, Y.Y. Cheng\* and Z. Liu\*. A general strategy towards personalized nanovaccines based on fluoropolymers for post-surgical cancer immunotherapy, *Nat. Nanotechnol.*, DOI: 10.1038/s41565-020-00781-4
- [63] Y. Yang, Z. Liu\*. Chemiluminescent Nanosystems for Imaging Cancer Chemodynamic Therapy, *Chem*, 6, 9, 2127-2129 (2020)
- [62] M. C. Chen, Y.J. Tan, Z.L. Dong, J.Q. Lu, X. Han, Q.T. Jin, W.J. Zhu, J.J. Shen, L. Cheng, Z. Liu\*, Q. Chen\*. Injectable Anti-inflammatory Nanofiber Hydrogel to Achieve Systemic Immunotherapy Post Local Administration, *Nano Lett.*, 20, 9, 6763–6773 (2020)
- [61] X. Yi, H.L. Zhou, Y. Chao, S.S. Xiong, J. Zhong, Z.F. Chai, K. Yang\*, and Z. Liu\*. Bacteria-triggered tumor-specific thrombosis to enable potent photothermal immunotherapy of cancer, *Sci. Adv.*, 6(33): eaba3546 (2020)
- [60] R. Sun, X.C. Liu, G.Z. Li, H. Wang, Y.X. Luo, G.X. Huang, X.S. Wang, G.H. Zeng, Z. Liu\*, S. Wu\*. Photo-Activated H<sub>2</sub> Nanogenerator for Enhanced Chemotherapy of Bladder Cancer, *ACS Nano*, 14, 7, 8135-8148 (2020)
- [59] F. Gong, L. Cheng\*, N.L. Yang, Y.H. Gong, Y.W. Ni, S. Bai, X.W. Wang, M.C. Chen, Q. Chen, Z. Liu\*. Preparation of TiH<sub>1.924</sub> nanodots by liquid-phase exfoliation for enhanced sonodynamic cancer therapy, *Nat. Commun.*, 11, 3712 (2020)
- [58] L.L. Sun, F.Y. Shen, J. Xu, X. Han, C.H. Fan, Z. Liu\*. DNA-Edited Ligand Positioning on Red Blood Cells to Enable Optimized T Cell Activation for Adoptive Immunotherapy, *Angew. Chem. Int. Ed.*, 59, 2-14 (2020)
- [57] Y. Chao, C. Liang, H.Q. Tao, Y.R. Du, D. Wu, Z.L. Dong, Q.T. Jin, G.B. Chen, J. Xu, Z.S. Xiao, Q. Chen, C. Wang, J. Chen and Z. Liu\*. Localized cock-tail chemo-immunotherapy after in situ gelation to trigger robust systemic antitumor immune responses, *Sci. Adv.*, 6(10), eaaz4204 (2020)
- [56] Z.L. Dong, L.Z. Feng\*, Y. Hao, Q.G. Li, M.C. Chen, Z.J. Yang, H. Zhao, Z. Liu\*. Synthesis of CaCO<sub>3</sub> based Nanomedicine for Enhanced Sonodynamic Therapy via Amplification of Tumor Oxidative Stress, *Chem.*, 6, 1391-1407 (2020)
- [55] G.Z. Li, S.P. Wang, D.S. Deng, Z.S. Xiao, Z.L. Dong, Z.P. Wang, Q.F. Lei, S. Gao, G.X. Huang, E.P. Zhang, G.H. Zeng, Z. Wen, S. Wu\*, and Z. Liu\*. Fluorinated Chitosan to Enhance Transmucosal Delivery of Sonosensitizer-Conjugated Catalase for Sonodynamic Bladder Cancer Treatment Post-intravesical Instillation, *ACS Nano*, 14, 2, 1586-1599 (2020)

- [54] H. Xiao, S.F. Shen, Q. Fan, G.J. Chen, E. Archibong, G. Dotti, Z. Liu\*, Z. Gu\*, and C. Wang\*. Red Blood Cell-Derived Nanoerythroosome for Antigen Delivery with Enhanced Cancer Immunotherapy, *Sci. Adv.*, 5 (10), eaaw6870 (2019)
- [53] Q. Chen \*, M.C. Chen, and Z. Liu\*. Local Biomaterials-Assisted Cancer Immunotherapy to Trigger Systemic Antitumor Responses, *Chem. Soc. Rev.*, 48 (22), 5506–26 (2019)
- [52] L. Cheng\*, X.W. Wang, F.Gong, T. Liu, Z. Liu\*. 2D Nanomaterials for Cancer Theranostic Applications, *Adv. Mater.*, 32(13), 1902333 (2019)
- [51] G.B. Yang, S.Z.F. Phua, W.Q. Lim, R.Zhang, L.Z. Feng, G.F. Liu, H.W. Wu, A.K. Bindra, D.Jana, Z. Liu\* and Y.L. Zhao\*. A Hypoxia-Responsive Albumin-Based Nanosystem for Deep Tumor Penetration and Excellent Therapeutic Efficacy, *Adv. Mater.*, 31(25), 1901513 (2019)
- [50] F. Gong, L. Cheng\*, N.L. Yang, O. Betzer, L.Z. Feng, Q. Zhou, Y.G. Li, R.H. Chen, R. Popovtzer and Z. Liu\*. Ultrasmall Oxygen-Deficient Bimetallic Oxide MnWOX Nanoparticles for Depletion of Endogenous GSH and Enhanced Sonodynamic Cancer Therapy, *Adv. Mater.*, (31)23, 1900730 (2019)
- [49] Z.Q. Meng, X.F. Zhou, J. Xu, X. Han, Z.L. Dong, H.R. Wang, Y.J. Zhang, J.L. She, L.G. Xu, C. Wang and Z. Liu\*. Light-Triggered In Situ Gelation to Enable Robust Photodynamic-Immunotherapy by Repeated Stimulations, *Adv. Mater.*, 31(24), 1900927 (2019)
- [48] T.X. Gu, Y. Wang, Y.H. Lu, L. Cheng, L.Z. Feng, H. Zhang, X. Li\*, G.R. Han\*, and Z. Liu\*. Platinum Nanoparticles to Enable Electrodynamical Therapy for Effective Cancer Treatment, *Adv. Mater.*, 31(14), 1806803 (2019)
- [47] Q. Chen, J.W. Chen, Z.J. Yang, J. Xu, L.G. Xu, C. Liang, X. Han and Z. Liu\*. Nanoparticle-Enhanced Radiotherapy to Trigger Robust Cancer Immunotherapy, *Adv. Mater.*, 31(10), 1802228 (2019)
- [46] Z.Q. Meng, X.F. Zhou, J.L. She, Y.J. Zhang, L.Z. Feng, and Z. Liu\*. Ultrasound-Responsive Conversion of Microbubbles to Nanoparticles to Enable Background-Free in Vivo Photoacoustic Imaging, *Nano Lett.*, 19 (11), 8109–17 (2019)
- [45] Y. Chao, G.B. Chen, C. Liang, J. Xu, Z.L. Dong, X. Han, C. Wang and Z. Liu\*. Iron Nanoparticles for Low-Power Local Magnetic Hyperthermia in Combination with Immune Checkpoint Blockade for Systemic, *Nano Lett.*, 19(7), 4287-4296 (2019)
- [44] Z.L. Dong, L.Z. Feng\*, Y. Chao, Y. Hao, M.C. Chen, F. Gong, X. Han, R. Zhang, L. Cheng, Z. Liu\*. Amplification of Tumor Oxidative Stresses with Liposomal Fenton Catalyst and Glutathione Inhibitor for Enhanced Cancer Chemotherapy and Radiotherapy, *Nano Lett.*, 19 (2), 805-815 (2019)
- [43] H. Zhao, J. Xu, Y. Li, X.X. Guan, X. Han, Y.Y. Xu, H.T. Zhou, R. Peng, J. Wang\*, and Z. Liu\*. Nanoscale Coordination Polymer Based Nanovaccine for Tumor Immunotherapy, *ACS Nano*, 13 (11), 13127–35 (2019)
- [42] L.L. Tian, X. Yi, Z.L. Dong, J. Xu, C. Liang, Y. Chao, Y.X. Wang, K. Yang\*, and Z. Liu\*. Calcium Bisphosphonate Nanoparticles with Chelator-Free Radiolabeling to Deplete Tumor-Associated Macrophages for Enhanced Cancer Radioisotope Therapy, *ACS Nano*, 12 (11), 11541-11551 (2018)

- [41] Z.Q. Meng, Y. Chao, X.F. Zhou, C. Liang, J.J. Liu, R. Zhang, L. Cheng, K. Yang, W. Pan, M.F. Zhu and Z. Liu\*. Near-Infrared-Triggered in Situ Gelation System for Repeatedly Enhanced Photothermal Brachytherapy with a Single Dose, *ACS Nano*, 12 (9), 9412-9422 (2018)
- [40] Y. Chao, C. Liang, Y. Yang, G.L. Wang, D. Maiti, L.L. Tian, F. Wang, W. Pan, S. Wu\*, K. Yang\* , and Z. Liu\*. Highly Effective Radioisotope Cancer Therapy with a Non-Therapeutic Isotope Delivered and Sensitized by Nanoscale Coordination Polymers, *ACS Nano*, 12 (8), 7519-7528 (2018)
- [39] R. Yang, J. Xu, L.G. Xu\*, X.Q. Sun, Q. Chen, Y.H. Zhao, R. Peng\*, and Z. Liu\*. Cancer Cell Membrane-Coated Adjuvant Nanoparticles with Mannose Modification for Effective Anticancer Vaccination, *ACS Nano*, 12 (6), 5121-5129 (2018)
- [38] Y. Yang, W.J. Zhu, L.Z. Feng, Y. Chao, X. Yi, Z.L. Dong, K. Yang, W.H. Tan, Z. Liu\*, and M.W. Chen\*. G-quadruplex based Nanoscale Coordination-polymers to Modulate Tumor Hypoxia and Achieve Nuclear-Targeted Drug Delivery for Enhanced Photodynamic Therapy, *Nano Lett.*, 18 (11), 6867-6875 (2018)
- [37] X.J. Song, J. Xu, C. Liang, Y. Chao, Q.T. Jin, C. Wang, M.W. Chen\*, and Z. Liu\*. Self-Supplied Tumor Oxygenation through Separated Liposomal Delivery of H<sub>2</sub>O<sub>2</sub> and Catalase for Enhanced Radio-Immunotherapy of Cancer, *Nano Lett.*, 18 (10), 6360-6368 (2018)
- [36] F. Gong, L. Cheng\*, N.L. Yang, Q.T. Jin, L.L. Tian, M.Y. Wang, Y.G. Li, Z. Liu\*. Bimetallic Oxide MnMoO<sub>x</sub> Nanorods for in vivo Photoacoustic Imaging of GSH and Tumor-Specific Photothermal Therapy, *Nano Lett.*, 18 (9), 6037-6044 (2018)
- [35] X.S. Li\*, N. Kwon, T. Guo, Z. Liu\*, and J. Yoon\*. Innovative Strategies for Hypoxic-Tumor Photodynamic Therapy, *Angew. Chem. Int. Ed.*, 57(36), 11522-11531 (2018)
- [34] Y. Chao, L.G. Xu, C. Liang, L.Z. Feng, J. Xu, Z.L. Dong, L.L. Tian, X. Yi, K. Yang\*, Z. Liu\*. Combined Local Immunostimulatory Radioisotope Therapy and Systemic Immune Checkpoint Blockade Imparts Potent Antitumour Responses, *Nat. Biomed. Eng.*, 2, 611-621 (2018)
- [33] G.B. Yang, L.G. Xu, J. Xu, R. Zhang, G.S. Song, Y. Chao, L.Z. Feng, F.X. Han, Z.L. Dong., B. Li\* and Z. Liu\*. Smart Nanoreactors for pH-Responsive Tumor Homing, Mitochondria-Targeting, and Enhanced Photodynamic-Immunotherapy of Cancer, *Nano. Lett.*, 18(4), 2475-2484 (2018)
- [32] Z.L. Dong, L.Z. Feng, Y. Hao, M.C. Chen, M. Gao, Y. Chao, H. Zhao, W.W. Zhu, J.J. Liu, C. Liang, Q. Zhang and Z. Liu\*. Synthesis of Hollow Biomineralized CaCO<sub>3</sub>-Polydopamine Nanoparticles for Multimodal Imaging-Guided Cancer Photodynamic Therapy with Reduced Skin Photosensitivity, *J. Am. Chem. Soc.*, 140, 2165-2178 (2018)
- [31] Y.Y. Chen, L. Cheng\*, Z.L. Dong, Y. Chao, H.L. Lei, H. Zhao, J. Wang, Z. Liu\*. Degradable Vanadium Disulfide Nanostructures with Unique Optical and Magnetic Functions for Cancer Theranostics, *Angew. Chem. Int. Ed.*, 56(42), 12991-12996 (2017)
- [30] Y. Yang, W.J. Zhu, Z.L. Dong, Y. Chao, L. Xu\*, M.W. Chen\*, Z. Liu\*. 1D Coordination Polymer Nanofibers for Low-Temperature Photothermal Therapy, *Adv. Mater.*, 29(40), 1703588 (2017)

- [29] G.B. Yang, L.G. Xu, Y. Chao, J. Xu, X.Q. Sun, Y.F. Wu, R. Peng, Z. Liu\*. Hollow MnO<sub>2</sub> as A Tumor-microenvironment-responsive Biodegradable Nano-platform for Combination Therapy Favoring Antitumor Immune Responses, *Nat. Commun.*, 8, 902 (2017)
- [28] M. Gao, C. Liang, X.J. Song, Q. Chen, Q.T. Jin, C. Wang, Z. Liu\*. Erythrocyte Membrane-Enveloped Perfluorocarbon as Nanoscale Artificial Red Blood Cells to Relieve Tumor Hypoxia and Enhance Cancer Radiotherapy, *Adv. Mater.*, 29(35), 1701429 (2017)
- [27] G.S. Song, L. Cheng, Y. Chao, K. Yang, Z. Liu\*. Emerging Nanotechnology and Advanced Materials for Cancer Radiation Therapy, *Adv. Mater.*, 29(32), 1700996 (2017)
- [26] Q. Chen, C. Liang, X.Q. Sun, J.W. Chen, Z.J. Yang, H. Zhao, L.Z. Feng, Z. Liu\*. H<sub>2</sub>O<sub>2</sub>-responsive Liposomal Nanoprobe for Photoacoustic Inflammation Imaging and Tumor Theranostics via In Vivo Chromogenic Assay, *Proc. Natl. Acad. Sci. U. S. A.*, 114(21), 5343-5348 (2017)
- [25] Q. Chen, L.G. Xu, C. Liang, C. Wang, R. Peng, Z. Liu\*, Photothermal therapy with immune-adjuvant nanoparticles together with checkpoint blockade for effective cancer immunotherapy, *Nature Commun.*, 7, 13193 (2016)
- [24] X.J. Song, L.Z. Feng, C. Liang, K. Yang, Z. Liu\*, Ultrasound triggered tumor oxygenation with oxygen-shuttle nanoparfluorocarbon to overcome hypoxia-associated resistance in cancer therapies, *Nano Lett.*, 16, 6145-6153 (2016)
- [23] Q. Chen, L.Z. Feng, J.J. Liu, W.W. Zhu, Z.L. Dong, Y.F. Wu, Z. Liu\*, Intelligent albumin-MnO<sub>2</sub> nanoparticles as pH-/H<sub>2</sub>O<sub>2</sub>-responsive dissociable nanocarriers to modulate tumor hypoxia for effective combination therapy, *Adv. Mater.*, 28,7129-7136 (2016)
- [22] G.S. Song, Y.Y. Chen, C. Liang, X. Yi, J.J. Liu, X.Q. Sun, S.D. Shen, K. Yang, Z. Liu\*, Catalase-loaded TaO<sub>x</sub> nanoshells as bio-nanoreactors combining high-Z element and enzyme delivery for enhancing radiotherapy, *Adv. Mater.*, 28,7143-7148 (2016)
- [21] G.S. Song, C. Liang, X. Yi, Q. Zhao, L. Cheng, K. Yang, Z. Liu\*, Perfluorocarbon loaded hollow Bi<sub>2</sub>Se<sub>3</sub> nanoparticles for timely supply of oxygen under near-infrared light to enhance radiotherapy of cancer, *Adv. Mater.*, 28, 2716–2723 (2016)
- [20] H. Gong, Y. Chao, J. Xiang, Xiao Han, G.S. Song, L.Z. Feng, J.J. Liu, G.B. Yang, Q. Chen, Z. Liu\*, Hyaluronidase to enhance nanoparticle-based photodynamic tumor therapy, *Nano Lett.*, 16, 2512–2521 (2016)
- [19] G.S. Song, J.L. Hao, C. Liang, T. Liu, M. Gao, L. Cheng, J.Q. Hu\*, Z. Liu\*, Degradable molybdenum oxide nanosheets with rapid clearance and efficient tumor homing capabilities as a novel therapeutic nano-platform, *Angew. Chem. Int. Ed.*, 55, 2122–2126 (2016)
- [18] Q. Chen, X.D. Liu, J.W. Chen, J.F. Zeng\*, Z.P. Cheng, Z. Liu\*, A self-assembled albumin-based nanoprobe for in vivo ratiometric photoacoustic pH imaging, *Adv. Mater.*, 27, 6820–6827 (2015)
- [17] J. Xiang, L.G. Xu\*, H. Gong, W.W. Zhu, C. Wang, J. Xu, L.Z. Feng, L. Cheng, R. Peng\*, Z. Liu\*, Antigen-loaded upconversion nanoparticles for dendritic cell stimulation, tracking, and vaccination in dendritic cell-based immunotherapy, *ACS Nano*, 9, 6401-6411 (2015)
- [16] Q. Chen, C. Liang, C. Wang, Z. Liu\*, An imagable and photothermal abraxane-like, nanodrug for

- combination cancer therapy to treat subcutaneous and metastatic breast tumors, *Adv. Mater.*, 27, 903-910 (2015)
- [15] C. Wang, L.G. Xu, C. Liang, J. Xiang, R. Peng, Z. Liu\*, Immunological responses triggered by photothermal therapy with carbon nanotubes in combination with anti-CTLA-4 therapy to inhibit cancer metastasis, *Adv. Mater.*, 26, 8154-8162 (2014)
- [14] L. Cheng, C. Wang, L.Z. Feng, K. Yang, Z. Liu\*, Functional nanomaterials for phototherapies of cancer, *Chem. Rev.*, 114(21), 10869-10939 (2014)
- [13] C. Liang, S. Diao, C. Wang, H. Gong, T. Liu, G.S. Hong, X.Z. Shi, H.J. Dai\*, Z. Liu\*, Tumor metastasis inhibition by imaging-guided photothermal therapy with single-walled carbon nanotubes, *Adv. Mater.*, 26, 5646-5652 (2014)
- [12] C. Wang, X.Q. Sun, L. Cheng, S.N. Yin, G.B. Yang, Y.G. Li, Z. Liu\*, Multifunctional theranostic red blood cells for magnetic field enhanced in vivo combination therapy of cancer, *Adv. Mater.*, 26, 4794-4802 (2014)
- [11] L. Cheng, J.J. Liu, X. Gu, H. Gong, X.Z. Shi, T. Liu, C. Wang, X.Y. Wang, G. Liu, H.Y. Xing, W.B. Bu, B.Q. Sun, Z. Liu\*, PEGylated WS<sub>2</sub> nanosheets as a multifunctional theranostic agent for in vivo dual-modal CT / photoacoustic imaging guided photothermal therapy, *Adv. Mater.*, 26, 1886-1893 (2014)
- [10] K. Yang, L.Z. Feng, H. Hong, W.B. Cai, Z. Liu\*, Preparation and functionalization of graphene nanocomposites for biomedical applications, *Nature Protocols*, 8, 2392-2403 (2013)
- [9] K. Yang, L.Z. Feng, X.Z. Shi, Z. Liu\*, Nano-graphene in biomedicine: theranostic applications, *Chem. Soc. Rev.*, 42, 530-547 (2012)
- [8] K. Yang, H. Xu, L. Cheng, C.Y. Sun, J. Wang, Z. Liu\*, In vitro and in vivo near-infrared photothermal therapy of cancer using polypyrrole organic nanoparticles, *Adv. Mater.*, 24, 5586-5592 (2012)
- [7] L. Cheng, K. Yang, Q. Chen, Z. Liu\*, Organic stealth nanoparticles for highly effective in vivo near-infrared photothermal therapy of cancer, *ACS Nano*, 6, 5605-5613 (2012) (Reported by C&E News)
- [6] X.J. Wang, C. Wang, L. Cheng, S.T. Lee, Z. Liu\*, Noble metal coated single-walled carbon nanotubes for applications in surface enhanced raman scattering imaging and photothermal therapy, *J. Am. Chem. Soc.*, 134, 7414-7422 (2012)
- [5] K. Yang, L.L. Hu, X.X. Ma, S.Q. Ye, L. Cheng, X.Z. Shi, C.H. Li, Y.G. Li, Z. Liu\*, Multimodal imaging guided photothermal therapy using functionalized graphene nano-sheets anchored with magnetic nanoparticles, *Adv. Mater.*, 24, 1868-1872 (2012) (Frontispieces Feature)
- [4] B. Tian, C. Wang, S. Zhang, L.Z. Feng, Z. Liu\*, Photothermally enhanced photodynamic therapy delivered by nano-graphene oxide, *ACS Nano*, 5, 7000-7009 (2011)
- [3] L. Cheng, K. Yang, Y.G. Li, J.H. Chen, C. Wang, M.W. Shao\*, S.T. Lee, Z. Liu\*, Facile preparation of multifunctional upconversion nanoprobe for multi-modal imaging and dual-targeted photothermal therapy, *Angew. Chem. Int. Ed.*, 50, 7385-7390 (2011)
- [2] K. Yang, J.M. Wan, S. Zhang, Y.J. Zhang, S.T. Lee, Z. Liu\*, In vivo pharmacokinetics, long-term biodistribution, and toxicology of PEGylated graphene in mice, *ACS Nano*, 5, 516-522 (2011)