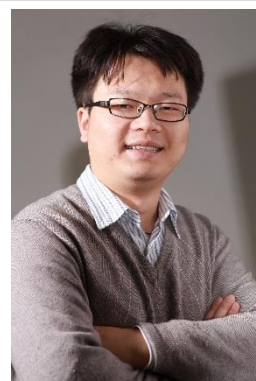


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Academic Qualification:

- Post-doctoral Scholar, Stanford University, 2009
- Ph.D. in Chemistry, Stanford University, 2008
- B.S. in Chemistry, Peking University, 2004

Teaching Area

Materials science

Research Area

- Inorganic nanomaterials for biomedical imaging and cancer theranostics.
- Polymer-based, protein-based, and other biomimetic nano-platforms for cancer combination therapy.
- Nanomedicine and cancer radiation therapy.
- Biomaterials for immunoengineering.
- Nanotechnology to modulate tumor microenvironment for enhanced cancer treatment.
- Translational nanomedicine and biomaterials.

Working Experience

- Professor, Macau University of Science and Technology, Macau, China, 2021 – present
- Professor / Principal Investigator, Soochow University, 2009-present

Academic Publication (selected)

- Jun Xu, Jia Lv, Qi Zhuang, Zongjin Yang, Zhiqin Cao, Ligeng Xu, Pei Pei, Chenya Wang, Hanfei Wu, Ziliang Dong, Yu Chao, Chao Wang, Kai Yang, Rui Peng*, Yiyun Cheng* and **Zhuang Liu***. "A general strategy towards personalized nanovaccines based on fluoropolymers for post-surgical cancer immunotherapy" *Nat. Nanotechnol.*, 15, 1043-1052 (2020).
- Xuan Yi, Hailin Zhou, Yu Chao, Saisai Xiong, Jing Zhong, Zhifang Chai, Kai Yang*, and **Zhuang Liu***. "Bacteria-triggered tumor-specific thrombosis to enable potent photothermal immunotherapy of cancer" *Sci. Adv.*, 6(33): eaba3546 (2020).
- Fei Gong, Liang Cheng*, Nailin Yang, Yuehan Gong, Yanwen Ni, Shang Bai, Xianwen Wang, Muchao Chen, Qian Chen, **Zhuang Liu***. "Preparation of TiH_{1.924} nanodots by liquid-phase exfoliation for enhanced sonodynamic cancer therapy" *Nat. Commun.*, 11, 3712 (2020).
- Lele Sun, Fengyun Shen, Jun Xu, Xiao Han, Chunhai Fan, **Zhuang 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).
- Yu Chao, Chao Liang, Huiquan Tao, Yaran Du, Di Wu, Ziliang Dong, Qitong Jin, Guobin Chen, Jun Xu, Zhisheng Xiao, Qian Chen, Chao Wang, Jian Chen and **Zhuang Liu***. "Localized cocktail chemo-immunotherapy after in situ gelation to trigger robust systemic antitumor immune responses." *Sci. Adv.*, 6(10), eaaz4204 (2020).
- Ziliang Dong, Liangzhu Feng*, Yu Hao, Quguang Li, Muchao Chen, Zhijuan Yang, He Zhao, **Zhuang Liu***. "Synthesis of CaCO₃ based Nanomedicine for Enhanced Sonodynamic Therapy via Amplification of Tumor Oxidative Stress." *Chem*, 6,1391-1407 (2020).
- Jingjing Liu, Min Wu, Yutong Pan, Yukun Duan, Ziliang Dong, Yu Chao, **Zhuang Liu***, Bin Liu*. "Biodegradable Nanoscale Coordination Polymers for Targeted Tumor Combination Therapy with Oxidative Stress Amplification." *Adv. Funct. Mater.*, 30, 1908865 (2020).
- Lin Zhang, Jinhua Zhou, Lvzhong Hu, Xiao Han, Xinwei Zou, Qian Chen, Youguo Chen*, **Zhuang Liu***, Chao Wang*. "In Situ Formed Fibrin Scaffold with Cyclophosphamide to Synergize with Immune Checkpoint Blockade for Inhibition of Cancer Recurrence after Surgery." *Adv. Funct. Mater.*, 30(7), 1906922 (2020).
- Xiao Han, Shufang Shen, Qin Fan, Guojun Chen, Edikan Archibong, Gianpietro Dotti, **Zhuang Liu***, Zhen Gu*, and Chao Wang*. "Red Blood Cell-Derived Nanoerythrocyte for Antigen Delivery with Enhanced Cancer Immunotherapy." *Sci. Adv.*, 5 (10), eaaw6870 (2019).
- Qian Chen*, Muchao Chen, and **Zhuang Liu***. "Local Biomaterials-Assisted Cancer Immunotherapy to Trigger Systemic Antitumor Responses." *Chem. Soc. Rev.*, 48 (22), 5506–26 (2019).
- Longlong Tian, Yaxing Wang, Lele Sun, Kai Yang, Shuao Wang, **Zhuang Liu***. "Cerenkov Luminescence-Induced NO Release from ³²P-Labeled ZnFe(CN)₅NO Nanosheets to Enhance Radioisotope-Immunotherapy" *Matter*,1(4),1061-76 (2019).
- Yu Chao, Qian Chen*, **Zhuang Liu***. "Smart Injectable Hydrogels for Cancer Immunotherapy" *Adv. Funct. Mater.*,1902785 (2019).

- Liang Cheng*, Xianwen Wang, Fei Gong, Teng Liu, **Zhuang Liu***. "2D Nanomaterials for Cancer Theranostic Applications" *Adv. Mater.*, 2019, 1902333 (2019).
- Fei Gong, Liang Cheng*, Nailin Yang, Oshra Betzer, Liangzhu Feng, Qiang Zhou, Yonggang Li, Ruihua Chen, Rachela Popovtzer and **Zhuang Liu***. "Ultrasmall Oxygen-Deficient Bimetallic Oxide MnWOX Nanoparticles for Depletion of Endogenous GSH and Enhanced Sonodynamic Cancer Therapy" *Adv. Mater.*, (31)23, 1900730 (2019).
- Yu Chao, Ligeng Xu, Chao Liang, Liangzhu Feng, Jun Xu, Ziliang Dong, Longlong Tian, Xuan Yi, Kai Yang* and **Zhuang Liu***. "Combined Local Immunostimulatory Radioisotope Therapy and Systemic Immune Checkpoint Blockade Imparts Potent Antitumour Responses" *Nat. Biomed. Eng.*, 2, 611-621(2018).
- Guangbao Yang, Ligeng Xu, Yu Chao, Jun Xu, Xiaoqi Sun, Yifan Wu, Rui Peng, and **Zhuang Liu***. "Hollow MnO₂ as A Tumor-microenvironment-responsive Biodegradable Nano-platform for Combination Therapy Favoring Antitumor Immune Responses" *Nat. Commun.*, 8, 902 (2017).
- Qian Chen, Chao Liang, Xiaoqi Sun, Jiawen Chen, Zhijuan Yang, He Zhao, Liangzhu Feng, and **Zhuang Liu***. "H₂O₂-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).
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- 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, Advanced Therapeutics (2017-)
- Editorial Board Member, Journal of Interdisciplinary Nanomedicine (2017-)
- Editorial Board Member, ChemMedChem (2016-)
- Editorial Board Member, Nano Research (2014-)
- Editorial Board Member, Scientific Reports (2013-2017)
- 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)