

CURRICULUM VITAE

Xiaoyuan (Shawn) Chen

EDUCATION

Colleges and Universities Attended:

Nanjing University, China	B.Sc.	1993	Chemistry
Nanjing University, China	M.Sc.	1996	Chemistry
University of Idaho (supervisor: Chien M. Wai)	Ph.D.	1999	Chemistry

Postdoctoral Training

Dept of Chemistry, Syracuse University (supervisor: Jon Zubieta)	1999-2000
Dept of Radiology, Washington University in St. Louis (supervisor: Mike Welch)	2000-2001

EMPLOYMENT HISTORY

National University of Singapore	
Nasrat Muzayyin Chair Professor in Medicine and Technology	11/20-present
National Institutes of health	
Senior Investigator and Laboratory Chief	08/09-07/20
Stanford University	
Associate Professor of Radiology	09/08-07/09
Stanford University	
Assistant Professor of Radiology	05/04-08/08
University of Southern California	
Assistant Professor of Radiology Research	02/02-04/04

PUBLIC AND PROFESSIONAL SERVICE

Committee Member:

Director, Nanomedicine Translational Research Program, NUS School of Medicine
 Research Director, Clinical Imaging Research Center, NUS School of Medicine
 Research Director, Institute of Molecular and Cell Biology, A*STAR
 Chair, Biomedical Imaging and Instrumentation I Committee, AIMBE
 Search committee for SoM (Radiology, Pathology, Surgery) and CDE (ChBE, BME)
 Promotion and Tenure Committee for SoM and CDE
 PET Users Committee (NIH, until July 2020)
 MRI Research Facility Steering Committee (NIH, until July 2020)
 CNRM translational imaging facility steering committee (DOD/NIH, until July 2020)
 NIH Earl Stadtman Tenure Track PI Search Committee (until July 2020)
 Board Member (2011-2013), the Radiopharmaceutical Science Council, Society of Nuclear
 Medicine and Molecular Imaging (SNMMI)
 President (2013-2015), Chinese American Society of Nuclear Medicine and Molecular Imaging
 Immediate-Past President (2015-2017), CASNMMI
 Vice-President Elect (2013-2014), Radiopharmaceutical Science Council (RPSC), Society of
 Nuclear Medicine and Molecular Imaging (SNMMI)
 Vice President (2014-2015), RPSC, SNMMI
 President (2015-2016), RPSC, SNMMI

Immediate Past President (2016-2017), RPSC, SNMMI
President (2015-2017), Chinese American Society of Nanomedicine and Nanobiotechnology (CASNN)

Affiliated Departments and Programs:

Joint appointment: Depts of Diagnostic Radiology, Surgery (School of Medicine), Chemical and Biomolecular Engineering, Biomedical Engineering (College of Design and Engineering)
Research Director, Clinical Imaging Research Center (CIRC), NUS
Director, Nanomedicine Translational Research Program, YYL School of Medicine, NUS

Editorial Board:

Theranostics (Founding Editor-in-Chief, IF = 12.4)
Accounts of Chemical Research (IF = 24.466)
ACS Nano (IF = 18.027)
Bioconjugate Chemistry (IF = 6.069)
Bioengineering and Translational Medicine (IF = 10.684)
Journal of Nuclear Medicine (IF = 11.082)
European Journal of Nuclear Medicine and Molecular Imaging (IF = 10.057)

Book Editor:

- Recent Advances of Bioconjugate Chemistry in Molecular Imaging (Publisher: Research Signpost) ISBN 978-81-308-0210-7
- Nanoplatfom-Based Molecular Imaging (Publisher: John Wiley & Sons) ISBN 978-04-705-2115-1
- Molecular Imaging Probes for Cancer Research (Publisher: World Scientific Publishing / Imperial College Press) ISBN 978-98-142-9367-9
- Cancer Theranostics (co-editor: Stephen Wong; Publisher: Elsevier) ISBN 978-0-12-407722-5.



Journal Guest Editor:

- Frontiers in Biosciences (SI: Molecular Imaging)
- Eur J Nucl Med Mol Imaging (SI: Imaging Angiogenesis. Co-editor: Ambros Beer)
- Amino Acids (SI: Peptide probes for molecular imaging)
- Curr Top Med Chem (SI: The Medicinal Chemistry of Targeted Tumor Imaging)
- Q J Nucl Med Mol Imaging (SI: Molecular Imaging of Tumor Environment. Co-editor: Silvana Del Vecchio)
- Acc Chem Res (SI: Theranostic Nanomedicine. Co-editors: Sanjiv S. Gambhir; Jinwoo Cheon)
- Theranostics (SI: Integrin Targeted Imaging and Therapy)
- Bioconjugate Chem (SI: Antibody-Drug Conjugate)
- Advanced Drug Delivery Reviews (SI: Peptides and Peptide-Drug Conjugates)
- Advanced Drug Delivery Reviews (SI: Skin-Associated Drug Delivery)
- Theranostics (SI: Progress in Critical Reviews of Immunotheranostics)
- Theranostics (SI: Progress in Gene Editing Nanotheranostics)
- Theranostics (SI: The EPR effect and beyond: Strategies to improve tumor targeting and nanomedicine efficacy)
- Theranostics (SI: Progress in Supramolecular Nanotheranostics)
- Acc Chem Res (SI: Chemistry in Immunotheranostics)

Conference Symposium Organizer

- 11th International Congress on Amino Acids, Peptides and Proteins, August 2009, Vienna, Austria (Symposium: Peptide Probes for Molecular Imaging)
- NIH Research Festival, October 5-6, 2010 (Symposium: Molecular Imaging: Biology, Physics and Chemistry)
- MRS 2012 Spring Meeting, San Francisco, CA (Symposium: Nanomedicine in Molecular Imaging and Therapy)
- 13th SCBA International Conference, *Guangzhou*, China July 25-29, 2011 (Symposium: Molecular Imaging in Biology and Medicine)
- 14th SCBA International Conference, Xi'an, China July 18-20, 2013 (Symposium: Nanotheranostics)
- 2014 International Symposium for Translational Theranostics, Shenzhen, China, May 26-27, 2014
- MRS 2014 Fall Meeting, Boston, MA (Symposium: Medical Applications of Noble Metal Nanoparticles (NMNPs))
- MRS 2016 Fall Meeting, Boston, MA (Symposium: Spatiotemporally and Morphologically-Controlled Biomaterials for Medical Applications)
- MRS 2019 Spring Meeting, Phoenix, AZ (Symposium: Progress in Supramolecular Nanotheranostics)

Grant Review

- Reviewer for NIH study sections (GDD (charter member), RTB, MEDI, CMIP, NANO, SBIR)
- Reviewer for DOD CDMRP (BCRP, PCRP, OCRP)
- Reviewer for National Science Foundation of China (NSFC)
- Reviewer for National Research Council (Canada), European Research Council, Innovation and Technology Commission (ITC, Hong Kong)...

POST-DEGREE HONORS AND AWARDS

- Journal of Biomedical Nanotechnology (JBN) Trailblazer Award, 2023
- Advanced Materials Hall of Fame, 2023
- SNMMI Fellow, 2020
- Michael J. Welch, PhD Award, Society of Nuclear Medicine and Molecular Imaging, 2019
- *ACS Nano*, *Bioconjug Chem*, and *Mol Pharm* Selected Highly Prolific Authors, 2017
- AIMBE Fellow, 2017
- Clarivate Analytics highly cited researcher, 2017-2023
- ACS Bioconjugate Chemistry Lectureship Award, 2016
- NIH Director's Award, 2014
- NIBIB Mentor Award, 2012
- EANM Springer Prize 2011 - MOST CITED PAPERS. Cai W, Chen K, Cao Q, Koong A, Chen X. Quantitative PET of EGFR expression in xenograft-bearing mice using ^{64}Cu -labeled cetuximab, a chimeric anti-EGFR monoclonal antibody. *Eur J Nucl Med Mol Imaging* 2007;34:850-858.
- *Eur J Nucl Med Mol Imaging* 2009 Best Basic Science paper "Liu Z, Niu G, Wang F, Chen X. (68)Ga-labeled NOTA-RGD-BBN peptide for dual integrin and GRPR-targeted tumor imaging. *Eur J Nucl Med Mol Imaging*. 2009 Sep;36(9):1483-94."
- *J Nucl Med* 2008 Best Basic Science paper "Lee HY, Li Z, Chen K, Hsu AR, Xu C, Xie J, Sun S, Chen X. PET/MRI dual-modality tumor imaging using arginine-glycine-aspartic (RGD)-conjugated radiolabeled iron oxide nanoparticles. *J Nucl Med*. 2008 Aug;49(8):1371-9."
- First place award in the Molecular Imaging Abstract track for abstract titled "Trafficking the fate of mesenchymal stem cells in vivo" from the SNM's Molecular Imaging Center of Excellence (55th SNM annual meeting), 2008
- Best Basic Science Abstract Award, 55th, 54th, and 53rd SNM annual meetings (2008, 2007, and 2006).
- *Circulation* Best Basic Science paper "Cao F, Lin S, Xie X, Ray P, Patel M, Zhang X, Drukker M, Dylla SJ, Connolly AJ, Chen X, Weissman IL, Gambhir SS, Wu JC. In vivo visualization of embryonic stem cell survival, proliferation, and migration after cardiac delivery. *Circulation*. 2006 Feb 21;113(7):1005-14."

Journal Cover Features

- *J Nucl Med* cover feature article "Chen X, Park R, Hou Y, Tohme M, Shahinian AH, Bading JR, Conti PS. microPET and autoradiographic imaging of GRP receptor expression with ^{64}Cu -DOTA-[Lys³]bombesin in human prostate adenocarcinoma xenografts. *J Nucl Med*. 2004;45(8):1390-7."
- *J Nucl Med* cover feature article "Xiong Z, Cheng Z, Zhang X, Patel M, Wu JC, Gambhir SS, Chen X. Imaging chemically modified adenovirus for targeting tumors expressing integrin alphavbeta3 in living mice with mutant herpes simplex virus type 1 thymidine kinase PET reporter gene. *J Nucl Med*. 2006;47(1):130-9."
- *Cancer Res* cover feature article "Liu Z, Chen K, Davis C, Sherlock S, Cao Q, Chen X, Dai H. Drug delivery with carbon nanotubes for in vivo cancer treatment. *Cancer Res*. 2008;68(16):6652-60."
- *Mol Imaging* cover feature article "Lee S, Chen X. Dual-modality probes for in vivo molecular imaging. *Mol Imaging*. 2009 Mar-Apr;8(2):87-100."

- *Clin Cancer Res* cover feature article “Niu G, Sun X, Cao Q, Courter D, Koong A, Le QT, Gambhir SS, Chen X. Cetuximab-based immunotherapy and radioimmunotherapy of head and neck squamous cell carcinoma. *Clin Cancer Res*. 2010 Apr 1;16(7):2095-105.”
- *J Control Release* cover feature article “Zhu L, Wang H-L, Wang L, Wang Y, Jiang K, Li Cheng, Ma Q, Gao S, Wang L, Li W, Cai M-J, Wang D-H, Niu G, Lee S, Yang W, Fang XX, Chen X. High-affinity peptide against MT1-MMP for in vivo tumor imaging. *J Control Release*, 2011; 150(3):248-55”
- *Small* cover feature article “Liu G, Xie J, Zhang F, Wang Z, Luo K, Zhu L, Quan Q, Lee S, Ai H, Chen X. N-Alkyl-PEI Functionalized Iron Oxide Nanocluster for Efficient siRNA Delivery. *Small*, 2011;7(19):2742-9.”
- *Angew Chem Int Ed Engl* back cover article “Liu G, Choi K-Y, Bhirde A, Swierczewska M, Yin J, Lee SW, Park JH, Hong JI, Niu G, Lee S, Chen X. Sticky Nanoparticles: A New Platform for siRNA Delivery by Bis(Zinc(II)-Dipicolylamine)-Functionalized, Self-Assembled Nanoconjugate. *Angew Chem Int Ed Engl*, 2012;51(2):445-9.”
- *Theranostics* cover article “Choi KY, Swierczewska M, Lee S, Chen X. Protease-Activated Drug Development. *Theranostics* 2012; 2(2): 156-179.”
- *Advanced Materials* front cover article “Wang S, Huang P, Nie L, Xing R, Liu D, Wang Z, Lin J, Chen S, Niu G, Lu G, Chen X. Single Continuous Wave Laser Induced Photodynamic/Plasmonic Photothermal Therapy Using Photosensitizer-Functionalized Gold Nanostars. *Adv Mater*. 2013; 25(22):3055-61.”
- *Theranostics* cover article “Niu G, Zhu L, Ho DN, Zhang F, Gao H, Quan Q, Hida N, Ozawa T, Liu G, Chen X. Longitudinal bioluminescence imaging of the dynamics of Doxorubicin induced apoptosis. *Theranostics*. 2013;3(3):190-200.”
- *Theranostics* cover article “Wu C, Li F, Niu G, Chen X. PET Imaging of Inflammation Biomarkers. *Theranostics* 2013; 3(7): 448-466.”
- *Small* back cover article “Wang X, Wang G, Li W, Zhao B, Xing B, Leng Y, Dou H, Sun K, Shen L, Yuan X, Li J, Sun K, Han J, Xiao H, Li Y, Huang P, Chen X. NIR-Emitting Quantum Dot-Encoded Microbeads through Membrane Emulsification for Multiplexed Immunoassays. *Small*. 2013;9(19):3327-35”
- *Angew Chem Int Ed Engl* back cover article “Liu D, Wang Z, Jin A, Huang X, Sun X, Wang F, Yan Q, Ge S, Xia N, Niu G, Liu G, Hight Walker AR, Chen X. Acetylcholinesterase-catalyzed hydrolysis allows ultrasensitive detection of pathogens with the naked eye. *Angew Chem Int Ed Engl*. 2013;52(52):14065-9.”
- *Angew Chem Int Ed Engl* frontispiece article “Huang P, Lin J, Li W, Rong P, Wang Z, Wang S, Wang X, Sun X, Aronova M, Niu G, Leapman RD, Nie Z, Chen X. Biodegradable Gold Nanovesicles with an Ultrastrong Plasmonic Coupling Effect for Photoacoustic Imaging and Photothermal Therapy. *Angew Chem Int Ed Engl*. 2013;52(52):13958-64.”
- *Angew Chem Int Ed Engl* back cover article “Wang Z, Wang Z, Liu D, Yan X, Wang F, Niu G, Yang M, Chen X. Biomimetic RNA-Silencing Nanocomplexes: Overcoming Multidrug Resistance in Cancer Cells. *Angew Chem Int Ed Engl*. 2014;53(7):1997-2001.”
- *Small* front cover article “Nie L, Wang S, Wang X, Rong P, Ma Y, Liu G, Huang P, Lu G, Chen X. In Vivo Volumetric Photoacoustic Molecular Angiography and Therapeutic Monitoring with Targeted Plasmonic Nanostars. *Small*. 2014;10(8):1585-93.”
- *Adv Healthc Mater* back cover article “Wang L, Wang X, Bhirde A, Cao J, Zeng Y, Huang X, Sun Y, Liu G, Chen X. Carbon-Dots-based Two-Photon Visible Nanocarriers for Safe and Highly Efficient Delivery of siRNA and DNA. *Adv Healthc Mater*. 2014; 3(8):1203-9.

- Small Inside Front Cover article “Wang S, Teng Z, Huang P, Liu D, Liu Y, Tian Y, Sun J, Li Y, Ju H, Chen X, Lu G. Reversibly Extracellular pH Controlled Cellular Uptake and Photothermal Therapy by PEGylated Mixed-Charge Gold Nanostars. *Small*. 2015 Apr;11(15):1801-1810.”
- *Bioconjugate Chem* Cover article “Jacobson O, Yan X, Ma Y, Niu G, Kiesewetter DO, Chen X. Novel Method for Radiolabeling and Dimerizing Thiolated Peptides Using ¹⁸F-Hexafluorobenzene. *Bioconjug Chem*. 2015;26(10):2016-20.”
- *Advanced Materials* Front Cover article “Song J, Yang X, Jacobson O, Huang P, Sun X, Lin L, Yan X, Niu G, Ma Q, Chen X. Ultrasmall Gold Nanorod Vesicles with Enhanced Tumor Accumulation and Fast Excretion from the Body for Cancer Therapy. *Adv Mater*. 2015;27(33):4910-7.”
- *Advanced Materials* Front Cover article “He Q, Kiesewetter DO, Qu Y, Fu X, Fan J, Huang P, Liu Y, Zhu G, Liu Y, Qian Z, Chen X. NIR-Responsive On-Demand Release of CO from Metal Carbonyl-Caged Graphene Oxide Nanomedicine. *Adv Mater*. 2015;27(42):6741-6.”
- *Bioconjugate Chemistry* Front cover for special issue “Antibody-Drug Conjugates. *Bioconjug Chem*. 2015;26(11):2169.”
- *Nanoscale* Front cover article “Temporal-spatially transformed synthesis and formation mechanism of gold bellflowers” *Nanoscale* 2016;8:7430-4.”
- *Angew Chem Int Ed* Back cover article “Liu Y, He J, Yang K, Yi C, Liu Y, Nie L, Khashab NM, Chen X, Nie Z. “Folding Up of Gold Nanoparticle Strings into Plasmonic Vesicles for Enhanced Photoacoustic Imaging”. *Angew Chem Int Ed Engl*. 2015;54:15809–15812.”
- *Adv Mater* Front cover article “Lin J, Wang M, Hu H, Yang X, Wen B, Wang Z, Jacobson O, Song J, Zhang G, Niu G, Huang P, Chen X. Multimodal-Imaging-Guided Cancer Phototherapy by Versatile Biomimetic Theranostics with UV and γ -Irradiation Protection”. *Adv Mater*. 2016; 28(17):3273-9.
- *Polymer Chem* Back Cover article “Yu G, Zhao R, Wu D, Zhang F, Shao L, Zhou J, Yang J, Tang G, Chen X, Huang F. Pillar[5]arene-based amphiphilic supramolecular brush copolymers: fabrication, controllable self-assembly and application in self-imaging targeted drug delivery. *Polymer Chem*, 2016;7:6178-6188.”
- *Chem Soc Rev* Back Inside Cover article “Fan W, Huang P, Chen X. Overcoming the Achilles' heel of photodynamic therapy. *Chem Soc Rev*. 2016 Nov 21;45(23):6488-6519.”
- *Angew Chem Int Ed* Back cover article “Fan W, Lu N, Huang P, Liu Y, Yang Z, Wang S, Yu G, Liu Y, Hu J, He Q, Qu J, Wang T, Chen X. Glucose-Responsive Sequential Generation of Hydrogen Peroxide and Nitric Oxide for Synergistic Cancer Starving-Like/Gas Therapy. *Angew Chem Int Ed Engl*. 2017;56(5):1229-1233.”
- *J Nucl Med* cover article “Zhang J, Niu G, Lang L, Li F, Fan X, Yan X, Yao S, Yan W, Huo L, Chen L, Li Z, Zhu Z, Chen X. Clinical translation of a dual integrin $\alpha\beta 3$ and GRPR targeting PET radiotracer ⁶⁸Ga-NOTA-BBN-RGD. *J Nucl Med*. 2017 Feb;58(2):228-234”
- *Chem Soc Rev* Inside Front Cover article “Shen Z, Wu A, Chen X. Current detection technologies for circulating tumor cells. *Chem Soc Rev*. 2017;46:2038-2056.”
- *Adv Funct Mater* Front Cover article “Zhang R, Gao S, Wang Z, Han D, Liu L, Ma Q, Tan W, Tian J, Chen X. Multifunctional Molecular Beacon Micelles for Intracellular mRNA Imaging and Synergistic Therapy in Multidrug-Resistant Cancer Cells. *Adv Funct Mater*. 2017;27:1701027.”
- *Adv Mater* Inside Back Cover article “Chu C, Lin H, Liu H, Wang X, Wang J, Zhang P, Gao H, Huang C, Zeng Y, Tan Y, Liu G, Chen X. Tumor Microenvironment-Triggered Supramolecular System as an In Situ Nanotheranostic Generator for Cancer Phototherapy. *Adv Mater*. 2017;29: 1605928.”

- *Adv Mater* Frontispiece article “Shen Z, Song J, Yung BC, Zhou Z, Wu A, Chen X. Emerging Strategies of Cancer Therapy Based on Ferroptosis. *Adv Mater.* 2018;30: 1704007.”
- *Adv Mater* Inside Cover article “Ni Q, Zhang F, Zhang Y, Zhu G, Wang Z, Teng Z, Wang C, Yung BC, Niu G, Lu G, Zhang L, Chen X. In Situ shRNA Synthesis on DNA-Polylactide Nanoparticles to Treat Multidrug Resistant Breast Cancer. *Adv Mater.* 2018;30:1705737”
- *Theranostics* Inside Back Cover article “Yang Z, Song J, Tang W, Fan W, Dai Y, Shen Z, Lin L, Cheng S, Liu Y, Niu G, Rong P, Wang W, Chen X. Stimuli-Responsive Nanotheranostics for Real-Time Monitoring Drug Release by Photoacoustic Imaging. *Theranostics* 2019; 9(2):526-536.”
- *Chem Soc Rev* Back Cover article “Sang W, Zhang Z, Dai Y, Chen X. Recent advances in nanomaterial-based synergistic combination cancer immunotherapy. *Chem Soc Rev.* 2019; 48(14): 3771-3810.”
- *Theranostics* Cover article “Yu G, Chen X. Host-Guest Chemistry in Supramolecular Theranostics. *Theranostics* 2019; 9(11): 3041-3074.”
- *Adv Mater* Back Cover article “Tian R, Ma H, Zhu S, Lau J, Ma R, Liu Y, Lin L, Chandra S, Wang S, Zhu X, Deng H, Niu G, Zhang M, Antaris AL, Hettie KS, Yang B, Liang Y, Chen X. Multiplexed NIR-II Probes for Lymph Node-Invaded Cancer Detection and Imaging-Guided Surgery. *Adv Mater* 2020;32:1907365”
- *PNAS* Cover article “Rao L, Xia S, Xu W, Tian R, Yu G, Gu C, Pan P, Meng QF, Cai X, Qu D, Lu L, Xie Y, Jiang S, Chen X. Decoy nanoparticles protect against COVID-19 by concurrently adsorbing viruses and inflammatory cytokines. *Proc Natl Acad Sci U S A.* 2020 Oct 6:202014352”
- *Matter* Cover article “Chen W, Cai B, Cheng Z, Chen F, Wang Z, Wang L, Chen X. Reducing false negatives in COVID-19 testing by using microneedle-based oropharyngeal swabs. *Matter*, 2020 Oct 5. doi: 10.1016/j.matt.2020.09.021”
- *Eur J Nucl Med Mol Imaging* Best Paper “Zang J, Liu Q, Sui H, Wang R, Jacobson O, Fan X, Zhu Z, Chen X. ¹⁷⁷Lu-EB-PSMA Radioligand Therapy with Escalating Doses in Patients with Metastatic Castration-Resistant Prostate Cancer. *J Nucl Med.* 2020;61(12):1772-1778”
- *View* Inside Front Cover “Fathi P, Rao L, Chen X. Extracellular vesicle-coated nanoparticles. *View* 2021;2: 20200187”.
- *Chem Soc Rev* Front Cover “Li B, Zhao M, Lin J, Huang P, Chen X. Management of fluorescent organic/inorganic nanohybrids for biomedical applications in the NIR-II region. DOI <https://doi.org/10.1039/D2CS00131D>”
- *Theranostics* Inside Front Cover “Wang R, Jakobsson V, Wang J, Zhao T, Peng X, Li B, Xue J, Liang N, Zhu Z, Chen X, Zhang J. Dual targeting PET tracer [⁶⁸Ga]Ga-FAPI-RGD in patients with lung neoplasms: a pilot exploratory study. *Theranostics.* 2023 May 15;13(9):2979-2992”.
- *Acc Chem Res* Front Cover “Tao Y, Jakobsson V, Chen X, Zhang J. Exploiting Albumin as a Versatile Carrier for Cancer Theranostics”. *Acc Chem Res.* 2023 Aug 25. doi: 10.1021/acs.accounts.3c00309.
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SOCIETY MEMBERSHIPS

Society of Nuclear Medicine (SNM)	2000-
American Chemical Society (ACS)	1996-
Society of Radiopharmaceutical Sciences	2008-

Scholarly Publications (in chronological order, Total Citations > 130,000, **H-index = 190**)

Submitted

Zhang L et al. Rational design and screening of bioactive β -sheet assemblies based on amino acid 'jigsaw puzzles'. Nat Nanotechnol, submitted.

Cao F et al. Oxygen-Independent Synchronized ROS Generation and Hypoxia Prodrug Activation with Z-Scheme Heterostructure Sonosensitizer, Adv Mater, under revision

Cao F et al. Engineering clinically relevant probiotics with switchable "nano-promoter" and "nano-effector" for precision tumor therapy, Adv Mater, under revision

Guo W et al. A zombie macrophage based "Trojan horse" enhances the effect of efferocytosis through immune regulation for atherosclerosis treatment, Adv Mater, under review

Liu J et al. Ultrathin clay nanoparticles-mediated mutual reinforcement of ferroptosis and cancer immunotherapy, Adv Mater, under revision

Zhou M. et al. Wake Biofilm Up to Enhance Suicidal Uptake of Gallium for Chronic Lung Infection Treatment, Adv Mater, under review

Zhou M. et al. Natural floating biosystem for alcohol-induced diseases. Matter, under revision

Wang K. et al. An efferocytosis-inhibiting nanoplatform for programmed tumor penetration through in situ apoptotic bodies. Matter, submitted.

Yang K. et al. Polyprodrug Nanomedicine for Chemiexcitation-Triggered Self-Augmented Cancer Chemotherapy and Gas Therapy. Angew Chem Int Ed, submitted

Xiang Z. et al. Urinary monitoring of tumor through in situ profiling and recording of ctDNA mutations via a DNA/ γ PNA hybrid nanoreporter. Angew Chem Int Ed, submitted

You Q et al. Development and Applications of D-Amino Acid Derivatives-based metabolic labeling of bacterial peptidoglycans. Angew Chem Int Ed, invited review

Zhao M. et al. Accounts of Materials Research, invited review

Yu G. et al. Fabrication of An Immunostimulatory Supramolecular Nanomedicine for Potent Cancer Chemoimmunotherapy. JACS Au, submitted

Zhang P. et al. A side-effect-free interventional therapy for precisely eliminating unresectable cancer pain. ACS Nano, submitted

Fan W. et al. Peroxynitrite-Scavenging Organosilica Nanomedicines for Light-Controllable NO Release and Precision On-Demand Glaucoma Therapy. ACS Nano, revised.

Zhu Y. et al. Stimuli-responsive Nanoadjuvant Rejuvenates Robust Immune Responses to Sensitize Cancer Immunotherapy. ACS Nano, revised

Yu G. et al. Vitamin E: a fortifier of lipid nanoparticles potentiates the efficacy and safety of cancer mRNA vaccines. Nat Commun, submitted

Wang K. et al. Biomimetic nanovaccine-mediated multivalent IL-15 self-transpresentation (MIST) for potent and safe cancer immunotherapy, Nat Commun, conditionally accepted.

Cheng J. et al. A non-metal single atom nanozyme for cutting off the energy and reducing power of tumors, Nat Commun, to be appealed

Shen Z. et al. A Generic Drug Delivery System: Mesoporous Superparamagnetic Iron Oxide Nanoparticles, Nat Commun, under revision.

Xie J. et al. Enhanced Glioblastoma Therapy through Redox-Sensitive Polymer Micelles Co-Encapsulating Immune Checkpoint Inhibitors and Chemotherapeutic Agents, Nat Commun, under revision.

Hou D. et al. Cascade-Activatable Nanoprodrug System Augments Sonochemotherapy of Bladder Cancer, Nat Commun, submitted

Zhang J. et al. A Phase 1 Trial to Determine the Maximum Tolerated Dose and Patient-specific Dosimetry of [177Lu]Lu-LNC1003 in patients with metastatic castration-resistant prostate cancer. Eur J Nucl med Mol Imaging, conditionally accepted.

Zhao H. et al. LCP1 knockdown in monocyte-derived macrophages: mitigating ischemic brain injury and shaping immune cell signaling and metabolism. Theranostics, under revision

Chen Q. et al. Ion Monitoring at Nanoscale Sites of Inter-organelle Membrane Contact in Living Cells. Small Structures, submitted

Papers in press

Li L, Yin J, Ma W, Tang L, Zou J, Yang L, Du T, Zhao Y, Wang L, Yang Z, Fan C, Chao J, Chen X
Spatial control of CD95 signaling using a programmable DNA origami to induce immune tolerance for rheumatoid arthritis reversal
Nat Mater, conditionally accepted.

Huang P, Wang C, Deng H, Zhou Y, Chen X
Cellular Trafficking of mRNA Delivery
Adv Mater, conditionally accepted.

2023 (976-1042)

1042. Wang K, Zhang X, Ye H, Wang X, Fan Z, Lu Q, Li S, Zhao J, Zheng S, He Z, Ni Q, Chen X, Sun J.

[Biomimetic nanovaccine-mediated multivalent IL-15 self-transpresentation \(MIST\) for potent and safe cancer immunotherapy](#)

Nat Commun. 2023 Oct 24;14(1):6748.

1041. Zang J, Wang G, Zhao T, Liu H, Lin X, Yang Y, Shao Z, Wang C, Chen H, Chen Y, Zhu Z, Miao W, Chen X, Zhang J.

[A phase I trial to determine the maximum tolerated dose and patient-specific dosimetry of \[177Lu\]Lu-LNC1003 in patients with metastatic castration-resistant prostate cancer](#)

Eur J Nucl Med Mol Imaging. 2023 Oct 21. doi: 10.1007/s00259-023-06470-3.

1040. Chen Y, Zou T, Xin G, Liu X, Yang Y, Wei L, Zhang B, Yu P, Ren Y, Feng Y, Chen R, Cao F, Chen X, Cheng Y.

[Oxygen-Independent Synchronized Ros Generation and Hypoxia Prodrug Activation with Z-Scheme Heterostructure Sonosensitizer](#)

Adv Mater. 2023 Oct 19:e2307929.

1039. Feng Z, Zhang X, Zhou J, Li Q, Chu L, Di G, Xu Z, Chen Q, Wang M, Jiang X, Xia H, Chen X.

[An in vitro-transcribed circular RNA targets the mitochondrial inner membrane cardiolipin to ablate EIF4G2+/PTBP1+ pan-adenocarcinoma](#)

Nat Cancer. 2023 Oct 16. doi: 10.1038/s43018-023-00650-8.

1038. Li C, Chen X, Zhang J.

[Comment on: "Development of a CLDN18.2-targeting immuno-PET probe for non-invasive imaging in gastrointestinal tumors"](#)

J Pharm Anal. 2023 Sep;13(9):958-959.

1037. Fu H, Huang J, Zhao T, Wang H, Chen Y, Xu W, Pang Y, Guo W, Sun L, Wu H, Xu P, Su B, Zhang J, Chen X, Chen H.

[Fibroblast Activation Protein-Targeted Radioligand Therapy with 177Lu-EB-FAPI for Metastatic Radioiodine Refractory Thyroid Cancer: First-in-Human, Dose-Escalation Study](#)

Clin Cancer Res. 2023 Oct 6. doi: 10.1158/1078-0432.CCR-23-1983.

1036. Cao F, Jin L, Zhang C, Gao Y, Qian Z, Wen H, Yang S, Ye Z, Hong L, Yang H, Tong Z, Cheng L, Ding Y, Wang W, Yu G, Mao Z, Chen X.

[Engineering Clinically Relevant Probiotics with Switchable "nano-promoter" and "nano-effector" for Precision Tumor Therapy](#)

Adv Mater. 2023 Oct 3:e2304257.

1035. Feng Z, Zhang X, Zhou J, Li Q, Chu L, Di D, Xu Z, Chen Q, Wang M, Jiang X, Xia H, Chen X
An in vitro-transcribed circular RNA targets the mitochondrial inner membrane cardiolipin to ablate EIF4G2+/PTBP1+ pan-adenocarcinoma

Nat Cancer, in press. DOI: 10.1038/s43018-023-00650-8

1034. Guo S, Gu D, Yang Y, Tian J, Chen X.
[Near-infrared photodynamic and photothermal co-therapy based on organic small molecular dyes](#)
J Nanobiotechnology. 2023 Sep 27;21(1):348.
1033. Lin R, Wang C, Chen S, Lin T, Cai H, Chen S, Yang Y, Zhang J, Xu F, Zhang J, Chen X, Zang J, Miao W.
[\[68Ga\]Ga-LNC1007 PET/CT in the evaluation of renal cell carcinoma: comparison with 2-\[18F\]FDG/\[68Ga\]Ga-PSMA PET/CT](#)
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