

June 25, 2021	Magnetic black phosphorus microbubbles for targeted tumor theranostics	Black phosphorus (BP) is attracting more and more interest for the biomedical application.
July 07, 2021	Low-dose X-ray enhanced tumor accumulation of theranostic nanoparticles for high-performance bimodal imaging-guided photothermal therapy	Background: Theranostic nanoparticles (NPs) have achieved rapid development owing to their capacity for personalized multimodal diagnostic imaging and
June 25, 2021	ROS-responsive liposomes with NIR light-triggered doxorubicin release for combinatorial therapy of breast cancer	Background: Reactive oxygen species (ROS)-responsive drug delivery systems (DDSs) are potential tools to minimize the side effects and substantially e
June 25, 2021	Dual mitigation of immunosuppression combined with photothermal inhibition for highly effective primary tumor and metastases therapy	T-cell based immune response can attack cancer cells formidably when certain immune checkpoint (e.g., PD-1/PD-L1) is blocked.
June 25, 2021	Dual-Stimuli-Responsive Nanotheranostics for Dual-Targeting Photothermal-Enhanced Chemotherapy of Tumor	Stimuli-responsive nanotheranostics have been widely explored for precision medicine.
January 04, 2021	Ultrastable AgBiS2Hollow Nanospheres with Cancer Cell-Specific Cytotoxicity for Multimodal Tumor Therapy	Specific cytotoxicity for catalytic nanomedicine triggered by the tumor microenvironment (TME) has attracted increasing interest.
January 04, 2021	Bruceantin targets HSP90 to overcome resistance to hormone therapy in castration-resistant prostate cancer	Rationale: Aberrant androgen receptor (AR) signaling via full-length AR (AR-FL) and constitutively active AR variant 7 (AR-V7) plays a key role in the
October 19, 2020	Opto-acoustic synergistic irradiation for vaporization of natural melanin-cored nanodroplets at safe energy levels and efficient sono-chemo-photothermal cancer therapy	Rationale: Insufficient penetration and accumulation of theranostic payloads in solid tumors greatly challenge the clinical translation of cancer nano
October 19, 2020	Tumor Microenvironment Cascade-Responsive Nanodrug with Self-Targeting Activation and ROS Regeneration for Synergistic Oxidation-Chemotherapy	Carrier-free nanodrug with exceptionally high drug payload has attracted increasing attentions.
October 16, 2020	Multiphase Assembly of Small Molecule Microcrystalline Peptide Hydrogel Allows Immunomodulatory Combination Therapy for Long-Term Heart Transplant Survival	Combination therapies that target multiple pathways involved in immune rejection of transplants hold promise for patients in need of restorative surge
September 09, 2020	Photoacoustic imaging biomarkers for monitoring biophysical changes during nanobubble-mediated radiation treatment	The development of novel anticancer therapies warrants the parallel development of biomarkers that can quantify their effectiveness.
September 09, 2020	In vivo photoacoustic guidance of stem cell injection and delivery for regenerative spinal cord therapies	Significance: Stem cell therapies are of interest for treating a variety of neurodegenerative diseases and injuries of the spinal cord.
April 01, 2020	3D printed core-shell hydrogel fiber scaffolds with NIR-triggered drug release for localized therapy of breast cancer	Localized therapy using hydrogels-based drug delivery system (DDS) is a promising strategy for the treatment of diseases such as cancer in superficial
January 01, 2020	Photoacoustic Imaging Quantifies Drug Release from Nanocarriers via Redox Chemistry of Dye Labeled Cargo	We report a new approach to monitor drug release from nanocarriers via a paclitaxel–methylene blue conjugate (PTX-MB) with redox activity.
December 14, 2018	Intrinsically absorbing photoacoustic and ultrasound contrast agents for cancer therapy and imaging	Nanoparticles are submicrometer in size and are used in a variety of ways in the biomedical field.
January 01, 2018	Therapy-educated mesenchymal stem cells enrich for tumor initiating cells	Stromal cells residing in the tumor microenvironment contribute to the development of therapy resistance.
June 20, 2016	Preclinical efficacy of bevacizumab with CRLX101, an investigational nanoparticle-drug conjugate, in treatment of metastatic triple-negative breast cancer	VEGF-pathway targeting antiangiogenic drugs, such as bevacizumab, when combined with chemotherapy have changed clinical practice for the treatment of

January 01, 2015	Co-option of Liver Vessels and Not Sprouting Angiogenesis Drives Acquired Sorafenib Resistance in Hepatocellular Carcinoma	Background: The anti-angiogenic Sorafenib is the only approved systemic therapy for advanced hepatocellular carcinoma (HCC).
September 22, 2015	Sequential Drug Release and Enhanced Photothermal and Photoacoustic Effect of Hybrid Reduced Graphene Oxide-Loaded Ultrasmall Gold Nanorod Vesicles for Cancer Therapy	We report a hybrid reduced graphene oxide (rGO)-loaded ultrasmall plasmonic gold nanorod vesicle (rGO-AuNRVe) (~65 nm in size) with remarkably amplified
September 10, 2014	A dual gold nanoparticle system for mesenchymal stem cell tracking	Stem cell-based therapies have demonstrated improved outcomes in preclinical and clinical trials for treating cardiovascular ischemic diseases.
July 09, 2014	Anti-VEGF therapy reduces intestinal inflammation in Endoglin heterozygous mice subjected to experimental colitis	Chronic intestinal inflammation is associated with pathological angiogenesis that further amplifies the inflammatory response.
December 18, 2013	Ultrasound-guided intra-tumor injection of combined immunotherapy cures mice from orthotopic prostate cancer	Intra-tumor injection of immunotherapeutic agents is often the most effective, likely because of concomitant modification of tumor microenvironment.
November 01, 2013	In vitro and in vivo mapping of drug release after laser ablation thermal therapy with doxorubicin-loaded hollow gold nanoshells using fluorescence and photoacoustic imaging	Doxorubicin-loaded hollow nanoshells (Dox@PEG-HAuNS) increases the efficacy of photothermal ablation (PTA) by not only mediating efficient PTA but also
November 01, 2013	Development and optimization of near-IR contrast agents for immune cell tracking	Gold nanorods (NRs) are attractive for in vivo imaging due to their high optical cross-sections and tunable absorbance.
July 23, 2013	CTGF antagonism with mAb FG-3019 enhances chemotherapy response without increasing drug delivery in murine ductal pancreas cancer.	Pancreatic ductal adenocarcinoma (PDA) is characterized by abundant desmoplasia and poor tissue perfusion.
April 01, 2013	Rapid decrease in tumor perfusion following VEGF blockade predicts long-term tumor growth inhibition in preclinical tumor models.	Vascular endothelial growth factor (VEGF) is a key upstream mediator of tumor angiogenesis, and blockade of VEGF can inhibit tumor angiogenesis and de
November 01, 2012	The Vascular Disrupting Agent STA-9584 Exhibits Potent Antitumor Activity by Selectively Targeting Microvasculature at Both the Center and Periphery of Tumors	Vascular disrupting agents (VDAs) are an emerging class of therapeutics targeting the existing vascular network of solid tumors.
July 06, 2012	Enhanced angiogenic and cardiomyocyte differentiation capacity of epigenetically reprogrammed mouse and human endothelial progenitor cells augments their efficacy for ischemic myocardial repair.	RATIONALE: Although bone marrow endothelial progenitor cell (EPC)-based therapies improve the symptoms in patients with ischemic heart disease, their
May 16, 2012	In vivo Ultrasound and Photoacoustic Monitoring of Mesenchymal Stem Cells Labeled with Gold Nanotracers	Longitudinal monitoring of cells is required in order to understand the role of delivered stem cells in therapeutic neovascularization.
March 01, 2010	IFN-beta restricts tumor growth and sensitizes alveolar rhabdomyosarcoma to ionizing radiation.	Ionizing radiation is an important component of multimodal therapy for alveolar rhabdomyosarcoma (ARMS).
January 01, 2009	Antiangiogenic Cancer Therapy : Monitoring with Molecular US and a Clinically Translatable Contrast Purpose : Methods : Results :	Purpose: Materials and Methods: To develop and test human kinase insert domain receptor (KDR)-targeted microbubbles (MBs) (MB KDR) for imaging KDR at
January 01, 2008	Monitoring kidney safety in drug development : Emerging technologies and their implications	Drug-induced kidney injury is a serious and not uncommon adverse event which needs to be considered during drug development.