



# PROGRAM SIPCD 2018

Worldhotel Grand DushuLake • Suzhou • China

14–17 September 2018

## 14 SEPTEMBER 2018 | FRIDAY

### 13:00–21:30 REGISTRATION

Main Building Lobby of Worldhotel Grand DushuLake

### 18:00–20:30 WELCOME RECEPTION

Grand Ballroom of Worldhotel Grand DushuLake

## 15 SEPTEMBER 2018 | SATURDAY

### 08:30–08:35 OPENING CEREMONY (Watson Auditorium)

**Jan Feijen** Soochow University, China /University of Twente, The Netherlands

### 08:35–10:15 SESSION ONE (Watson Auditorium)

#### Chairpersons:

**Sung Wan Kim** University of Utah, USA

**Andreas Lendlein** Helmholtz-Zentrum Geesthacht, Germany

08:35–09:00 **Kinam Park** Purdue University, USA

*PLGA microparticles: Very well-known but unexplored formulations*

09:00–09:25 **Jeroen J.L.M. Cornelissen** University of Twente, The Netherlands

*Protein cages as new tools for nanomedicine*

09:25–09:50 **Yi Yan Yang** Institute of Bioengineering and Nanotechnology, Singapore

*Macromolecular chemotherapeutics that mitigate resistance in cancer and prevent metastasis*

09:50–10:15 **Patrick S. Stayton** University of Washington, USA

*Engineering intracellular drug therapies*

### 10:15–10:45 COFFEE

### 10:45–12:25 SESSION TWO (Watson Auditorium)

#### Chairpersons:

**Emily Hu** John Wiley & Sons Inc (Beijing), China

**Yong-Hee Kim** Hanyang University, Korea

10:45–11:10 **Benzhong Tang** Hong Kong University of Science and Technology, Hong Kong

*Theranostics based on AIEgens*

11:10–11:35 **Theresa M. Reineke** University of Minnesota, USA

*Controlled polymer synthesis and assembly to promote drug delivery and cellular gene editing*

11:35–12:00 **Andreas Lendlein** Helmholtz-Zentrum Geesthacht, Germany  
*Multifunctional polymer systems for controlled drug release and transport*

12:00–12:25 **Shaoyi Jiang** University of Washington, USA  
*Anti-PEG antibodies: Current issues and beyond PEGylation*

**12:25–13:30 Lunch** (Grand Ballroom)

**13:30–16:00 SESSION THREE** (Watson Auditorium)

**Chairpersons:** **Theresa M. Reineke** University of Minnesota, USA  
**Zhuang Liu** Soochow University, China

13:30–13:55 **Kazunori Kataoka** University of Tokyo, Japan  
*Self-assembled supramolecular nanosystems for smart diagnosis and targeted therapy of intractable diseases*

13:55–14:20 **Bin Liu** National University of Singapore, Singapore  
*Organic nanoparticles for sensing, imaging and therapy*

14:20–14:45 **Julien Nicolas** Université Paris-Sud, France  
*Drug-initiated synthesis of polymer prodrug nanocarriers for anticancer therapy*

14:45–15:10 **Jianmin Fang** Tongji University, China  
*Antibody-drug conjugates for targeted delivery of high potency payloads*

15:10–15:35 **Youngro Byun** Seoul National University, Korea  
*Polymeric nano-shielding of transplanted pancreatic islets for the prevention of immune reactions*

15:35–16:00 **Mingdong Dong** Aarhus University, Denmark  
*Understanding of abnormal protein aggregation*

**16:00–18:30 POSTER SESSION with Snacks and Wine**

Grand Ballroom

**Biomacromolecules Poster Awards Selection Committee:** Timothy J. Deming (Chair), Haeshin Lee, Hai-Quan Mao, Julien Nicolas, Patrick S. Stayton, Richard Hoogenboom, Yi Yan Yang, Yong-Hee Kim

## 16 SEPTEMBER 2018 | SUNDAY

**08:30–10:10 SESSION FOUR** (Watson Auditorium)

**Chairpersons:** **Kinam Park** Purdue University, USA  
**Ruibing Wang** University of Macau, China

08:30–08:55 **Ick Chan Kwon** Korea Institute of Science and Technology, Korea  
*Activatable molecular probes for drug delivery*

08:55–09:20 **Jinming Gao** University of Texas Southwestern Medical Center, USA  
*Exploiting molecular cooperativity for precision medicine*

09:20–09:45 **Wim E. Hennink** Utrecht University, The Netherlands  
*Modular core-shell polymeric nanoparticles mimicking viral structures for vaccination*

09:45–10:10 **Zhiyong Qian** Sichuan University, China  
*Redox/pH dual-stimuli responsive camptothecin prodrug nanogels for “on-demand” drug delivery*

**10:10–10:40 COFFEE**

**10:40–12:15 SESSION FIVE (Watson Auditorium)**

**Chairpersons:** **Giuseppe Battaglia** University College London, UK  
**Shaoyi Jiang** University of Washington, USA

10:40–11:05 **Frank Caruso** The University of Melbourne, Australia  
*Hybrid functional materials from metal-phenolic networks*

11:05–11:30 **Guanghui Ma** Institute of Process Engineering, CAS, China  
*Preparation of uniform particles and employed as chassis for constructing composite virus-like particles by assembling antigen on it*

11:30–11:55 **Haeshin Lee** Korea Advanced Institute of Science and Technology, Korea  
*Polydopamine coating and TANNylation: Mussel and plant-inspired biomaterial studies*

11:55–12:15 **Maarten van Twisk** Elsevier, The Netherlands  
*How to write a great paper (Author Workshop)*

**12:15–13:30 Lunch (Grand Ballroom)**

**13:30–15:20 SESSION SIX (Watson Auditorium)**

**Chairpersons:** **Jan Feijen** Soochow University, China  
**Wim E. Hennink** Utrecht University, The Netherlands

13:30–13:55 **Rainer Haag** Freie Universität Berlin, Germany  
*Multifunctional graphene-based nanosystems for virus capture and tumor therapy*

13:55–14:20 **Hai-Quan Mao** Johns Hopkins University, USA  
*Controlled polyelectrolyte assembly and therapeutic delivery*

**14:20–15:20 BIOMACROMOLECULES FORUM**

14:20–14:26 **Huabing Chen** Soochow University, China  
*Photoactive nanoparticles for cooperative cancer phototherapy*

14:26–14:32 **Christian Wischke** Helmholtz-Zentrum Geesthacht, Germany  
*Polymer network carriers that switch their shape*

14:32–14:38 **Jianzhong Du** Tongji University, China  
*Polymer vesicles for biomedical applications*

14:38–14:44 **Jing Sun** Qingdao University of Science and Technology, China  
*Functional bioinspired polypeptide/peptoid-based polymers*

- 14:44–14:50 **Jianshu Li** Sichuan University, China  
*Controlled delivery systems of calcitonin for anti-osteoporosis therapy*
- 14:50–14:56 **Chuanliang Feng** Shanghai Jiao Tong University, China  
*Bioinspired chiral supramolecular hydrogels*
- 14:56–15:02 **Haijun Yu** Shanghai Institute of Materia Medica, CAS, China  
*Stimuli-responsive nanoparticles for cancer immunotherapy*
- 15:02–15:08 **Edgar H. H. Wong** University of New South Wales, Australia  
*Novel formulations of antimicrobial polymers and small molecule compounds for synergistic action against (multidrug-resistant) bacteria*
- 15:08–15:14 **Wei Li** The Second Military Medical University, China  
*Nano physical pharmaceuticals (NPP): the overlooked powerful tool for promoting in vivo performance of nano formulations*
- 15:20–15:50 COFFEE**
- 15:50–17:30 SESSION SEVEN (Watson Auditorium)**
- Chairpersons:** **Rainer Haag** Freie Universität Berlin, Germany  
**Weiping Gao** Tsinghua University, China
- 15:50–16:15 **David Kaplan** Tufts University, USA  
*Engineering silk protein delivery systems*
- 16:15–16:40 **Xuesi Chen** Changchun Institute of Applied Chemistry, CAS, China  
*Tumor selective hypoxia induced by vascular disrupting agents: Towards highly enhanced hypoxia-activated prodrug therapy in metastatic breast carcinoma*
- 16:40–17:05 **Giuseppe Battaglia** University College London, UK  
*Precision targeting nanomedicines: principles and applications*
- 17:05–17:30 **Richard Hoogenboom** Ghent University, Belgium  
*Poly(2-oxazoline)s as potent(ial) biomaterials*
- 17:30–17:35 CLOSING OF SYMPOSIUM (Watson Auditorium)**
- Zhiyuan Zhong** Soochow University, China
- 19:00–21:30 BANQUET & BIOMACROMOLECULES POSTER AWARDS**  
Grand Ballroom

17 SEPTEMBER 2018 | MONDAY

**09:00–14:00 City Tour (Optional)**

**Route 1:** Humble Administrator's Garden and Suzhou First Silk Factory Tour

**Route 2:** Tongli Watery Town Tour

# SIPCD 2018 Abstract Book

## NO. TITLE

---

- 1 Nano-liposomes for resveratrol delivery with potential anti-cancer activities  
*Jun Wang, Ning Li, Aimin Shi, Qiang Wang*
- 2 pH responsive H<sub>2</sub>S-releasing biomimetic hydrogel promoting wound regeneration by M2 macrophage polarization  
*Anqi Chen, Yajiao Zhou, Sen Zheng, Jian Xiao, Jiang Wu, Xiaokun Li*
- 3 Antibacterial conductive anti-oxidant hydrogel with hemostasis and adhesiveness for wound dressing  
*Baolin Guo, Xin Zhao, Peter Ma*
- 4 Shedding light on photo-triggered capsules  
*Bartosz Tylkowski, Anna Trojanowska, Valentina Marturano, Veronica Ambroggi, Pierfrancesco Cerruti, Marta Giamberini*
- 5 Facile synthesis of a new manganese based dendritic MRI contrast agent with intrinsic chelators  
*Bing Xiao, Xiaoxuan Zhou, Dongdong Li, Zhuxian Zhou, Xiangrui Liu, Jianbin Tang, Youqing Shen*
- 6 Preparation of high stable and size tunable alkylated lignin microspheres by amphiphilic modification for a long-term delivery of hydrophobic anticancer drugs  
*Bingqi Li, Wei Qi, Rongxin Su, Zhimin He*
- 7 Engineering zwitterionic materials for safe and efficacious protein delivery  
*Bowen Li, Shaoyi Jiang*
- 8 Silicone implants capable of the local, controlled delivery of triamcinolone for the prevention of fibrosis with minimized drug side effects  
*Byung Ho Shin, Chan Yeong Heo, Young Bin Choy*
- 9 Tuning cell behaviour by nanoparticles shape  
*C. De Pace, E. Scarpa, A. Poma, L. Rizzello, G. Battaglia*
- 10 Glucose and H<sub>2</sub>O<sub>2</sub> dual-sensitive nanogels for enhanced glucose-responsive insulin delivery  
*Chang Li, Gang Wu, Ying Liu, Yong Liu, Juan Lv, Rujiang Ma, Yingli An, Linqi Shi*
- 11 Multifunctional Bi<sub>2</sub>WO<sub>6</sub> nanoparticles for CT-guided photothermal and oxygen-free photodynamic therapy  
*Chao Zhang, Yong Hu*
- 12 Cell-loaded thermosensitive hydrogel releasing PEG-NELL-1 as sustained drug delivery system on cartilage repair  
*Chaohua Gao, Chenyu Wang, Fan Yang, Hui Jin, Zhonghan Wang, Zuhao Li, Chenyu Shi, Yi Leng, He Liu, Jincheng Wang*
- 13 Blood-brain tumor barrier-penetrating nanoconstruct system delivers doxorubicin and manganese dioxide for the diagnosis and treatment of glioma  
*Chaoping Fu, Xiaohui Duan, Huiyan Ting, Jun Shen, Li-Ming Zhang*
- 14 Heparin-mimicking bFGF conjugate accelerating wound regeneration by stabilizing bFGF  
*Chaoqun Cheng, Junyi Zhu, Yajiao Zhou, Sen Zheng, Xuan Xuan, Ying An, Wen Huang, Huacheng He, Jiang Wu, Jian Xiao, Xiaokun Li*
- 15 Antibacterial mesh for pelvic organ prolapse based on nanocellulose  
*Chen Lai, Xuetao Shi, Shujiang Zhang*
- 16 Biodegradable hyperbranched poly (beta-amino esters) for gene delivery and CXCR4 antagonism  
*Chenfei Zhu, Yixin Wang, Jinwen Dong, Minjie Sun, David Oupicky*

- 17 Enhancement of tumor therapy through the tegulation of tumor IFP  
*Cheng Li, Xiqun Jiang*
- 18 Nanosheets loaded with antibacterial factor and coagulation factor used for wound hemostasis and anti-infection  
*Chengkai Xuan, Chen Lai, Xuetao Shi*
- 19 A pH-triggered drug delivery system for cancer therapy: toward disrupting lysosomes and overcoming drug resistance  
*Chenxu Zhang, Ao Yu, Yongjian Wang*
- 20 Adipose-derived stem cells and EGF-loaded hydrogel synthesized by polyvinyl alcohol and poly aminophenyl boronic acid enhances wound healing in diabetic rats  
*Chenyu Shi, Chenyu Wang, Hui Jin, Zhonghan Wang, Zuhao Li, Chaohua Gao, Yi Leng, Fan Yang, He Liu, Jincheng Wang*
- 21 In situ monitoring of the interaction between the model membrane and a pH-responsive polymer  
*Chu Wang, Yuchen Chang, Ting Wang, Xiaolin Lu*
- 22 Photoactive targeted hybrid nanoassemblies for cancer combined photo-chemotherapy  
*Qiuyue Liu, Jiming Xu, Yingxue Zhang, Chunhui Wu*
- 23 Monitoring based on resonance Raman for “phase-shifting”  $\pi$ -conjugated polydiacetylene vesicles upon host-guest interaction and thermal stimuli  
*Chunzhi Cui*
- 24 Ultrasound-triggered release system based on perfluorocarbon nanodroplets encapsulated fluorinated rhodamine 6G-mesoporous silica nanoparticles  
*Hongrui Zhu, Dui Qin, Nan Chang, Mingxi Wan, Daocheng Wu*
- 25 Tumor-targeted therapy strategies based on tumor-associated macrophages  
*Bingjie Wang, Mengna Liu, Xinxin Fan, Lei Fang, Daquan Chen*
- 26 Control release of silver-loaded polyamide microspheres/nanofibers composite  
*Di Huang, Jingjing Du, Yan Wei, Weiyi Chen, Lian Xiaojie, Yinchun Hu*
- 27 Targeted intracellular co-delivery of peptide inhibitor and FOXA1 siRNA for synergistic therapy of breast cancer  
*Di Li, Jianxun Ding, Zigang Li*
- 28 Porphyrinic covalent organic framework nanoparticles for photothermal cancer treatment  
*Dianwei Wang, Zhe Zhang, Huayu Tian, Xuesi Chen*
- 29 Protein-templated synthesis of metal-organic nanoparticles for effective anticancer therapy  
*Ding Hu, Hongxia Xu, Zhuxian Zhou, Xiangrui Liu, Jianbin Tang, Youqing Shen*
- 30 Anti-inflammatory drug-based nanocarrier system for anticancer immunotherapy  
*Dongdong Li, Bing Xiao, Ding Hu, Zhuxian Zhou, Xiangrui Liu, Jianbin Tang, Youqing Shen*
- 31 A space-time biphasic drug release system fabricated through electrospraying and electrospinning for transdermal drug delivery  
*Dongdong Zhang, Xinran Song, Meiqi Sun, Hongsheng Wang*
- 32 Dual drug backboneed shattering polymeric theranostic nanomedicine for synergistic eradication of patient-derived lung cancer  
*Zigui Wang, Yuwei Cong, Dongfang Zhou, Xuesi Chen, Yubin Huang*
- 33 Clustered magnetic nanocarriers for photothermal-chemotherapy of tumor and lung metastasis by inducing proinflammatory polarization of tumor-associated macrophages and improving tumor penetration  
*Dongqing Wang, Tianyu Zheng, Pan Ji, Mengxue Zhou, Huiru Lu, Yi Hu, Jun Chen*
- 34 Redox/pH dual-responsive targeted DOX/ICG loaded polymeric micelles for chemo-photothermal combination therapy  
*Yu Qin, Zhiming Zhang, Fanfan, Chenlu Huang, Linhua Zhang, Dunwan Zhu*

- 35 pH-Responsive polymer-lipid-incorporated nanovesicles for intracellular delivery of anticancer drug and antigens  
*Eiji Yuba, Tomohiro Osaki, Atsushi Harada*
- 36 Mesoporous silica nanorods as a tumor-microenvironment-responsive platform for cancer therapy  
*Fan Yang, Weifeng Zhao, Changsheng Zhao*
- 37 A portable electrospinning device capable of delivering multiple essential materials for wound care  
*Francis Brako, CJ Luo, Duncan Craig, Mohan Edirisinghe*
- 38 Green synthesis of iron oxide nanoparticles by green tea for drug delivery  
*Fang Zhang, Lei Nie, Meng Sun, Can Wang, Shaolan Sun, Jingjing Zhang, Jilai Cui, Hongyu Yuan*
- 39 PAK5 inhibits apoptosis through mitochondorial pathway in vascular smooth muscle cells  
*Fanglin Man, Tianyi Song, Xin Sun*
- 40 Disulfide-crosslinked nanogel for bladder cancer-specific doxorubicin delivery  
*Faping Li, Hui Guo, Heping Qiu, Yuchuan Hou*
- 41 A bioactive scaffold for tendon regeneration in a chronic rotator cuff tear model  
*Fei Han, Peng Zhao, Chao Lin*
- 42 Inhibition of osteoclast genesis by polymeric hybrid micelle-encapsulated microRNA-124 and its activity against rheumatoid arthritis  
*Fei Hao, Lihuang Zhong, Chunmiao Yang, Robert J. Lee, Di Wang, Lesheng Teng*
- 43 Altering cytoskeleton reorganization via chloroquine-modified dextrin nanogel to prevent metastatic breast cancer  
*Feiran Zhang, Jingwen Dong, Yiwen Zhou, Bowen Duan, Zhaoting Li, Gang Chen, Minjie Sun, David Oupicky*
- 44 Emulsion-templating preparation of nanocarrier with prolonged circulation and potential applications in drug delivery  
*Feng Ding, Shuang Yang, Qiong Dai, Peiyu Zhang, Jianman Guo, Zhiliang Gao, Jiwei Cui*
- 45 Activatable photoacoustic imaging nanoprobe for precise cancer diagnosis  
*Feng Liu, Lin Lin, Huayu Tian, Xuesi Chen*
- 46 Two-dimensional carbon nitride (C<sub>3</sub>N<sub>4</sub>) composite nanosheets for photodynamic therapy  
*Fengxian Qiu, Yao Zhu, Kaili Mao, Tao Zhang*
- 47 Low-cost, high-load and high-stability prodrug-based self-assembly nanocarriers for controlled release of bortezomib  
*Fuli Zhao, Tenglong Mei, Liandong Deng, Anjie, Dong, Jianhua Zhang*
- 48 Trophic transfer of nanoparticles in food chain: A review  
*Gaozhong Pu*
- 49 Local delivery of polydopamine nanoparticles/doxorubicin hydrochloride loaded core-shell microspheres for enhanced photothermo-chemotherapy  
*Guoli Ni, Guang Yang, Shaobing Zhou*
- 50 Nanoparticles based on novel crosslinkable temperature responsive polyaspartamide copolymer containing  $\alpha$ ,  $\beta$ -unsaturated carbonyl moieties  
*Jun Zhou, Junjian An, Guangyan Zhang*
- 51 Design and construction of hybrid microcapsules for cancer therapy  
*Guangyu Wu, Xin Huang, Yudong Huang*
- 52 Synthesis of a feather keratin/carboxymethyl cellulose complex exhibiting pH sensitivity for sustained pesticide release  
*Guanquan Lin, Xi Chen, Hongjun Zhou, Xinhua Zhou, Hua Xu, Huayao Chen*
- 53 GA-modified multi-functional hyaluronic micelles for codelivery of all-trans retinoic acid and doxorubicin: *in vitro* and *in vivo* evaluations  
*Guixiang Tian, Hong Jiang, Zhipeng Li, Jinhua Dong, Zhiqin Gao, Bo Zhang, Jingliang Wu*



- 54 Multifunctional asymmetric wettable nanoparticles/chitosan composite scaffold as wound dressing for treating chronic wounds  
*Guixue Xia, Hongxia Li, Yuanyuan Gao*
- 55 Optimization and evaluation of rapamycin loaded magnetic graphene oxide nanocomposites  
*Zhide Zhou, Nan Yan, Guiyin Li*
- 56 Sugar-sensitive dynamic biointerface for controlled cell adhesion and release  
*Yue Ma, Jianming Pan, Guoqing Pan*
- 57 Water-soluble and UV crosslinkable C6-allyl specific substituted chitosan via amino groups protection  
*Haichang Ding, Baoqiang Li, Yujie Feng, Daqing Wei, Dechang Jia, Yu Zhou*
- 58 Erythrocyte-membrane mimicking manganese dioxide as tumor microenvironment-responsive multifunctional agent favoring combined chemo-chemodynamic therapy  
*Haijun Wang, Tiaotian Xie, Shiwei Niu, Junzi Wu, Li-min Zhu*
- 59 Impact of photothermal treatment mediated by Au-based nanoparticles on mice neutrophil genetic profile  
*Haiqing Dong, Yan Li, Ya Wen, Yiqiong Liu, Lianghua He, Huaiji Wang, Yongyong Li*
- 60 Folated pH-degradable PVA nanogels for targeted cancer chemoimmunotherapy  
*Haishi Qiao, Dechun Huang, Enping Chen, Hongliang Qian, Lin Dai, Wei Chen*
- 61 pH-responsive core-shell nanoparticles for enhanced uptake by cancer cells  
*Haiyan Sui, Shuli Dong, Jiwei Cui*
- 62 Combination of polymeric combretastatin A4 and berberine for cancer treatment  
*Haiyang Yu, Zhaohui Tang, Xuesi Chen*
- 63 An artificial vascular graft with an inner layer co-modified by salvianolic acid B and heparin  
*Haizhu Kuang, Yao Wang, Shuofei Yang, Yosry Morsi, Shuyang Lu, Xiumei Mo*
- 64 Ligand-modified alginate hydrogels as three-dimensional scaffolds promotes the differentiation of iPSC-derived NPC spheroids towards oligodendrocytes *in vitro*  
*Han Wen, Wenwu Xiao, Zhaoqing Cong, Feifei Yang, Xinmin Liu, Wenbin Deng, Yonghong Liao*
- 65 Oxidation-responsive polypeptide toward conformation-specific self-assembly  
*Hang Liu, Yi Zheng, Cheng Cheng, Mingming Ding, Jing Wei, Rui Wang, Hong Tan, Qiang Fu*
- 66 Synthesis heterofunctional dendrimer by passerini multicomponent reaction as a multi-stimuli responsive drug nanocarrier  
*Yu Zhang, Ho-An Kim, Naganath G. Patil, Tran Hoang Chinh, Eun Hye Jang, Il Kim*
- 67 Gd-DTPA-loaded compound micelles co-delivering doxorubicin and microRNA-34a for cancer therapy and MR imaging  
*Xiaoxue Xie, Zhongyuan Chen, Hanxi Zhang, Xue Shen, Tingting Li, Hong Yang*
- 68 The improved blood compatibility of polyurethane electrospun fibrous membrane modified with tourmaline nanoparticles for the small caliber vascular graft  
*Jinsheng Liang, Tianyu Zhao, Na Hui, Hong Zhang*
- 69 *In vitro* and *in vivo* evaluation of novel SN-38-loaded mPEG-PCL/ PC hybrid nanoparticles  
*Hongwan Dang, Mengyue Gan, Wenping Zhang, Shijie Wei*
- 70 Cuprous oxide templated layer-by-layer polymer capsules with diverse morphologies  
*Hongyan Pei, Jiwei Cui*
- 71 Redox-sensitive fluorinated poly(amidoamine)s delivered vaccines for tumor immunotherapy  
*Hongyuan Yuan, Wei Xue, Zonghua Liu*
- 72 Preparation and structural characterization of rice protein with less content of phenylalanine for phenylketonuria  
*Hongzhi Liu, Xiaojing Sheng, Aimin Shi, Li Liu, Hui Hu, Qiang Wang*



- 73 pH-Responsive adhesive polyphenol-peptide molecular-glue coating for combating thrombosis and bacteria  
*Hua Qiu, Zhilu Yang, Nan Huang*
- 74 Monocytes engineered with multifunctional Au nanorod for light mediated release  
*Huaiji Wang, Lianghua He, Yongyong Li*
- 75 Tumor-specific activated photodynamic therapy with an oxidation regulated strategy for enhancing anti-tumor efficacy synergistically  
*Huan Liang, Zhanwei Zhou, Wenyuan Liu*
- 76 An enzyme-sensitive shielding strategy for polycationic gene delivery system  
*Huapang Fang, Jie Chen, Lin Lin, Huayu Tian, Xuesi Chen*
- 77 Enzyme-sensitive PEG/polyglutamic acid based micelles for photodynamic therapy as well as reducing the metastasis of cancer  
*Hui Chen, Shuang Li, Tongtong Zhao, Bingbing Jiang, Cao Li*
- 78 Functional component of tetraphenylene fluorophore facilely incorporated into pH-responsive cleavable PEGylated polyplex for promoted gene transfection  
*Zhu Jiang, Qixian Chen, De-E Liu, Wei Li, Shuai Chen, Hui Gao*
- 79 Positively charged polypeptide nanogel with improved mucoadhesiveness to overcome drug resistance of bladder cancer  
*Hui Guo, Weiguo Xu, Heping Qiu, Yuchuan Hou, Chunxi Wang, Jianxun Ding*
- 80 Actively targeted binary-drug loaded liposomes for synergistic therapy of breast cancer  
*Huili Sun, Jingya Zhao, Lingqiao Liu, Shaobing Zhou*
- 81 Mitochondria-targeting delivery of artemisinin for highly efficient cancer therapy  
*Hui Yu, Wei Zhou, Qian Wang, Kai Deng, Jia-Mi Li, Kun-Heng Li, Ren-Xi Zhuo, Shi-Wen Huang*
- 82 A sensitive antibody-free fluorescent nanoprobe for detection of  $\beta$ -Amyloid peptide  
*Huiru Yang, Han Sun, Shu Wang, Linqi Shi*
- 83 Microneedle combined with electrospinning films for diabetic uclers repair and diabetes therapy  
*Huishang Yang, Chen Lai, Xuetao Shi*
- 84 Tumor microenvironment-responsive core-shell disassociation nanosystem with charge-reversal property for treatment of chemoresistant breast cancer  
*Lei Zhao, Daan Fu, Bingcheng Chang, Zhilan Ye, Jia Liu*
- 85 pH-Sensing polymeric-inorganic hybrid nanocomposite as an MRI-visible gene delivery system  
*Jiali Cai, Shihui Huang, Changhui Deng, Hong Liu, Zhiyong Wang, Junyao Xu*
- 86 pH Responsive drug delivery system based on amino terminated hyperbranched polymer modified reduced graphene oxide  
*Wei Zhang, Jiamu Dai, Yi Zhang, Qianyu Wang*
- 87 Polymeric combretastatin A4-induced MMP9-signal-amplification boosts tumor-selective targeting of matrix metalloproteinase-activated doxorubicin prodrug nanomedicine  
*Jian Jiang, Na Shen, Haiyang Yu, Zhaohui Tang, Gao Li, Xuesi Chen*
- 88 Coassembly approach to pH-sensitive, high-targeting DOX-loaded nanoparticles with the ability of in situ self-gelation for tumor local sustained and controlled drug delivery  
*Fuli Zhao, Anjie Dong, Di Wu, Huiming Liu, Liandong Deng, Ruiwei Guo, Jianhua Zhang*
- 89 Tea-leaf-like self-folding polylactic acid composite with crumpled morphology for long-term drug delivery  
*Jinxin Liu, Runrun Wu, Yue Ma, Xiaohui Dai, Jianming Pan*
- 90 Dynamically PEGylated and borate-hierarchical-pore metal-organic frameworks for synergetic targeted drug delivery  
*Shucheng Liu, Yue Ma, Guoqing Pan, Jianming Pan*
- 91 Hollow mesoporous silica nanoparticles with glutathione-sensitive prodrug gatekeeper for synergistic chemo/photothermal therapy

- Jianrong Wu, Shiwei Niu, Xueyi Zhang, Yanbo Yang, Haijun Wang, Li-Min Zhu*
- 92 Carbon quantum dots (CQDs) modified monodispersed colloids as chemically crosslinkers for ultrahigh strength pHEMA hydrogels with hierarchical microstructure  
*Jiaying Wang, Yuhua Zhu, Xiang Zhu, Xiaofei Ma, Honghao Jiang*
- 93 Shell thickness of surface-coated copolymer of core-shell structured P@BMMs and its effects on the ibuprofen delivery via SAXS characterization  
*Jiayu Ma, Jihong Sun, Shiyang Bai, Xia Wu*
- 94 A novel wrinkled-surface and pH-responsive polymer particles for drug delivery  
*Jin Liu, Rumin Wang, Qiuyu Zhang*
- 95 Facile synthesis of hollow mesoporous silica spheres with ordered radial mesochannels  
*Jing Hu, Yudi Zhang*
- 96 Fabrication and properties of silk fibroin microcapsules loaded with osmanthus oil  
*Jing Hu, Lei He*
- 97 Self-assembled nanoscale coordination polymers carrying doxorubicin for effective chemotherapy and photothermal cancer therapy  
*Jing Li, Cuiting Zhang, Minjie Sun*
- 98 Green synthesis of carbon dots for bio-optical and magnetic resonance imaging  
*Jingmin Wang, Lei Jiang, Paulo C. Morais, Hong Bi*
- 99 Hypoxia-responsive nanoparticles for prolonged circulation time and enhanced tumor penetration  
*Jingru Zhen, Yang Liu, Linqi Shi*
- 100 Photoluminescence enhancement of conjugated poly (3-methylthiophene) nanowires upon length variable DNA hybridization  
*Jingyuan Huang, Chunzhi Cui*
- 101 Erythrocyte membrane-coated polypeptide nanogel for targeted prostate cancer chemotherapy  
*Jixue Wang, Shengxian Li, Weiguo Xu, Chunxi Wang, Jianxun Ding*
- 102 Silver and copper nanoparticles grown on carbon nanomaterials for the treatment of bacteria and their biofilm  
*Jonghoon Choi*
- 103 PEGylated graphene-oxide wrapped gold nanorods/mesoporous silica nanoparticles for near-infrared-activated drug delivery  
*Jun Shi, Zheng Zhang, Zeer Qi, Shaokui Cao*
- 104 Construction of antibacterial Polylactide nanofibers via biomimetic assisted self assembly  
*Lina Wang, Feng Zhang, Lan Liao, Junchao Wei*
- 105 The pH-triggered nanocarrier enabled highly efficient siRNA delivery *in vitro* and *vivo*  
*Junhui Zhou, Lili Du, Yuanyu Huang, Zicai Liang, Anjie Dong*
- 106 Preparation of the bacteria-responsive antimicrobial surface based on titanium nanotubes  
*Junjian Chen, Lin Wang*
- 107 bFGF modified magnetic nanoparticles with heparin-dopamine polymer control macrophage polarization to promoting wound healing.  
*Junyi Zhu, Xuan Xuan, Yi Li, Shishuang Jiang, Huacheng He, Jian Xiao, Jiang Wu, Xiaokun Li*
- 108 *In vivo* visual detection of ROS generated in photodynamic therapy via oxidation-triggered aggregation enhanced magnetic resonance imaging  
*Kai Deng, Qian Wang, Yang Zhang, Hui Yu, Jia-Mi Li, Kun-Heng Li, Bo Wu, Ren-Xi Zhuo, Shi-Wen Huang*
- 109 NIR-mediated thermal, upconversion, persistent luminescence imaging of latent fingerprints based on self-assembled hybrid vesicles  
*Kai Song, Xuemei Liu, Jingang Mo, Shuquan Xin, Shuyan Huang, Chengwen Lu*

- 110 Synthesis of perylenediimide-cored dendrimers as dendritic fluorescent probes for tumor imaging  
112  
*Kaiqi Wang, Zhuxian Zhou, Hailin Cong, Bing Yu, Youqing Shen*
- 111 BMP-2 peptides loaded 3D nanofibers scaffolds based on electrospinning for bone regeneration  
*Kaiqiang Ye, Wei Shen, Xiumei Mo*
- 112 Magnetically-responsive porous carbon@hydroxyapatite core-shell nanospheres for dual anticancer drug delivery  
*Kangmin Zhang, Miaomiao Wang, Jing Zhao, Jianan Zhang*
- 113 A targeted strategy for polycationic gene delivery system  
*Kui Wang, Jie Chen, Lin Lin, Huayu Tian, Xuesi Chen*
- 114 The liposome delivery siRNA for cancer therapy  
*Kuirong Mao, Xiuxiu Cong, Xiandi Meng, Yongguang Yang, Tianmeng Sun*
- 115 Modulation of bone morphogenetic protein-2 release via gelatin microparticels and coacervate loaded thiolated gelatin-PEGDA interpenetrating hydrogels for carvarial bone regeneration  
*Sungjun Kim, Junhyung Kim, Byung-Jae Kang, Kyobum Kim*
- 116 Coacervate-mediated dual growth factor delivery for scarless wound healing  
*Uiseon Park, Min-suk Lee, Hee-seok Yang, Kyobum Kim*
- 117 The next-generation taxane loaded electrospinning nanofibers for *in situ* chemotherapy against glioma  
*Lan Mei, Yangmei Ren, Liangxue Zhou, Gang Guo*
- 118 Green synthesis of nitrogen-doped carbon dots from red maple leaves for cell imaging  
*Lei Jiang, Jingmin Wang, Qiyang Wang, Hong Bi*
- 119 Dendrimer-in-hydrogel delivery system for combining chemotherapy and immunotherapy  
*Lei Jiang, Xiqun Jiang*
- 120 Preparation of folate-decorated pH-responsive zwitterionic polymeric prodrug and its application for drug deliver  
*Lei Li, Yue Song, Jinlin He, Mingzu Zhang, Peihong Ni*
- 121 Magnetic microbeads with dynamic bioactivity for capture and release of circulating tumor cell  
*Xiaohua Tian, Guoqing Pan, Lei Liu*
- 122 Sustained release of dexamethasone through cyclodextrin/self-assembling peptide based nanoscaffold to reduce neuroinflammation induced by perinatal hypoxic-ischemic brain injury  
*Lei Lu, Larry D. Unsworth*
- 123 Extracellular matrix inspired programmed sequential release of dual growth factors for bone tissue engineering  
*Lei Nie, Pei Li, Can Wang, Chingching Ji*
- 124 Experimental and computational study of the mechanical reinforcement of dental resin composites  
126  
*Lei Pan, Bei Li, Chao Zha, Gang Chen, Zhengzhi Wang*
- 125 Ultra-high FRET efficiency NaGdF<sub>4</sub>: Tb<sup>3+</sup>-rose bengal biocompatible nanocomposite for X-ray excited photodynamic therapy  
*Li Fan, Wenli Zhang, Hongbing Lu*
- 126 Charisterization of interfacial adsorption behavior of arachin subunit  
*Li Liu, Hong-Zhi Liu, Ai-Min Shi, Hui Hu, Mehmet Nail Nasir, Magali Deleu, Qiang Wang*
- 127 Tumor-acid sensitive melittin for targeted and safe antitumor therapy  
*Li Luo, Hanbin Dai, Yi Wang, Yuan Zhong, Wei Wu, Guixue Wang*
- 128 pH- and thermo-sensitive hydroxypropylcellulose/poly (acrylic acid derivative) hybrid microgels as acid-proof capsules for oral insulin delivery  
*Liang Liu, Yuhao Zhou, Shuangjiang Yu, Chaoliang He, Xuesi Chen*

- 129 Whey protein isolate enhanced SMEDDS for daidzein delivery  
*Liang Lv, Caili Fu, Fang Zhang, Shaoyun Wang*
- 130 Sulfo and hydrazine co-functionalized grapheme quantum dots for cell cytoplasm-imaging  
*Weitao Li, Ming Li, Yijian Liu, Yu Han, Liang Wang*
- 131 Photodynamic and photothermal antigen nanoparticles promote the dendritic cell maturation  
*Lianghua He, Huaiji Wang, Yongyong Li*
- 132 Bioreduction-triggered immolative polymeric micelles for drug release  
*Liefu Zhou, Qinyu Zuo, Xintao Zheng, Wensong Xi, Haifang Wang, Aoneng Cao, Rong Jin*
- 133 Fluorinated polypeptide nanoparticles for oxygen self-sufficient NIR imaging-guided photodynamic therapy  
*Pan Yuan, Zheng Ruan, Wei Jiang, Le Liu, Jiaxiang Dou, Tuanwei Li, Lifeng Yan*
- 134 Tumor-targeted magnetic mesoporous silica nanoparticles based drug delivery system with aggregation-induced emission (AIE) property for cancer theranostic  
*Lihui Wan, Bingbing Jiang, Cao Li*
- 135 Cancer associated fibroblasts instructed construction of nanofibers in situ for sensitivity enhanced tumor imaging  
*Li-Li Li, Xiao-Xiao Zhao, Hao Wang*
- 136 Thermal- and pH-sensitive targeted lignin-based nanoparticle-hydrogel drug delivery system  
*Lin Dai, Chuanling Si*
- 137 Preparation of the antimicrobial surface via 2D self-assembly of the peptide with surface binding activity  
*Junjian Chen, Lin Wang*
- 138 The self-assembly of heparin based polyions and their preliminary application as nano drug carrier  
*Qingping Chen, Juan Wen, Qingxuan Li, Lin Ye, Aiyang Zhang, Zengguo Feng*
- 139 Inhibition of the aggregation and toxicity of the core amyloidogenic fragment of tau protein by artificial chaperones  
*Lin Zhu, Huiru Yang, Feihe Ma, Linqi Shi*
- 140 The p53 protein nanocomplex for HER2<sup>+</sup> breast tumor targeting treatment  
*Ling-Kun Zhang, Shiwei Du, Yuxuan Jiao, Shaoping Chen, Yan-Qing Guan*
- 141 Paclitaxel nano-suspension loaded porous starch: an effective oral drug delivery for improving water solubility and bioavailability  
*Lingling Wang, Xiuhua Zhao*
- 142 The bubble-generating drug delivery system for effective chemotherapy combined with photothermal therapy  
*Fan Fan, Chenlu Huang, Yu Qin, Zhiming Zhang, Dunwan Zhu, Linhua Zhang*
- 143 Development of polycaprolactone (PCL)/zein composite scaffolds via electrohydrodynamic printing (EHDP) for 3D cell culture and drug delivery application  
*Linzhi Jing, Jie Sun, Dejian Huang*
- 144 Designing heparosan polysaccharides-based nanocarriers for intracellular redox-sensitive antitumor drug delivery  
*Lipeng Qiu, Lu Ge, Jing Mao, Xiaotian Shan, Jinghua Chen*
- 145 The bilayered composite scaffold containing hydrogels and phase-separated nanofibers for potential osteochondral repair  
*Lixia Zheng, Wangwei Zhong, Qianqian Zhang, Chuanglong He*
- 146 Vitamin E succinate modified sericin nanoparticles for glutathione-sensitive doxorubicin release  
*Lizhi Deng, Liqun Yang, Liming Zhang*
- 147 Electrospun pH-sensitive polymer-based janus nanofibers for providing a double-phase controlled releases of ketoprofen  
*Man Zhang, Xiao-Lu Zheng, Meng-Long Wang, Ming-Li Yuan, Deng-Guang Yu*

- 148 Differentiating breast cancer molecular subtypes using DNA aptamers  
*Mei Liu, Tong Yang, Zhifei Wang, Nongyue He*
- 149 T7 peptide-modified natural low-density lipoprotein particles for systemic glioma-targeting drug delivery  
*Meng Liang, Lin Cui, Shiyao Fu, Zhenhan Zhou, Chaopei Zhou, Yuli Wang, Yang Yang, Chunsheng Gao*
- 150 Fabrication of polydopamine-coated magnetic mesoporous silica nanoplatforam for multimodal imaging-guided cancer photothermal therapy  
*Menghan Shi, Yu Fan, Jianhong Wang, Hong Yang, Xiangyang Shi*
- 151 Construction of a NIR/pH programmable responsive poly ( $\beta$ -aminoesters)-based drug delivery nanosystem for mitochondrial-targeted drug delivery  
*Mengxue Zhou, Miao Wang, Tianyu Zheng, Dongqing Wang, Huiru Lu, Yi Hu, Jun Chen*
- 152 Poly(ethylene glycol) crosslinked star-like poly( $\epsilon$ -benzyloxycarbonyl-L-lysine)s as efficient delivery systems for poorly water-soluble drugs  
*Miao Pan, Chao Lu, Daojun Liu*
- 153 Yolk-shell structured dual-pore carbon@ $\text{maSiO}_2$ @ $\text{meSiO}_2$  composite microcontainers for multiple amphiphilic drug delivery  
*Miaomiao Wang, Kangmin Zhang, Jianan Zhang*
- 154 Small-sized and robust chimaeric lipopepsomes: A simple and functional platform with high protein loading for targeted intracellular delivery of protein toxin *in vivo*  
*Min Qiu, Zhenqi Zhang, Yaohua Wei, Huanli Sun, Fenghua Meng, Chao Deng, Zhiyuan Zhong*
- 155 Folic acid-conjugated human serum albumin wrapping resveratrol nanoparticles: Preparation, characterization, and targeting effect on liver tumors  
*Mingfang Wu, Ziqi Feng, Yiping Deng, Chen Zhong, Xiuhua Zhao*
- 156 Preparation and anticancer effect of long-circulating drug carriers based on mesoporous nanoparticles  
*Mingyu Wang, Yuting Zhou, Xihe Zhang, Juan Zhou, Jinghua Chen*
- 157 Oral delivery of heat shock protein 90 (HSP90) inhibitor by nanoparticles provides enhanced efficacy with reduced systemic exposure in murine models of ulcerative colitis and colitis-associated cancer  
*Mei Yang, Biyun Fang, Mingzhen Zhang, Didier Merlin*
- 158 DNA nano-therapeutics for the treatment of rheumatoid arthritis  
*Na Li, Yongxing Zhao, Nan Zhang*
- 159 ROS-responsive mitochondria-targeting nanocarriers with pH-controlled negative to positive charge reversal for photodynamic therapy  
*Na Peng, Hui Yu, Kai Deng, Qian Wang, Tao Zou, Shiwen Huang, Yi Liu*
- 160 Polymeric combretastatin A4 harbors tumor-specific BRCA1 deficiency and enriches synthetic lethality strategy and the spectrum of PARP inhibitors  
*Na Shen, Zhaohui Tang, Xuesi Chen*
- 161 Reductively cleavable dendritic polyglycerol sulfate-monomethyl auristatin E conjugates as potential anticancer drugs  
*Nadine Rades, Katharina Achazi, Min Qiu, Chao Deng, Zhiyuan Zhong, Kai Licha, Rainer Haag*
- 162 Mesenchymal stem cell-conjugated tumor necrosis factor- $\alpha$  inhibitor for synergistic therapy of rheumatoid arthritis  
*Naibo Feng, Fei Chang, Jianxun Ding*
- 163 A telomerase-sensitive signal amplifier for miRNA detection  
*Nan Yan, Huayu Tian, Xuesi Chen*
- 164 DNA tetrahedron-based biological therapy for colon cancer  
*Nan Zhang, Yanan Yang, Jing Yang, Yongxing Zhao*

- 165 PEGylated polypeptides bearing reduction-sensitive side-chains for anticancer drug delivery  
*Pan He, Jiuxu Yao, Peng Zhang, Mingxiao Deng, Chunsheng Xiao*
- 166 Reversibly PEGylated arsenic trisulfide nanoparticle bound with platinum drug for synergistic therapy of hepatoma  
*Pan Zheng, Gao Li, Jianxun Ding*
- 167 Controlled phase inversion behaviours of poly (vinylidene fluoride) solution containing PPG-g-PEG-g-PPG copolymer with hydrophobic ends and hydrophilic intermediate for membrane fouling reduction  
*Panpan Wang, Haicheng Jiang, Bo Zhang, Jun Ma*
- 168 Understanding of relay luminescence enhancement with AIE and temperature-induced ACQ from Au nanoclusters derivative  
*Pei Zhou, Zhentao Luo, Xiaoman Liu, Jianping Xie, Xin Huang*
- 169 Dual-Responsive and core cross-linked polyphosphoester-doxorubicin prodrug for pH/redox-triggered drug delivery  
*Youwen Cao, Jie Liu, Jinlin He, Mingzu Zhang, Peihong Ni*
- 170 NCA synthesized antimicrobial peptides and their coatings to combat biomaterial-associated infections  
*Peng Li, Qiang Gao, Yajuan Su, Miao Xu, Qianqian Wang, Wei Huang*
- 171 Redox-responsive polymeric micelles with high intracellular delivery of sodium borocaptate for tumor targeted radiotherapy  
*Jing Liu, Peng Mi*
- 172 Bio-inspired pentapeptide decorated silica nanoparticles loaded with salmon calcitonin for osteoporosis treatment  
*Peng Yu, Ruitao Jin, Yanpeng Liu, Jing Xie, Jianshu Li*
- 173 Delivery of low-dose simvastatin using polyethylene terephthalate hybrid scaffold improve the tendon-bone healing  
*Peng Zhang, Shiyi Chen*
- 174 Self-assembled nanoparticles targeted against miR-155 and CXCR4 for combination therapy of liver fibrosis  
*Pengkai Wu, Ling Ding, Xingping Luo, Fei Yu, Jing Li, Kaikai Wang, Minjie Sun, David Oupicky*
- 175 Preparation of microparticles with different shapes as drug delivery carriers via electrospraying  
*Junwei Xu, Bing Qi, Kun Li, Ping Li, Yubo Fan*
- 176 Preparation of fibrous scaffold with magnetic/electroactive properties and its biomedical application  
*Kun Li, Fengnian Zhu, Junwei Xu, Ping Li, Yubo Fan*
- 177 Multifunctional sequeantial release shell-core nanoparticles for treatment of multidrug resistance hepatocellular carcinoma  
*Qi Wang, Wei-Hong Zhu, Yourong Duan*
- 178 A multifunctional hydrogel-based smart dressing for wound infection monitoring and UV-responsive antibiotic delivery  
*Qian Pang, Guangming Wang, Dong Lou, Shurong Dong, Changyou Gao, Lie Ma*
- 179 Tumor-acidity triggered detachment of surface coating and charge-reversal of fluorinated polymeric micelles for enhanced photodynamic cancer therapy  
*Qian Wang, Kai Deng, Hui Yu, Jia-Mi Li, Kun-Heng Li, Ren-Xi Zhuo, Shi-Wen Huang*
- 180 Modulation of neuron behavior and nerve regeneration by multifunctional silk scaffold  
*Shuqin Yan, Qingqing Yang, Guocong Han, Qiusheng Wang, Renchuan You, Xiufang Li, Qiang Zhang*
- 181 3D Printing of HAgelMA hydrogels loaded with heparin/poly-L-lysine and HIF-1 $\alpha$ -expressing MDSCs to promote vascularization for tissue regeneration  
*Zhifang Wang, Qiangqiang Tang, Chen Lai, Xuetao Shi*



- 182 Multifunctional theranostic lanthanide-doped mesoporous silica nanoparticles for bone tissue engineering  
*Qianqian Zhang, Xi He, Ningwen Chai, Liwen Fu, Jingtian Zhang, Huang Lin, Chuanglong He*
- 183 Bone-like apatite nano-crystals formation on TiO<sub>2</sub> nanotube arrays  
*Qiaoxia Lin, Di Huang, Yan Wei, Yinchun Hu, Xiaojie Lian, Weiyi Chen, Jingjing Du*
- 184 Thermally induced *trans* linolenic acids in trilinolenin controlled by L-ascorbyl palmitate  
*Qin Guo, Yiming Ha, Qingpeng Li, Hongzhi Liu, Aimin Shi, Li Liu, Hui Hu, Qiang Wang*
- 185 Improved *in vivo* osteogenesis of PGA/HA/PLGA ternary composite by 3, 4-dihydroxyphenethylamine-containing insulin-like growth-factor-1  
*Yuhang Zhu, Boyin Zhang, Zongliang Wang, Yuntao Wu, Peibiao Zhang and Qingsan Zhu*
- 186 Self-regulated smart drug delivery systems for enhanced cancer therapy  
*Qingsong Yu, Zhihua Gan*
- 187 High gene-transfection efficacy and binding affinity of zinc (ii)-coordinative polyethylenimine with a hydrophobic core  
*Qingyan Zhang, Zhanwei Zhou, Chenzi Li, Pengkai Wu, Minjie Sun*
- 188 Drug eluting hydrophilic coating surface modification of intraocular lens for PCO prevention  
*Yuemei Han, Junmei Tan, Quankui Lin, Hao Chen*
- 189 Silk fibroin microspheres as a carrier for bioactive molecules  
*Xiufang Li, Luping Wang, Mingzhong Li, Zuwei Luo, Renchuan You*
- 190 Glutathione, pH, and temperature responsive amphiphilic triblock copolymer micelles as an efficient theranostic platform  
*Rimesh Augustine, Dae-Kyoung Kim, Jae Ho Kim and Il Kim*
- 191 Preparation of HA@SPI by in-situ deposition and its controllable released behavior  
*Rong-Min Wang, Dawei Zhang, Ya Shen, Kangqi Sun, Fawei Wang, Yufeng He, Pengfei Song*
- 192 Glutathione-responsive polymeric nanomedicine with modularly tailorable surface  
*Chen Sun, Ruibing Wang*
- 193 Preparation and pharmacokinetics study of curcumin emulsion for targeted colonic inflammation  
*Ruirui Xu, Xiuli Wang*
- 194 Biocompatible carboxyl modified mesogen-jacketed liquid crystal films for biomineralization and bone repair  
*Ruitao Jin, Peng Yu, Yanpeng Liu, Jing Xie, Jianshu Li*
- 195 Specific aptamer modified DNA nanotube for the treatment of lymph cancer  
*Run Chen, Nan Zhang, Jing Yang, Yongxing Zhao*
- 196 High strengthened Lipo-hydrogel with controlled release of multi-type drugs for biomedical application  
*Ruoyu Cheng, LiLi Liu, Wenguo Cui*
- 197 Hyperbranched polymer based smart materials for sensing and drug delivery  
*Seok Hyeon Baek, Il Kim*
- 198 Zwitterionic polysulfobetaine-grafted zein-based stealth micelle as a long-circulating and biodegradable drug carrier  
*Shanshan Chen, Quanming Li, Hailiang Li, Minqiang Xie, Liqun Yang, Li-Ming Zhang*
- 199 Enhancement of the sterilization performance modified by GO/TiO<sub>2</sub>  
*Shaofei Zhou, Feng Zhou*
- 200 pH-Mediated molecule aggregation behavior of citrus pectin regulating interfacial capacity  
*Shaojie Zhao, Guifang Tian, Xingxun Liu, Jinkai Zheng*
- 201 Intelligent nanoplatform for drug combinations: predefined component, increased penetration and controlled release  
*Sheng Ma, Wantong Song, Zhaohui Tang, Xuesi Chen*



- 202 Hypoxia-sensitive polypeptide nanoparticles as an efficient delivery of doxorubicin for cancer therapy  
*Shengcai Yang, Zhaohui Tang, Xuesi Chen*
- 203 Size effect of nanovaccine on cancer immunotherapy  
*Shengxian Li, Jixue Wang, Weiguo Xu, Chunxi Wang, Jianxun Ding, Xuesi Chen*
- 204 Synthesis of novel resveratrol grafted  $\beta$ -cyclodextrin bioconjugate for drug delivery: Self-inclusion and physicochemical properties  
*Shijie Wei, Lin Yang, Jing Tian, Qing Huang, Hurong Ge, Zhizhong Wang*
- 205 Studies on the synthesis and self-assembly of folate-conjugated zwitterionic phosphorylcholine copolymer  
*Qian Lu, Meijun Yi, Zhangyu Shi, Guiqiang He, Shiping Zhang, Yongkuan Gong*
- 206 The self-assembled nanoparticles loading doxorubicin and cell-specific ligand effectively inhibit the growth of ER<sup>+</sup>, PR<sup>+</sup> or HER2<sup>+</sup> breast cancer  
*Shiwei Du, Lingkun Zhang, Yan-Qing Guan*
- 207 CPP functionalized dual-sensitive nanoparticles loaded with MoS<sub>2</sub> quantum dots for near-infrared fluorescence imaging and photothermal therapy of breast cancer  
*Shiwei Niu, Jianrong Wu, Haijun Wang, Xuejing Zhang, Li-Min Zhu*
- 208 Dendrimer-stabilized ultrasmall iron oxide/gold nanoflowers for multimode imaging-guided combination therapy of tumors  
*Shiyi Lu, Xiangyang Shi, Mingwu Shen*
- 209 Bioswitchable nanoparticles for facile bacteria detection and temporal antibacterial activity  
*Shuai Chen, Qixian Chen, Qiaoying Li, Jinxia An, Peng Sun, Jianbiao Ma, Hui Gao*
- 210 Zwitterionic polymerization based on emulsion droplet template  
*Shuang Yang, Feng Ding, Jianman Guo, Qiong Dai, Zhiliang Gao, Jiwei Cui*
- 211 Local co-delivery of CA4P and CDDP with a thermogelling hydrogel for enhanced cancer therapy  
*Shuangjiang Yu, Chaoliang He, Desheng Qi, Jiayu Wang, Wanying He, Xuesi Chen*
- 212 Multifunctional biodegradable mesoporous silica nanoparticles with redox-responsive triggered drug release for tumor chemotherapy  
*Shuguang Yang, Liang Chen, Chuanglong He*
- 213 Cu(II)-doped polydopamine-coated gold nanorods for tumor theranostics  
*Shuwei Liu, Lu Wang, Yi Liu, Hao Zhang, Bai Yang*
- 214 Oral cyclodextrin nanoparticles for preventing and treating atherosclerosis  
*Sufang Gu, Xiangrui Liu, Youqing Shen*
- 215 PLA-PEG-FA NPs for drug delivery system: Evaluation of carrier micro-structure, size-cell proliferation relationship  
*Sujun Wang, Yanfeng Luo, Liye Wang, Mingxing Wang, Yuanliang Wang*
- 216 Reactive oxygen species (ROS)-scavenging Lipid-polymer nanoparticles improve outcome in a mouse model of spinal cord injury  
*Tianhui Zhang, Feng Lin, Wanguo Liu, Chunsheng Xiao, Xiuli Zhuang, Xuesi Chen*
- 217 Uniform-sized DDAB-PLA microparticles as vaccine adjuvant  
*Ting Lu, Tingyuan Yang, Fumin Hu, Lianyan Wang, Guanghui Ma*
- 218 The antioxidant activities of a proteoglycan isolated from fruiting body of ganoderma lucidum  
*Ting Ren, Tianyi Song, Xin Sun*
- 219 Fluorescent trace performance for drug delivery from pH-responsive mesopores P@BMMs with core-shell feature  
*Tingting Wei, Chang Liu, Jihong Sun, Shiyang Bai, Xia Wu*
- 220 Biocompatible spherical nucleic acid base on DNA nanoclew for siRNA delivery  
*Tong Jiang, Weimin Ruan, Meng Zheng, Bingyang Shi*

- 221 Preparation of PVA/CS electrospun fiber membrane with OH-CATH30 nanoparticles  
*Pengfei Zou, Hongfei Zhang, Hongxia Li, Di Qin, Yuanyuan Gao, Tongyi Sun*
- 222 A faciel and green synthesis of hierarchical porous carbon materials for drug delivery  
*Sen Luan, Xiaojian Hou, Wenxiu Li, Zanwu Guo, Yi Song, Wei Li*
- 223 Ultrahigh cellular uptake of polyethylenimine-conjugated carbon nano-onions for cancer photothermal therapy  
*Wei Sun, Fu-Gen Wu*
- 224 Voltage-responsive fluorescent supramolecular hyperbranched polymer vesicles for controlled drug delivery  
*Shuodong Wang, Yu Zhao, Wei Tian*
- 225 Chitosan Sulfate Inhibits Angiogenesis to Suppress Tumor Growth *in vivo*  
*Yingying Li, Xiaojin Qu, Yu Li, Wei Wang, Zhi Yuan*
- 226 Combined direct current therapy and photothermal therapy of tumors accomplished by water soluble poly (3,4-ethylenedioxythiophene)  
*Bing Li, Zhongqiang Wang, Jianfeng Liu, Wei Wang*
- 227 The drug loading behavior of amino terminated hyperbranched polymer modified rGO and the photothermal sensitive delivery in hybrid polymer nanofibers  
*Jiamu Dai, Wei Zhang, Weiting Yang*
- 228 Lentinan prodrug for immunochemotherapy of malignancy  
*Weiguo Xu, Xiuli Zhuang, Jianxun Ding, Xuesi Chen*
- 229 O<sub>2</sub> self-evolving Gd<sub>2</sub>O<sub>3</sub>: Yb, Er, Mn upconverting nanoparticles designed for high efficient photodynamic therapy  
*Weihua Wang, Shaoxin Song, Xinglong Hou, Wei Wang*
- 230 Dual-stimuli responsive halloysite nanotubes/quantum dots/polymers-based hybrid materials for drug delivery  
*Weinan Xing, Guangyu Wu, Gang Chen, Yudong Huang*
- 231 Edge-sulfonated graphene quantum dots as biomembrane-active fluorescent probes by adjusting the pH value of cell environment  
*Weitao Li, Ming Li, Yijian Liu, Yu Han, Liang Wang*
- 232 Recombinant protein improves drug anticancer efficacy  
*Weizhi Chen, Xiqun Jiang*
- 233 Targeting mitochondria with Au-Ag@PDA nanoparticles for thyroid cancer therapy  
*Wenjing Wang, Jing Li, Hao Zhang*
- 234 Organocatalyzed synthesis of hyperbranched polyglycidol-star-poly (L-lactide) for pH-sensitive controlled doxorubicin delivery system  
*Wenliang Song, Seokhyeon Baek, Yechan Lee, Anuraj Varyambath, Mi-Ra Kim, Il Kim*
- 235 A novel glucose-responsive self-assembly nanoparticels for blood glucose regulation by oral insulin administration  
*Xia Zhou, Ruimin Long, Shibin Wang, Yuangang Liu*
- 236 Enzyme-responsive polyprodrug nanoparticles to combat cisplatin resistant cancers by the cascade promotion of phototherapy and chemotherapy  
*Xianglong Hu*
- 237 Intracellular codelivery of indoleamine-2, 3-dioxygenase inhibitor and chemotherapeutic agent by polypeptide nanogel for synergistically enhanced chemo-immunotherapy  
*Xiangru Feng, Gao Li, Jianxun Ding*
- 238 Engineering poly (ethylene glycol) particles for improved tumor therapy  
*Xiao Fu, Jiwei Cui*
- 239 Degradable amphiphilic comb-like polymeric prodrugs of 10-hydroxycamptothecins: synthesis, self-assembly and properties

*Huang Jin, Ting Yu, Lijia Xu, Xiaofen Hu*

- 240 Formation of hierarchical porous carbon nanospheres for drug delivery  
*Xiaojian Hou, Sen Luan, Wenxiu Li, Zanwu Guo, Yi Song, Wei Li*
- 241 Polytyrosine nanoparticles enable ultra-high loading of anthraquinone anticancer agents and rapidly enzyme-responsive drug release  
*Xiaolei Gu, Chao Deng, Zhiyuan Zhong*
- 242 Laser-triggered system injectable gelatin hydrogel for combinational upconversion fluorescence imaging and antitumor chem-/photothermal therapy  
*Po Li, Haiming Fan, Xiaonan Huang*
- 243 Construction of a multifunctional dendrimer-based nanoplatfrom for targeted dual mode MR/CT imaging of orthotopic glioma tumor  
*Xiaoying Xu, Mingwu Shen, Xiangyang Shi*
- 244 Laquinimod-loaded microsphere improve the spinal cord injury recovery  
*Xin Guo, Yao Yang, Shengyu Li, Yanxin Chen, Jian Xiao, Jiang Wu, Huacheng He, Xiaokun Li*
- 245 Environmentally responsive dual-targeting nanotheranostics for overcoming cancer multidrug resistance  
*Xin Pang, Caixia Yang, Gang Liu*
- 246 Synthesis of carboxylated PAMAM dendron-grafting polysaccharide derivatives as a design of adjuvant  
*Xin Shu, Eiji Yuba, Atsushi Harada*
- 247 A multifunctional polydiacetylenic complex films: Preferential host-guest interaction with specific small molecules and recognition of aldehyde derivatives  
*Xin Wu, Chunzhi Cui*
- 248 A novel synthesis of boron doped carbon quantum dots and their applications to the detection of antibiotics in aqueous solutions  
*Xin Zhang, Yongbo Wang, Yingkun Ren, Xiaoyu Hu, Enzhou Liu, Jun Fan*
- 249 Visible light-induced diselenide-crosslinked polymeric micelles for ROS-triggered drug delivery  
*Xinfeng Cheng, Wei Zhao, Zhipei Sang, Zhiqiang Wang,*
- 250 pH-Sensitive doxorubicin-peptide conjugate for synergistic cancer therapy  
*Xingang Guan, Li Chen, Mengran Xu, Yu Chang, Wei Xia*
- 251 Tumor-adhesive pH-degradable PVA microgels by combining microfluidics and photo-crosslinking for localized delivery of bevacizumab in melanoma  
*Xingmei Chen, Hongliang Qian, Dechun Huang, Lin Dai, Wei Chen*
- 252 Dex-based pH-responsive nanogels for protein delivery  
*Xinghui Si, Zhaohui Tang*
- 253 Octenyl succinic anhydride (OSA) modified starches as wall materials used for functional molecule delivery  
*Shaojie Zhao, Guifang Tian, Xiaozhi Tang, Qiang Wang, Xingxun Liu, Jinkai Zheng*
- 254 Synthesis of interior-functionalized drug-binding dendrimers for cancer drug delivery  
*Xinhao Fang, Zhuxian Zhou, Xiangrui Liu, Jianbin Tang, Youqing Shen*
- 255 PK11195 as a mitochondrial targeting carrier to overcome multidrug resistance of breast cancer cells  
*Xinnan Wang, Xueming Lv, Ao Yu, Yongjian Wang*
- 256 Controlled delivery of growth factors by tunable biomimetic matrix for tissue engineering applications and cancer therapy studies  
*Sai-Sai Gu, Xin-Ting Chen, Xi-Qiu Liu*
- 257 Formulation and evaluation of tanshinone IIA-glycyrrhizic acid loaded nanoemulsion for enhanced oral bioavailability  
*Xiurong Zhang, Renjie Qiu, Xiuli Wang*

- 258 Enhancing gene delivery efficiency by modifying liposomes with different functional groups  
*Xiuxiu Cong, Xiandi Meng, Kuirong Mao, Hongmei Chen, Yongguang Yang, Tianmeng Sun*
- 259 Lipoic acid crosslinked star PLGA nanoparticles: An intelligent drug delivery platform  
*Xiuxiu Wang, Ru Cheng, Fenghua Meng, Zhiyuan Zhong*
- 260 Plasma polymerized temperature-sensitive poly (N-isopropylacrylamide) films for the adhesion to Hela cells  
*Xu Yang, Jing Peng, Zhaojie Sun, Haitao Lv, Dongyan Tang*
- 261 Coordinative-hydrophobic-electrostatic interaction increases the efficacy and serum-resistance in gene delivery  
*Xuan Nie, Ye-Zi You*
- 262 bFGF loaded injectable hydrogel through chitosan and Ag ion complexation promoting infected skin wound regeneration  
*Xuan Xuan, Ying An, Wen Huang, Tengxiao Xuan, Jian Xiao, Jiang Wu, Xiaokun Li*
- 263 Macrophage-mediated biomimetic system for brain-targeted drug delivery  
*Xuanrong Sun, Yue Cai, Dabu Zhu*
- 264 Designing antibody-engineered membrane nanovesicles as cancer drug delivery system  
*Xue Liu, Chao Liu, Gang Liu*
- 265 NIR-responsive PLGA-based nanoparticles as a versatile nanoplatform for fluorescence and photoacoustic imaging-guided combination cancer therapy  
*Xue Shen, Zhongyuan Chen, Xiaoxue Xie, Hanxi Zhang, Tingting Li, Yiyao Liu*
- 266 NIR-stimulated responsive sunitinib release using IR780 loaded liposome for anti-angiogenic and anti-tumor therapy  
*Xue Yang, Huipeng Li, Chenzi Li, Gao Fang, Ying Yang, David Oupicky, Minjie Sun*
- 267 Histone deacetylase inhibitor SAHA synergizes ROS responsive polymer based therapeutic gene delivery for cancer therapy  
*Xuefei Zhou, Zhuxian Zhou, Jianbin Tang, Xiangrui Liu, Youqing Shen*
- 268 Bilayer photocrosslinked hydrogel with controlled-release of cellular differentiated factors for integrative osteochondral repair  
*Xuemin Liu, Chen Lai, Xuetao Shi*
- 269 Amorphous calcium phosphate and poly (L-lactic acid)-based electrospinning nanofibrous scaffold for sustained delivery of calcium and orthophosphate ions and bone regeneration  
*Xufeng Niu, Fenghe Yang, Yubo Fan*
- 270 Thermosensitive, injectable and photocrosslinkable hydroxypropyl chitin hydrogels  
*Xulin Jiang, Meng Yuan, Bo Bi, Renxi Zhuo*
- 271 Polysaccharides from vinegar baked radix bupleuri as efficient solubilizer for water-insoluble drugs of Chinese Medicine  
*Ya Zhao, Peng Wan, Qiaohong Hu, Ruizhi Zhao*
- 272 UV/redox dual-triggered mesoporous silica nanoparticles for targeted hepatocellular carcinoma therapy  
*Yaling Wu, Zheng Xu, Yingyue Yang, Wenjing Sun, Jinghua Chen, Jingxiao Chen*
- 273 Polyphenol-based nanoparticles for dual imaging guided photothermal therapy  
*Yanbing Wang, Caina Xu, Huayu Tian, Xuesi Chen*
- 274 Bionic polymer thermogel-porous composite scaffold multilayer platform repairs full-thickness defect of articular cartilage  
*Yanbo Zhang, Fei Chang, Jianlin Zuo*
- 275 Construction of supramolecular prodrug self-assemblies with different morphology and their responsive controlled release behaviors of abstract  
*Yang Bai, Cai-ping Liu, Long-hai Zhuo, Wei Tian*
- 276 Preparation and characterization of a taurine modified collagen film for corneal repair

- Yang Liu , Xia Liu, Minghui Wu, Zhongxun Zhang, Huilin Lv, Linhong Deng*
- 277 Benzoxaborole-catechol dynamic covalent chemistry crosslinked hydrogel: self-healing and 3D cell encapsulation  
*Yangjun Chen, Ravin Narain*
- 278 Investigation of hyperbranched mPEG-CS-PLL as gene carrier  
*Xue Zhang, Zhichao Dai, Jing Ma, Lin Chi, Xin Mu, Yanhui Li, Huayu Tian*
- 279 Erythrocyte membrane-camouflaged biomimetic nanomedicine for targeted glioblastoma therapy  
*Yanjie Liu, Meng Zheng, Yan Zou, Bingyang Shi*
- 280 Inclusion of  $\beta$ -cyclodextrin with *meso*-tetrakis (4-sulfonatophenyl)iron porphyrin. insight from free energy calculation  
*Dongfang Ji, Yuping Dai, Hao Wang, Yanmin Yu, Zhicheng Sun*
- 281 Efficient complexation of gambogic acid by poly(amino acid) for combination drug therapy  
*Yanxue Yang, Cheng Cheng, Hang Liu, Yi Zheng, Lulu Cai, Hong Tan, Qiang Fu, Mingming Ding*
- 282 Co-delivery of pinocembrin and bFGF using injectable F127/ $\alpha$ -CD supramolecular hydrogel system to enhance wound regeneration  
*Yanyan Li, Yajiao Zhou, Liang Wu, Xuan Xuan, Xin Guo, Shishuang Jiang, Tengxiao Xuan, Chengxi Jiang, Jiang Wu, Huacheng He*
- 283 Macrophage targeting polymersomes for atherosclerotic plaque imaging  
*Yaohua Wei, Fenghua Meng, Gert Storm, Zhiyuan Zhong*
- 284 Electrospayed medicated shellac nanoparticles with blank ethylcellulose nanocoating layers for an improved ferulic acid sustained release profile  
*Yao-Yao Yang, Jin-Ke Yang, Jiang-Song Hou, Wei Wang, Deng-Guang Yu*
- 285 Combination therapy of capecitabine and cisplatin(IV)  
*Yasun Jing, Wen Pan, Leijiao Li, Yunhui Li, Ying Gao, Wenliang Li*
- 286 Preparation and evaluation of paclitaxel-loaded human serum albumin (HSA) nanoparticles using microfluidic technology  
*Yating Sun, Xiaolong Zheng, Xiuting Zhao, Robert J. Lee, Jing Xie, Lesheng Teng*
- 287 Various nanoscaled superstructures of adenine and thymine derivatives as controlled drug delivery vehicles  
*Ye-Chan Lee, Reddi Mohan Naidu Kalla, Il Kim*
- 288 Encapsulation of protein drugs by albumin nanoparticle under physiological temperature as a potentially universal approach  
*Yi Han, Yan Li, Yiqiong Liu, Lianghua He, Huaiji Wang, Yongyong Li*
- 289 Protein coronas improve targeting of metal-phenolic capsules  
*Yi Ju, Qiong Dai, Jiwei Cui, Frank Caruso*
- 290 CTS-Ag<sup>+</sup>/NH<sub>3</sub> hydrogel releasing VEGF to enhance the bone regeneration of 3D printed scaffold in osteomyelitis bone defect  
*Yi Leng, Chuangang Peng, Baoming Yuan, Guangkai Ren, Zhonghan Wang, Zuhao Li, Chenyu Shi, Liheng Kang, He Liu, Dankai Wu*
- 291 Erythrocyte membrane enveloped nanoparticles for targeted atherosclerosis therapy  
*Yi Wang, Kang Zhang, Xuan Qin, Yuan Zhong, Li Luo, Wei Wu, Guixue Wang*
- 292 Self-Nanoemulsifying electrospun fibrous membrane for drug permeation improvement  
*Yi Xiang, Wenguo Cui*
- 293 Multifunctional fluorescent carbon dots with charge-conversional and redox degradable for theranostic agent combining bioimaging and cancer gene therapy  
*Yi Zhang, Haijie Zhao, Wei Xue*
- 294 *In situ* osteogenesis through bioactive glucomannan-modulated macrophage-scaffold interaction  
*Yiming Niu, Chunming Wang*

- 295 Cytotoxic effect of Ag@CNTs nanohybrids  
*Meng Yin, Di Huang, Yinchun Hu, Jingjing Du, Weiyi Chen, Yan Wei*
- 296 Dendritic polyglycerol sulfate-shelled micellar doxorubicin for efficacious tumor targeting and chemotherapy  
*Yinan Zhong, Mathias Dimde, Fenghua Meng, Zhiyuan Zhong, Rainer Haag*
- 297 High-yield nitrogen-doped carbon dots from chitosan/acrylamide for detection of ferric ions  
*Ying Liu, Baoqiang Li, Guanxiong Liu, Dechang Jia, Yu Zhou*
- 298 Carriers-assisted nanodrug for synchronously chemo/chemodynamic tumor therapy  
*Ying Zhang, Liang Liu, Huayu Tian, Xuesi Chen*
- 299 A facile combined strategy to enhance the vaccination for tumor immunotherapy  
*Yingying Hu, Jie Chen, Lin Lin, Huayu Tian, Xuesi Chen*
- 300 Hybrid polyion complex crosslinked paclitaxel prodrug micelles for drug delivery  
*Yinwen Li, Youqing Shen*
- 301 Nuclear-tropic polydopamine nanocarriers to reverse doxorubicin resistance in cancer therapy  
*Yiqiong Liu, Haiqing Dong, Yongyong Li*
- 302 Real-time and long-term monitoring of tumor-related autophagy *in vivo* by Fe<sub>3</sub>O<sub>4</sub>-NO<sub>2</sub> nanoparticles  
*Chao Zhang, Yong Hu*
- 303 Electrical stimulation through a microgrooved graphene-incorporated substrate enhances the neural differentiation of MSCs  
*Chanjuan Dong, Yonggang Lv*
- 304 A drug delivery system assembled by polyrotaxanes bearing targeting glucosamine groups  
*Sa Liu, Jiahong Jin, Yong-Guang Jia, Jin Wang, Lina Mo, Xiaohui Chen, Li Ren, X. X. Zhu*
- 305 A novel nanoplatfrom based on docose hexaenoic acid-labeled nanoparticles for combinational photodynamic-chemotherapy of HER2<sup>+</sup> breast cancer  
*Baoyan Wu, Yongyong Xue, Yan-Qing Guan*
- 306 Self-healing and release-controlled hydrogel based on hyperbranched polysaccharide and xanthan gum  
*Yongzhen Tao, Ruquan Zhang, Simin Du, Quan He*
- 307 Bionic bilayer scaffold with on-demand osteochondrogenic factors for osteochondral reconstruction  
*Yu Han, Xiangru Feng, Weiguo Xu, Fei Chang, Jianxun Ding*
- 308 LRP-1 targeted virus-mimicking polymersomes for efficient protein delivery to glioblastoma  
*Yu Jiang, Weijing Yang, Jian Zhang, Fenghua Meng, Zhiyuan Zhong*
- 309 Synthesis of amphiphilic copolymers by metal-free catalyzed ring-opening alternating copolymerization for oxidation responsive drug delivery  
*Yu Zhang, Pan He, Xinming Liu, Hongyu Zhang, Chunsheng Xiao, Xuesi Chen*
- 310 pH/redox Dual-stimuli-responsive nanocarriers fabricated by catecholic polymer hybrids for targeting antitumor treatment  
*Yu Zhang, Saji Uthaman, Xinwen Zhou, In-Kyu Park, Il Kim*
- 311 Nanoengineering of polyphenol-functionalized poly (ethylene glycol) particles for anti-cancer drug delivery  
*Yuan Tian, Jiwei Cui*
- 312 Tracking cell internalization behavior of tat modified polymeric micelles by tuning surface tat density  
*Yang Ming, Yuan Tian, Shaobing Zhou*
- 313 Targeted and traceable nanocarriers for enhanced antitumor gene delivery  
*Yuan Zhong, Yi Wang, Li Luo, Wei Wu, Gui-Xue Wang*
- 314 The survival of probiotics is enhanced by encapsulated into alginate/ carboxymethyl chitosan /alginate microcapsules



*Pengfei Zou, Yantong Chen, Delong Ge, Yuxia Wang, Yuanyuan Gao, Tongyi Sun*

- 315 Endo/lysosomal escape *via* generation of azidyl radicals from a prodrug polymer to maximize RNAi and chemotherapy  
*Shasha He, Yanxin Qi, Dongfang Zhou, Yubin Huang*
- 316 Study on the characteristics of drug release *in vitro* of G-SLN  
*Yue Li, Fangning Chen, Xiuli Wang*
- 317 Multi stimuli-responsive polymeric prodrug for enhanced cancer therapy  
*Yue Wang, Zhaohui Tang, Xuesi Chen*
- 318 Novel Chitosan-CaCO<sub>3</sub> composites granules for instant hemostasis and wound healing  
*Yue Zhu, He Wei, Haiming Fan, Xiaonan Huang*
- 319 Triple-stimuli responsive nanomicelles with upper critical solution temperature for chemo-/photothermal/photodynamic therapy of tumors  
*Mingyang Hei, Yuejia Ji, Yun Fu, Yufang Xu, Xuhong Qian, Weiping Zhu*
- 320 Fabrication of PLLA/Gelatin nanofiber scaffolds loaded with chicken utricle stromal cell-derived extracellular matrix for hair cell regeneration  
*Yuexia Li, Yunliang Wu, Lingbin Che, Lei Zhou, Hongmei Liu, Xiangxin Lou*
- 321 Preparation of anti-nonspecific adsorption chitosan-based BSA-imprinted polymers with outstanding adsorption capacity and selectivity recognition capacity based on magnetic microspheres  
*Yufei Wang, Jingjing Zhou, Baoliang Zhang, Quyu Zhang*
- 322 Preparation of soy protein based polymer microgels conjugating salen metal complexes and their antioxidant ability  
*Yufeng He, Lizhong Qian, Di Gao, Guifang Yan, Jing Chen, Rong-Min Wang*
- 323 A reactive oxygen species (ROS)-responsive low molecular weight gel co-loaded with doxorubicin and Zn(II) phthalocyanine tetrasulfonic acid for combined chemo-photodynamic therapy  
*Long Xu, Yuji Pu, Bin He*
- 324 Hypoxia-shattered nanoplatfrom for high-specific RNA interference of breast cancer  
*Yujing Li, Jianxun Ding, Lesheng Teng, Jiahui Lu, Robert J. Lee, Jinjun Shi*
- 325 Promotion osteogenesis of hiPSC-MSCs by nanofibrous scaffold decorated with osteoblast-derived extracellular matrix  
*Yunliang Wu, Lei Zhou, Yuexia Li, Lingbin Che, Hongmei Liu, Dianwen Song, Xiangxin Lou*
- 326 pH and reduction dual-responsive micelles based on a novel polyurethanes for controlled release of doxorubicin  
*Le-Ran Bu, He-Na Zhang, Bai-Xiang Du, Yu-Ling Li*
- 327 Injectable hydrogel system with controlled release of drugs  
*Yulong Ding, Hongbo Zhang*
- 328 A pH and redox dual-responsive controlled release system based on breakable mesoporous silica nanoparticles  
*Huijing Wu, Yun Fu, Yuejia Ji, Yufang Xu, Xuhong Qian, Weiping Zhu*
- 329 Quadruple hydrogen bonded supramolecular hydrogels for stem cell encapsulation and delivery  
*Mingjian Xu, Chen Lai, Yunhua Chen*
- 330 Study of lipid bilayer-coated calcium phosphate nanoparticles as a drug carrier for antitumor drug  
*Yunqiu Miao, Xinxin Zhang, Rui Wang, Yong Gan*
- 331 Co-delivery of combretastatin-A4 and Prussian blue into injectable hydrogel depot for synergistic anti-cancer therapy  
*Yuqing Liang, Xiaoyi Sun, Juan Li, You-Nian Liu*
- 332 A metal-organic network combining apoptosis and ferroptosis for cancer treatment  
*Yuxin Guo, Wei Sun, Fu-Gen Wu*
- 333 Ligand-switchable nanoparticles for deep tumor penetration and improved therapeutic efficacy



*Yuxun Ding, Hanlin Ou, Xue Li, Linqi Shi*

- 334 Multicellular interactions mediated by a biomimetic anisotropic three-dimensional scaffold  
*Zengxiao Cai, Linpeng Fan, Jingliang Li, Xungai Wang*
- 335 ATP-activated decrosslinking and charge-reversal vectors for siRNA delivery and cancer therapy  
*Zhanwei Zhou, Qingyan Zhang, Minghua Zhang, Chenzi Li, David Oupicky, Minjie Sun*
- 336 Modulation of autophagy behavior to enhance pDNA transfection by arginine-grafted cationic polymer vector  
*Zhao Wang, Ting Luo, Ruilong Sheng, Amin Cao*
- 337 Nanofiber-based solid self-emulsifying delivery systems fabricated using a modified coaxial electrospinning  
*Zhao-Bin Zheng, Deng-Guang Yu, Ke Wang, Yaoyao Yang*
- 338 Establishing superiority of pulmonary versus intravenous delivery with fluorinated polymeric plerixafor enveloped perfluorocarbon for the siRNA delivery and advanced lung metastasis treatment  
*Zhaoting Li, Gang Chen, Ling Ding, Yixin Wang, Kaikai Wang, Jing Li, Minjie Sun, David Oupicky*
- 339 Injectable click polypeptide hydrogel *via* tetrazine-norbornene chemistry for cisplatin localized release  
*Zhen Zhang, Chaoliang He, Xuesi Chen*
- 340 Preparation and application of slow-released and antistatic thermally expandable microspheres  
*Shouzheng Jiao, Zhicheng Sun, Qian Li, Meijuan Cao, Luhai Li*
- 341 Preparation of 2, 4-Dichlorophenoxyacetic acid loaded on cysteamine modified polydopamine via amide bond and its release behaviors  
*Zhichuan Shen, Hongjun Zhou, Xuanhua Sun, Xinhua Zhou, Hua Xu, Huayao Chen*
- 342 Tumor microenvironment sensitive polypeptide nanoparticles for improved anti-cancer drug delivery efficiency  
*Zhiliang Gao, Jiwei Cui*
- 343 Combination of polymeric cisplatin micelles and acetylsalicylic acid for solid tumor treatment  
*Zhilin Liu, Wantong Song, Zhaohui Tang, Xuesi Chen*
- 344 Mussel-inspired catalytic selenocystamine - dopamine surface chemistry for generating therapeutic gas on cardiovascular stents  
*Zhilu Yang, Nan Huang*
- 345 Covalent and non-covalent binding modes of ibuprofen with  $\beta$ -cyclodextrin for colon-targeted and sustained delivery  
*Lin Yang, Jing Tian, Shijie Wei, Qing Huang, Zhizhong Wang*
- 346 Improved bone ingrowth of 3D printed titanium alloy porous implant by filling injectable hydrogel loaded with BMSCs and TNF- $\alpha$  antagonist in antigen-induced arthritis  
*Zhonghan Wang, Yanbing Wang, Chenyu Wang, Zuhao Li, Chenyu Shi, Chaohua Gao, Yi Leng, Liu He, Jincheng Wang*
- 347 Macropolyamine [12]aneN<sub>3</sub> compound containing fluorescent moieties as effective and real-time tracking non-viral gene vectors  
*Wan Sun, Xu-ying Liu, Ming-Xuan Liu, Le-Le Ma, Zhong-Lin Lu*
- 348 Charge-reversal multifunctional drug delivery system for targeted cancer photothermal therapy to reverse multidrug resistance  
*Zhongyin Chen, Bingbing Jiang, Cao Li*
- 349 Calcium phosphate-cured nanocluster of cisplatin-loaded polypeptide nanoparticle and arsenic trioxide for synergistic chemotherapy of ovarian cancer  
*Zhongyu Jiang, Jianxun Ding, Xiuli Zhuang, Xuesi Chen*

- 350 Combined administration of DOX and TGF- $\beta$  receptor inhibitor by nanoparticle: an effective treatment against insufficient chemotherapy promoted metastasis  
*Zifu Li, Xiangliang Yang*
- 351 Synthesis of L-cysteine modified ZnO for biomedical applications  
*Ziyu Zhou, Jiaolong Wang, Lina Wang, Lan Liao, Xiaolei Wang, Junchao Wei, Yiwang Chen*
- 352 Cell-loaded self-healing hydrogel releasing zoledronate to enhance the osseointegration of 3D printing porous titanium alloy in osteoporotic bone defect  
*Zuhao Li, Chenyu Wang, Chuangang Peng, Zhonghan Wang, Chenyu Shi, Chaohua Gao, Yi Leng, Liu He, Jincheng Wang*
- 353 Endogenous and exogenous combinational oxidative stress generating nanoparticles for ROS therapy  
*Zujian Feng, Pingsheng Huang, Weiwei Wang, Anjie Dong*

---

**Note:**

1. The posters are listed in an alphabetic order of the presenting author's name.
2. The PDF version of abstract book can be downloaded at [www.sipcd.com](http://www.sipcd.com)