Bing Xu

Professor, Department of Chemistry, Brandeis University; bxu@brandeis.edu; Office: 781-736-5201

Part I. General Information

Education

Postdoc	Sept 1997 – Jun 2000 Department of Chemistry and Chemical Biology, Harvard University, Supervisor: Professor George M. Whitesides.
Postdoc	Aug 1996 – Sept 1997, Department of Chemistry, Massachusetts Institute of Technology, Supervisor: Professor Timothy M. Swager.
Ph. D.	Feb 1996, University of Pennsylvania, Philadelphia, USA. Thesis Title: Calix[4]arene-Based Metallomesogens, Advisor: Professor Timothy M. Swager.
M.S.	July 1990, Department of Chemistry, Nanjing University, Nanjing, China. Thesis Title: Structures of Pyrazine-Bridged Cobalt(III) and Copper(II) Complexes, Advisor: Professor Wenxia Tang.
B.S.	July 1987, Department of Chemistry, Nanjing University, Nanjing, China.

National & International Recognitions

2014: "Highly-cited researchers" in Chemistry, Thompson Reuters
2013: Kenneth Rainin Foundation Innovator Award
2008: Human Frontier Science Program Award.
2007: Distinguished Lectureship, Asian International Symposium, Chemical Society of Japan
2001: DuPont Asian & European Young Investigator Award
1997: NIH Postdoctoral Fellowship
1996: Glenn Brown Award of International Liquid Crystal Society

Professional Experience

Aug 2009 – Present	Professor of Chemistry, Brandeis University.
July 2008 – June 2010	Professor of Chemistry, Hong Kong University of Science and Technology.
Jan 2006 – June 2008	Associate Professor, Hong Kong University of Science and Technology.
July 2000 – Dec 2005	Assistant Professor, Hong Kong University of Science and Technology.
Sept 1997 – Jun 2000	Research Associate, Department of Chemistry and Chemical Biology, Harvard University, Supervisor: Prof. George M. Whitesides.
Aug 1996 – Sept 1997	Research Associate, Department of Chemistry, Massachusetts Institute of Technology, Supervisor: Prof. Timothy M. Swager.
Sept 1991 – July 1996	Research Assistant, Department of Chemistry, University of Pennsylvania, Supervisor: Prof. Timothy M. Swager.
Aug 1990 – Aug 1991	Lecturer, Department of Chemistry, Sichuan University.
Sept 1987 – July 1990	Research Assistant, Department of Chemistry, Nanjing University, Supervisor: Prof. Wenxia Tang.

Professional Society Association: American Chemical Society; Materials Research Society; American Society of Biochemistry and Molecular Biology; American Society of Gene & Cell Therapy.

Part II. Research Activities

A. Mission Statement

The mission of our research is to develop enzymatic noncovalent synthesis for understanding and treating human diseases. Inspired by nature, we integrate the knowledge and techniques in chemistry, biology, materials science, nanotechnology, and bioinformatics to design molecular biofunctional materials, for the applications in biomedicine (e.g., cancer therapy, infectious diseases, therapeutic molecular processes, and

diagnostics), and other fundamental problems in chemical and biological science.

B. Peer-reviewed Publications

Peer-reviewed Journal Publications
*corresponding author, h-index 78 based on Google Scholar

Year 2020

246. Hongjian He, Xinyi Lin, Difei Wu, Jiaqing Wang, Jiaqi Guo, Douglas R. Green, Hongwei Zhang, and Bing Xu* "Enzymatic Noncovalent Synthesis for Mitochondrial Genetic Engineering of Cancer Cells" Cell Reports Physical Science, 2020, in press.
245. Dongsik Yang, Hongjian He and Bing Xu* "Enzyme-Instructed Morphological Transition of the Supramolecular Assemblies of Branched Peptides" Beilstein Journal of Organic Chemistry, 2020, in press.
244. Hongjian He, Weiyi Tan, Jiaqi Guo, Meihui Yi, Adrianna N. Shy and Bing Xu* "Enzymatic Noncovalent Synthesis" Chemical Reviews, 2020, 18, 9994-10078.
243. Jiaqi Guo, Hongjian He, Beomjin Kim, Jiaqing Wang, Meihui Yi, Cheng Lin, and Bing Xu* "The Ratio of Hydrogelator and Precursor Controls Enzymatic Hydrogelation of a Branched Peptide" Soft Matter, 2020, in press.
242. Adrianna N. Shy, Jie Li, Junfeng Shi, Ning Zhou, and Bing Xu* "Enzyme-Instructed Self-assembly of the Stereoisomers of Pentapeptides to Form Biocompatible Supramolecular Hydrogels" Journal of Drug Targeting, 2020, 28, 760-765.
241. Jiaqing Wang, Weiyi Tan, Guanying Li, Difei Wu, Hongjian He, Jiashu Xu, Meihui Yi, Ye Zhang, S. Ali Aghvami, Seth Fraden, Bing Xu* "Enzymatic Insertion of Lipids Increases Membrane Tension for Inhibiting Cancer Cells" Chemitry: European Journal 2020, in press.
240. Hongjian He, Shuang Liu, Difei Wu, and Bing Xu* "Enzymatically-Formed Peptide Assemblies Sequestrate Proteins and Relocate Inhibitors for Selectively Killing Cancer Cells" Angewandte Chemie International Edition 2020, 59, 16445-16450.
239. Dongsik Yang, Beom Jin Kim, Hongjian He, and Bing Xu* "Enzymatically Forming Cell Compatible Supramolecular Assemblies of Tryptophan-Rich Short Peptides" Peptide Science. 2020, in press.
238. Beom Jin Kim, Yu Fang, Hongjian He, and Bing Xu* "Trypsin-Instructed Self-Assembly on Endoplasmic Reticulum for Selectively Inhibiting Cancer Cells " Advanced Healthcare Materials. 2020, in press.
237. Jiaqi Guo, Changhao Tian and Bing Xu* "Biomaterials Based on Noncovalent Interactions of Small Molecules" EXCLI Journal, 2020, 19, 1124-1140.
236. Zhaoqianqi Feng, Huaimin Wang, Fengbin Wang, Younghoon Oh, Cristina Berciu, Qiang Cui,* Edward H. Egelman* and Bing Xu* "Artificial Intracellular Filaments" Cell Reports Physical Science. 2020, 1, 10085.
235. Hongjian He, Xingyi Lin, Jiaqi Guo, Jiaqing Wang, and Bing Xu* "Perimitochondrial Enzymatic Self-Assembly for Selective Targeting the Mitochondria of Cancer Cells" ACS Nano. 2020, 14, 6947-6955.
234. Shuang Liu and Bing Xu* "Enzyme-Instructed Self-Assembly for Subcellular Targeting" ACS Omega. 2020, 5, 15771-15776.
233. Hongjian He, Jiaqi Guo, Xingyi Lin and Bing Xu* "Enzyme-Instructed Assemblies Enable Mitochondria Localization of H2B in Cancer Cells" Angewandte Chemie International Edition 2020, 59, 9330-9334.
232. Zhaoqianqi Feng, Huaimin Wang, Meihui Yi, Chieh-Yun Lo, Ashanti Sallee, Jer-Tsong Hsieh and Bing Xu* "Instructed-Assembly of Small Peptides Inhibits Drug-Resistant Prostate Cancer Cells" Peptide Science 2020, 1, e24123.

231. Beom Jin Kim, Bing Xu* “Enzyme-Instructed Self-Assembly for Cancer Therapy and Imaging” Bioconjugate Chemistry 2020, 31, 492-500.

230. Beom Jin Kim, Dongsik Yang, and Bing Xu* “Emerging Applications of Supramolecular Peptide Assemblies” Trends in Chemistry 2020, 2, 71-83.

Year 2019

229. Huaimin Wang, Zhaoqianqi Feng, Weiyi Tan, Bing Xu* “Assemblies of D-peptides for Targeting Cell Nucleolus” Bioconjugate Chemistry 2019, 30, 2528-2532.

228. Jiaqing Wang, Adrianna Shy, Difei Wu, Deani Cooper, Jiashu Xu, Hongjian He, Wenjun Zhan, Shenghuan Sun, Susan Lovett, Bing Xu* “The Structure-Activity Relationship of Peptide Conjugated Chloramphenicol for Inhibiting E. coli” J. Med. Chem 2019, 62, 10245-10257.

227. Adrianna N. Shy, Beom Jin Kim, and Bing Xu* “Enzymatic Noncovalent Synthesis of Supramolecular Soft Matters for Biomedical Applications” Matter 2019, 1, 1127-1147.

226. Zhaoqianqi Feng, Xiuguo Han, Huaimin Wang, Tingting Tang,* and Bing Xu* “Enzyme-Instructed Peptide Assemblies Selectively Inhibit Bone Tumors” Chem 2019, *5*, 2442-2449.

225. Jiaqing Wang, Deani L. Cooper, Wenjun Zhan, Difei Wu, Hongjian He, Shenghuan Sun, Susan Lovett,* Bing Xu* “Diglycine Enables Rapid Intrabacterial Hydrolysis for Activating Anbiotics against Gram-negative Bacteria” Angewandte Chemie International Edition 2019, *58*, 10631- 10634.

224. Huaimin Wang,* Zhaoqianqi Feng, and Bing Xu* “Supramolecular Assemblies of Peptides or Nucleopeptides for Gene Delivery” Theranostics 2019, 9, 3213-3222.

223. Huaimin Wang, Zhaoqianqi Feng, and Bing Xu* “Dynamic Continuum of Molecular Assemblies for Controlling Cell Fates” ChemBioChem 2019, 20, 2442-2446.

222. Huaimin Wang, Zhaoqianqi Feng, and Bing Xu* “Assemblies of Peptides in Complex Environment and Their Applications” Angewandte Chemie International Edition 2019, 58, 10423-10432.

221. Huaimin Wang, Zhaoqianqi Feng, and Bing Xu* “Intercellular Instructed-Assembly Mimics Protein Dynamics to Induce Cell Spheroids” Journal of the American Chemical Society 2019, *141*, 7271-7274.

220. Huaimin Wang, Zhaoqianqi Feng, and Bing Xu* “Instructed-Assembly as Context-Dependent Signals for Death and Morphogenesis of Cells” Angewandte Chemie International Edition 2019, *58*, 5567-5571.

219. Huaimin Wang, Zhaoqianqi Feng, Cuihong Yang, Jinjian Liu, Jamie E. Medina, S. Ali Aghvami, Daniela M. Dinulescu, Jianfeng Liu, Seth Fraden, and Bing Xu* “Unraveling the Cellular Mechanism of Assembling Cholesterols for Selective Cancer Cell Death''. Molecular Cancer Research 2019, 17, 907-917

218. Jiaqing Wang, Jie Zhou, Hongjian He, Difei Wu, Xuewen Du, Bing Xu* “Cell-compatible Nanoprobes for Imaging Intracellular Phosphatase Activities” ChemBioChem, 2019, *20*, 526- 531.

Year 2018

217. Zhaoqianqi Feng, Huaimin Wang and Bing Xu* “Instructed-Assembly of Peptides for Intracellular Enzyme Sequestration.” Journal of the American Chemical Society 2018, *140*, 16433-16437.

216. Jie Zhou; Xuewen Du; Xiaoyi Chen; Bing Xu* “Adaptive Multifunctional Supramolecular Assemblies of Glycopeptides Rapidly Enable Morphogenesis''. Biochemistry 2018, *57*, 4867- 4879.

215. Hongjian He; Bing Xu* “Instructed-Assembly (Ia): A Molecular Process for Controlling Cell Fate''. Bulletin of the Chemical Society of Japan 2018, *91*, 900-906.

214. Jie Zhou; Xuewen Du; Cristina Berciu; Steven J. Del Signore; Xiaoyi Chen; Natsuko Yamagata; Avital A. Rodal; Daniela Nicastro; Bing Xu* “Cellular Uptake of a Taurine-Modified, Ester Bond-Decorated D-Peptide Derivative Via Dynamin-Based Endocytosis and Macropinocytosis". Molecular Therapy 2018, *26*, 648-658.

213. Qingxin Yao; Qiang Bao; Xinming Li; Hui Wang; Zhenyu Yang; Xinghua Shi; Yuan Gao*; Bing Xu “Determination of the Packing Model of a Supramolecular Nanofiber Via Mass-Per-Length Measurement and De Novo Simulation". Nanoscale 2018, *10*, 3990-3996.

212. Jiaqing Wang; Taotao Xiong; Jie Zhou; Hongjian He; Dongdong Wu; Xuewen Du; Xingyi Li; Bing Xu* “Enzymatic Formation of Curcumin in Vitro and in Vivo". Nano Research 2018, *11*, 3453-3461.

211. Huaimin Wang; Zhaoqianqi Feng; Yanan Qin; Jiaqing Wang; Bing Xu* “Nucleopeptide Assemblies Selectively Sequester Atp in Cancer Cells to Increase the Efficacy of Doxorubicin". Angewandte Chemie International Edition 2018, *57*, 4931-4935.

210. Zhaoqianqi Feng; Huaimin Wang; Shiyu Wang; Qiang Zhang; Xixiang Zhang; Avital A. Rodal; Bing Xu* “Enzymatic Assemblies Disrupt the Membrane and Target Endoplasmic Reticulum for Selective Cancer Cell Death". Journal of the American Chemical Society 2018, *140*, 9566-9573.

209. Jie Li; Ziqing Zhan; Xuewen Du; Jiaqing Wang; Brandon Hong; Bing Xu* “Selection of Secondary Structures of Heterotypic Supramolecular Peptide Assemblies by an Enzymatic Reaction". Angewandte Chemie International Edition 2018, *57*, 11716-11721.

208. Jie Li; Xuewen Du; Devon J. Powell; Rong Zhou; Junfeng Shi; Hongjian He; Zhaoqianqi Feng; Bing Xu* “Down-Regulating Proteolysis to Enhance Anticancer Activity of Peptide Nanofibers". Chemistry-an Asian journal 2018, 13, 3464-3468

207. Jie Li; Domenico Bullara; Xuewen Du; Hongjian He; Stavroula Sofou; Ioannis G. Kevrekidis; Irving R. Epstein*; Bing Xu* “Kinetic Analysis of Nano-Structures Formed by Enzyme- Instructed Intracellular Assemblies against Cancer Cells". ACS Nano 2018, *12*, 3804-3815.

206. Huaimin Wang; Zhaoqianqi Feng; Steven J. Del Signore; Avital A. Rodal; Bing Xu* “Active Probes for Imaging Membrane Dynamics of Live Cells with High Spatial and Temporal Resolution over Extended Time Scales and Areas". Journal of the American Chemical Society 2018, *140*, 3505-3509.

205. Jie Zhou; Xuwen Du; Xiaoyi Chen; Jiaqing Wang; Ning Zhou; Dongdong Wu; Bing Xu* “Enzymatic Self-Assembly Confers Exceptionally Strong Synergism with Nf-Kappab Targeting for Selective Necroptosis of Cancer Cells". Journal of the American Chemical Society 2018, *140*, 2301-2308.

204. Hongjian He; Jiaqing Wang; Huaimin Wang; Ning Zhou; Dongsik Yang; Douglas R. Green; Bing Xu* “Enzymatic Cleavage of Branched Peptides for Targeting Mitochondria". Journal of the American Chemical Society 2018, *140*, 1215-1218.

203. Hongjian He; Huaimin Wang; Ning Zhou; Dongsik Yang; Bing Xu* “Branched Peptides for Enzymatic Supramolecular Hydrogelation". Chemical Communications 2018, *54*, 86-89.

Year 2017

202. Ning Zhou; Zeyuan Cao; Bing Xu* “Functional Hyper-Crosslinkers". Chemistry-a European Journal 2017, *23*, 15844-15851.

201. Ning Zhou; Xiaoyan Cao; Xuewen Du; Huaimin Wang; Ming Wang; Shuang Liu; Nguyen Khang; Klaus Schmidt-Rohr; Qiaobing Xu; Gaolin Liang; Bing Xu* “Hyper-Crosslinkers Lead to Temperature- and Ph-Responsive Polymeric Nanogels with Unusual Volume Change". Angewandte Chemie International Edition 2017, *56*, 2623-2627.

200. Jie Zhou; Jie Li; Xuewen Du; Bing Xu* “Supramolecular Biofunctional Materials". Biomaterials 2017, *129*, 1-27.

199. Jie Zhou; Xuewen Du; Jiaqing Wang; Natsuko Yamagata; Bing Xu* “Enzyme-Instructed Self-Assembly of Peptides Containing Phosphoserine to Form Supramolecular Hydrogels as

Potential Soft Biomaterials". Frontiers of Chemical Science and Engineering 2017, *11*, 509-515.

198. Xue Zhang; Peng Liu; Christie Zhang; Direkrit Chiewchengchol; Fan Zhao; Hongbo Yu; Jingyu Li; Hiroto Kambara; Kate Y. Luo; Arvind Venkataraman; Ziling Zhou; Weidong Zhou; Haiyan Zhu; Li Zhao; Jiro Sakai; Yuanyuan Chen; Ye-Shih Ho; Besnik Bajrami; Bing Xu; Leslie E. Silberstein; Tao Cheng; Yuanfu Xu; Yuehai Ke; Hongbo R. Luo "Positive Regulation of Interleukin-1 Beta Bioactivity by Physiological Ros-Mediated Cysteine S-Glutathionylation". Cell Reports 2017, *20*, 224-235.
197. Cuihong Yang; Chunhua Ren; Jie Zhou; Jinjian Liu; Yumin Zhang; Fan Huang; Dan Ding; Bing Xu*; Jianfeng Liu* "Dual Fluorescent- and Isotopic-Labelled Self-Assembling Vancomycin for in Vivo Imaging of Bacterial Infections". Angewandte Chemie International Edition 2017, *56*, 2356-2360.
196. Natsuko Yamagata; Xiaoyi Chen; Jie Zhou; Jie Li; Xuewen Du; Bing Xu* “Enzymatic Self-Assembly of an Immunoreceptor Tyrosine-Based Inhibitory Motif (Itim)". Organic & Biomolecular Chemistry 2017, *15*, 5689-5692.
195. Huaimin Wang; Junfeng Shi; Zhaoqianqi Feng; Rong Zhou; Shiyu Wang; Avital A. Rodal; Bing Xu* “An in Situ Dynamic Continuum of Supramolecular Phosphoglycopeptides Enables Formation of 3d Cell Spheroids". Angewandte Chemie International Edition 2017, *56*, 16297-16301.
194. Huaimin Wang; Zhaoqianqi Feng; Bing Xu* “Bioinspired Assembly of Small Molecules in Cell Milieu". Chemical Society reviews 2017, *46*, 2421-2436.
193. Huaimin Wang; Zhaoqianqi Feng; Alvin Lu; Yujie Jiang; Hao Wu; Bing Xu* “Instant Hydrogelation Inspired by Inflammasomes". Angewandte Chemie International Edition 2017, *56*, 7579-7583.
192. Jie Li; Junfeng Shi; Jamie E. Medina; Jie Zhou; Xuewen Du; Huaimin Wang; Cuihong Yang; Jianfeng Liu; Zhimou Yang; Daniela M. Dinulescu; Bing Xu* “Selectively Inducing Cancer Cell Death by Intracellular Enzyme-Instructed Self-Assembly (Eisa) of Dipeptide Derivatives". Advanced Healthcare Materials 2017, *6*.
191. Jie Li; Xuewen Du; Saqib Hashim; Adrianna Shy; Bing Xu* “Aromatic-Aromatic Interactions Enable Alpha-Helix to Beta-Sheet Transition of Peptides to Form Supramolecular Hydrogels". Journal of the American Chemical Society 2017, *139*, 71-74.
190. Zhaoqianqi Feng; Tengfei Zhang; Huaimin Wang; Bing Xu* “Supramolecular Catalysis and Dynamic Assemblies for Medicine". Chemical Society Reviews 2017, *46*, 6470-6479.
189. Zhaoqianqi Feng; Huaimin Wang; Xiaoyi Chen; Bing Xu* “Self-Assembling Ability Determines the Activity of Enzyme-Instructed Self-Assembly for Inhibiting Cancer Cells". Journal of the American Chemical Society 2017, *139*, 15377-15384.
188. Zhaoqianqi Feng; Huaimin Wang; Rong Zhou; Jie Li; Bing Xu* “Enzyme-Instructed Assembly and Disassembly Processes for Targeting Downregulation in Cancer Cells". Journal of the American Chemical Society 2017, *139*, 3950-3953.
187. Xuewen Du; Jie Zhou; Jiaqing Wang; Rong Zhou; Bing Xu* “Chirality Controls Reaction- Diffusion of Nanoparticles for Inhibiting Cancer Cells". Chemnanomat 2017, *3*, 17-21.
186. Xuewen Du; Jie Zhou; Huainin Wang; Junfeng Shi; Yi Kuang; Wu Zeng; Zhimou Yang; Bing Xu* “In Situ Generated D-Peptidic Nanofibrils as Multifaceted Apoptotic Inducers to Target Cancer Cells". Cell Death & Disease 2017, *8*, e2614-e2614.
185. Xuewen Du; Jie Zhou; Xinming Li; Bing Xu* “Self-Assembly of Nucleopeptides to Interact with Dnas". Interface Focus 2017, *7*, 20160116.

Year 2016

184. Rong Zhou; Yi Kuang; Jie Zhou; Xuewen Du; Jiayang Li; Junfeng Shi; Richard Haburcak; Bing Xu* “Nanonets Collect Cancer Secretome from Pericellular Space". PLoS One 2016, *11*, e0154126.

183. Jie Zhou; Michael O'keeffe; Gongxian Liao; Fan Zhao; Cox Terhorst; Bing Xu* “Design and Synthesis of Nanofibers of Self-Assembled De Novo Glycoconjugates Towards Mucosal Lining Restoration and Anti-Inflammatory Drug Delivery". Tetrahedron 2016, *72*, 6078-6083.

182. Jie Zhou; Xuewen Du; Bing Xu* “Regulating the Rate of Molecular Self-Assembly for Targeting Cancer Cells". Angewandte Chemie International Edition 2016, *55*, 5770-5775.

181. Jie Zhou; Xuewen Du; Cristina Berciu; Hongjian He; Junfeng Shi; Daniela Nicastro; Bing Xu* “Enzyme-Instructed Self-Assembly for Spatiotemporal Profiling of the Activities of Alkaline Phosphatases on Live Cells". Chem 2016, *1*, 246-263.

180. Dan Yuan; Bing Xu* “Heterotypic Supramolecular Hydrogels". Journal of Materials Chemistry B 2016, *4*, 5638-5649.

179. Huaimin Wang; Zhaoqianqi Feng; Dongdong Wu; Keith J. Fritzsching; Mike Rigney; Jie Zhou; Yujie Jiang; Klaus Schmidt-Rohr; Bing Xu* “Enzyme-Regulated Supramolecular Assemblies of Cholesterol Conjugates against Drug-Resistant Ovarian Cancer Cells". Journal of the American Chemical Society 2016, *138*, 10758-10761.

178. Huaimin Wang; Zhaoqianqi Feng; Youzhi Wang; Rong Zhou; Zhimou Yang; Bing Xu* “Integrating Enzymatic Self-Assembly and Mitochondria Targeting for Selectively Killing Cancer Cells without Acquired Drug Resistance". Journal of the American Chemical Society 2016, *138*, 16046-16055.

177. A. P. Mccloskey; S. M. Gilmore; J. Zhou; E. R. Draper; S. Porter; B. F. Gilmore; Bing Xu; G. Laverty "Self-Assembling Ultrashort Nsaid-Peptide Nanosponges: Multifunctional Antimicrobial and Anti-Inflammatory Materials". Rsc Advances 2016, *6*, 114738-114749.

176. Richard Haburcak; Junfeng Shi; Xuewen Du; Dan Yuan; Bing Xu* “Ligand-Receptor Interaction Modulates the Energy Landscape of Enzyme-Instructed Self-Assembly of Small Molecules". Journal of the American Chemical Society 2016, *138*, 15397-15404.

175. Zhaoqianqi Feng; Huaimin Wang; Xuewen Du; Junfeng Shi; Jie Li; Bing Xu* “Minimal C-Terminal Modification Boosts Peptide Self-Assembling Ability for Necroptosis of Cancer Cells". Chemical Communications 2016, *52*, 6332-6335.

Year 2015

174. Jie. Zhou; Bing. Xu "Enzyme-Instructed Self-Assembly: A Multistep Process for Potential Cancer Therapy". Bioconjugate Chemistry 2015, *26*, 987-999.

173. Jie Zhou; Xuewen. Du; Bing Xu* “Prion-Like Nanofibrils of Small Molecules (Prism): A New Frontier at the Intersection of Supramolecular Chemistry and Cell Biology". Prion 2015, *9*, 110- 118.

172. Jie Zhou; Xuewen Du; Jie Li; Natsuko Yamagata; Bing Xu* “Taurine Boosts Cellular Uptake of Small D-Peptides for Enzyme-Instructed Intracellular Molecular Self-Assembly". Journal of the American Chemical Society 2015, *137*, 10040-10043.

171. Ye Zhang; Ning Zhou; Junfeng Shi; Susan Sondej Pochapsky; Thomas C. Pochapsky; Bei Zhang; Xixiang Zhang; Bing Xu* “Unfolding a Molecular Trefoil Derived from a Zwitterionic Metallopeptide to Form Self-Assembled Nanostructures". Nature Communications 2015, *6*, 6165.

170. Dan Yuan; Junfeng Shi; Xuewen Du; Ning Zhou; Bing Xu* “Supramolecular Glycosylation Accelerates Proteolytic Degradation of Peptide Nanofibrils". Journal of the American Chemical Society 2015, *137*, 10092-10095.

169. Dan Yuan; Xuewen Du; Junfeng Shi; Ning Zhou; Jie Zhou; Bing Xu* “Mixing Biomimetic Heterodimers of Nucleopeptides to Generate Biocompatible and Biostable Supramolecular Hydrogels". Angewandte Chemie International Edition 2015, *54*, 5705-5708.

168. Dan Yuan; Xuewen Du; Junfeng Shi; Ning Zhou; Abdulgader Ahmed Baoum; Khalid Omar Al Footy; Khadija Omar Badahdah; Bing Xu* “Synthesis and Evaluation of the Biostability and Cell Compatibility of Novel Conjugates of Nucleobase, Peptidic Epitope, and Saccharide". Beilstein Journal of Organic Chemistry 2015, *11*, 1352-1359.

167. Dongdong Wu; Xuewen Du; Junfeng Shi; Jie Zhou; Ning Zhou; Bing Xu* “The First Cd73-Instructed Supramolecular Hydrogel". Journal of Colloid and Interface Science 2015, *447*, 269- 272.

166. Junfeng Shi; Xuewen Du; Dan Yuan; Richard Haburcak; Ning Zhou; Bing Xu* “Supramolecular Detoxification of Neurotoxic Nanofibrils of Small Molecules Via Morphological Switch". Bioconjugate Chemistry 2015, *26*, 1879-1883.

165. Junfeng Shi; Xuewen Du; Dan Yuan; Richard Haburcak; Dongdong Wu; Ning Zhou; Bing Xu* “Enzyme Transformation to Modulate the Ligand-Receptor Interactions between Small Molecules". Chemical Communications 2015, *51*, 4899-4901.

164. Junfeng Shi; Xuewen Du; Yibing Huang; Jie Zhou; Dan Yuan; Dongdong Wu; Ye Zhang; Richard Haburcak; Irving R. Epstein; Bing Xu* “Ligand-Receptor Interaction Catalyzes the Aggregation of Small Molecules to Induce Cell Necroptosis". Journal of the American Chemical Society 2015, *137*, 26-29.

163. Jie Li; Yi Kuang; Junfeng Shi; Jie Zhou; Jamie E. Medina; Rong Zhou; Dan Yuan; Cuihong Yang; Huaimin Wang; Zhimou Yang; Jianfeng Liu; Daniela M. Dinulescu; Bing Xu* “Enzyme-Instructed Intracellular Molecular Self-Assembly to Boost Activity of Cisplatin against Drug-Resistant Ovarian Cancer Cells". Angewandte Chemie International Edition 2015, *54*, 13307- 13311.

162. Xuwen Du; Jie Zhou; Bing Xu* “Ectoenzyme Switches the Surface of Magnetic Nanoparticles for Selective Binding of Cancer Cells". Journal of Colloid and Interface Science 2015, *447*, 273- 277.

161. Xuewen Du; Jie Zhou; Junfeng Shi; Bing Xu* “Supramolecular Hydrogelators and Hydrogels: From Soft Matter to Molecular Biomaterials". Chemical Reviews 2015, *115*, 13165-13307.

Year 2014

160. Rong Zhou; Bing Xu* “Insight of the Cytotoxicity of the Aggregates of Peptides or Aberrant Proteins: A Meta-Analysis". PLoS One 2014, *9*, e95759.

159. Jie Zhou; Xuewen Du; Yuan Gao; Junfeng Shi; Bing Xu* “Aromatic-Aromatic Interactions Enhance Interfiber Contacts for Enzymatic Formation of a Spontaneously Aligned Supramolecular Hydrogel". Journal of the American Chemical Society 2014, *136*, 2970-2973.

158. Fan Zhao; Jingyu Li; Ning Zhou; Jiro Sakai; Yuan Gao; Junfeng Shi; Bronia Goldman; Hayley

M. Browdy; Hongbo R. Luo; Bing Xu* “De Novo Chemoattractants Form Supramolecular Hydrogels for Immunomodulating Neutrophils in Vivo". Bioconjugate Chemistry 2014, *25*, 2116- 2122.

157. Fan Zhao; Balthasar A. Heesters; Isaac Chiu; Yuan Gao; Junfeng Shi; Ning Zhou; Michael C. Carroll; Bing Xu* “L-Rhamnose-Containing Supramolecular Nanofibrils as Potential Immunosuppressive Materials". Organic & Biomolecular Chemistry 2014, *12*, 6816-6819.

156. Ye Zhang; Ning Zhou; Ning Li; Megan Sun; Dongshin Kim; Seth Fraden; Irving R. Epstein; Bing Xu* “Giant Volume Change of Active Gels under Continuous Flow". Journal of the American Chemical Society 2014, *136*, 7341-7347.

155. Dan Yuan; Rong Zhou; Junfeng Shi; Xuewen Du; Xinming Li; Bing Xu* “Enzyme-Instructed Self-Assembly of Hydrogelators Consisting of Nucleobases, Amino Acids, and Saccharide". Rsc Advances 2014, *4*, 26487-26490.

154. Dan Yuan; Xuewen Du; Junfeng Shi; Ning Zhou; Abdulgader Ahmed Baoum; Bing Xu* “Synthesis of Novel Conjugates of a Saccharide, Amino Acids, Nucleobase and the Evaluation of Their Cell Compatibility". Beilstein Journal of Organic Chemistry 2014, *10*, 2406-2413.

153. Dongdong Wu; Jie Zhou; Junfeng Shi; Xuewen Du; Bing Xu* “A Naphthalene-Containing Amino Acid Enables Hydrogelation of a Conjugate of Nucleobase-Saccharide-Amino

Acids". Chemical Communications 2014, *50*, 1992-1994.

152. Dongdong Wu; Xuewen Du; Junfeng Shi; Jie Zhou; Bing Xu* “Supramolecular Nanofibers/Hydrogels of the Conjugates of Nucleobase, Saccharide, and Amino Acids". Chinese Journal of Chemistry 2014, *32*, 313-318.
151. Junfeng Shi; Xuewen Du; Dan Yuan; Jie Zhou; Ning Zhou; Yibing Huang; Bing Xu* “D-Amino Acids Modulate the Cellular Response of Enzymatic-Instructed Supramolecular Nanofibers of Small Peptides". Biomacromolecules 2014, *15*, 3559-3568.
150. Sukho Park; Dongshin Kim; Seong Young Ko; Jong-Oh Park; Sathish Akella; Bing Xu; Ye Zhang; Seth Fraden "Controlling Uniformity of Photopolymerized Microscopic Hydrogels". Lab Chip 2014, *14*, 1551-1563.
149. Garry Laverty*; Alice P. Mccloskey; Brendan F. Gilmore; David S. Jones; Jie Zhou; Bing Xu “Ultrashort Cationic Naphthalene-Derived Self-Assembled Peptides as Antimicrobial Nanomaterials". Biomacromolecules 2014, *15*, 3429-3439.
148. Yi Kuang; Junfeng Shi; Jie Li; Dan Yuan; Kyle A. Alberti; Qiaobing Xu; Bing Xu* “Pericellular Hydrogel/Nanonets Inhibit Cancer Cells". Angewandte Chemie International Edition 2014, *53*, 8104-8107.
147. Yi Kuang; Marcus J. C. Long; Jie Zhou; Junfeng Shi; Yuan Gao; Chen Xu; Lizbeth Hedstrom; Bing Xu* “Prion-Like Nanofibrils of Small Molecules (Prism) Selectively Inhibit Cancer Cells by Impeding Cytoskeleton Dynamics". Journal of Biological Chemistry 2014, *289*, 29208-29218.
146. Yi Kuang; Yuan Gao; Junfeng Shi; Jie Li; Bing Xu* “The First Supramolecular Peptidic Hydrogelator Containing Taurine". Chemical Communications 2014, *50*, 2772-2774.
145. Yi Kuang; Xuewen Du; Jie Zhou; Bing Xu* “Supramolecular Nanofibrils Inhibit Cancer Progression in Vitro and in Vivo". Advanced Healthcare Materials 2014, *3*, 1217-1221.
144. Xuewen Du; Jie Zhou; Bing Xu* “Supramolecular Hydrogels Made of Basic Biological Building Blocks". Chemistry-an Asian Journal 2014, *9*, 1446-1472.
143. Xuewen Du; Jie Zhou; Liheng Wu; Shouheng Sun; Bing Xu* “Enzymatic Transformation of Phosphate Decorated Magnetic Nanoparticles for Selectively Sorting and Inhibiting Cancer Cells". Bioconjugate Chemistry 2014, *25*, 2129-2133.

Year 2013

142. Ye Zhang; Rong Zhou; Junfeng Shi; Ning Zhou; Ivring. R. Epstein; Bing Xu* “Post-Self-Assembly Cross-Linking to Integrate Molecular Nanofibers with Copolymers in Oscillatory Hydrogels". Journal of Physical Chemistry. B 2013, *117*, 6566-6573.
141. Ye Zhang; Ning Zhou; Sathish Akella; Yi Kuang; Dongshin Kim; Alyssa Schwartz; Marc Bezpalko; Bruce M. Foxman; Seth Fraden; Irving R. Epstein; Bing Xu* “Active Cross-Linkers That Lead to Active Gels". Angewandte Chemie International Edition 2013, *52*, 11494-11498.
140. Ye Zhang; Bei Zhang; Yi Kuang; Yuan Gao; Junfeng Shi; Xi Xiang Zhang; Bing Xu* “A Redox Responsive, Fluorescent Supramolecular Metallohydrogel Consists of Nanofibers with Single- Molecule Width". Journal of the American Chemical Society 2013, *135*, 5008-5011.
139. Jiayang Li; Xinming Li; Yi Kuang; Yuan Gao; Xuewen Du; Junfeng Shi; Bing Xu* “Self-Delivery Multifunctional Anti-Hiv Hydrogels for Sustained Release". Advanced Healthcare Materials 2013, *2*, 1586-1590.
138. Jiayang Li; Yi Kuang; Junfeng Shi; Yuan Gao; Jie Zhou; Bing Xu* “The Conjugation of Nonsteroidal Anti-Inflammatory Drugs (Nsaid) to Small Peptides for Generating Multifunctional Supramolecular Nanofibers/Hydrogels". Beilstein Journal of Organic Chemistry 2013, *9*, 908- 917.

137. Jiayang Li; Yi Kuang; Yuan Gao; Xuewen Du; Junfeng Shi; Bing Xu* “D-Amino Acids Boost the Selectivity and Confer Supramolecular Hydrogels of a Nonsteroidal Anti-Inflammatory Drug (Nsaid)". Journal of the American Chemical Society 2013, *135*, 542-545.

136. Jiayang Li; Yuan Gao; Yi Kuang; Junfeng Shi; Xuewen Du; Jie Zhou; Huaimin Wang; Zhimou Yang; Bing Xu* “Dephosphorylation of D-Peptide Derivatives to Form Biofunctional, Supramolecular Nanofibers/Hydrogels and Their Potential Applications for Intracellular Imaging and Intratumoral Chemotherapy". Journal of the American Chemical Society 2013, *135*, 9907- 9914.

135. Yi Kuang; Dan Yuan; Ye Zhang; Anita Kao; Xuewen Du; Bing Xu* “Interactions between Cellular Proteins and Morphologically Different Nanoscale Aggregates of Small Molecules". RSC Advances 2013, *3*, 7704-7707.

134. Yi Kuang; Bing Xu* “Disruption of the Dynamics of Microtubules and Selective Inhibition of Glioblastoma Cells by Nanofibers of Small Hydrophobic Molecules". Angewandte Chemie International Edition 2013, *52*, 6944-6948.

133. Yibing Huang; Junfeng Shi; Dan Yuan; Ning Zhou; Bing Xu* “Length-Dependent Proteolytic Cleavage of Short Oligopeptides Catalyzed by Matrix Metalloprotease-9". Biopolymers 2013, *100*, 790-795.

132. Yuan Gao; Yi Kuang; Xuewen Du; Jie Zhou; Preethi Chandran; Ferenc Horkay; Bing Xu* “Imaging Self-Assembly Dependent Spatial Distribution of Small Molecules in a Cellular Environment". Langmuir 2013, *29*, 15191-15200.

131. Yuan Gao; Cristina Berciu; Yi Kuang; Junfeng Shi; Daniela Nicastro; Bing Xu* “Probing Nanoscale Self-Assembly of Nonfluorescent Small Molecules inside Live Mammalian Cells". ACS Nano 2013, *7*, 9055-9063.

Year 2012

130. Ye Zhang; Ning Li; Jorge Delgado; Ning Zhou; Ryo Yoshida; Seth Fraden; Irving R. Epstein; Bing Xu* “Structural Modulation of Self-Oscillating Gels: Changing the Proximity of the Catalyst to the Polymer Backbone to Tailor Chemomechanical Oscillation". Soft Matter 2012, *8*, 7056- 7061.

129. Ye Zhang; Ning Li; Jorge Delgado; Yuan Gao; Yi Kuang; Seth Fraden; Irving R. Epstein; Bing Xu* “Post-Self-Assembly Cross-Linking of Molecular Nanofibers for Oscillatory Hydrogels". Langmuir 2012, *28*, 3063-3066.

128. Zhimou Yang; Yi Kuang; Xinming Li; Ning Zhou; Ye Zhang; Bing Xu* “Supramolecular Hydrogel of Kanamycin Selectively Sequesters 16s Rrna". Chemical Communications 2012, *48*, 9257-9259.

127. Yue Pan; Marcus J. C. Long; Hsin-Chieh Lin; Lizbeth Hedstrom; Bing Xu* “Magnetic Nanoparticles for Direct Protein Sorting inside Live Cells". Chemical Science 2012, *3*, 3495- 3499.

126. Yue Pan; Xuewen Du; Fan Zhao; Bing Xu* “Magnetic Nanoparticles for the Manipulation of Proteins and Cells". Chemical Society Reviews 2012, *41*, 2912-2942.

125. Xinming Li; Yi Kuang; Bing Xu* “"Molecular Trinity" for Soft Nanomaterials: Integrating Nucleobases, Amino Acids, and Glycosides to Construct Multifunctional Hydrogelators". Soft Matter 2012, *8*, 2801-2806.

124. Xinming Li; Xuewen Du; Jiayang Li; Yuan Gao; Yue Pan; Junfeng Shi; Ning Zhou; Bing Xu* “Introducing D-Amino Acid or Simple Glycoside into Small Peptides to Enable Supramolecular Hydrogelators to Resist Proteolysis". Langmuir 2012, *28*, 13512-13517.

123. Xinming Li; Xuewen Du; Yuan Gao; Junfeng Shi; Yi Kuang; Bing Xu* “Supramolecular Hydrogels Formed by the Conjugates of Nucleobases, Arg-Gly-Asp (Rgd) Peptides, and Glucosamine". Soft Matter 2012, *8*, 7402-7407.

122. Yuan Gao; Junfeng Shi; Dan Yuan; Bing Xu* “Imaging Enzyme-Triggered Self-Assembly of Small Molecules inside Live Cells". Nature Communications 2012, *3*, 1033.

121. Yuan Gao; Marcus J. C. Long; Junfeng Shi; Lizbeth Hedstrom; Bing Xu* “Using Supramolecular Hydrogels to Discover the Interactions between Proteins and Molecular Nanofibers of Small Molecules". Chemical Communications 2012, *48*, 8404-8406.

120. Xuewen Du; Junfeng Li; Yuan Gao; Yi Kuang; Bing Xu* “Catalytic Dephosphorylation of Adenosine Monophosphate (Amp) to Form Supramolecular Nanofibers/Hydrogels". Chemical Communications 2012, *48*, 2098-2100.

119. Guoqina Chen; Chunhuab Ren; Ling Wang; Bing Xu*; Zhimou Yang* "Orthogonal Enzymatic Reactions to Control Supramolecular Hydrogelations". Chinese Journal of Chemistry 2012, *30*, 53-58.

Year 2011

118. Fan Zhao; Christopher S. Weitzel; Yuan Gao; Hayley M. Browd; Junfeng Shi; Hsin-Chieh Lin; Susan T. Lovett; Bing Xu* “Beta-Galactosidase-Instructed Formation of Molecular Nanofibers and a Hydrogel". Nanoscale 2011, *3*, 2859-2861.

117. Fan Zhao; Yuan Gao; Junfeng Shi; Hayley M. Browdy; Bing Xu* “Novel Anisotropic Supramolecular Hydrogel with High Stability over a Wide Ph Range". Langmuir 2011, *27*, 1510- 1512.

116. Ye Zhang; Yi Kuang; Yuan Gao; Bing Xu* “Versatile Small-Molecule Motifs for Self-Assembly in Water and the Formation of Biofunctional Supramolecular Hydrogels". Langmuir 2011, *27*, 529-537.

115. Bengang Xing*; Tingting Jiang; Wuguo Bi; Yanmei Yang; Lihua Li; Manlun Ma; Chi-Kwong Chang; Bing Xu; Edwin Kok Lee Yeow. "Multifunctional Divalent Vancomycin: The Fluorescent Imaging and Photodynamic Antimicrobial Properties for Drug Resistant Bacteria". Chemical Communications 2011, *47*, 1601-1603.

114. Junfeng Shi; Yuan Gao; Ye Zhang; Yue Pan; Bing Xu* “Calcium Ions to Cross-Link Supramolecular Nanofibers to Tune the Elasticity of Hydrogels over Orders of Magnitude". Langmuir 2011, *27*, 14425-14431.

113. Junfeng Shi; Yuan Gao; Zhimou Yang; Bing Xu* “Exceptionally Small Supramolecular Hydrogelators Based on Aromatic-Aromatic Interactions". Beilstein Journal of Organic Chemistry 2011, *7*, 167-172.

112. Yue Pan; Marcus J. C. Long; Xinming Li; Junfeng Shi; Lizbeth Hedstrom; Bing Xu* “Glutathione (Gsh)-Decorated Magnetic Nanoparticles for Binding Glutathione-S-Transferase (Gst) Fusion Protein and Manipulating Live Cells". Chemical Science 2011, *2*, 945-948.

111. Yue Pan; Yuan Gao; Junfeng Shi; Ling Wang; Bing Xu* “A Versatile Supramolecular Hydrogel of Nitrilotriacetic Acid (Nta) for Binding Metal Ions and Magnetorheological Response". Journal of Materials Chemistry 2011, *21*, 6804-6806.

110. Marcus J. C. Long; Yue Pan; Hsin-Chieh Lin; Lizbeth Hedstrom; Bing Xu* “Cell Compatible Trimethoprim-Decorated Iron Oxide Nanoparticles Bind Dihydrofolate Reductase for Magnetically Modulating Focal Adhesion of Mammalian Cells". Journal of the American Chemical Society 2011, *133*, 10006-10009.

109. Xinming Li; Yi Kuang; Junfeng Shi; Yuan Gao; Hsin-Chieh Lin; Bing Xu* “Multifunctional, Biocompatible Supramolecular Hydrogelators Consist Only of Nucleobase, Amino Acid, and Glycoside". Journal of the American Chemical Society 2011, *133*, 17513-17518.

108. Xinming Li; Yi Kuang; Hsin-Chieh Lin; Yuan Gao; Junfeng Shi; Bing Xu* “Supramolecular Nanofibers and Hydrogels of Nucleopeptides". Angewandte Chemie International Edition 2011, *50*, 9365-9369.

107. Yi Kuang; Yuan Gao; Bing Xu* “Supramolecular Hydrogelators of N-Terminated Dipeptides Selectively Inhibit Cancer Cells". Chemical Communications 2011, *47*, 12625-12627.

106. Yi Kuang; Yuan Gao; Junfeng Shi; Hsin-Chieh Lin; Bing Xu* “Supramolecular Hydrogels

Based on the Epitope of Potassium Ion Channels". Chemical Communications 2011, *47*, 8772-8774.

105. J. Delgado; Ye Zhang; Bing Xu; Irving R. Epstein* "Terpyridine- and Bipyridine-Based Ruthenium Complexes as Catalysts for the Belousov-Zhabotinsky Reaction". Journal of Physical Chemistry. A 2011, *115*, 2208-2215.

Year 2010

104. Bei Zhang; J. Gao; Bing Xu; Xixiang Zhang* "Low-Temperature Dynamics of Magnetic Nanoshells". EPL 2010, *91*.
103. Zhimou Yang; Ling Wang; Jingyu Wang; Ping Gao; Bing Xu* "Phenyl Groups in Supramolecular Nanofibers Confer Hydrogels with High Elasticity and Rapid Recovery". Journal of Materials Chemistry 2010, *20*, 2128-2132.
102. Cheng Yang; Yu-Tao Xie; Matthew Ming-Fai Yuen*; Bing Xu; Bo Gao; Xiaomin Xiong; C. P. Wong "Silver Surface Iodination for Enhancing the Conductivity of Conductive Composites". Advanced Functional Materials 2010, *20*, 2580-2587.
101. Yue Pan; Jinhao Gao; Bei Zhang; Xixiang Zhang; Bing Xu* "Colloidosome-Based Synthesis of a Multifunctional Nanostructure of Silver and Hollow Iron Oxide Nanoparticles". Langmuir 2010, *26*, 4184-4187.
100. Manlung Ma; Yi Kuang; Yuan Gao; Yan Zhang; Ping Gao; Bing Xu* "Aromatic-Aromatic Interactions Induce the Self-Assembly of Pentapeptidic Derivatives in Water to Form Nanofibers and Supramolecular Hydrogels". Journal of the American Chemical Society 2010, *132*, 2719- 2728
99. Xinming Li; Jiayang Li; Yuan Gao; Yi Kuang; Junfeng Shi; Bing Xu* "Molecular Nanofibers of Olsalazine Form Supramolecular Hydrogels for Reductive Release of an Anti-Inflammatory Agent". Journal of the American Chemical Society 2010, *132*, 17707-17709.
98. Xinming Li; Yuan Gao; Yi Kuang; Bing Xu* "Enzymatic Formation of a Photoresponsive Supramolecular Hydrogel". Chemical Communications 2010, *46*, 5364-5366.
97. Yuan Gao; Fan Zhao; Qigang Wang; Ye Zhang; Bing Xu* "Small Peptide Nanofibers as the Matrices of Molecular Hydrogels for Mimicking Enzymes and Enhancing the Activity of Enzymes". Chemical Society Reviews 2010, *39*, 3425-3433.
96. Yuan Gao; Zhimou Yang; Yi Kuang; Man-Lung Ma; Jiayang Li; Fan Zhao; Bing Xu* "Enzyme-Instructed Self-Assembly of Peptide Derivatives to Form Nanofibers and Hydrogels". Biopolymers 2010, *94*, 19-31.

Year 2009

95. Fan Zhao; Man Lung Ma; Bing Xu* "Molecular Hydrogels of Therapeutic Agents". Chemical Society Reviews 2009, *38*, 883-891.
94. Zhimou Yang; Manlung Ma; Bing Xu* "Using Matrix Metalloprotease-9 (Mmp-9) to Trigger Supramolecular Hydrogelation". Soft Matter 2009, *5*, 2546-2548.
93. Cheng Yang; Gaolin Liang; Keming Xu; Ping Gao; Bing Xu* "Bactericidal Functionalization of Wrinkle-Free Fabrics Via Covalently Bonding Tio2@Ag Nanoconjugates". Journal of Materials Science 2009, *44*, 1894-1901.
92. Cheng Yang; Ping Gao; Bing Xu* "Investigations of a Controllable Nanoscale Coating on Natural Fiber System: Effects of Charge and Bonding on the Mechanical Properties of Textiles". Journal of Materials Science 2009, *44*, 469-476.
91. Bing Xu* "Gels as Functional Nanomaterials for Biology and Medicine". Langmuir 2009, *25*, 8375-8377.
90. C. K. Y. Wong; Matthew M. F. Yuen*; Bing Xu "Thiol-Based Self-Assembly Nanostructures in Promoting Interfacial Adhesion for Copper-Epoxy Joint". Applied Physics Letters 2009, *94*, 263102.
89. Qigang Wang; Lihua Li; Bing Xu* "Bioinspired Supramolecular Confinement of Luminol

and Heme Proteins to Enhance the Chemiluminescent Quantum Yield". Chemistry-a European Journal 2009, *15*, 3168-3172.

88. Gaolin Liang; Zhimou Yang; R. J. Zhang; Lihua Li; Y. J. Fan; Yi Kuang; Yuan Gao; T. Wang; William W. Lu; Bing Xu* "Supramolecular Hydrogel of a D-Amino Acid Dipeptide for Controlled Drug Release in Vivo". Langmuir 2009, *25*, 8419-8422.
87. Zhaoyang Li; Williamw. Lu*; Peter K.Y. Chiu; Raymond W. M. Lam; Bing Xu; Kenneth M. C. Cheung; John C. Y. Leong; Keith D. K. Luk "Strontium-Calcium Coadministration Stimulates Bone Matrix Osteogenic Factor Expression and New Bone Formation in a Large Animal Model". Journal of Orthopaedic Research 2009, *27*, 758-762.
86. Yuan Gao; Yi Kuang; Zu-Feng Guo; Zhihong Guo; Isaac J. Krauss; Bing Xu* "Enzyme-Instructed Molecular Self-Assembly Confers Nanofibers and a Supramolecular Hydrogel of Taxol Derivative". Journal of the American Chemical Society 2009, *131*, 13576-13577.
85. Jinhao Gao; Bing Xu* "Applications of Nanomaterials inside Cells". Nano Today 2009, *4*, 37- 51.
84. Jinhao Gao; Hongwei Gu; Bing Xu* "Multifunctional Magnetic Nanoparticles: Design, Synthesis, and Biomedical Applications". Accounts of Chemical Research 2009, *42*, 1097-1107.

Year 2008

83. Zhimou Yang; Gaolin Liang; Bing Xu* "Enzymatic Hydrogelation of Small Molecules". Accounts of Chemical Research 2008, *41*, 315-326.
82. Cheng Yang; Zhimou Yang; Hongwei Gu; Chris K. Chang; Ping Gao; Bing Xu* "Facet-Selective 2d Self-Assembly of Tio2nanoleaves Via Supramolecular Interactions". Chemistry of Materials 2008, *20*, 7514-7520.
81. Keming Xu; Weiwei Ge; Gaolin Liang; Ling Wang; Zhimou Yang; Qigang Wang; I. Ming Hsing; Bing Xu* "Bisphosphonate-Containing Supramolecular Hydrogels for Topical Decorporation of Uranium-Contaminated Wounds in Mice". International Journal of Radiation Biology 2008, *84*, 353 - 362.
80. Qigang Wang; Zhimou Yang; Man Lung Ma; Chi K. Chang; Bing Xu* "High Catalytic Activities of Artificial Peroxidase Based on Supramolecular Hydrogel Containing Heme Model". Chemistry-a European Journal 2008, *14*, 5073-5078.
79. Qigang Wang; Zhimou Yang; Yuan Gao; Weiwei Ge; Ling Wang; Bing Xu* "Enzymatic Hydrogelation to Immobilize an Enzyme for High Activity and Stability". Soft Matter 2008, *4*, 550- 553.
78. Lihua Li; Bing Xu* "Synthesis and Characterization of 5-Substituted 8-Hydroxyquinoline Derivatives and Their Metal Complexes". Tetrahedron 2008, *64*, 10986-10995.
77. Jinhao Gao; Wei Zhang; Pingbo Huang; Bei Zhang; Xixiang Zhang; Bing Xu* "Intracellular Spatial Control of Fluorescent Magnetic Nanoparticles". Journal of the American Chemical Society 2008, *130*.
76. Jinhao Gao; Gaolin Liang; Jerry S. Cheung; Yue Pan; Yi Kuang; Fan Zhao; Bei Zhang; Xixiang Zhang; Ed X. Wu; Bing Xu* "Multifunctional Yolk-Shell Nanoparticles: A Potential Mri Contrast and Anticancer Agent". Journal of the American Chemical Society 2008, *130*, 11828-11833.

Year 2007

75. Zhimou Yang; Keming Xu; Zufeng Guo; Zhihong Guo; Bing Xu* "Intracellular Enzymatic Formation of Nanofibers Results in Hydrogelation and Regulated Cell Death". Advanced Materials 2007, *17*, 3152-3156.
74. Zhimou Yang; Bing Xu* "Supramolecular Hydrogels Based on Biofunctional Nanofibers of Self- Assembled Small Molecules". Journal of Materials Chemistry 2007, *17*, 2385-2393.
73. Zhimou Yang; Gaolin Liang; Bing Xu* "Enzymatic Control of the Self-Assembly of Small Molecules: A New Way to Generate Supramolecular Hydrogels". Soft Matter 2007, *2*, 515-

520.

72. Zhimou Yang; Gaolin Liang; Manlung Ma; Yuan Gao; Bing Xu* “Conjugates of Naphthalene and Dipeptides Produce Molecular Hydrogelators with High Efficiency of Hydrogelation and Superhelical Nanofibers". Journal of Materials Chemistry 2007, *17*, 850-854.
71. Zhimou Yang; Gaolin Liang; Manlung Ma; Yuan Gao; Bing Xu* “In Vitro and in Vivo Enzymatic Formation of Supramolecular Hydrogels Based on Self-Assembled Nanofibers of a Beta-Amino Acid Derivative". Small 2007, *3*, 558-562.
70. Zhimou Yang; Gaolin Liang; Manlung Ma; A. Sunny Abbah; W. William Lu; Bing Xu* “D- Glucosamine-Based Supramolecular Hydrogels to Improve Wound Healing". Chemical Communications 2007, 843-845.
69. Zhimou Yang; Gaolin Liang; Zufeng Guo; Zhihong Guo; Bing Xu* “Intracellular Hydrogelation of Small Molecules Inhibits Bacterial Growth". Angewandte Chemie International Edition 2007, *46*, 8216-8219.
68. Zhimou Yang; Pak-Leung Ho; Gaolin Liang; Kin Hung Chow; Qigang Wang; Yang Cao; Zhihong Guo; Bing Xu* “Using Beta-Lactamase to Trigger Supramolecular Hydrogelation". Journal of the American Chemical Society 2007, *129*, 266-267.
67. Zhimou Yang; Hongwei Gu; Jun Du; Jinhao Gao; Bei Zhang; Xixiang Zhang; Bing Xu* “Self- Assembled Hybrid Nanofibers Confer a Magnetorheological Supramolecular Hydrogel". Tetrahedron 2007, *63*, 7349-7357.
66. Qigang Wang; Zhimou Yang; Xieqiu Zhang; Xudong Xiao; Chi K. Chang; Bing Xu* “A Supramolecular Hydrogel-Encapsulated Hemin as an Artificial Enzyme to Mimic Peroxidase". Angewandte Chemie International Edition 2007, *46*, 4285-4289.
65. Qigang Wang; Zhimou Yang; Ling Wang; Man Lung Ma; Bing Xu* “Molecular Hydrogel-Immobilized Enzymes Exhibit Superactivity and High Stability in Organic Solvents". Chemical Communications 2007, 1032-1034.
64. Gaolin Liang; Keming Xu; Lihua Li; Ling Wang; Yi Kuang; Zhimou Yang; Bing Xu* “Using Congo Red to Report Intracellular Hydrogelation Resulted from Self-Assembly of Small Molecules". Chemical Communications 2007, 4096-4098.
63. Zhaoyang Li; W. M. Lam; Cheng Yang; Bing Xu; G. X. Ni; S. A. Abbah; Kenneth M. C. Cheung; Keith D. K. Luk; William W. Lu* "Chemical Composition, Crystal Size and Lattice Structural Changes after Incorporation of Strontium into Biomimetic Apatite". Biomaterials 2007, *28*, 1452-1460.
62. Yann Gilbert; Marie Deghorain; Ling Wang; Bing Xu; Philipp D. Pollheimer; Hermann J. Gruber; Jeff Errington; Bernard Hallet; Xavier Haulot; Claire Verbelen; Pascal Hols; Yves F. Dufrene* "Single-Molecule Force Spectroscopy and Imaging of the Vancomycin/D-Ala-D-Ala Interaction". Nano Letters 2007, *7*, 796-801.
61. Jinhao Gao; Bei Zhang; Yuan Ga; Yue Pan; Xixiang Zhang; Bing Xu* "Fluorescent Magnetic Nanocrystals by Sequential Addition of Reagents in a One-Pot Reaction: A Simple Preparation for Multifunctional Nanostructures". Journal of the American Chemical Society 2007, *129*, 11928-11935.
60. Jinhao Gao; Gaolin Liang; Bei Zhang; Yi Kuang; Xixiang Zhang; Bing Xu* “Fept@Cos2 Yolk- Shell Nanocrystals as a Potent Agent to Kill Hela Cells". Journal of the American Chemical Society 2007, *129*, 1428-1433.

Year 2006

59. Rongkun Zheng; Hongwei Gu; Bing Xu; Xixiang Zhang* "The Origin of the Non-Monotonic Field Dependence of the Blocking Temperature in Magnetic Nanoparticles". Journal of Physics- Condensed Matter 2006, *18*, 5905-5910.
58. Rongkun Zheng; Hongwei Gu; Bing Xu; K. K. Fung; Xixiang Zhang*; Simon P. Ringer "Self-Assembly and Self-Orientation of Truncated Octahedral Magnetite Nanocrystals". Advanced Materials 2006, *18*, 2418-2421.

57. Zhimou Yang; Bing Xu* “Using Enzymes to Control Molecular Hydrogelation". Advanced Materials 2006, *18*, 3043-3046.
56. Zhimou Yang; Gaolin Liang; Bing Xu* “Supramolecular Hydrogels Based on Beta-Amino Acid Derivatives". Chemical Communications 2006, 738-740.
55. Zhimou Yang; Gaolin Liang; Ling Wang; Bing Xu* “Using a Kinase/Phosphatase Switch to Regulate a Supramolecular Hydrogel and Forming the Supramolecular Hydrogel in Vivo". Journal of the American Chemical Society 2006, *128*, 3038-3043.
54. C. K. Y. Wong; Hongwei Gu; Bing Xu; Matthew M. F. Yue*n "A New Approach in Measuring Cu-Emc Adhesion Strength by Afm". IEEE Transactions on Components and Packaging Technologies 2006, *29*, 543-550.
53. Ling Wang; Min Zhang; Zhimou Yang; Bing Xu* “The First Pamidronate Containing Polymer and Copolymer". Chemical Communications 2006, 2795-2797.
52. Ling Wang; Zhimou Yang; Jinhao Gao; Keming Xu; Hongwei Gu; Bei Zhang; Xixiang Zhang; Bing Xu* “A Biocompatible Method of Decorporation: Bisphosphonate-Modified Magnetite Nanoparticles to Remove Uranyl Ions from Blood". Journal of the American Chemical Society 2006, *128*, 13358-13359.
51. G. X. Ni; William W. Lu*; Bing Xu; Peter K. Y. Chiu; Cheng Yang; Zhaoyang Li; W. M. Lam; Keith D. K. Luk "Interfacial Behaviour of Strontium-Containing Hydroxyapatite Cement with Cancellous and Cortical Bone". Biomaterials 2006, *27*, 5127-5133.
50. Gaolin Liang; Ling Wang; Zhimou Yang; Hokee Koon; Naiki Mak; Chi K. Chang; Bing Xu* “Using Enzymatic Reactions to Enhance the Photodynamic Therapy Effect of Porphyrin Dityrosine Phosphates". Chemical Communications 2006, 5021-5023.
49. Hongwei Gu; Keming Xu; Chenjie Xu; Bing Xu* “Biofunctional Magnetic Nanoparticles for Protein Separation and Pathogen Detection". Chemical Communications 2006, 941-949.
48. Jinhao Gao; Bei Zhang; Xixiang Zhang; Bing Xu* “Magnetic-Dipolar-Interaction-Induced Self- Assembly Affords Wires of Hollow Nanocrystals of Cobalt Selenide". Angewandte Chemie International Edition 2006, *45*, 1220-1223.
47. Jinhao Gao; Lihua Li; Pak-Leung Ho; Gannon C. Mak; Hongwei Gu; Bing Xu* “Combining Fluorescent Probes and Biofunctional Magnetic Nanoparticles for Rapid Detection of Bacteria in Human Blood". Advanced Materials 2006, *18*, 3145-3148.

Year 2005

46. Rongkun Zheng; Hongwei Gu; Bing Xu; Xixiang Zhang* "Memory Effects in a Nanoparticle System: Low-Field Magnetization and Ac Susceptibility Measurements". Physical Review B 2005, *72*, 7.
45. Zhimou Yang; Keming Xu; Ling Wang; Hongwei Gu; Heng Wei; Mingjie Zhang; Bing Xu* “Self- Assembly of Small Molecules Affords Multifunctional Supramolecular Hydrogels for Topically Treating Simulated Uranium Wounds". Chemical Communications 2005, 4414-4416.
44. Hongwei Gu; Rongkun Zheng; Hui Liu; Xixiang Zhang; Bing Xu* “Direct Synthesis of a Bimodal Nanosponge Based on Fept and Zns". Small 2005, *1*, 402-406.
43. Hongwei Gu; Zhimou Yang; Jinhao Gao; Chi. K. Chang; Bing Xu* “Heterodimers of Nanoparticles: Formation at a Liquid-Liquid Interface and Particle-Specific Surface Modification by Functional Molecules". Journal of the American Chemical Society 2005, *127*, 34-35.
42. Hongwei Gu; Keming Xu; Zhimou Yang; Chi K. Chang; Bing Xu* “Synthesis and Cellular Uptake of Porphyrin Decorated Iron Oxide Nanoparticles - a Potential Candidate for Bimodal Anticancer Therapy". Chemical Communications 2005, 4270-4272.

Year 2004

41. Yan Zhang; Zhimou Yang; Fang Yuan; Hongwei Gu; Ping Gao; Bing Xu* “Molecular Recognition Remolds the Self-Assembly of Hydrogelators and Increases the Elasticity of

the Hydrogel by 10(6)-Fold". Journal of the American Chemical Society 2004, *126*, 15028-15029.

40. Zhimou Yang; Bing Xu* “A Simple Visual Assay Based on Small Molecule Hydrogels for Detecting Inhibitors of Enzymes". Chemical Communications 2004, 2424-2425.
39. Zhimou Yang; Hongwei Gu; Yan Zhang; Ling Wang; Bing Xu* “Small Molecule Hydrogels Based on a Class of Antiinflammatory Agents". Chemical Communications 2004, 208-209.
38. Zhimou Yang; Hongwei Gu; Degang Fu; Ping Gao; Jing Kwok Lam; Bing Xu* “Enzymatic Formation of Supramolecular Hydrogels". Advanced Materials 2004, *16*, 1440-1444.
37. Chenjie Xu; Keming Xu; Hongwei Gu; Xiaofen Zhong; Zhihong Guo; Rongkun Zheng; Xixiang Zhang; Bing Xu* “Nitrilotriacetic Acid-Modified Magnetic Nanoparticles as a General Agent to Bind Histidine-Tagged Proteins". Journal of the American Chemical Society 2004, *126*, 3392-3393.
36. Chenjie Xu; Keming Xu; Hongwei Gu; Rongkun Zheng; Hui Liu; Xixiang Zhang; Zhihong Guo; Bing Xu* “Dopamine as a Robust Anchor to Immobilize Functional Molecules on the Iron Oxide Shell of Magnetic Nanoparticles". Journal of the American Chemical Society 2004, *126*, 9938- 9939.
35. Hongwei Gu; Rongkun Zheng; Xixiang Zhang; Bing Xu* “Facile One-Pot Synthesis of Bifunctional Heterodimers of Nanoparticles: A Conjugate of Quantum Dot and Magnetic Nanoparticles". Journal of the American Chemical Society 2004, *126*, 5664-5665.
34. Hongwei Gu; Rongkun Zheng; Xixiang Zhang; Bing Xu* “Using Soft Lithography to Pattern Highly Oriented Polyacetylene (Hopa) Films Via Solventless Polymerization". Advanced Materials 2004, *16*, 1356-1359.
33. Hongwei Gu; Degang Fu; Lu-Tao Weng; Jie Xie; Bing Xu* “Solventless Polymerization to Grow Thin Films on Solid Substrates". Advanced Functional Materials 2004, *14*, 492-500.

Year 2003

32. Yan Zhang; Hongwei Gu; Zhimou Yang; Bing Xu* “Supramolecular Hydrogels Respond to Ligand-Receptor Interaction". Journal of the American Chemical Society 2003, *125*, 13680-13681.
31. Hsiao-Hua Yu; Bing Xu; Timothy M. Swager* "A Proton-Doped Calix[4]Arene-Based Conducting Polymer". Journal of the American Chemical Society 2003, *125*, 1142-1143.
30. Bengang Xing; Chun-Wing Yu; Pak-Leung Ho; Kin-Hung Chow; Terence Cheung; Hongwei Gu; Zongwei Cai; Bing Xu* “Multivalent Antibiotics Via Metal Complexes: Potent Divalent Vancomycins against Vancomycin-Resistant Enterococci". Journal of Medicinal Chemistry 2003, *46*, 4904-4909.
29. Bengang Xing; Pak Leung Ho; Chun-Wing Yu; Kin-Hung Chow; Hongwei Gu; Bing Xu* “Self- Assembled Multivalent Vancomycin on Cell Surfaces against Vancomycin-Resistant Enterococci (Vre)". Chemical Communications 2003, 2224-2225.
28. Hongwei Gu; Chenjie Xu; Lu-Tao Weng; Bing Xu* “Solventless Polymerization: Spatial Migration of a Catalyst to Form Polymeric Thin Films in Microchannels". Journal of the American Chemical Society 2003, *125*, 9256-9257.
27. Hongwei Gu; Bing Xu; Jiancun Rao; R. K. Zheng; Xixiang Zhang; K. K. Fung; Catherine Y. C. Wong "Chemical Synthesis of Narrowly Dispersed Smco5 Nanoparticles". Journal of Applied Physics 2003, *93*, 7589-7591.
26. Hongwei Gu; Pak-Leung Ho; Kenneth W. T. Tsang; Ling Wang; Bing Xu* “Using Biofunctional Magnetic Nanoparticles to Capture Vancomycin-Resistant Enterococci and Other Gram-Positive Bacteria at Ultralow Concentration". Journal of the American Chemical Society 2003, *125*, 15702-15703.

25. Hongwei Gu; Pak-Leung Ho; Kenneth Wt Tsang; Chun-Wing Yu; Bing Xu* “Using Biofunctional Magnetic Nanoparticles to Capture Gram-Negative Bacteria at an Ultra-Low Concentration". Chemical Communications 2003, 1966-1967.
24. Hongwei Gu; P. L. Ho; Edmond Tong; Ling Wang; Bing Xu* “Presenting Vancomycin on Nanoparticles to Enhance Antimicrobial Activities". Nano Letters 2003, *3*, 1261-1263.

Year 2002

23. Bengang Xing; Chun-Wing Yu; Kin-Hung Chow; Pak-Leung Ho; Degang Fu; Bing Xu* “Hydrophobic Interaction and Hydrogen Bonding Cooperatively Confer a Vancomycin Hydrogel: A Potential Candidate for Biomaterials". Journal of the American Chemical Society 2002, *124*, 14846-14847.
22. Bengang Xing; Ming-Fai Choi; Zhongyuan Zhou; Bing Xu* “Spontaneous Enrichment of Organic Molecules from Aqueous and Gas Phases into Stable Metallogel". Langmuir 2002, *18*, 9654-9658.
21. Bengang Xing; Ming-Fai Choi; Bing Xu* “A Stable Metal Coordination Polymer Gel Based on a Calix[4]Arene and Its 'Uptake' of Non-Ionic Organic Molecules from the Aqueous Phase". Chemical Communications 2002, 362-363.
20. Bengang Xing; Ming-Fai Choi; Bing Xu* “Design of Coordination Polymer Gels as Stable Catalytic Systems". Chemistry-a European Journal 2002, *8*, 5028-5032.
19. Degang Fu; Lu-Tao Weng; Binyang Du; Ophelia K. C. Tsui; Bing Xu* “Solventless Polymerization at the Gas-Solid Interface to Form Polymeric Thin Films". Advanced Materials 2002, *14*, 339-343.

Year 2001 and before (Postodc & PhD)

18. Francisco Arias; Scott R. J. Oliver; Bing Xu; R. Erik Holmlin; George M. Whitesides* "Fabrication of Metallic Heat Exchangers Using Sacrificial Polymer Mandrils". Journal of Microelectromechanical Systems 2001, *10*, 107-112.
17. Francisco Arias; Paul J. A. Kenis; Bing Xu; Tao Deng; Olivier J. A. Schueller; George M. Whitesides*; Yuki Sugimura; Anthony G. Evans "Fabrication and Characterization of Microscale Sandwich Beams". Journal of Materials Research 2001, *16*, 597-605.
16. Insung S. Choi; Marcus Weck; Bing Xu; Noo Li Jeon; George M. Whitesides* "Mesoscopic, Templated Self-Assembly at the Fluid-Fluid Interface". Langmuir 2000, *16*, 2997-2999.
15. Bing Xu; Francisco Arias; George M. Whitesides* "Making Honeycomb Microcomposites by Soft Lithography". Advanced Materials 1999, *11*, 492-495.
14. Bing Xu; Francisco Arias; Scott T. Brittain; Xiao-Mei Zhao; Bartosz Grzybowski; Salvatore Torquato; George M. Whitesides* "Making Negative Poisson's Ratio Microstructures by Soft Lithography". Advanced Materials 1999, *11*, 1186-1189.
13. Jianghong Rao; Lin Yan; Bing Xu; George M. Whitesides* "Using Surface Plasmon Resonance to Study the Binding of Vancomycin and Its Dimer to Self-Assembled Monolayers Presenting D- Ala-D-Ala". Journal of the American Chemical Society 1999, *121*, 2629-2630.
12. Dong Qin; Younan Xia; Bing Xu; Hong Yang; Cheng Zhu; George M. Whitesides* "Fabrication of Ordered Two-Dimensional Arrays of Micro- and Nanoparticles Using Patterned Self- Assembled Monolayers as Templates". Advanced Materials 1999, *11*, 1433-1437.
11. Noo Li Jeon; Insung S. Choi; Bing Xu; George M. Whitesides* "Large-Area Patterning by Vacuum-Assisted Micromolding". Advanced Materials 1999, *11*, 946-950.
10. Tao Deng; Joe Tien; Bing Xu; George M. Whitesides* "Using Patterns in Microfiche as Photomasks in 10-Mu M-Scale Microfabrication". Langmuir 1999, *15*, 6575-6581.
9. Bing Xu; Yi-Jun Miao; Timothy M. Swager* "Palladium Couplings on Metallocalix[4] Arenes:

A Efficient Synthesis of New Functionalized Cavities". Journal of Organic Chemistry 1998, *63*, 8561-8564.

8. Dian-Kui Fu; Bing Xu; Timothy M. Swager* "Alternating Poly(Pyridyl Vinylene Phenylene Vinylene)S: Synthesis and Solid State Organizations". Tetrahedron 1997, *53*, 15487-15494.
7. Hanxing Zheng; Bing Xu; Timothy M. Swager* "Stabilization of Nondiscoid Columnar Liquid Crystals: Studies of Unsymmetrical Copper Bis-Beta-Diketonates". Chemistry of Materials 1996, *8*, 907-911.
6. Bing Xu; P. J. Carroll; Timothy M. Swager* "Chiral Metallocalix[4]Arenes: Resolution by Diastereomeric Tungsten(Vi) Alkoxides". Angewandte Chemie International Edition 1996, *35*, 2094-2097.
5. Pierre D. Harvey; Jonathan Gagnon; Rejean Provencher; Bing Xu; Timothy M. Swager* "Tungsten and Molybdenum Oxo Complexes of Tetrakis(Phenyldiazenyl)Calix[4]Arene Substituted Derivatives: Ehmo Calculations, Spectroscopic Characterization, and Perturbations of the Photophysical Properties by Neutral Guest Molecules". Canadian Journal of Chemistry- Revue Canadienne De Chimie 1996, *74*, 2279-2288.
3. Bing Xu; Timothy M. Swager* "Host-Guest Mesomorphism - Cooperative Stabilization of a Bowlic Columnar Phase". Journal of the American Chemical Society 1995, *117*, 5011-5012.
4. Dian-Kui Fu; Bing Xu; Timothy M. Swager* "3-Methylcalix[4]Arene: A New Versatile Precursor to Inherently Chiral Calix[4]Arenes". Journal of Organic Chemistry 1996, *61*, 802-804.
2. Timothy M. Swager*; Bing Xu “Liquid-Crystalline Calixarenes". Journal of Inclusion Phenomena and Molecular Recognition in Chemistry 1994, *19*, 389-398.
1. Bing Xu; Timothy M. Swager* "Rigid Bowlic Liquid-Crystals Based on Tungsten Oxo Calix[4]Arenes - Host Guest Effects and Head-to-Tail Organization". Journal of the American Chemical Society 1993, *115*, 1159-1160.

C. Book Chapters and Feature Articles

7. Dan Yuan; Junfeng Shi; Ning Zhou; Bing Xu* "A General Method to Prepare Peptide-Based Supramolecular Hydrogels". Methods in molecular biology (Clifton, N.J.) 2018, *1777*, 175-180.
6. Jiaqing Wang; Bing Xu* "Too Crowded to Be Straight: Insights from Self-Assembly of Heterochiral Tripeptides". Chem 2018, *4*, 1765-1767.
5. Yi Kuang; Ning Zhou; Bing Xu* In Book *"Biocompatibility of Hydrogelators Based on Small Peptide Derivatives"*; Connon, E. b. C., Hamley, I., Eds.; Royal Society of Chemistry,: London, 2014.
4. Ye Zhang; Bing Xu* In Book *"Superactivity of Enzymes in Supramolecular Hydrogels"*; John Wiley & Sons, Inc.: New Jersy, 2013.
3. Hsin-Chieh Lin; Bing Xu* In Book *"Supramolecular Hydrogels for Soft Nanotechnology"*; Schneider, H.-J., Ed.; CRC Press: Roca Raton, 2012.

2. Bing Xu* "Biocompatible Reactions: Internal Construction". Nature Chemistry 2010, *2*, 13-14.
1. Lihua Li; Bing Xu* "Multivalent Vancomycins and Related Antibiotics against Infectious Diseases". Current Pharmaceutical Design 2005, *11*, 3111-3124.

Updated 9 November 2020.