

YOUNAN XIA, Ph.D.

Brock Family Chair and GRA Eminent Scholar in Nanomedicine
The Wallace H. Coulter Department of Biomedical Engineering
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Joint appointment: School of Chemistry and Biochemistry, Georgia Institute of Technology

EDUCATION BACKGROUND

<u>Institution</u>	<u>Degree</u>	<u>Dates</u>
Harvard University	Ph.D. ^a	1993 – 1996
University of Pennsylvania	M.S. ^b	1991 – 1993
University of Science and Technology of China	B.S. ^c	1982 – 1987

- Ph.D. Dissertation Title: Soft Lithography: Micro- and Nanofabrication Based on Microcontact Printing and Replica Molding. Advisor: Professor George M. Whitesides
- M.S. Dissertation Title: I. Synthesis, Characterization and Protonic Acid Doping of Poly(2,5- dimethoxy-phenylenevinylene); II. Polyaniline Conformations Studied by UV-Vis-NIR Spectroscopic Method. Advisor: Professor Alan G. MacDiarmid
- B.S. Dissertation Title: Experimental and Simulation Studies of Minimum Smoke Rocket Propellants. Advisor: Professor Shufen Li

EMPLOYMENT RECORD

<u>Institution</u>	<u>Position</u>	<u>Dates</u>
Georgia Institute of Technology	Brock Family Chair and GRA Eminent Scholar in Nanomedicine (Joint: Biomedical Engineering; Chemistry & Biochemistry)	1/2012 –
Washington University in St. Louis	James M. McKelvey Professor for Advanced Materials (Joint: Biomedical Engineering; Radiology; Biochemistry & Molecular Biophysics; Chemical, Energy and Environmental Engineering; Mechanical Engineering & Materials Science)	9/2007 – 12/2011
University of Washington	Professor of Chemistry	9/2004 – 9/2007
University of Washington	Associate Professor of Chemistry (Adjunct: Materials Science & Engineering; Chemical Engineering)	9/2002 – 9/2004
University of Washington	Assistant Professor of Chemistry (Adjunct: Materials Science & Engineering)	7/1997 – 9/2002
Harvard University	Postdoctoral Fellow	8/1996 – 7/1997
Fujian Institute of Research on	Research Assistant	9/1987 – 12/1991

the Structure of Matter

HONORS AND AWARDS

Top 100 material scientists (#4) and top 100 chemists (#35) in the world from 2000-2010 based on the number of citations per paper, see <http://sciencewatch.com/dr/sci/misc/Top100Chemists2000-10/> (articles with citation data: 445; sum of the times cited: 48,588; average citations per article: 106; and h-index: 116. For details, see <http://www.researcherid.com/rid/E-8499-2011>)

Top 10 chemists (#5) in the world from 1999-2009 based on the number of citations per paper, for details, see <http://www.timeshighereducation.co.uk/story.asp?storyCode=409418§ioncode=26>

The 2nd most cited scientist in the field of nanomedicine, see <http://www.nano-biology.net/labs.php>

Fellow of American Institute for Medical and Biological Engineering (AIMBE), 2011

Honorary Bent Lecture, Department of Chemical Engineering, University of Missouri-Columbia, March, 2011

Guest Professor, Department of Materials Science and Engineering, Zhejiang University, Hangzhou, China, since 2010

Fellow of Materials Research Society (MRS), 2009

World Class University (WCU) Professor, Department of Materials Science and Engineering, Yonsei University, Korea, 2009-2014

New Power Lectureship, Department of Chemical Engineering, National Tsing Hua University, Taiwan, 2009

NIH Director's Pioneer Award, the National Institutes of Health (NIH), 2006

Leo Hendrik Baekeland Award, North Jersey Section of the American Chemical Society (ACS), 2005

Guest Professor, Department of Chemistry, Fudan University, Shanghai, China, since 2004

Camille Dreyfus Teacher Scholar, the Camille and Henry Dreyfus Foundation, 2002

Fellow in Science and Engineering, the David and Lucile Packard Foundation, 2000

Research Fellow, the Alfred P. Sloan Foundation, 2000

Faculty Early Career Development Award, the National Science Foundation, 1999

Victor K. LaMer Award, the American Chemical Society (ACS), 1999

Oversea Young Investigator Award, the Chinese Natural Science Foundation, 1999

New Faculty Award, the Camille and Henry Dreyfus Foundation, 1997

ICI Student Award Finalist, the American Chemical Society (ACS), 1997

Stone Corporation Award for the Best Graduate Student, Graduate School of the Chinese Academy of Sciences, 1988

Guo-Mo-Rou Award for the Best Student (the highest honor), University of Science and Technology of China, the Chinese Academy of Sciences, 1986

PROFESSIONAL OFFICES AND SERVICES

Editorial Responsibilities

Associate Editor, *Nano Letters*, 2002 –

Member of International Advisory Board, *Angewandte Chemie International Edition*, 2011 –

Chairman (inaugural) of International Advisory Board, *Advanced Healthcare Materials*, 2011 –

Member of International Advisory Board, *Chemistry: An Asian Journal*, 2010 –

Member of Editorial Advisory Board, *Accounts of Chemical Research*, 2010 –

Member of Editorial Advisory Board, *Journal of Biomedical Optics*, 2010 –

Member of Editorial Advisory Board, *Cancer Nanotechnology*, 2010 –

Member of Editorial Advisory Board, *Science of Advanced Materials*, 2009 –

Member of Editorial Advisory Board, *Nano Research*, 2008 –

Member of Editorial Advisory Board, *Nano Today*, 2006 –

Member of Editorial Advisory Board, *Recent Patents on Nanotechnology*, 2007 –

Member of Editorial Advisory Board, *Langmuir*, 2005 – 2010

Member of Editorial Advisory Board, *Chemistry of Materials*, 2005 – 2007
Member of Editorial Advisory Board, *Nano Letters*, 2002 – 2003
Member of International Advisory Board, *Advanced Functional Materials*, 2001 –
Member of International Advisory Board, *International Journal of Nanoscience*, 2004 –
Member of International Advisory Board, *International Journal of Nanotechnology*, 2003 –
Member of Advisory Board of the Nanoscience and Nanotechnology book series, World Scientific Publishers, 2009
Member of Editorial Advisory Board, the *Dekker Encyclopedia of Nanoscience and Nanotechnology*, Marcel Dekker Inc., 2001

Co-Guest Editor of a Special Issue on Nanoparticles for Catalysis, *Accounts of Chemical Research*, 2012
Co-Guest Editor of a Special Issue on Nanomaterials Research by Chinese Scientists, *Advanced Functional Materials*, 2010
Co-Guest Editor of a Special Issue on USTC Materials Science, *Advanced Materials*, 2010
Co-Guest Editor of a Special Issue on Bionanotechnology, *Advanced Materials*, 2007
Co-Guest Editor of a Special Issue on Shaped-Controlled Nanostructures of Metals and Surface Plasmonics, *Materials Research Society (MRS) Bulletin*, 2005
Guest Editor of a Special Issue on Soft Lithography and Surface Patterning, *Advanced Materials*, 2004
Co-Guest Editor of a Special Issue on Nanowires, *Advanced Materials*, 2003
Guest Editor of a Special Issue on Photonic Crystals, *Advanced Materials*, 2001
Co-Guest Editor of a Special Issue on Materials Research in China, *Advanced Materials*, 1999
Book Co-Editor, *Nontraditional Approaches to Patterning and Their Applications*, Materials Research Society (MRS), 2004
Book Co-Editor, *Unconventional Approaches to Nanofabrication, with Applications in Photonics, Electronics and Sensing*, Materials Research Society (MRS), 2003
Book Co-Editor, *Nonlithographic and Lithographic Methods of Nanofabrication – From Ultralarge-Scale Integration to Photonics to Molecular Electronics*, Materials Research Society (MRS), 2000

Organization of Conferences

Member of Organizing Committee, Fibrous Nanocomposites: Tailored Hybrid Nanostructures and Bio-Nano-Devices, Crete, Greece, September, 2012
Member of International Advisory Committee, China Nano 2011, Beijing, September, 2011
Co-organizer for a Symposium on “Patterning and Assembly of Nanomaterials and Biomolecules” for the International Conference on Materials for Advanced Technologies (ICMAT), Singapore, June, 2011
Session Chair of a Symposium on “Nanomaterials for Energy Conversion and Storage” for the American Chemical Society (ACS) Spring Meeting, Anaheim, CA, March, 2010
Member of Advisory Committee, the First International NanoArt Exhibition, Shanghai, China, November, 2010
Member of International Advisory Committee, the 18th International Vacuum Congress, the 2010 International Conference on Nanoscience and Technology, and the 14th International Conference on Solid Surfaces, Beijing, August, 2010
Session Chair of a Symposium on “Multifunctional Nanoparticle Systems” for the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2010
Session Chair, Asia Communications and Photonics Conference and Exhibit, Shanghai, China, November, 2009
Session Chair, the 2nd Asian Conference on Coordination Chemistry, Nanjing, China, November, 2009
Member of International Advisory Committee, China Nano 2009, Beijing, September, 2009
Co-organizer of China-USA Workshop on Nanomaterials, Hefei, June, 2009
Member of International Advisory Committee, China Nano 2007, Beijing, June, 2007
Organizer of a Symposium on the Synthesis and Assembly of Nanostructures for Materials Today Asia Meeting, Beijing, China, September, 2007
Organizer of a Symposium in Honor of the Priestley Medalist Prof. George M. Whitesides for the American Chemical Society (ACS) Spring Meeting, Chicago, IL, March, 2007
Co-organizer of a Symposium on Self-Assembly and Nanofabrication for the American Chemical Society (ACS) Fall Meeting, San Francisco, CA, September, 2006

Member of Program Committee of a Symposium on Nanophotonic Materials (NP202), SPIE Optics and Photonics, San Diego, CA, July, 2006
Co-organizer of a Symposium on Nanostructured Materials for the American Chemical Society (ACS) Northwest Regional Meeting (NORM), Reno, NV, June, 2006
Co-organizer of a Symposium on Nanostructured Materials for the 80th Colloid and Surface Science Symposium of the American Chemical Society (ACS), Boulder, CO, June, 2006
Co-organizer of a Symposium on Semiconductor Nanowires for the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2006
Session Chair of a Symposium on Nanomanufacturing for the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2006
Session Chair of a Symposium on Plasmonics for the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2005
Session Chair of a Symposium on Self-Assembly for the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2005
Member of Program Committee of a Symposium on Photonic Crystals and Photonic Crystal Fibers for Sensing Applications (SA115), SPIE Optics East, Boston, MA, October, 2005
Co-organizer of a Symposium on Unconventional Fabrication Techniques for the Materials Research Society (MRS) Fall Meeting, Boston, MA, December, 2003
Co-organizer of a Symposium on Nanostructured Materials and Nanophotonics for the SPIE, San Diego, CA, August, 2003
Co-organizer of a Symposium on Self-Assembly and Nanostructured Materials for the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2003
Subcommittee Member of the 2002 Conference on Lasers and Electro-Optics (CLEO'2002), Optical Materials: Fabrication and Characterization, Long Beach, CA, May, 2002
Session Chair of a Symposium on Self-Assembly for the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2002
Session Chair of a Symposium on Photonic Crystals for the American Chemical Society (ACS) 2001 National Spring Meeting, San Diego, CA, April, 2001
Co-organizer of a Symposium on Nanofabrication for the Materials Research Society (MRS) Fall Meeting, Boston, MA, December, 2000
Session Chair of a Symposium on Microfabrication for the Materials Research Society (MRS) Fall Meeting, Boston, MA, December, 1999

Advisory Board

Science Advisory Board, Nanoterra, Brighton, MA, 2010 –
Foreign Member of Advisory Committee, Korea Basic Science Institute (KBSI), 2010 –
Member of Scientific Advisory Committee, NESAC/BIO at the University of Washington, funded by the National Institute for Biomedical Imaging and Bioengineering of the National Institutes of Health, 2009 –

INVITED LECTURES AND PRESENTATIONS

2011

- 285 “Controlling the Synthesis and Assembly of Silver Nanocrystals for Plasmonic Applications”, Department of Chemistry, University of California, Berkeley, CA, December, 2011.
- 284 “Inverse Opal Scaffolds for Tissue Engineering Applications”, Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2011.
- 283 “Putting Nanomaterials to Work for Biomedical Research”, Department of Polymer Science and Engineering, SungKyunKwan University, Suwon, Korea, November, 2011.
- 282 “Putting Chemistry to Work for Nano and Biomedical Research”, Department of Chemistry, Zhejiang University, Hangzhou, Zhejiang, China, October, 2011.

- 281 "Colloidal Nanocrystals: Past, Present, and Future", Department of Materials Science and Engineering, Zhejiang University, Hangzhou, Zhejiang, China, October, 2011.
- 280 "Metal Nanowires for Touch Screen Applications", Flat-Panel Display Standardization Forum, the 11th International Meeting on Information Display (IMID 2011), Ilsan, Korea, October, 2011.
- 279 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, University of Colorado, Boulder, CO, September, 2011.
- 278 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA, September, 2011.
- 277 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Ohio State University, Columbus, OH, September, 2011.
- 276 "Putting Nanomaterials to Work for Biomedical Research", the 7th Annual NIH Director's Pioneer Award Symposium, Washington DC, September, 2011.
- 275 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Boston College, MA, September, 2011.
- 274 "Colloidal Nanocrystals: Past, Present, and Future", Center for Nanotechnology, University of Washington, Seattle, WA, September, 2011.
- 273 "Gold Nanocages for Theranostic Applications", Division of Colloid and Surface Chemistry, American Chemical Society (ACS) Fall Meeting, Denver, CO, August, 2011.
- 272 "Novel Silver Nanostructures for Surface-Enhanced Raman Scattering", Division of Physical Chemistry, American Chemical Society (ACS) Fall Meeting, Denver, CO, August, 2011.
- 271 "Seeded Growth of Metal Nanocrystals with Controllable Shapes", Gordon Research Conference on Thin Film and Growth Mechanisms, Biddeford, ME, July, 2011.
- 270 "Colloidal Nanocrystals of Noble Metals: Past, Present and Future", Nanotechnology and Printed Electronics Symposium 2011, Singapore, July, 2011 (plenary lecture).
- 269 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Renmin University, Beijing, China, June, 2011.
- 268 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Tsinghua University, Beijing, China, June, 2011.
- 267 "Controlling the Alignment of Electrospun Nanofibers for Various Applications", WCU-LGD Nanomaterials and Device Symposium, Jeju, Korea, June, 2011 (keynote talk).
- 266 "Gold Nanocages with Tunable Plasmonic Properties for Biomedical Applications", the 5th International Conference on Nanophotonics, Shanghai, China, May, 2011 (plenary lecture).
- 265 "Shape-Controlled Silver Nanocrystals for Plasmonic Applications", the 5th International Conference on Surface Plasmon Photonics (SPP5), Busan, Korea, May, 2011.
- 264 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, University of Pittsburgh, Pittsburgh, PA, April, 2011.
- 263 "Putting Electrospun Nanofibers to Work for Biomedical Research", Department of Polymer Science and Engineering, University of Massachusetts, Amherst, MA, April, 2011.
- 262 "Seeded Growth for Large-Scale Production of Noble-Metal Nanostructures with Controllable Sizes and Shapes", Division of Polymeric Materials: Science and Engineering, American Chemical Society (ACS) Spring Meeting, Anaheim, CA, March, 2011.
- 261 "Novel Pd-Pt Bimetallic Nanocrystals for Fuel Cell Applications", Division of Colloid and Surface Chemistry, American Chemical Society (ACS) Spring Meeting, Anaheim, CA, March, 2011.
- 260 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, University of Wisconsin, Madison, WI, March, 2011.
- 259 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Materials Science and Engineering, Carnegie Mellon University, Pittsburgh, PA, March, 2011.
- 258 "Putting Chemistry to Work for Nano and Biomedical Research", Honorary Bent Lecture, Department of Chemical Engineering, University of Missouri-Columbia, MO, March, 2011.
- 257 "Shape-Controlled Synthesis of Noble-Metal Nanocrystals", Department of Chemistry and Department of Physics, Georgetown University, Washington D.C., March, 2011.
- 256 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Biomedical Engineering and Department of Chemistry and Biochemistry, Georgia Institute of Technology, GA, February, 2011.

255 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Columbia University, New York, NY, February, 2011.

2010

- 254 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Brown University, Providence, RI, December, 2010.
- 253 "Gold Nanocages: A Multifunctional Platform for Nanomedicine", Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2010.
- 252 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Materials Science and Engineering and Department of Bioengineering, Iowa State University, Ames, IA, November, 2010.
- 251 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemical Engineering, University of Florida, Gainesville, FL, November, 2010.
- 250 "Putting Chemistry to Work for Nanocrystal Synthesis", Department of Chemistry, Indiana University, Bloomington, IN, November, 2010
- 249 "Putting Electrospun Nanofibers to Work for Biomedical Research", 2010 International Symposium on Nature-Inspired Technology, Seoul National University, Seoul, Korea, October, 2010
- 248 "Putting Chemistry to Work for Nano and Biomedical Research", National Meeting of Korean Chemical Society, Daegu, Korea, October, 2010
- 247 "Following Your Curiosity, Intuition, and Good Luck into Different Research Areas", Pioneer-NanoSeoul Forum, Seoul, Korea, October, 2010
- 246 "Putting Chemistry to Work for Nanocrystal Synthesis", Department of Chemistry, Rice University, Houston, TX, October, 2010
- 245 "Gold Nanocages: A New Platform for Biomedical Applications", Department of Chemical and Biomolecular Engineering, Rice University, Houston, TX, October, 2010.
- 244 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Texas Christian University, Ft. Worth, TX, October, 2010.
- 243 "Putting Nanocrystal Synthesis under Control", Center for Nano and Molecular Science and Technology, University of Texas, Austin, TX, September, 2010.
- 242 "Design and Synthesis of Bimetallic Nanocrystals for Catalytic Applications", Catalysis Research Center, Hokkaido University, Sapporo, Japan, September, 2010.
- 241 "Nanocrystal Synthesis: Past, Present and Future", International Conference on Nanoscopic Colloid and Surface Science, Chiba, Japan, September, 2010 (plenary lecture).
- 240 "Colloidal Nanocrystals: Past, Present and Future", Department of Chemistry, Fudan University, Shanghai, China, September, 2010.
- 239 "Putting Chemistry to Work for Nano and Biomedical Research", Institute of Advanced Materials and Nanomedicine, Tongji University, Shanghai, China, September, 2010.
- 238 "Novel Silver Nanostructures for SERS Applications", the 18th International Vacuum Congress, Beijing, China, September, 2010.
- 237 "Gold Nanocages: A New Platform for Cancer Diagnosis and Treatment", Gordon Research Conference on Lasers in Medicine and Biology, Holderness, NH, July, 2010.
- 236 "Gold Nanocages for Controlled Release with Near-Infrared Light", the 37th Annual Meeting & Exposition of the Controlled Release Society (CRS), Portland, OR, July, 2010.
- 235 "Etching and Growth: An Intertwined Pathway to Nanocrystals with Different Shapes", Gordon Research Conference on Noble Metal Nanoparticles, South Hadley, MA, June, 2010.
- 234 "Nanocrystal Synthesis: Past, Present and Future", International Symposium on Nucleation and Growth of Crystals: Structures, Functions and Applications, Shandong University, Jinan, China, June, 2010.
- 233 "Nanocrystal Synthesis: Past, Present and Future", the 125th Anniversary Symposium, Yonsei University, Seoul, Korea, June, 2010.
- 232 "Nanomaterials, Synthesis, Manufacturing, and Applications", Samsung Advanced Institute of Technology (SAIT), Seoul, Korea, June, 2010.
- 231 "Seed-Mediated Synthesis for Nanocrystal Manufacturing", US-Sino Nano Workshop, Suzhou, China, June, 2010.

- 230 "Shape-Controlled Synthesis of Metal Nanocrystals", Department of Energy Engineering, Hanyang University, Seoul, Korea, June, 2010.
- 229 "Shape-Controlled Synthesis of Metal Nanocrystals", Department of Chemistry and Nano Science, Ehwa Womans University, Seoul, Korea, May, 2010.
- 228 "Metal Nanocrystals: From Synthesis to Manufacturing and Applications", Center for Nanoscale Science and Technology (CNST) Annual Nanotechnology Workshop, University of Illinois at Urbana Champaign, May, 2010.
- 227 "Putting Nanomaterials to Work for Biomedical Research", Department of Chemistry, University of Maryland at Baltimore County, MD, May, 2010.
- 226 "Putting Nanomaterials to Work for Biomedical Research", Department of Biomedical Engineering, Purdue University, West Lafayette, IN, May, 2010.
- 225 "Engineering the Plasmonic Properties of Nanostructures for Various Applications", Applied Physics Lecture, Washington University, St. Louis, MO, April, 2010.
- 224 "Putting Nanomaterials to Work for Biomedical Research", Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, MI, April, 2010.
- 223 "Nanochemistry: Where Are We Now?", California NanoSystems Institute (CNSI), University of California, Los Angeles, CA, April, 2010.
- 222 "Gold Nanocages: A Multifunctional Platform for Biomedical Applications", Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2010.
- 221 "Controlling the Nucleation and Growth of Bimetallic Nanostructures", Division of Polymeric Materials: Science and Engineering, American Chemical Society (ACS) Spring Meeting, San Francisco, CA, March, 2010.
- 220 "Putting Nanomaterials to Work for Biomedical Research", Department of Chemistry, Brandeis University, Waltham, MA, March, 2010.
- 219 "Putting Nanomaterials to Work for Biomedical Research", the 2010 Annual Conference of Institute of Biological Engineering (IBE), Cambridge, MA, March, 2010.
- 218 "Engineering the Optical Properties of Gold Nanocages for Biomedical Applications", IEEE INEC 2010, Hong Kong, January, 2010.

2009

- 217 "Gold Nanocages: A New Platform for Cancer Diagnosis and Treatment", Marilyn Fixman Clinical Cancer Conference, Siteman Cancer Center, Washington University Medical School, St. Louis, December, 2009.
- 216 "Metallic Nanowires: Synthesis and Applications", the Third International Conference on One-Dimensional Nanomaterials, Atlanta, GA, December, 2009.
- 215 "Nanowires for Electronic and Photonic Applications", Samsung Advanced Institute of Technology (SAIT), Seoul, Korea, December, 2009.
- 214 "Shape-Controlled Synthesis of Metal Nanocrystals", LG Chem, Daejeon, Korea, December, 2009.
- 213 "Putting Electrospun Nanofibers to Work for Biomedical Research", Korea Research Institute of Chemical Technology (KRICT), Daejeon, Korea, December, 2009.
- 212 "Shape-Controlled Synthesis of Metal Nanocrystals", Korea Basic Science Institute (KBSI), Daejeon, Korea, December, 2009.
- 211 "Putting Nanomaterials to Work for Biomedical Research", Department of Chemistry, Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Korea, December, 2009.
- 210 "Electrospun Nanofibers: A New Platform for Neural Tissue Engineering", International Workshop on Emerging Materials & Active Polymer Patterning, Gyeongju, Korea, 2009.
- 209 "Putting Nanostructures to Work for Biomedical Research", Department of Chemistry, Yonsei University, Seoul, Korea, November, 2009.
- 208 "Gold Nanocages: A New Platform for Biomedical Applications", Asia Communications and Photonics Conference and Exhibit, Shanghai, China, November, 2009.
- 207 "Maneuvering the Plasmonic Properties of Silver Nanocrystals", Asia Communications and Photonics Conference and Exhibit, Shanghai, China, November, 2009.
- 206 "Shape-Controlled Synthesis of Metal Nanostructures", School of Chemical and Biomolecular Engineering, Southeast University, Nanjing, China, November, 2009.
- 205 "Controlling the Synthesis and Assembly of Nanocrystals", The 2nd Asian Conference on Coordination

- Chemistry, Nanjing, China, November, 2009.
- 204 "Shape-Controlled Synthesis of Metal Nanostructures", Department of Materials Science and Engineering, Yonsei University, Seoul, Korea, October, 2009.
- 203 "Putting Nanomaterials to Work for Biomedical Research", Biophysics Evening, Department of Biochemistry and Molecular Biophysics, Washington University School of Medicine, MO, October, 2009.
- 202 "Gold Nanocages: A New Platform for Biomedical Applications", the '09 Federation of Analytical Chemistry and Spectroscopy Societies (FACSS) Conference, Louisville, KY, October, 2009.
- 201 "Nanomaterials at Work in various Applications", the First symposium on Nanotechnology, National Nanotechnology Infrastructure Network (NNIN), Washington University in St. Louis, MO, September, 2009.
- 200 "Putting Nanomaterials to Work for Biomedical Research", Department of Chemical and Biomolecular Engineering, University of Illinois at Urbana Champaign, IL, September, 2009.
- 199 "Dimers of Silver Nanospheres or Nanocubes for SERS Applications", Division of Colloidal and Surface Science, American Chemical Society (ACS) Fall Meeting, Washington D.C., August, 2009.
- 198 "Gold Nanocages: A New Platform for Biomedical Applications", Division of Physical Chemistry, American Chemical Society (ACS) Fall Meeting, Washington D.C., August, 2009.
- 197 "Hierarchically Porous Scaffolds for Tissue Engineering Applications", Division of Polymeric Materials Science and Engineering, American Chemical Society (ACS) Fall Meeting, Washington D.C., August, 2009.
- 196 "Nanochemistry: Where Are We Now?", National Center for Nano Science and Nanotechnology, Beijing, China, July, 2009.
- 195 "Controlling the Assembly of Atoms into Nanocrystals with Different Shapes", Dalian Institute of Chemical Physics, Dalian, China, July, 2009.
- 194 "Design and Synthesis of Novel Catalysts for Fuel Cell Applications", US-Sino Nano Workshop, Hefei, China, July, 2009.
- 193 "Bridging the Gap between Atoms and Nanocrystals", College of Engineering, National Tsing Hua University, Taiwan, May, 2009.
- 192 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemical Engineering, National Tsing Hua University, Taiwan, May, 2009.
- 191 "Putting Electrospun Nanofibers to Work for Biomedical Research", Keynote Lecture, 2009 International Advanced Drug Delivery Symposium, Taiwan, May, 2009.
- 190 "Putting Nanomaterials to Work for Biomedical Research", The 2nd International Symposium on Advanced Particles (ISAP2009), Yokohama, Japan, April, 2009 (plenary lecture).
- 189 "Nanomaterials: A New Platform for Molecular Imaging and Therapy", Washington University Imaging Sciences Pathway Program, St. Louis, MO, April, 2009.
- 188 "Synthesis and Self-Assembly of Silver Nanocrystals", Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2009.
- 187 "Some New Developments in the Synthesis of Gold Nanostructures", Division of Colloidal and Surface Science, American Chemical Society (ACS) Spring Meeting, Salt Lake City, UT, March, 2009.
- 186 "Shape-Controlled Synthesis of Palladium Nanocrystals in Aqueous Solutions", Division of Industrial and Engineering Chemistry, American Chemical Society (ACS) Spring Meeting, Salt Lake City, UT, March, 2009.
- 185 "Controlling the Synthesis and Assembly of Nanoscale Building Blocks", Division of Physical Chemistry, American Chemical Society (ACS) Spring Meeting, Salt Lake City, UT, March, 2009.
- 184 "Electrospun Nanofibers for Neural and Tissue Engineering", American Physical Society (APS) Spring Meeting, Pittsburgh, PA, March, 2009.
- 183 "Electrospun Nanofibers for Repairing the Body", Department of Orthopaedic Surgery, Washington University, St. Louis, MO, January, 2009.

2008

- 182 "Putting Electrospun Nanofibers to Work for Biomedical Research", Department of Chemistry, Hong Kong University of Science and Technology, Hong Kong, December, 2008.
- 181 "Nanomaterial Synthesis in the Context of Energy, Environment, and Sustainability", I-CARES, Washington University, St. Louis, MO, November, 2008.
- 180 "Putting Nanomaterials to Work for Biomedical Research", Department of Biomedical Engineering, Johns

- Hopkins University, Baltimore, MD, November, 2008.
- 179 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, Duke University, Durham, NC, October, 2008.
- 178 "Controlling the Assembly of Atoms into Nanocrystals with Different Shapes", Department of Chemistry, University of North Carolina, Chapel Hill, NC, October, 2008.
- 177 "Nanochemistry: Where Are We Now?", Symposium in Honoring Prof. Ozin on the Occasion of his 65th Birthday, Department of Chemistry, University of Toronto, Toronto, Canada, October, 2008.
- 176 "Putting Electrospun Nanofibers to Work for Biomedical Research", Fiber Society's Fall Conference, Montreal, Canada, October, 2008.
- 175 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Biomedical Engineering, Washington University in St. Louis, September, 2008.
- 174 "Controlling the Evolution of Atoms to Nanocrystals with Different Shapes", Hefei National Laboratory for Physical Science at the Microscale, Hefei, Anhui, China, July, 2008.
- 173 "Tailoring Surface Plasmonic Properties of Metal Nanostructures", The Key Laboratory of Quantum Information, Chinese Academy of Sciences, Hefei, Anhui, July, 2008.
- 172 "Shape-Controlled Synthesis of Nanocrystals: The Case of Palladium", the 7th International Symposium for Chinese Inorganic Chemists, Shanghai, July, 2008.
- 171 "Engineering the Optical Properties of Gold Nanostructures for Biomedical Applications", the American Chemical Society (ACS) 82nd Colloidal & Surface Science Symposium, Raleigh, NC, June, 2008.
- 170 "Controlling the Shapes of Colloidal Nanocrystals", the American Chemical Society (ACS) 82nd Colloidal & Surface Science Symposium, Raleigh, NC, June, 2008.
- 169 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, University of Toronto, Toronto, Canada, April, 2008.
- 168 "Shape-Controlled Synthesis of Nanocrystals: The Case of Palladium", the American Chemical Society (ACS) National Meeting, New Orleans, LA, April, 2008.
- 167 "Putting Chemistry to Work for Nanomaterial Synthesis", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, March, 2008.
- 166 "Shape-Controlled Synthesis of Nanocrystals", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, March, 2008.
- 165 "Putting Nanostructures to Work for Biomedical Research", Nanoscale Science and Engineering, University of California, Berkeley, CA, March, 2008.
- 164 "Gold Nanocages: A New Class of Nanostructures for Photothermal and Photoacoustic Applications", Gordon Research Conference on "Photoacoustic and Photothermal Phenomena: Photoinduced Processes and Applications", Ventura, CA, February, 2008.
- 163 "Putting Chemistry to Work for Nano and Biomedical Research", Department of Chemistry, University of California, Irvine, CA, February, 2008.
- 162 "Shape-Controlled Synthesis of Nanocrystals", Center for Nanoscience, University of Missouri at St. Louis, MO, January, 2008.

2007

- 161 "Putting Nanostructures to Work for Biomedical Research", Nanyang Technological University, Singapore, December, 2007.
- 160 "Shape-Controlled Synthesis of Nanocrystals", Singapore International Chemical Conference 5 (SICC-5), Singapore, December, 2007 (plenary talk).
- 159 "Putting Nanostructures to Work for Biomedical Research", International Institute for Nanotechnology, Northwestern University, Chicago, IL, December, 2007.
- 158 "Putting Nanostructures to Work for Biomedical Research", International Institute for Nanotechnology, University of Rochester, Rochester, NY, December, 2007.
- 157 "Self-Assembly Approaches to Three-Dimensionally Structured Nanomaterials", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2007.
- 156 "Shape-Controlled Synthesis of Nanocrystals", Department of Chemistry, Columbia University, New York, NY, November, 2007.

- 155 "Shape-Controlled Synthesis of Nanocrystals", Center for Nanotechnology, University of Texas, Dallas, TX, September, 2007.
- 154 "Putting Nanostructures to Work for Biomedical Research", the Annual NIH Director's Pioneer Award Symposium, Bethesda, MD, September, 2007.
- 153 "Shape-Controlled Synthesis of Nanocrystals: Simple Chemistry Meets Complex Physics", Department of Chemistry, Tsinghua University, Beijing, China, September, 2007.
- 152 "Shape-Controlled Synthesis of Nanocrystals", Department of Chemistry, Nankai University, Tianjin, China, September, 2007.
- 151 "Nanostructured Materials Enabled by Electrospinning", School of Engineering, Tianjin University, Tianjin, China, September, 2007.
- 150 "Tailoring the Optical Properties of Gold Nanocages for Biomedical Applications", the Materials Today Asia Meeting, Beijing, China, September, 2007.
- 149 "Tailoring the Optical Properties of Gold Nanocages for Biomedical Applications", International Conference on Molecular Photonics, San Juan Islands, WA, August, 2007.
- 148 "Some New Developments in the Fabrication of Macroporous Materials", the American Chemical Society (ACS) Fall National Meeting, Boston, MA, August, 2007.
- 147 "Tailoring the Optical Properties of Gold Nanocages for Biomedical Applications", the American Chemical Society (ACS) Fall National Meeting, Boston, MA, August, 2007.
- 146 "Nanostructured Materials Enabled by Electrospinning", School of Engineering, National University of Singapore, Singapore, July, 2007.
- 145 Inorganic Chemistry Seminar, Department of Chemistry, Washington University, St. Louis, MO, April, 2007.
- 144 Annual Distinguished Lecture Series, Division of Polymers, the National Institute of Standards and Technology, Gaithersburg, MD, April, 2007.
- 143 Physical Chemistry Seminar, Department of Chemistry, University of California, Riverside, CA, April, 2007.
- 142 "Putting Nanostructures to Work for Biomedical Research", Nanobiotechnology Seminar Series, Stanford University, Stanford, CA, April, 2007.
- 141 "Tailoring the Optical Properties of Gold Nanocages for Biomedical Applications", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2007.
- 140 Seminar, Department of Materials Science and Engineering, University of Illinois, Urbana, IL, April, 2007.
- 139 "Putting Nanostructures to Work for Biomedical Research", Center for Materials Innovation, Washington University, St. Louis, MO, March, 2007.
- 138 "Phase Separation: An Effective Approach to Nanostructured Materials", the American Chemical Society (ACS) Spring National Meeting, Chicago, IL, March, 2007.
- 137 "Colloidal Molecules?", the American Chemical Society (ACS) Spring National Meeting, Chicago, IL, March, 2007.
- 136 Seminar, Department of Chemical and Biomolecular Engineering, University of Wisconsin, Madison, WI, March, 2007.
- 135 Inorganic Chemistry Seminar, Department of Chemistry and Biochemistry, University of California, Los Angeles, CA, March, 2007.
- 134 "Shape-Controlled Synthesis of Nanocrystals: Simple Chemistry Meets Complex Physics", Plenary Lecture, Undergraduate Nanotechnology Conference (UNC), Toronto, Canada, March, 2007.
- 133 "Putting Nanostructures to Work for Biomedical Research", School of Life Sciences, University of Science and Technology of China (USTC), Hefei, China, January, 2007.
- 132 "Nanostructured Materials Enabled by Electrospinning", Department of Macromolecular Science, Fudan University, Shanghai, China, January, 2007.

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- 131 "Some New Developments in Colloidal Synthesis and Assembly", Institute of Micro- and Nanotechnology, Jiaotong University, Shanghai, December, 2006.
- 130 "Nanostructured Materials Enabled by Electrospinning", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2006.
- 129 Physical Chemistry Seminar, Department of Chemistry, Princeton University, Princeton, NJ, November, 2006.

- 128 "Nanostructured Materials by Electrospinning", Conference on Chemical Nanotechnology, Frankfurt, Germany, October, 2006.
- 127 Institute Nanotechnology Seminar Series, Stevens Institute of Technology, Hoboken, NJ, September, 2006.
- 126 Centennial Lecture, Department of Engineering Mechanics, University of Nebraska, Lincoln, NE, September, 2006.
- 125 Chemistry Colloquium, Department of Chemistry, University of Nebraska, Lincoln, NE, September, 2006.
- 124 "Shape-Controlled Synthesis of Metal Nanostructures", the American Chemical Society (ACS) Northwest Regional Meeting (NORM), Reno, NV, June, 2006.
- 123 "Metal Nanostructures with Controllable Shapes", Cambrios Inc., Mountain View, CA, June, 2006.
- 122 Chemistry Colloquium, Department of Chemistry, Nanyang Technological University, Singapore, June, 2006.
- 121 "Gold Nanocages: Engineering the Optical Properties for Biomedical Applications", Institute of Bioengineering and Nanotechnology, Singapore, June, 2006.
- 120 "Shape-Controlled Synthesis of Metal Nanostructures", School of Materials Science and Engineering, Shanghai Jiaotong University, Shanghai, China, June, 2006.
- 119 "Nanostructured Materials by Electrospinning", PPG Research Center, Pittsburgh, May, 2006.
- 118 "Chemical Approaches to Nanomanufacturing", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2006.
- 117 Physical Chemistry Seminar, Department of Chemistry, University of Texas A&M, College Station, TX, March, 2006.
- 116 "Tailoring the Plasmonic Properties of Metal Nanostructures for Biomedical Applications", the American Physical Society (APS) Spring Meeting, Baltimore, MD, March, 2006.
- 115 Spring Colloquium, Department of Chemistry, University of Syracuse, Syracuse, NY, March, 2006.
- 114 Chemistry Colloquium, Department of Chemistry, Pennsylvania State University, University Park, PA, February, 2006.
- 113 Inorganic Chemistry Seminar, Department of Chemistry, University of Pennsylvania, Philadelphia, PA, February, 2006.
- 112 Materials Science Seminar, Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, February, 2006.
- 111 "Ceramic Processing Science: Perspectives from a Chemist", the 9th International Ceramic Processing Science Symposium, Plenary Lecture, Coral Springs, FL, January, 2006.
- 110 "Exploration of New Research Areas", Department of Chemistry, Fudan University, Shanghai, China, January, 2006.

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- 109 "Shape-Controlled Synthesis of Metal Nanostructures", the 5th PacificChem Meeting, Honolulu, HI, December, 2005.
- 108 "The Roles of Capping Agents in Shape-Controlled Synthesis of Metal Nanostructures", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2005.
- 107 "Some New Developments in Colloidal Self-Assembly", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2005.
- 106 "Nanostructures of Noble Metals: Tailoring their Surface Plasmonic Properties through Shape Control", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2005.
- 105 Materials Chemistry Seminar, Department of Chemistry, Rutgers University, New Brunswick, NJ, November, 2005.
- 104 "Shape-Controlled Synthesis of Nanostructures: Simple Chemistry Meets Complex Physics", 2005 Leo Hendrik Baekeland Award Symposium, Murray Hill, NJ, November, 2005.
- 103 "New Methods and Materials for Micro- and Nanofabrication", Boston Scientific, Bellevue, WA, October, 2005.
- 102 Inorganic Chemistry Seminar", Department of Chemistry, Brown University, Providence, RI, September, 2005.
- 101 "Controlling the Synthesis of Metal Nanostructures", the David and Lucile Packard Foundation Annual Meeting, Monterey, CA, September, 2005.
- 100 "Shape-Controlled Synthesis of Metallic Nanostructures", Gordon Research Conference on Clusters,

Nanocrystals and Nanostructures, New London, CT, August, 2005.

- 99 "Shape-Controlled Synthesis of Metal Nanostructures", Sandia National Laboratories, Albuquerque, NM, July, 2005.
- 98 "Soft and Imprint Lithography", the 3rd ASME Nano Training Bootcamp, Washington, DC, July, 2005.
- 97 "Building Complex and Functional Structures from Spherical Colloids", Gordon Research Conference on Polymer Colloids, Tilton, NH, July, 2005.
- 96 "Shape-Controlled Synthesis of Metal Nanostructures", Institute of Physics, the Chinese Academy of Sciences, Beijing, China, June, 2005.
- 95 "Shape-Controlled Synthesis of Nanostructured Materials", ChinaNANO 2005, Beijing, China, June, 2005.
- 94 "Controlling the Structure, Alignment, and Assembly of Electrospun Nanofibers", Philip Morris USA Workshop on Droplet Engineering, Williamsburg, VA, May, 2005.
- 93 "Metal Nanostructures with Controllable Shapes and Their Applications", the Microscale Life Science Center (MLSC), University of Washington, May, 2005.
- 92 Materials Chemistry Seminar, Department of Materials Science and Engineering, Stanford University, May, 2005.
- 91 "Shape-Controlled Synthesis of Nanostructured Materials", the Woodward Lecture Series in the Chemical Sciences, Department of Chemistry and Chemical Biology, Harvard University, April, 2005.
- 90 "Shape-Controlled Synthesis of Metal Nanostructures", Department of Chemistry, University of Toronto, Canada, April, 2005.
- 89 "Some New Developments in the Synthesis and Assembly of Spherical Colloids", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, March, 2005.
- 88 "Shape-Controlled Synthesis of Metal Nanostructures", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, March, 2005.
- 87 "Shape-Controlled Synthesis of Nanostructured Materials", the GE Global Research Center, Niskayuna, NY, March, 2005.
- 86 Materials Chemistry Seminar, Department of Chemistry, University of Victoria, Canada, March, 2005.
- 85 "New Building Blocks for Nanocomposites", the American Chemical Society (ACS) Spring Meeting, San Diego, CA, March, 2005.
- 84 "Tailoring the Surface Plasmonic Properties of Metals by Shape Control", the American Chemical Society (ACS) Spring Meeting, San Diego, CA, March, 2005.

2004

- 83 "Shape-Controlled Synthesis of Nanostructured Materials", the 5th International Symposium for Chinese Inorganic Chemists, Hong Kong, December, 2004.
- 82 "Shape-Controlled Synthesis of Metallic Nanostructures", the Materials Research Society (MRS) Fall Meeting, Boston, MA, December, 2004.
- 81 Materials Chemistry Seminar, Department of Materials Science and Engineering, University of Pennsylvania, Philadelphia, PA, September, 2004.
- 80 "Shape-Controlled Synthesis of Metallic Nanostructures", the Society of Photo-Optical Instrumentation Engineers (SPIE) Annual Meeting, Denver, CO, August, 2004.
- 79 "Mechanistic Studies on the Replacement Reaction between Silver Nanostructures and Chloroauric Acid", the Society of Photo-Optical Instrumentation Engineers (SPIE) Annual Meeting, Denver, CO, August, 2004.
- 78 "Shape-Controlled Synthesis of Nanostructured Materials", the 3rd German-American Frontiers of Chemistry Symposium (GAFOC III), Munich, Germany, July, 2004.
- 77 "Shape-Controlled Synthesis and Self-Assembly of Nanostructured Materials", the ACS-PRF Summer School on Nanomaterials, East Michigan University, MI, June, 2004.
- 76 "Synthesis and Self-Assembly of Nanostructured Materials", the Foundations of Nanoscience, Snowbird, UT, April, 2004.
- 75 Materials Science Colloquium, Department of Materials Science and Engineering, University of Illinois, Urbana Champaign, IL, April, 2004.
- 74 "Shape-Controlled Synthesis of Nanostructured Materials", the American Chemical Society (ACS) National Meeting, Anaheim, CA, April, 2004.

- 73 Physical Chemistry Seminar, Department of Chemistry, Northwestern University, Evanston, IL, February, 2004.
- 72 Inorganic Chemistry Seminar, Department of Chemistry, University of California, Davis, CA, February, 2004.
- 71 Materials Science Seminar, Department of Chemistry, University of Simon Fraser, Vancouver, BC, Canada, February, 2004.
- 70 Materials Chemistry Colloquium, Department of Chemistry, University of Chicago, Chicago, IL, February, 2004.
- 69 Materials Chemistry Seminar, Department of Chemistry, Fudan University, Shanghai, China, January, 2004.
- 68 Materials Chemistry Seminar, Department of Chemistry, University of Science and Technology of Hong Kong, Hong Kong, January, 2004.

2003

- 67 Materials Chemistry Seminar, Department of Chemistry, University of Science and Technology of Hong Kong, Hong Kong, December, 2003.
- 66 Materials Science Seminar, Department of Chemistry, University of New Orleans, New Orleans, LA, December, 2003.
- 65 "Nanowires by Solution-Phase Methods", the Materials Research Society Fall Meeting, Boston, MA, December, 2003.
- 64 Materials Science Seminar, Department of Materials, ETH Zurich, November, 2003
- 63 Materials Chemistry Seminar, Brockhouse Institute for Materials, University of McMaster, Hamilton, Ontario, Canada, November, 2003.
- 62 Materials Chemistry Seminar, Department of Chemistry, University of Toronto, Toronto, Ontario, Canada, November, 2003.
- 61 Materials Chemistry Seminar, Department of Chemical Engineering, University of Rochester, Rochester, NY, November, 2003.
- 60 "Shape-Controlled Synthesis of Nanostructured Materials", the International Conference on Nanomaterials, Xiamen, Fujian, China, October, 2003.
- 59 "Self-Assembled Photonic Crystals", the 8th IUMRS International Conference on Advanced Materials, Yokohama, Japan, October, 2003.
- 58 "Nanowires by Soft Solution-Phase Methods", the 8th IUMRS International Conference on Advanced Materials, Yokohama, Japan, October, 2003.
- 57 "Self-Assembled Photonic Devices", the 2003 Frontiers in Optics/Laser Science XIX, American Optical Society, Tucson, AZ, October, 2003.
- 56 "Shape-Controlled Synthesis of Nanostructures", the Alvin L. Kwiram Symposium on the Electrical, Optical, and Magnetic Properties of Organic and Hybrid Materials, University of Washington, Seattle, WA, June, 2003.
- 55 "Tutorial Introduction on Nanostructured Materials", the ACS/PRF Summer School on Photonics, University of Washington, Seattle, WA, June, 2003.
- 54 "Shape-Controlled Synthesis of Nanostructures", the 77th ACS Colloid and Surface Science Symposium, Atlanta, GA, June, 2003.
- 53 Physical Chemistry Seminar, Department of Chemistry, University of British Columbia, Vancouver, BC, Canada, March, 2003.
- 52 Materials Science Seminar, Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, March, 2003.

2002

- 51 "Self-Assembly Approaches to Photonic Devices", the Knowledge Foundation's International Conference on Photonic Nanostructures, San Diego, CA, October, 2002.
- 50 Inorganic Chemistry Seminar, Department of Chemistry, University of California, Santa Barbara, CA, October, 2002.
- 49 Physical Chemistry Seminar, Department of Chemistry, Stanford University, Palo Alto, CA, October, 2002.
- 48 "Self-Assembly Approaches to Photonic Structures and Devices", the Society of Photo-Optical Instrumentation Engineers (SPIE) Annual Meeting, Seattle, WA, July, 2002.

- 47 "The Chemistry and Art of Synthesizing Nanowires", the Society of Photo-Optical Instrumentation Engineers (SPIE) Annual Meeting, Seattle, WA, July, 2002.
- 46 "The Chemistry and Art of Generating 1D Nanostructures", the International Conference on Synthetic Metals (ICSM), Shanghai, China, June, 2002.
- 45 Physical Chemistry Seminar, Department of Chemistry, Duke University, Durham, NC, April, 2002.
- 44 Inorganic Chemistry Seminar, Department of Chemistry, University of South Carolina, Columbia, SC, April, 2002.
- 43 Materials Seminar, Department of Chemical Engineering, North Carolina State University, Raleigh, NC, April, 2002.
- 42 Inorganic Chemistry Seminar, Department of Chemistry, University of North Carolina, Chapel Hill, NC, April, 2002.
- 41 Physical Chemistry Seminar, Department of Chemistry, University of Reno, March, 2002
- 40 "Photonic Bandgap Crystals by Self-Assembly", the American Chemical Society (ACS) National Meeting, Orlando, FL, April, 2002.
- 39 "Soft Solution Approaches to One-Dimensional Nanostructures", the Materials Research Society (MRS) Spring Meeting, San Francisco, CA, April, 2002.

2001

- 38 Materials Chemistry Seminar, Department of Chemistry, University of Cambridge, London, UK, December, 2001.
- 37 "Complex Structures Self-Assembled from Colloidal Systems", the Royal Society of Chemistry (RSC), London, UK, December, 2001.
- 36 "Self-Assembled Approaches to the Fabrication of Photonic Devices", the Materials Research Society (MRS) Fall Meeting, Boston, MA, November, 2001.
- 35 "Self-Assembly Approaches to Photonic Structures and Devices", the Knowledge Foundation's International Conference on Photonic Nanostructures, San Diego, CA, October, 2001.
- 34 Inorganic Chemistry Seminar, Department of Chemistry, University of California, Berkeley, CA, October, 2001.
- 33 Materials Chemistry Seminar, Department of Chemistry, University of Washington, Seattle, WA, October, 2001.
- 32 "Self-Assembly Approaches to Nanostructures and Nanomaterials", the Dupont Chesapeake Conference on Nanotechnology, Chesapeake Farm, MD, August, 2001.
- 31 "Synthesis and Characterization of One-Dimensional Nanostructures", the International Workshop on Nanoscience and Nanotechnology, Beijing, China, July, 2001.
- 30 Materials Chemistry Seminar, College of Chemistry, University of Science and Technology of China, Hefei, Anhui, China, July, 2001.
- 29 "Chemical Approaches to One-Dimensional Nanostructures", the American Chemical Society Northwestern Regional Meeting (NORM), Seattle, WA, June, 2001.
- 28 "Self-Assembly Approaches to Nanostructured Materials and Photonic Devices", Los Alamos National Laboratory, Los Alamos, NM, June, 2001.
- 27 "Mesoscale Self-Assembly: A Tutorial Review", the American Chemical Society (ACS) National Meeting, San Diego, CA, April, 2001.
- 26 Physical Chemistry Seminar, Department of Chemistry, University of Washington, Seattle, WA, January, 2001.
- 25 "Fabrication of Complex Structures with Monodispersed Colloids as the Building Blocks", Nanoparticles 2001, Orlando, FL, February, 2001.

2000

- 24 "Self-Assembly Approaches to Photonic Structures and Devices", the Defense Scientific Research Council (DSRC) and Defense Advanced Research Projects Agency (DARPA) Workshop on Self-Assembly in Manufacturing, Washington D.C., December, 2000.
- 23 Colloidal Materials Seminar, Department of Chemical Engineering, University of Washington, Seattle, WA, December, 2000.

- 22 Materials Chemistry Seminar, College of Chemistry, University of Science and Technology of China, Hefei, Anhui, China, September, 2000.
- 21 Inorganic Chemistry Seminar, Department of Chemistry, Tsinghua University, Beijing, China, September, 2000.
- 20 "Photonic Properties of Thin Films Patterned with Three-Dimensionally Periodic Structures", the American Chemical Society (ACS) National Meeting, Washington D.C., August, 2000.
- 19 Physical Chemistry Seminar, Department of Chemistry, Western Washington University, Bellingham, WA, January, 2000.
- 18 Inorganic Chemistry Seminar, Department of Chemistry, Fudan University, Shanghai, China, January, 2000.

1999

- 17 Inorganic Chemistry Seminar, Department of Chemistry, Nanjing University, Nanjing, Jiangsu, China, December, 1999.
- 16 Materials Chemistry Seminar, Department of Bioengineering and Bioelectronics, Southeast University, Nanjing, Jiangsu, China, December, 1999.
- 15 Materials Chemistry Seminar, Department of Chemistry, Nanjing Normal University, Nanjing, Jiangsu, China, December, 1999.
- 14 Materials Chemistry Seminar, College of Chemistry, University of Science and Technology of China, Hefei, Anhui, China, December, 1999.
- 13 Materials Chemistry Seminar, College of Chemistry, Beijing University, Beijing, China, December, 1999.
- 12 Inorganic Chemistry Seminar, Department of Chemistry, Tsinghua University, Beijing, China, December, 1999.
- 11 Materials Chemistry Seminar, Department of Bioengineering, Tsinghua University, Beijing, China, December, 1999.
- 10 "Fabrication and Characterization of Three-Dimensional Photonic Crystals", the Air Force Office of Scientific Research (AFOSR) Workshop on Nanostructured Materials, Dayton, OH, October, 1999.
- 9 Physical Chemistry Seminar, Department of Chemistry, University of California, Santa Cruz, CA, October, 1999.
- 8 Physical Chemistry Seminar, Department of Chemistry, University of Minnesota, Minneapolis, MN, October, 1999.
- 7 "Organic Molecular Wires Threaded by Insulating Tubules", the 7th National Science Foundation (NSF) Materials Chemistry Workshop, Minneapolis, MN, October, 1999.
- 6 "Self-Assembly and Its Applications in Nanofabrication", the 73rd Colloid and Surface Science Symposium of the American Chemical Society (ACS), Boston, MA, June, 1999 (plenary lecture).

1998

- 5 Materials Science Seminar, Department of Materials Science and Engineering, University of Washington, Seattle, WA, October, 1998.
- 4 Physical Chemistry Seminar, Department of Chemistry, University of Washington, Seattle, WA, March, 1998.

1997

- 3 "Soft Lithography", the Summer Institute of the Center for Practical Analytical Chemistry (CPAC), University of Washington, Seattle, WA, July, 1997.
- 2 "Soft Lithography", the American Chemical Society (ACS) National Fall Meeting, ICI Student Award Symposium in Applied Polymer Science, Las Vegas, NV, September, 1997.
- 1 "Controlling the Orientation of Inorganic Functional Groups in the Solid State", the 5th National Science Foundation (NSF) Materials Chemistry Workshop, Pasadena, CA, October, 1997.

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- 484 A quantitative analysis of the role played by poly(vinyl pyrrolidone) in seed-mediated growth of Ag nanocrystals
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- 483 Modifying the pores of an inverse opal scaffold with chitosan microstructures for truly three-dimensional cell culture
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- 482 Choosing orientation: Influence of cargo geometry and ActA polarization on actin comet tails
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- 481 Palladium nanocrystals enclosed by {100} and {111} facets in controlled proportions and their catalytic activities for formic acid oxidation
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- 480 Quantifying the coverage density of poly(ethylene glycol) chains on the surface of gold nanostructures
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- 478 SV119-gold nanocage conjugates: A new platform for targeting cancer cells via sigma-2 receptors
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- 477 Formation of embryoid bodies with controlled sizes and maintained pluripotency in three-dimensional inverse opal scaffolds
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- 475 In vivo quantitative evaluation of the transport kinetics of gold nanocages in a lymphatic system by noninvasive photoacoustic tomography
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- 474 Controlling nucleation and growth of silver on palladium nanocubes by manipulating the reaction kinetics
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- 472 Patterning materials through viscoelastic flow and phase separation
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- 466 Smart multifunctional hollow microspheres for the quick release of drugs in intracellular lysosomal compartments
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- article entitled “The dose makes the poison”).
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- 451 Synthesis of Pd-Pt bimetallic nanocrystals with a concave structure through a bromide-induced galvanic replacement reaction
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