TERI W. ODOM

Department of Chemistry
Northwestern University
2145 Sheridan Road
Evanston, IL 60208-3113

847-491-7674 (phone)
todom@northwestern.edu
www.odomgroup.northwestern.edu

EDUCATION AND TRAINING

2018 –	Chair, Department of Chemistry
2015 –	Charles E. and Emma H. Morrison Professor of Chemistry, Northwestern University
2016 – 2018	Associate Director, International Institute for Nanotechnology, Northwestern University
2011 – 2015	Board of Lady Managers of the Columbian Exposition Professor of Chemistry, Northwestern University
2011 –	Professor of Materials Science and Engineering, Northwestern University
2008 – 2010	Dow Chemical Company Research Professor, Northwestern University
2007 – 2011	Associate Professor of Chemistry, Northwestern University
2007 – 2011	Associate Professor of Materials Science and Engineering, Northwestern University
2002 – 2007	Assistant Professor of Chemistry, Northwestern University
2001	Postdoctoral Fellow, Harvard University
2001	Ph.D. Chemical Physics, Harvard University
1996	B.S. Chemistry, Stanford University

MAJOR PROFESSIONAL INTERESTS

Nanoscience; plasmonics and nanophotonics; optical properties of nanomaterials; imaging; large-area nanofabrication; materials chemistry; cancer therapeutics

HONORS AND AWARDS

2019	Optical Society of America (OSA) Fellow
2018	American Physical Society (APS) Fellow
2018	OSA Senior Member Designation
2018	Research Corporation for Science Advancement (RCSA) Cottrell Scholar TREE Award
2017	ACS Nano Lectureship Award (The Americas)
2017	Vannevar Bush Faculty Fellowship Award (Department of Defense)
2017 – 2018	Associated Student Government (ASG) Faculty Honor Roll (Weinberg, Chemistry)
2016	Fellow of the American Chemical Society (ACSF)
2016	Materials Research Society (MRS) Fellow
2016	Blavatnik National Award for Young Scientists, Finalist (Chemistry)
2016 – 2017	Associated Student Government (ASG) Faculty Honor Roll (Weinberg, Chemistry)
2014	Fellow of the Royal Society of Chemistry (FRSC)
2014	Blavatnik National Award for Young Scientists, Finalist (Physical Sciences / Engineering)
2014	Public Voices Fellowship, Northwestern University
2014	International Precious Metals Institute (IPMI) Carol Tyler Award
2013	Dalton Lecture Award
2011	Radcliffe Institute for Advanced Study Fellowship, Hrdy Fellow, Harvard University
2011	American Chemical Society (ACS) Akron Section Award

2010 Defense Science Study Group (DSSG) Member
2009 MRS Outstanding Young Investigator Award
2008 National Fresenius Award (Phi Lambda Upsilon and ACS)
2008 National Institutes of Health (NIH) Director's Pioneer Award
2007 Rohm and Haas New Faculty Award
2006 Exxon-Mobil Solid State Chemistry Faculty Fellowship (ACS Inorganic)
2005 Cottrell Scholar Award (Research Corporation)
2005 DuPont Young Investigator
2005 Alfred P. Sloan Research Fellowship
2004 TR100 MIT Technology Review Award for "one of world's top young innovators"
2004 NSF Nanotechnology Undergraduate Education (NUE) Award
2004 NSF CAREER Award
2003 David and Lucile Packard Fellowship
2003 Searle Fellow
2003 Hewlett Funding for Undergraduate Innovation in Teaching
2002 Research Innovation Award (Research Corporation)
2002 Dow Teacher-Scholar Award

Postdoctoral Awards and Honors

2003 Victor K. LaMer Award (ACS Colloids and Surface Chemistry), Harvard University
2001 NIH NRSA Postdoctoral Fellowship, Harvard University
2001 IUPAC Prize for Young Chemists (international thesis prize), Harvard University

Predoctoral Awards and Fellowships

1999 White Prize for Excellence in Undergraduate Physics Teaching, Harvard University
1996 - 1999 NSF Predoctoral Fellowship, Harvard University
1996 Karplus Award for Chemical Physics, Harvard University
1996 S.S & I.M.F. Marsden Memorial Prize for Chemistry Research, Stanford University
1996 Phi Beta Kappa, Stanford University

PUBLICATIONS

Northwestern Publications (Reverse Order)

166. Lee, W.K.; Odom, T.W. "Designing Hierarchical Nanostructures from Conformable and Deformable Thin Materials," *ACS Nano* **2019**, accepted.

165. Lin, Y.; Wang, D.; Hu, J.; Liu, J.; Wang, W.; Schaller, R.D.; Odom, T.W. "Engineering Symmetry-breaking Nanocrescent Arrays for Nanolasing," *submitted*.

164. Wang, W.; Watkins, N.; Yang, A.; Schaller, R.D.; Schatz, G.C.; Odom, T.W. "Ultrafast Dynamics of Lattice Plasmon Lasers," *J. Phys. Chem. Lett*. **2019**, accepted.

163. Pallares, R.M.; Cole, L.E.; Mirkin, C.A.; Lee, A.; Odom, T.W. "Manipulating Immune Activation of Macrophages by Tuning the Oligonucleotide Composition of Gold Nanoparticles," *Bioconjugate Chem., submitted*.

162. Fernandez-Bravo, A.; Wang, D.; Barnard, E.S.; Teitelboim, A.; Tajon, C.; Guan, J.; Schatz, G.C.; Cohen, B.E.; Chan, E.M.; Schuck, P.J.; Odom, T.W. "Ultralow-threshold, Continuous-wave Upconverting Lasing from Subwavelength Plasmons," *submitted*.

161. Deng, S.; Rhee, D.; Lee, W.-K.; Che, S.; Keisham, B.; Berry, V.; Odom, T.W. "Graphene Wrinkles enable Spatially-defined Chemistry," *submitted*.

160. Li, R.; Wang, D.; Guan, J.; Wang, W.; Ao, Xianyu; Schatz, G.C.; Schaller, R.; Odom, T.W. "Plasmon Nanolasing with Aluminum Nanoparticle Arrays," *JOSA B*, *submitted*.

159. Knudson, M.; Li, R.; Wang, D.; Wang, W.; Schaller, R.D.; Odom, T.W. "Polarization-Dependent Lasing Behavior from Low-Symmetry Nanocavity Arrays," *ACS Nano* **2019**, *13*, 4613-4620. DOI: 10.1021/acsnano.9b01142

158. Hu, J.; Wang, D.; Bhowmik, D.; Liu, T.; Deng, S.; Knudson, M.; Ao, X.; Odom, T.W. "Lattice-Resonance Metalenses for Fully Reconfigurable Imaging," *ACS Nano* **2019**, DOI: 10.1021/acsnano.9b00651 [**Highlighted** by Northwestern]

157. Hua, Y.; Fumani, A.; Odom, T.W. "Tunable Lattice Plasmon Resonances in 1D Nanogratings," *ACS Photonics* **2019**, *6*, 332-326. DOI: 10.1021/acsphotonics.8b01541

156. Liu, J.; Wang, W.; Wang, D.; Hu, J.; Ding, W.; Schaller, R.D.; Schatz, G.C.; Odom, T.W. "Spatially Defined Molecular Emitters Coupled to Plasmonic Nanoparticles," *PNAS* **2019**, *116*, 5925-5930. DOI: 10.1073/pnas.1818902116

155. Eller, M.; Chandra, K.; Coughlin, E.; Odom, T.W.; Schweikert, E. "Label Free Particle-by-Particle Quantification of DNA-Loading on Sorted Gold Nanostars," *Anal. Chem* **2019**, *91*, 5566-5572. DOI: 10.1021/acs.analchem.8b03715

154. Hooper, D.; Kuppe, C.; Wang, D.; Wang, W.; Guan, J.; Odom, T.W.; Valev, V. "Second Harmonic Spectroscopy of Surface Lattice Resonances," *Nano Lett.* **2019**, *19*, 165–172. DOI: 10.1021/acs.nanolett.8b03574

153. Xue, Y.; Lee, W.-K.; Yuan, J; Odom, T.W.; Huang, Y. "Mechanics Modelling of Hierarchical Wrinkle Structures from Sequential Release of Pre-strain," *Langmuir* **2018**, *34*, 15749-15753. DOI: 10.1021/acs.langmuir.8b03498

152. Choo, P.; Hryn, A.; Culver, K.; Bhowmik, D.; Odom, T.W. "Wavelength-Dependent Differential Interference Contrast Inversion of Anisotropic Gold Nanoparticles," *J. Phys. Chem. C* **2018**, *122*, 27024-27031. DOI: 10.1021/acs.jpcc.8b08995

151. Wang, D.; Bourgeois, M.R.; Lee, W.-K.; Li, R.; Wang, W.; Trivedi, D.; Knudson, M.; Schatz, G.C.; Odom, T.W. "Stretchable Nanolasing from Hybrid Quadrupole Plasmons," *Nano Lett.* **2018**, *18*, 4549-4555. DOI: 10.1021/acs.nanolett.8b01774 [**Highlighted** by Northwestern, physicsworld.org, electronicsweekly.com, business-standard.com, WTTW, Optics and Photonics, C&E News, others]

150. Yue, J.; Pallares, R.; Cole, L.; Coughlin, E.; Mirkin, C.A.; Lee, A.; Odom, T.W. "Smaller CpG-conjugated Gold Nanoconstructs Achieve Higher Targeting Specificity of Immune Activation," *ACS Appl. Mater. Int.* **2018**, *10*, 21920-21926. DOI: 10.1021/acsami.8b06633

149. Lee, W-K.; Jung, W.-B.; Rhee, D.; Hu, J.; Lee, Y.-A.; Jacobson, C.; Jung, H.-T.; Odom, T.W. "Monolithic Polymer Nanoridges with Programmable Wetting Transitions," *Adv. Mater.* **2018**, *30*, 1706657. DOI: 10.1002/adma.201706657

148. Culver, K.S.B.; Liu, T.; Hryn, A.J.; Fang, N.; Odom, T.W. "In Situ Identification of Nanoparticle Structural Information Using Optical Microscopy," *J. Phys. Chem. Lett* **2018**, *9*, 2886-2892. DOI: 10.1021/acs.jpclett.8b01191

147. Stockman, M.I.; Kneipp, K.; Bozhevolnyi, S.I.; Saha, S.; Dutta, A.; Ndukaife, J.; Kinsey, N.; Reddy, H.; Guler, U.; Shalaev, V.M.; Boltasseva, A.; Gholipour, B.; Krishnamoorthy, H.N.S.;

MacDonald, K.F.; Soci, C.; Zheludev, N.I.; Savinov, V.; Singh, R.; Groß, P.; Lienau, C.; Vadai, M.; Solomon, M.L.; Barton III, D.R.; Lawrence, M.; Dionne, J.A.; Boriskina, S.V.; Esteban, R.; Aizpurua, J.; Zhang, X.; Yang, S.; Wang, D.; Wang, W.; Odom, T.W.; Accanto, N.; de Roque, P.M.; Hancu, I.M.; Piatkowski, L.; van Hulst, N.F.; Kling, M.F. "Roadmap on plasmonics," *J. Optics* **2018**, *20*, 043001. DOI: 10.1088/2040-8986/aaa114

146. Chandra, K.; Rugg, B.; Ratner, M.A.; Wasielewski, M.R.; Odom, T.W. "Detecting and Visualizing Reaction Intermediates of Anisotropic Nanoparticle Growth," *JACS* **2018**, *140*, 3219–3222. DOI: 10.1021/jacs.8b00124

145. Deeb, C.; Guo, Z.; Yang, A.; Huang, L.; Odom, T.W. "Correlating Nanoscopic Energy Transfer and Far-Field Emission to Unravel Lasing Dynamics in Plasmonic Nanocavity Arrays," *Nano Lett.* **2018**, *18*, 1454-1459. DOI: 10.1021/acs.nanolett.7b05223

144. Jung, W.-B.; Lee, W-K; Cho, K.M.; Odom, T.W.; Jung, H.-T. "Universal Method for Creating Hierarchical Wrinkles on Thin-film Surfaces," *ACS App. Mater. Inter.* **2017**, *10*, 1347-1355. DOI: 10.1021/acsami.7b14011

143. Trivedi, D.; Wang, D.; Odom, T.W.; Schatz, G.C. "Model for Describing Plasmonic Nanolasers using Maxwell-Liouville Equations with Finite-Difference Time-Domain Calculations," *Phys. Rev. A* **2017**, 96, 053825. DOI: 10.1103/PhysRevA.96.053825

142. Wang, W.; Ramezani, M.; Vakevainen, A.I.; Torma, P.; Gomez Rivas, J.; Odom, T.W. "The Rich Photonic World of Plasmonic Nanoparticle Arrays," *Materials Today* **2018**, *21*, 303. DOI: 10.1016/j.mattod.2017.09.002

141. Wang, D.; Wang, W.; Knudson, M.; Schatz, G.C.; Odom, T.W. "Structural Engineering in Plasmon Nanolasers," *Chemical Reviews* **2018**, *118*, 2865. DOI: 10.1021/acs.chemrev.7b00424. Accompanying ACS LiveSlides™ presentation by D. Wang.

140. Hoang, T.B.; Akselrod, G.M.; Yang, A.; Odom, T.W.; Mikkelsen, M.H. "Millimeter-scale Spatial Coherence from a Plasmon Laser," *Nano Lett.* **2017**, *17*, 6690-6695. DOI: 10.1021/acs.nanolett.7b02677

139. Knudson, M.; Hryn, A.; Huntington, M.D.; Odom, T.W. "Sequential Feature-Density Doubling for Ultraviolet Plasmonics," *ACS Appl. Mater. Interfaces* **2017**, *9*, 33554-33558. DOI: 10.1021/acsami.7b10842 [**ACS Editor's Choice**]

138. Chandra, K.; Kumar, V.; Werner, S.; Odom, T.W. "Separation of Stabilized MOPS Gold Nanostars by Density Gradient Centrifugation," *ACS Omega* **2017**, *2*, 4878-4884. DOI: 10.1021/acsomega.7b00871

137. Lee, W-K; Yu, S.; Engel, C.J.; Rhee, D.; Chen, W.; Odom, T.W. "Concurrent Design of Quasi-Random Photonic Nanostructures," *PNAS* **2017**, *114*, 8734-8739. DOI: 10.1073/pnas.1704711114

136. Paul, A.; Stührenberg, M.; Chen, S.; Rhee, D.; Lee, W-K; Odom, T.W.; Heilshorn, S.; Enejder, A. "Micro- and Nano-patterned Elastin-like Polypeptide Hydrogels for Stem Cell Culture," *Soft Matter* **2017**, *13*, 5665-5675. DOI: 10.1039/C7SM00487G

135. Wang, D.; Yang, A.; Wang, W.; Hua, Y; Schaller, R.D.; Schatz, G.C.; Odom, T.W. "Band-edge Engineering for Multi-Modal Nanolasing in Plasmonic Superlattices," *Nature Nanotech.* **2017**, *12*, 889-894. DOI: 10.1038/nnano.2017.126 [**Highlighted** by German news pro-physik.com, Northwestern, nanowerk.com, AZO Optics, and *Nature Nanotechnology*'s News and Views]

134. Yue, J.; Feliciano, T.J.; Li, W.; Lee, A.; Odom, T.W. "Gold Nanoparticle Size and Shape Effects on Cellular Uptake and Intracellular Distribution of siRNA Nanoconstructs," *Bioconjugate Chem.* **2017**, *28*, 1791-1800. DOI: 10.1021/acs.bioconjchem.7b00252

133. Yu, S.; Zhang, Y.; Wang, C.; Lee, W-K; Dong, B.; Odom, T.W.; Sun, C.; Chen, W. "Characterization and Design of Functional Quasi-Random Nanostructured Materials Using Spectral Density Function," *J. Mech. Design* **2017**, *139*, 071401-1-12. DOI: 10.1115/1.4036582

132. Rhee, D.; Lee, W-K; Odom, T.W. "Crack-free, Soft Wrinkles Enable Switchable Anisotropic Wetting," *Angew. Chemie* **2017**, *129*, 6623-6627. DOI: 10.1002/anie.201701968

131. Yang, A.; Wang, D.; Wang, W.; Odom, T.W. "Coherent Light Sources at the Nanoscale," *Annual Reviews of Physical Chemistry* **2017**, *68*, 83-99. DOI: 10.1146/annurev-physchem-052516-050730

130. Tran, T.; Wang, D.; Xu, Z.; Toth, M.; Yang, A.; Odom, T.W.; Aharonovich, I. "Deterministic Coupling of Quantum Emitters in 2D Materials to Plasmonic Nanocavity Arrays," *Nano Lett.* **2017**, *17*, 2634-2639. DOI: 10.1021/acs.nanolett.7b00444

129. Paci, J.; Lee, W-K; Chapman, C.; Odom, T.W.; Schatz, G.C. "Wrinkles in Polytetrafluoroethylene on Polystyrene: Persistence Lengths and the Effect of Nanoinclusions," *Appl. Mater. Interfaces* **2017**, *9*, 9079–9088. DOI: 10.1021/acsami.6b14789

128. Hu, J.; Ren, X.; Reed, A.N.; Reese, T.; Rhee, D.; Howe, B.; Lauhon, L.J.; Urbas, A.M.; Odom, T.W. "Evolutionary Design and Prototyping of Single Crystalline Titanium Nitride Lattice Optics," *ACS Photonics* **2017**, *4*, 606-612. DOI:10.1021/acsphotonics.6b00955 [**Highlighted** by nanowerk.com] [**Cover**]

127. Yang, A.; Hryn, A.; Bourgeois, M.R.; Lee, W-K; Hu, J.; Schatz, G.C.; Odom, T.W. "Programmable and Reversible Plasmon Mode Engineering," *PNAS* **2016**, *113*, 14201-14206. DOI: 10.1073/pnas.1615281113 [**Highlighted** by nanowerk.com and nanotechweb.org]

126. Hu, J.; Liu, C.H.; Ren, X.; Lauhon, L.J.; Odom, T.W. "Plasmonic Lattice Lenses for Multi-Wavelength Achromatic Focusing," *ACS Nano* **2016**, *10*, 10275. DOI: 10.1021/acsnano.6b05855 [**Highlighted** by nanowerk.com]

125. Lee, W-K; Kang, J.; Chen, K.-S.; Engel, C.; Jung, W.B.; Rhee, D.; Hersam, M.C.; Odom, T.W. "Multiscale, Hierarchical Patterning of Graphene by Conformal Wrinkling," *Nano Lett.* **2016**, *16*, 7121. DOI: 10.1021/acs.nanolett.6b03415

124. Culver, K.S.B.; Shin, Y.J.; Rotz, M.; Meade, T.J.; Hersam, M.C.; Odom, T.W. "Shape-dependent Relaxivity of Nanoparticle-based T_1 Magnetic Resonance Imaging Contrast Agents," *J. Phys. Chem. C* **2016**, *120*, 22103. DOI: 10.1021/acs.jpcc.6b08362

123. Chandra, K.; Culver, K.S.B.; Werner, S.; Lee, R.; Odom, T.W. "Manipulating the Anisotropic Structure of Gold Nanostars using Good's Buffers," *Chem. Mater.* **2016**, *28*, 6763. DOI: 10.1021/acs.chemmater.6b03242

122. Chapman, C.M.; Paci, J.T.; Engel, C.J.; Lee, W-K; Odom, T.W.; Schatz, G.C. "Interfacial Effects on Nanoscale Wrinkling in Gold-Covered Polystyrene," *ACS Appl. Mater. Interfaces* **2016**, *8*, 24339. DOI: 10.1021/acsami.6b08554

121. Lee, W-K; Jung, W.-B.; Nagel, S.; Odom, T.W. "Stretchable Superhydrophobicity from Monolithic, Three-Dimensional Hierarchical Wrinkles," *Nano Letters* **2016**, *16*, 3774. DOI: 10.1021/acs.nanolett.6b01169 [**Highlighted** by nanowerk.com]

120. Wang, D.; Yang, A.; Hryn, A.; Schatz, G.C.; Odom, T.W. "Superlattice Plasmons in Hierarchical Au Nanoparticle Arrays," *ACS Photonics* **2015**, *2*, 1789. DOI: 10.1021/acsphotonics.5b00546

119. Hua, Y.; Chandra, K.; Dam, D.H.M.; Wiedderecht, G.P.; Odom, T.W. "Shape-dependent Nonlinear Optical Properties of Anisotropic Gold Nanoparticles," *J. Phys. Chem. Lett* **2015**, *6*, 4904. DOI: 10.1021/acs.jpclett.5b02263

118. Yang, A.; Li, Z.; Knudson, M.P.; Hryn, A.J.; Wang, W.; Aydin, K.; Odom, T.W. "Unidirectional Lasing from Template-stripped Two-dimensional Plasmonic Crystals," *ACS Nano* **2015**, *9*, 11582. DOI: 10.1021/acsnano.5b05419 [**ACS Editor's Choice Article**]

117. Lee, H.; Dam, D.H.M.; Ha, J.; Odom, T.W. "Enhanced Human Epidermal Growth Factor Receptor 2 Degradation in Breast Cancer Cells by Lysosome-Targeting Gold Nanoconstructs," *ACS Nano* **2015**, *9*, 9859. DOI: 10.1021/acsnano.5b05138

116. Lee, W-K; Engel, C.J.; Huntington, M.D.; Hu, J.; Odom, T.W. "Controlled Three-Dimensional Hierarchical Structuring by Memory-Based, Sequential Wrinkling," *Nano Letters* **2015**, *15*, 5624. DOI: 10.1021/acs.nanolett.5b02394 [**Highlighted by** Science, nanowerk.com]

115. Odom, T.W.; Dickson, R.M.; Duncan, M.A.; Tan, W. "Shining a Light on the Molecular and Nanoscopic Worlds," *ACS Photonics* **2015**, *2*, 787. DOI: 10.1021/acsphotonics.5b00337

114. Yang, A.; Odom, T.W. "Breakthroughs in Photonics 2014: Advances in Plasmonic Nanolasers," *IEEE Photonics Journal* **2015**, *7*, 0700606. DOI: 10.1109/JPHOT.2015.2413773

113. Yang, A.; Hoang, T.B.; Dridi, M.; Deeb, C.; Mikkelsen, M.H.; Schatz, G.C.; Odom, T.W. "Real-time Tunable Lasing from Plasmonic Nanocavity Arrays," *Nature Communications*, **2015**, *6*, 6939. DOI: 10.1038/ncomms7939. [**Highlighted in** nanowerk.com, physicsworld.com, **Northwestern News** (liquid nanolasers)]

112. Rotz, M.W.; Culver, K.S.B.; Parigi, G.; MacRenaris, K.W.; Luchinat, C.; Odom, T.W.; Meade, T.J. "High Relaxivity Gd(III)-DNA Gold Nanostars: Investigation of Shape Effects on Proton Relaxation," *ACS Nano* **2015**, *9*, 3385. DOI: 10.1021/nn5070953 [**Cover Image**]

111. Dam, D.H.M.; Lee, R.C.; Lee, H.; Odom, T.W. "Tunable Loading of Oligonucleotides with Secondary Structure on Gold Nanoparticles through a pH-driven Method," *Bioconjugate Chemistry* **2015**, *26*, 279. DOI: 10.1021/bc500562s.

110. Lee, H.; Odom, T.W. "Controlling Ligand Density on Nanoparticles as a means to Enhance Biological Activity," *Nanomedicine* **2015**, *10*, 177. DOI: 10.2217/nnm.14.204.

109. Dam, D.H.M.; Culver, K.S.B; Kandela, I.; Lee, R.C.; Chandra, K.; Lee, H.; Mantis, C.; Ugolkov, A.; Mazar, A.P.; Odom, T.W. "Biodistribution and in Vivo Toxicity of Aptamer-Loaded Gold Nanostars," *Nanomedicine: Nanotechnology, Biology, and Medicine* **2015**, *11*, 671. DOI: 10.1016/j.nano.2014.10.005. NIHMS 643436.

108. Huntington, M.D.; Lauhon, L.J.; Odom, T.W. "Subwavelength Lattice Optics by Evolutionary Design," *Nano Lett.* **2014**, *14*, 7195. DOI: 10.1021/nl5040573 [PMCID: PMC4264853] [**Highlighted by** Women in Nanoscience Blog, MRS Bulletin, Materials Today, nanotechweb.org]

107. Huntington, M.D.; Engel, C.J.; Odom, T.W. "Controlling the Orientation of Nanowrinkles and Nanofolds by Patterning Strain in a Thin Skin Layer on a Polymer Substrate," *Angew. Chemie* **2014**, *53*, 8117. DOI: 10.1002/anie.201404483

106. Yang, A.; Huntington, M.D.; Cardinal, M.F.; Masango, S.; Van Duyne, R.P.; Odom, T.W. "Hetero-oligomer Nanoparticle Arrays for Plasmon-Enhanced Hydrogen Sensing," *ACS Nano* **2014**, *8*, 7639. DOI: 10.1021/nn502502r [**Highlighted** in Nanotechweb.org]

105. Dam, D.H.M.; Culver, K.B.; Odom, T.W. "Improved in Vitro Efficacy of Gold Nanoconstructs by Increased Loading of G-quadruplex Aptamer," *Nano Lett.* **2014**, *14*, 2843. DOI: 10.1021/nl500844m [PMCID: PMC4023846] [**Highlighted in** nanowerk.com and nanotechweb.org]

104. Li, S.; Guo, P.; Buchholz, D.B.; Zhou, W.; Hua, Y.; Odom, T.W.; Ketterson, J.B.; Ocola, L.E., Sakoda, K. Chang, R.P.H. "Plasmonic–Photonic Mode Coupling in Indium-Tin-Oxide Nanorod Arrays," *ACS Photonics* **2014**, *1*, 163. DOI: 10.1021/ph400038g

103. Dam, D.H.M.; Culver, K.B.; Odom, T.W. "Grafting Aptamers onto Gold Nanostars increases in vitro Efficacy in a Wide Range of Cancer Cell Types," *Mol. Pharmaceutics* **2014**, *11*, 580. DOI: 10.1021/mp4005657 [PMCID: PMC3974612]

102. Hod, I.; Bury, W.; Karlin, D.M.; Deria, P.; Kung, C.; Katz, M.J.; So, M.; Klahr, B.; Jin, D.; Chung, Y.; Odom, T.W.; Farha, O.K.; Hupp, J.T. "Directed Growth of Electroactive Metal Organic Framework Thin Films Using Electrophoretic Deposition," *Adv. Mater.* **2014**, *26*, 6295. DOI: 10.1002/adma.201401940

101. Lubin, S.M.; Hryn, A.; Huntington, M.D.; Engel, C.J.; Odom, T.W. "Quasiperiodic Moiré Plasmonic Crystals," *ACS Nano* **2013**, *8*, 11035. DOI: 10.1021/nn404703z

100. Suh, J.Y.; Odom, T.W. "Nonlinear Properties of Nanoscale Antennas," *Nano Today* **2013**, *8*, 469. DOI: 10.1016/j.nantod.2013.08.010

99. Zhou, W.; Dridi, M.; Suh, J.Y.; Kim, C.H.; Co, D.T.; Wasielewski, M.R.; Schatz, G.C.; Odom, T.W. "Lasing Action in Strongly Coupled Plasmonic Nanocavity Arrays," *Nature Nanotech.* **2013**, *8*, 506. DOI: 10.1038/nnano.2013.99 [**Highlighted in News and Views** *Nature Nanotech.* **2013**, *8*, 479 and nanotechweb.org]

98. Huntington, M.D.; Engel, C.J.; Hryn, A.; Odom, T.W. "Polymer Nanowrinkles with Continuously Tunable Wavelengths," *Appl. Materials and Interfaces* **2013**, *5*, 6438. DOI: 10.1021/am402166d

97. Odom, T.W. "Materials science: The same, but better." *Nature* **2013**, *496*, 40. DOI: 10.1038/496040a

96. Lin, J.; Stuparu, A.; Huntington, M.D.; Mrksich, M.; Odom, T.W. "Nanopatterned Substrates increase Surface Sensitivity for Real-time Biosensing," *J. Phys. Chem. C* **2013**, *117*, 5286. DOI: 10.1021/jp401598a

95. Dam, D.H.M.; Culver, K.B.; Sisco, P.N.; Odom, T.W. "Shining Light on Nuclear-targeted Therapy using Gold Nanostar Constructs," *Therapeutic Delivery* (Spotlight) **2012**, *3*, 1263. DOI: 10.4155/tde.12.107 [PMCID: PMC3632341]

94. Suh, J.Y.; Kim, C.H.; Zhou, W.; Huntington, M.D.; Co, D.T.; Wasielewski, M.R.; Odom, T.W. "Plasmonic Bowtie Nanolaser Arrays," *Nano Lett.* **2012**, *12*, 5769. DOI: 10.1021/nl303086r. [**Highlighted in Northwestern University News** (laser the size of a virus particle) and other media sources]

93. Blaber, M.G.; Engel, C.J.; Vivekchand, S.R.C.; Lubin, S.M.; Odom, T.W.; Schatz, G.C. "Eutectic Liquid Alloys for Plasmonics: Theory and Experiment," *Nano Lett.* **2012**, *12*, 5275. DOI: 10.1021/nl3025104

92. Zhou, W.; Suh, J.Y.; Hua, Y.; Odom, T.W. "Hybridization of Localized and Guided Modes in 2D Metal-Insulator-Metal Nanocavity Arrays," *J. Phys. Chem. C* **2013**, *117*, 2541. DOI: 10.1021/jp306972j

91. Odom, T.W.; You, E.; Sweeney, C.M. "Multi-scale Plasmonic Nanoparticles and the Inverse Problem," *J. Phys. Chem. Lett.* **2012**, *3*, 2611. DOI: 10.1021/jz300886z [PMCID: PMC3467152] [**Invited Perspective**]. [**Cover Article**].

90. Lubin, S.M.; Zhou, W.; Hryn, A.J.; Huntington, M.D.; Odom, T.W. "High Rotational Symmetry Lattices Fabricated by Moiré Nanolithography," *Nano Lett.* **2012**, *12*, 4948. DOI: 10.1021/nl302535p [**Highlighted** in NanotechWeb.org].

89. Odom, T.W. "Colours at the Nanoscale: Printable Stained Glass," *Nature Nanotech.* **2012**, *7*, 550. DOI: 10.1038/nnano.2012.135

88. Vivekchand, S.R.C.; Engel, C.J.; Lubin, S.M.; Blaber, M.G.; Zhou, W.; Suh, J.Y.; Schatz, G.C.; Odom, T.W. "Liquid Plasmonics: Manipulating Surface Plasmon Polaritons via Phase Transitions," *Nano Lett.* **2012**, *12*, 4324. DOI: 10.1021/nl302053g [**Highlighted in** Chemistry World]

87. Hua, Y.; Zhou, W.; Suh, J.Y.; Huntington, M.D.; Odom, T.W. "The Talbot Effect Beyond the Paraxial Limit at Optical Frequencies," *Opt. Express.* **2012**, *20*, 14284. DOI: 10.1364/OE.20.014284 [PMCID: PMC3482921]

86. Zhou, W.; Hua, Y.; Huntington, M.D.; Odom, T.W. "Delocalized Lattice Plasmon Resonances Show Dispersive Quality Factors," *J. Phys. Chem. Lett.* **2012**, *3*, 1381. DOI: 10.1021/jz300318v

85. Dam, D.H.M.; Lee, J.; Sisco, P.; Co, D.; Zhang, M.; Wasielewski, M.R.; Odom, T.W. "Direct Observation of Nanoparticle-Cancer Cell Nucleus Interactions," *ACS Nano* **2012**, *6*, 3318. DOI: 10.1021/nn300296p [PMCID: PMC3337354]. [**Highlighted in C&E News**, 2 April 2012, *90*, 25, and **Northwestern University News** (tiny hitchhikers)]

84. Odom, T.W.; Huntington, M.D. "Benchtop Photolithography Tool offers a Low-cost Route to Nanomanufacturing," *SPIE Newsroom* **2012**, 28 February 2012, DOI: 10.1117/2.1201202.004132.

83. Kichin, G.; Weiss, T.; Gao, H.; Henzie, J.; Odom, T.W.; Tikhodeev, S.G.; Giessen, H. "Metal-dielectric Photonic Crystal Superlattice: 1D and 2D Models and Empty Lattice Approximation," *Physica B: Condensed Matter* **2012**, *407*, 4037. DOI: 10.1016/j.physb.2012.01.128.

82. You, E.; Zhou, W.; Suh, J.Y.; Huntington, M.D. "Polarization-Dependent Multipolar Plasmon Resonances in Anisotropic Multiscale Au Particles," *ACS Nano* **2012**, *6*, 1786. DOI: 10.1021/nn204845z [PMCID: PMC3289737]

81. Suh, J.Y.; Huntington, M.D.; Kim, C.-H.; Zhou, W.; Wasielewski, M.R.; Odom, T.W. "Extraordinary Nonlinear Absorption in 3D Bowtie Nanoantennas," *Nano Lett.* **2012**, *12*, 269. DOI: 10.1021/nl2034915 [PMCID: PMC3256284]

80. Li, S. Q.; Guo, P.; Zhang, L.; Zhou, W.; Odom, T.W.; Seideman, T.; Ketterson, J.B.; Chang, R.P.H. "Infrared Plasmonics with Indium-Tin-Oxide Nanorod Arrays," *ACS Nano* **2011**, *5*, 9161. DOI: 10.1021/nn203406f

79. Huntington, M.D.; Odom, T.W. "A Portable, Benchtop Photolithography System based on a ¬Solid State Light Source," *Small* **2011**, *7*, 3144. DOI: 10.1002/smll.201101209 [**Cover Article**]

78. Sweeney, C.M.; Nehl, C.; Hasan, W.; Liang, T.; Eckermann, A.; Meade, T.J.; Odom, T.W. "A Three-Channel Spectrometer for Wide-Field Imaging of Anisotropic Plasmonic Nanoparticles," *J. Phys. Chem. C* **2011**, *115*, 15933. DOI: 10.1021/jp206157v [PMCID: PMC3171732]

77. Odom, T.W.; Schatz, G.C. "Introduction to Plasmonics," *Chem. Rev.* **2011**, *111*, 3667. DOI: 10.1021/cr2001349

76. Sweeney, C.M.; Stender, C.L.; Nehl, C.; Hasan, W.; Shuford, K.L.; Odom, T.W. "Optical Properties of Tipless Gold Nanopyramids," *Small* **2011**, *7,* 2032. DOI: 10.1002/smll.201100758 [PMCID: PMC3632636]

75. Zhou, W.; Odom, T.W. "Tunable Subradiant Lattice Plasmons by Out-of-Plane Dipolar Interactions," *Nature Nanotech* **2011** *6*, 423. DOI: 10.1038/nnano.2011.72

74. Stoerzinger, K.A.; Lin, J.Y.; Odom, T.W. "Nanoparticle SERS Substrates with 3D Raman-Active Volumes," *Chemical Science* **2011**, *2*, 1435. DOI: 10.1039/C1SC00125F

73. Chia, M.; Sweeney, C.M.; Odom, T.W. "Chemistry in Microfluidic Channels," *J. Chem. Educ.* **2011**, *88* 461. DOI: 10.1021/ed1008624 [**Cover Article** in April 2011.]

72. Gao, H.; Lee, M.H.; Hyun, J.K.; Yang, J.-C.; Lauhon, L.J.; Odom, T.W. "Broadband Plasmonic Microlenses based on Nanoholes in Arbitrary Lattices," *Nano Lett.* **2010**, *10*, 4111. DOI: 10.1021/nl1022892 [PMCID: PMC2955180] [**Highlighted in** nanotechweb.org].

71. Lee, M.H.; Huntington, M.D.; Zhou, W.; Yang, J.-C.; Odom, T.W. "Programmable Soft Lithography: Solvent-Assisted Nanoscale Embossing," *Nano Lett.* **2011**, *11*, 311. DOI: 10.1021/nl102206x [**Highlighted in C&E News**, 16 August 2010, *88*, 41. and **Northwestern University News** (shrink dinks nanopatterning)] [**Cover Article** in *Nano Lett.* February 2011]

70. Yang, J.-C.; Gao, H.; Suh, J.Y.; Zhou, W.; Lee, M.H.; Odom, T.W. "Enhanced Optical Transmission Mediated by Localized Plasmons in Anisotropic, 3D Nanohole Arrays," *Nano Lett.* **2010**, *10*, 3173. DOI: 10.1021/nl102078j [PMCID: PMC2921222] [**Highlighted in** nanotechweb.org].

69. Gao, H.; Yang, J.-C.; Lin, J.Y.; Stuparu, A.; Lee, M.H.; Mrksich, M.; Odom, T.W. "Using the Angle-Dependent Resonances of Molded Plasmonic Crystals to Improve the Sensitivities of Biosensors," *Nano Lett.* **2010**, *10*, 2549. DOI: 10.1021/nl101165r [**Highlighted in** nanotechweb.org].

68. Lee, M.H.; Lin, J.Y.; Odom, T.W. "Large-area Nanocontact Printing using Nanostencil Masks," *Angew. Chemie* **2010**, *49*, 3057. DOI: 10.1002/anie.200906800

67. Li, P.; Stender, C.L.; Ringe, E.; Marks, L.D.; Odom, T.W. "Synthesis of TaS_2 Nanotubes from Ta_2O_5 Nanotube Templates," *Small* **2010**, *6*, 1096. DOI: 10.1002/smll.201000226

66. Stoerzinger, K.A.; Hasan, W.; Lin, J.Y.; Robles, A.; Odom, T.W. "Screening Nanopyramid Assemblies to Optimize Surface Enhanced Raman Scattering," *J. Phys. Chem. Lett.* **2010**, *1*, 1046. DOI: 10.1021/jz100095b

65. Zhou, W.; Gao, H.; Odom, T.W. "Toward Broadband Plasmonics: Tuning Dispersion in Rhombic Plasmonic Crystals," *ACS Nano* **2010**, *4*, 1241. DOI: 10.1021/nn901590p [**Highlighted in** nanotechweb.org].

64. Lin, J.; Hasan, W.; Yang, J.-C.; Odom, T.W. "Optical Properties of Nested Pyramidal Nanoshells," *J. Phys. Chem. C* **2010**, *114*, 7432. DOI: 10.1021/jp910627r [PMCID: PMC2812899].

63. Odom, T.W. "Materials Screening and Applications of Plasmonic Crystals," *MRS Bulletin*, **2010**, *35*, 66.

62. Gao, H.; Zhou, W.; Odom, T.W. "Plasmonic Crystals: A Platform to Catalog Resonances from Ultraviolet to Near-infrared Wavelengths in a Plasmonic Library," *Adv. Func. Mater.* **2010**, *20*, 523. DOI: 10.1002/adfm.200901623. [**Inside Cover**]

61. Odom, T.W.; Gao, H.; McMahon, J.M.; Henzie, J.; Schatz, G.C. "Plasmonic Superlattices: Hierarchical Subwavelength Hole Arrays," *Chem. Phys. Lett.* **2009**, *483*, 187. DOI: 10.1016/j.cplett.2009.10.084 [**Cover Article**].

60. You, E.; Ahn, R.; Lee, M.H.; Raja, M.R.; O'Halloran, T.; Odom, T.W. "Size Control of Arsenic Trioxide Nanocrystals Grown in Nanowells," *J. Am. Chem. Soc.* **2009**, *131*, 1086. DOI: 10.1021/ja902117b [PMCID: PMC3086295]

59. Barton, J.; Stender, C.L.; Li. P.; Odom, T.W. "Structural Control of Anodized Ta_2O_5 Nanotubes," *J. Mater. Chem.* **2009**, *19*, 4896. DOI: 10.1039/b904964a

58. Lee, M.H.; Gao, H.; Odom, T.W. "Refractive Index Sensing using Quasi-1D Nanoslit Arrays," *Nano Lett.* **2009**, *9*, 2584. DOI: 10.1021/nl900773m [**Highlighted in** nanotechweb.org]

57. Hasan, W.; Stender, C.L.; Lee, M.H.; Nehl, C.L.; Lee, J.; Odom, T.W. "Tailoring the Structure of Nanopyramids for Optical Heat Generation," *Nano Lett.* **2009**, *9*, 1555. DOI: 10.1021/nl803647n [PMCID: PMC2668542]. [**Highlighted in** nanotechweb.org].

56. Babayan, Y.; McMahon, J.M.; Li, S.; Gray, S.K.; Schatz, G.C.; Odom, T.W. "Confining Standing Waves in Optical Corrals," *ACS Nano*, **2009**, *3*, 615. DOI: 10.1021/nn8008596 [**Highlighted in ACS Nano Perspective** [**2009**, *3*, 488]].

55. Gao, H.; McMahon, J.; Lee, M.H.; Henzie, J.; Gray, S.K.; Schatz, G.C.; Odom, T.W. "Rayleigh Anomaly-Surface Plasmon Polariton Resonances in Palladium and Gold Subwavelength Hole Arrays," *Optics Express*, **2009**, *17*, 2334.

54. Sweeney, C.M.; Hasan, W.; Nehl, C.L.; Odom, T.W. "Optical Properties of Anisotropic Core-Shell Pyramidal Particles," *J. Phys. Chem. A*, **2009**, *113*, 4265. DOI: 10.1021/jp810837u [PMCID: PMC2670351]

53. Lee, J.; Hasan, W.; Odom, T.W. "Tuning the Thickness and Orientation of Single Au Pyramids for Improved Refractive Index Sensitivities," *J. Phys. Chem. C,* **2009**, *113*, 2205. DOI: 10.1021/jp8111155 [PMCID: PMC2664166]

52. Odom, T.W.; Pileni, M.P. "Guest Editorial: Nanoscience," *Acc. Chem. Res.*, **2008**, *41*, 1565. DOI: 10.1021/ar800253n

51. Gao, H.; Henzie, J.; Lee, M.H.; Odom, T.W. "Screening Plasmonic Materials using Pyramidal Gratings," *PNAS*, **2008**, *105*, 20146. DOI: 10.1073/pnas.0809034105 [PMCID: PMC2629303]

50. Henzie, J.; Lee, J.; Lee, M.H.; Hasan, W.; Odom, T.W. "Nanofabrication of Plasmonic Structures," *Annual Rev. of Physical Chemistry*, **2009**, *60*, 147. DOI: 10.1146/annurev.physchem.040808.090352. [**Invited article**].

49. Lee, J.; Hasan, W.; Stender, C.; Odom, T.W. "Pyramids: A Platform for Designing Multifunctional Plasmonic Particles," *Acc. Chem. Res.* (Special Issue on Nanoscience), **2008**, *41*, 1762. DOI: 10.1021/ar800126p

48. Stender, C.L.; Odom, T.W. "Solid State Chemistry on a Surface and in a Beaker: Unconventional Routes to Transition Metal Chalcogenide Nanomaterials," *J. of Solid State Chemistry*, **2008**, *181* 1621. DOI: 10.1016/j.jssc.2008.06.004 [**Special Issue on Solid State Chemistry on the Nanoscale: Achievements, Challenges, and Opportunities**].

47. Odom, T.W.; Nehl, C.L. "How Gold Nanoparticles Have Stayed in the Light: The 3Ms Principle," *ACS Nano*, **2008**, *2*, 616. DOI: 10.1021/nn800178z. [**Invited Perspective article**].

46. Shuford, K.; Lee, J.; Odom, T.W.; Schatz, G.C. "Optical Properties of Gold Pyramidal Shells," *J. Phys. Chem. C*, **2008**, *112*, 6662. DOI: 10.1021/jp8004844

45. Wang, L.; Lee, M.H.; Barton, J.E.; Hughes, L.D.; Odom, T.W. "Shape-control of Protein Crystals in Patterned Microwells," *J. Am. Chem. Soc.* **2008**, *130*, 2142. DOI: 10.1021/ja077956v

44. McMahon, J.; Henzie, J.; Odom, T.W.; Schatz, G.C.; Gray, S.K. "Tailoring the Sensing Capabilities of Nanohole Arrays in Gold Films with Wood's Anomaly-Surface Plasmon Polaritons," *Optics Express* **2007**, *15*, 18119.

43. Lee, J.; Hasan, W.; Lee, M.H.; Odom, T.W. "Optical Properties and Magnetic Manipulation of Bi-Material Nanopyramids," *Adv. Mater.* **2007**, *19*, 4387. DOI: 10.1002/adma.200701505

42. Lee, M.H.; Henzie, J.; Gao, H.; Odom, T.W. "Microscale Arrays of Nanoscale Holes," *Small* **2007**, *3,* 2029. DOI: 10.1002/smll.200700499 [**In most accessed articles 4/2007-3/2008**].

41. Hasan, W.; Lee, J.; Henzie, J.; Odom, T.W. "Selective Functionalization and Spectral Identification of Gold Nanopyramids," *J. of Phys. Chem. C* **2007**, *111*, 17176. DOI: 10.1021/jp709607s

40. Henzie, J.; Lee, M.H.; Odom, T.W. "Multiscale Patterning of Plasmonic Metamaterials," *Nature Nanotech.* **2007**, *2*, 549. DOI:10.1038/nnano.2007.252. [**Cover Article**]. *See also editorial in Nature Nanotech.* [**2007**, *2*, 521. DOI:10.1038/nnano.2007.273], NSF Press Release*, and Editor's Choice Highlights of the Recent Literature* [*Science* **2007**, *318*, 21. DOI:10.1126/science.318.5847.21a]

39. Visawanathan, M.; Babayan, Y.; Odom, T.W. "Benchtop Nanoscale Patterning using Soft Lithography," *J. Chem. Educ.* **2007,** *84,* 1795.

38. Stender, C.L.; Odom, T.W. "Chemical Nanofabrication: A General Route to Surface-Patterned and Free-standing Transition Metal Chalcogenide Nanostructures," *J. Mater. Chem.* **2007**, *17*, 1866. DOI:10.1039/ B617714J [**Inside Cover**]. [**Invited article for special issue on Emerging Investigators in Materials Chemistry**].

37. Price, S.P.; Henzie, J.; Odom, T.W. "Addressable, Large-area Nanoscale Organic Light Emitting Diodes," *Small* **2007**, *3*, 372. DOI: 10.1002/smll.200600628

36. Gu, Y.; Romankiewicz, J.P.; David, J.K.; Lensch, J.L.; Kwak, E.S.; Odom, T.W.; Lauhon, L.J. "Local Photocurrent Mapping as a Probe of Contact Effects and Charge Carrier Transport in Semiconductor Nanowire Devices," *J. Vac. Sci. Technol. B* **2006**, *24*, 2172. DOI: 10.1116/1.2216717

35. Gao, H.; Henzie, J.; Odom, T.W. "Direct Evidence for Surface Plasmon-Mediated Enhanced Transmission through Metallic Nanohole Arrays," *Nano Letters* **2006**, *6*, 2104. DOI:10.1021/nl061670r

34. Henzie, J.; Shuford, K.L.; Kwak, E.S.; Schatz, G.C.; Odom, T.W. "Manipulating the Optical Properties of Pyramidal Nanoparticle Arrays," *J. of Phys. Chem. B* **2006**, *110*, 14028. DOI: 10.1021/jp063226i

33. Henzie, J.; Barton, J.E.; Stender, C.L.; Odom, T.W. "Large-area Nanoscale Patterning: Chemistry meets Fabrication," *Accts. of Chem. Res.* **2006**, *39*, 249. DOI: 10.1021/ar050013n [**Top 12 accessed articles in 2006**].

32. Greyson, E.C.; Barton, J.E.; Odom, T.W. "Tetrahedral Zinc Blende Tin Sulfide Nano- and Microcrystals," *Small* **2006**, *2*, 368. DOI: 10.1002/smll.200500460

31. Stender, C.; Greyson, E.C.; Babayan, Y.; Odom, T.W. "Patterned MoS_2-Patterned Nanostructures over cm^2-Areas," *Adv. Mater.* **2005**, *17*, 2837. DOI: 10.1002/adma.200500856

30. Kwak, E.S.; Henzie, J.; Chang, S.T.; Gray, S.K.; Schatz, G.S.; Odom, T.W. "Surface Plasmon Polariton Waves in Large-area Subwavelength Hole Arrays," *Nano Letters* **2005**, *5*, 1963. DOI: 10.1021/nl051339s

29. Odom, T.W.; Henzie, J.; Babayan, Y.; Greyson, E.; Kwak, E. "Optical Properties of Surface Patterned Nanostructures," *Talanta* **2005**, *67*, 507. DOI: 10.1016/j.talanta.2005.06.024

28. Gu, Y.; Kwak, E.S.; Lensch, J.L.; Allen, J.E.; Odom, T.W.; Lauhon, L.J. "Near-field Scanning Photocurrent Microscopy of a Nanowire Photodetector," *App. Phys. Lett.* **2005**, *87*, 043111. DOI: 10.1063/1.1996851 *Cover Figure.*

27. Henzie, J.; Kwak, E.S.; Odom, T.W. "Mesoscale Metallic Pyramids with Nanoscale Tips," *Nano Lett.* **2005**, *5*, 1199. DOI: 10.1021/nl0506148

26. Odom, T.W. "The Nano-Micro Interface: Bridging Micro and Nano Worlds. Edited by Hans-Jörg Fecht and Matthias Werner," *Small* **2005**, *1*, 462. DOI: 10.1002/smll.200400161

25. Sekar, P.; Greyson, E.C.; Barton, J.E.; Odom, T.W. "Synthesis of Nanoscale $NbSe_2$ Materials from Molecular Precursors," *JACS* **2005**, *127*, 2054. DOI: 10.1021/ja0428006

24. Damean, N.; Parviz, B.A.; Lee, J.N.; Odom, T.W.; Whitesides, G.M. "Composite Ferromagnetic Photoresist for the Fabrication of MicroElectroMechanical Systems," *J. of Micromechanics and Microengineering*, **2005**, *15,* 29-34. DOI: 10.1088/0960-1317/15/1/005

23. Greyson, E.C.; Babayan, Y.; Odom, T.W. "Directed Growth of Ordered Arrays of Small-Diameter ZnO Nanowires," *Adv. Mater.* **2004**, *16*, 1348. DOI: 10.1002/adma.200400765

22. Babayan, Y.; Barton, J.E.; Greyson, E.C.; Odom, T.W. "Templated and Hierarchical Assembly of CdSe/ZnS Quantum Dots," *Adv. Mater.* **2004**, *16*, 1341. DOI: 10.1002/adma.200400764

21. Barton, J.; Odom, T.W. "Mass-limited Growth in Zeptoliter Beakers: A General Approach for Nanocrystal Synthesis," *Nano Lett.* **2004**, *4*, 1525. DOI: 10.1021/nl049151g [**See also Nature Materials online NanoZone—15 July 2004**]

Postdoctoral Publications

20. Wu, H.; Odom, T.W.; Chiu, D.T.; Whitesides, G.M. "Fabrication of Complex Three-Dimensional Microchannel Systems in PDMS," *JACS* **2003**, *125*, 554.

19. Odom, T.W.; Thalladi, V.R.; Love, J.C.; Whitesides, G.M. "Generation of 30-50 nm Structures using Easily Fabricated, Composite PDMS Masks," *JACS* **2002**, *124*, 12112.

18. Wu, H.; Odom, T.W.; Whitesides, G.M. "Generation of Chrome Masks with Micrometer Features using Microlens Array Lithography," *Adv. Mat.* **2002**, *14*, 1213.

17. Wu, H.; Odom, T.W.; Whitesides, G.M. "Reduction Photolithography using Microlens Arrays: Applications in Grayscale Photolithography," *Anal. Chem.* **2002**, *74*, 3267.

16. Wu, H.; Odom, T.W.; Whitesides, G.M. "Connectivity of Features in Microlens Array Photolithography: Generation of Various Patterns with a Single Photomask," *JACS* **2002**, *124*, 7288.

15. Odom, T.W.; Love, J.C.; Wolfe, D.B.; Paul, K.E.; Whitesides, G.M. "Improved Pattern Transfer in Soft Lithography using Composite Stamps," *Langmuir*, **2002**, *18*, 5314.

Predoctoral Publications

14. Odom, T.W.; Huang, J.L.; Lieber, C.M. "Single-walled Carbon Nanotubes—from Fundamental Studies to New Device Concepts," *Ann. NY Acad. Sci.* **2002**, *960*, 203.

13. Odom, T.W. "Electronic Properties of Single-walled Carbon Nanotubes," *Aust. J. of Chem.* **2002**, *54*, 601. *See also C&E News—20 August 2001.*

12. Odom, T.W.; Huang, J.L.; Lieber, C.M. (*invited Topical Review)* "STM Studies of Single-walled Carbon Nanotubes," *J. Phys.: Cond. Matter* **2002**, *14*, R145.

11. Odom, T.W.; Hafner, J.H.; Lieber, C.M. "Scanning Probe Microscopy Studies of Carbon Nanotubes" in Topics in Applied Physics, Vol. 80, M.S. Dresselhaus, G. Dresselhaus, P. Avouris, eds. (Springer-Verlag, 2001). **Book Chapter.**

10. Odom, T.W.; Huang, J.L.; Lieber, C.M. "Magnetic Clusters on Single-walled Carbon Nanotubes: The Kondo Effect in a One-dimensional Host," *Science* **2000**, *290*, 1549.

9. Kim, P.; Odom, T.W.; Huang, J.L.; Lieber, C.M. "STM Study of Single-walled Carbon Nanotubes," *Carbon* **38**, 1741 (2000).

8. Cheung, C.L.; Hafner, J.H.; Odom, T.W.; Kim, K.; Lieber, C.M. "Growth and Fabrication with Single-walled Carbon Nanotube Probes," *Appl. Phys. Lett.* **2000**, *76*, 3136.

7. Odom, T.W.; Huang, J.L.; Kim, P.; Lieber, C.M. "Structure and Electronic Properties of Carbon Nanotubes," *J. Phys. Chem. B* **2000**, *104*, 2794.

6. Kim, P.; Odom, T.W.; Lieber, C.M. "Electronic Properties of Novel Materials: Electronic Structures and Applications of Carbon Nanotubes," *AIP Conference Proceedings* **1999**, 486.

5. Kim, P.; Odom, T.W.; Huang, J.L.; Lieber, C.M. "Electronic Density of States of Atomically Resolved Single Walled Carbon Nanotubes," *Phys. Rev. Lett.* **1999**, *82*, 1225.

4. Hu, J.; Odom, T.W.; Lieber, C.M. "Chemistry and Physics in One-Dimension: Synthesis and Properties of Nanowires and Nanotubes," *Acc. Chem. Res.* **1999**, *32*, 435.

3. Wong, S. S.; Woolley, A.T.; Odom, T.W.; Huang, J.L.; Kim, P.; Vezenov, D.V.; Lieber, C.M. "Single-walled Carbon Nanotube Probes for High-resolution Imaging," *Appl. Phys. Lett.* **1998**, *73*, 3465.

2. Odom, T.W.; Huang, J.L.; Kim, P.; Ouyang, M.; Lieber, C.M. "Scanning Tunneling Microscopy and Spectroscopy Studies of Single Wall Carbon Nanotubes," *J. Mater. Res.* **1998** *13*, 59.

1. Odom, T.W.; Huang, J.L.; Kim, P.; Lieber, C.M. "Atomic Structure and Electronic Properties of Single-walled Carbon Nanotubes," *Nature* **1998**, *391*, 62.

Northwestern Book Chapters

9. Engel, C.; Odom, T.W. "Shrinkable and Stretchable Nanomanufacturing," *Encyclopedia of Nanotechnology*, Bhushan, B. Ed., Springer, **2015**, p. 1-8. DOI: 10.1007/978-94-007-6178-0_100924-1

8. Zhou, W.; Suh, J.Y.; Odom, T.W. "Novel Fabrication Methods for Optical Antennas," *Optical Antennas*, Agio, M.; Alù, A. Eds., Cambridge University Press, **2013**. ISBN: 9781107014145.

7. Lin, J.Y.; Chan, J.-C.; Gao, H.; Odom, T.W. "Surface Plasmon Biosensing with 3D Plasmonic Crystals," *Plasmonics and Plasmonic Metamaterials: Analysis and Applications*, Shvets, G.; Tsukerman, I., Eds., World Scientific Publishers, **2011**. ISBN-10: 9814355275 [**Cover image**]

6. Odom, T.W.; Flory, M. "Nanotechnology and Ethics," *The Social Scale: Nanotechnology and the Weight of Justice*, editors: Laurie Zoloth and Marta Flory, *submitted*.

5. Babayan, Y.; Visawanathan, M; Odom, T.W. "Benchtop Nanoscale Patterning Experiments," *ACS Nanotechnology in Undergraduate Education*, Pacheco, K.O., Ed. **2009**, p. 177-188 (Chapter 13). **Chapter DOI:** 10.1021/bk-2009-1010.ch013

4. Gao, H.; Odom, T.W. "Near-field Scanning Optical Microscopy of Nanohole Arrays." In *Nano-optics and Near-field Microscopy*, Richards, D.; Zayats, A., Eds. Artech Publishers, **2008**, p. 165-184 (Chapter 8).

3. Henzie, J.; Lee, M.H.; Odom, T.W. "Multiscale Fabrication of Plasmonic Nanostructures." In *Unconventional Nanopatterning and Applications*, Rogers, J.A.; Lee, H.H., Eds. **2009**, p. 515-538 (Chapter 19).

2. Lee, J.; Henzie, J.; Odom, T.W. "Manipulating the Optical Properties of Individual and Arrays of Gold Nanopyramids." In *Nanostructures in Electronics and Photonics*, Rahman, F., Ed. World Scientific Publishing Company, **2008**, p. 193-208 (Chapter 11).

1. Odom, T.W. "Research-Based Courses in Nanotechnology for Undergraduates and Nanoscience Modules for High School and Community College Students." In *Nanoscale Science and Engineering Education*, Sweeney, A.E.; Seal, S., Eds. American Scientific Publishers: Stevenson Ranch, **2008**, p. 111-131 (Chapter 7).

OP-EDS

1. "Light Technologies Illuminate Global Challenges," The Conversation, 13 January 2015. Syndicated in "How Investing in Light Technologies can Change Our World," Longitudes, 18 February 2015. http://longitudes.ups.com/author/teri-odom/
2. "Cheating in Schools is Rampant but there is an Easy Fix," Washington Post, 13 March 2015. Syndicated in http://www.winnipegfreepress.com/opinion/analysis/Cheating-a-problem-and-so-is-learning---296251151.html and http://www.nhregister.com/opinion/20150315/another-view-to-stop-cheating-in-schools-ditch-the-test
3. "Why Altering the Powdered Donuts at Dunkin' Donuts Is Bad for Innovation," Huffington Post, 1 April 2015. Also in Northwestern News Stories Opinion, 1 April 2015.
4. "How to Remove Bias from Peer Review," The Chronicle of Higher Education, 7 May 2015. Also in Northwestern News Stories Opinion, 8 May 2015.
5. "Scientists Make Better Leaders: Using Ideas for the Common Good," Huffington Post, 24 June 2015. Also, in Northwestern News Stories Opinion, 25 June 2015.

PATENTS

1. Odom, T.W.; Henzie, J.; Kwak, E.S. "Mesoscale Pyramids, Arrays, and Method of Preparation" (US Patent no. 7,999,353)—issued 16 August 2011
2. Odom, T.W.; Henzie, J.; Kwak, E.S.; Lee, M.H. "Mesoscale Pyramids, Arrays, and Method of Preparation" (US Patent no. 8,048,789)—issued 1 November 2011
3. Odom, T.W.; Lee, M.H.; Huntington, M.D. "Programmable Soft Lithography: Solvent-Assisted Nanoscale Embossing" (US Patent Application no. 13/135,910)—filed 18 July 2011
4. Odom, T.W.; Lee, J.H.; Dam, Duncan. "Aptamer-loaded, Biocompatible Nanoconstructs for Nuclear-targeted Cancer Therapy" (US Patent no. 9,642,805)—issued 9 May 2017
5. Odom, T.W.; Huntington, M.D. "Photolithography System Using a Solid-State Light Source" (US Patent Application no. 13/374,262)—filed 19 December 2011
6. Odom, T.W.; Zhou, W. "Band-edge Lattice Plasmon Lasers based on Strongly Coupled Nanocavity Arrays" (US Provisional Application no. 61/835,304)—filed 14 June 2013

INVITED PRESENTATIONS

Research Presentations: 385 to date, 91 international talks

University Colloquia and Seminars (156)

156. University of Illinois at Chicago (Chemistry), Chicago, IL. "TBD," March 10, 2020.
155. Wesleyan University (Chemistry), Middletown, CT. "TBD," October 25, 2019.
154. Wesleyan University (College of Integrative Sciences), Middletown, CT. "TBD," October 24, 2019.
153. University of Texas at San Antonio (Physics and Astronomy), San Antonio, TX. "TBD," October 11, 2019.
152. Northwestern Polytechnical University (Chemistry), Xi'an, China. "TBD," July 5 – 9, 2019.
151. Jilin University (Chemistry), Changchun, China. "TBD," July 1 – 3, 2019.

150. University of Chicago (Inorganic/Organic Chemistry), Chicago, IL. "Plasmon-Exciton Interactions in Confined Volumes," May 24, 2019.
149. Universidade de São Paulo, São Paulo, Brazil. "Plasmon-Molecule Interactions in Small Volumes," May 15, 2019.
148. Federal University of Minas Gerais, Minas Gerais, Brazil. "Plasmon-Molecule Interactions in Small Volumes," May 14, 2019.
147. Federal University of São Paulo, São Paulo, Brazil. "Plasmon-Molecule Interactions in Small Volumes," May 13, 2019.
146. Rice University (Chemistry Graduate Student Association), Houston, TX. "Reconfigurable Flat Nanoparticle Optics," March 27, 2019. [**Student-sponsored seminar**]
145. University of Colorado (Materials and Nanoscience), Boulder, CO. "Conformable and Deformable Thin Materials," March 4, 2019.
144. University of Colorado (Physics), Boulder, CO. "Nanoscale Lasing: a Conundrum?" November 28, 2018.
143. University of Arizona (Chemistry), Tucson, AZ. "Single-Nanoparticle Sensors of Nano-bio Interactions," October 25, 2018.
142. Tufts University (Chemistry), Medford, MA. "Single-Particle Sensors of Nano-Bio Interactions," October 2, 2018.
141. AMOLF, Amsterdam, The Netherlands. "Programmable Nanoparticle Optics," May 14, 2018.
140. Tel-Aviv University (Physics), Tel-Aviv, Israel. "Programmable Nanoparticle Optics," April 25-26, 2018.
139. University of Maryland, Baltimore County (Physics), Baltimore, MD. "Nanoscale Lasing: a Conundrum?" April 18, 2018.
138. Northwestern University (Cancer Center), Chicago, IL. "Nano-Basics for Clinicians," April 11, 2018.
137. University of Iowa, Nanoscience and Nanotechnology Institute, Iowa City, IA. "Single-Nanoparticle Sensors of Nano-bio Interactions," March 2, 2018. [**Keynote speaker**]
136. North Carolina State University (Physics), Raleigh, NC. "Nanoscale Lasing: a Conundrum?" November 13, 2017.
135. University of Massachusetts Graduate Students for Diversity in Science and Engineering (GSDSE), Amherst, MA. "Gold (Nano)Star Solutions: Nanoscale Imaging and Therapeutics," November 9-10, 2017.
134. University of Kentucky Dawson Distinguished Lecture (Chemistry), Lexington, KY. "Single-Nanoparticle Sensors of Nano-bio Interactions," October 27, 2017.
133. University of Washington (Analytical Chemistry), Seattle, WA. "Single-Nanoparticle Sensors of Nano-Bio Interactions," October 15, 2017.
132. University of Maryland (NanoCenter), College Park, MD. "Collective Nanoparticle Optics," September 26, 2017.
131. Caltech (Chemical Physics), Pasadena, CA. "Nanoscale Lasing: a Conundrum?" September 19, 2017.

130. Fudan University (Mini-symposium on Nanophotonics), Shanghai, China. "Collective Nanoparticle Optics," August 3, 2017.
129. Wuhan National Laboratories for Opto-electronics (International Forum on Functional Materials and Devices for Optoelectronics), Wuhan, China. "Collective Nanoparticle Optics," August 2, 2017.
128. Institute of Physics, Chinese Academy of Sciences (Emerging Ideas in Photonics), Beijing, China. "Collective Nanoparticle Optics," August 1, 2017.
127. Tsinghua University (ACS-Tsinghua Symposium on Photonics), Beijing, China. "Collective Nanoparticle Optics," July 31, 2017.
126. KAIST (KAIST EE-ACS Photonics Workshop), Seoul, Korea. "Collective Nanoparticle Optics," July 28, 2017.
125. Northwestern University, Shanghai Jiaotong University Delegation, Evanston, IL. "IIN Overview to Cancer Nano," July 24, 2017.
124. Naval Research Laboratory, Washington DC "Multiscale Nanoscale Metamaterials," June 29, 2017. [Summer Series by Vannevar Bush Faculty Fellows]
123. University of Illinois Champaign (Mechanical Engineering), Champaign, IL. "3D Hierarchical Materials by Manipulating Mechanical Instabilities," May 2, 2017.
122. Notre Dame IMPACT Lecture (Chemistry), South Bend, IN. "Gold Nanostars as Probes for Imaging and Therapeutics," April 6, 2017.
121. Georgia State University (Chemistry), "Gold Nanostars as Probes for Imaging and Therapeutics," March 31, 2017.
120. Michigan Tech (Physics), Houghton, MI. "Rich Optics from Seemingly Simple Systems: Nanoparticle Arrays," March 23, 2017.
119. Caltech (Materials Science), Pasadena, CA. "Rich Optics from Seemingly Simple Systems: Nanoparticle Arrays," March 8, 2017.
118. University of Texas, A&M (Chemistry), "Squeezing Light into Small Spaces," November 1, 2016.
117. UCF/CREOL, "Squeezing Light into Small Spaces," October 27, 2016.
116. Massachusetts Institute of Technology (Chemical Biology), Cambridge, MA. "Gold Nanostars as Probes for Imaging and Therapeutics," October 17, 2016.
115. University of New Mexico, Albuquerque, NM. "Squeezing Light into Small Spaces," September 23, 2016. [**Distinguished Seminar Series**]
114. University of Pennsylvania (Materials Science), Philadelphia, PA. "Gold Nanostars as Probes for Imaging and Therapeutics," September 15, 2016.
113. University of Houston (Electrical and Computer Engineering), Houston, TX. "Follow the Nano-brick Road," April 29, 2016.
112. Michigan State University (Chemistry), East Lansing, MI. "Gold Nanostars as Probes for Imaging and Therapeutics," April 18, 2016.
111. University of Florida (Materials Science), Gainesville, FL. "Squeezing Light into Small Spaces," April 12, 2016.

110. Purdue University (Chemistry), Lafayette, IN. "Gold Nanostars as Probes for Imaging and Therapeutics," October 28, 2015.
109. Oregon State University (Chemistry), Corvalis, OR. "Gold Nanostars as Probes for Imaging and Therapeutics," October 14, 2015.
108. Northwestern University, SPIE, Evanston, IL. "Light-Matter Interactions in Plasmonic Nanocavities," May 28, 2015. [**Student sponsored seminar**]
107. University of Southern California (Chemistry), Los Angeles, CA. "Gold Nanostar Probes for Imaging and Therapeutics," April 24, 2015.
106. University of Southern California (Materials Science and Engineering), Los Angeles, CA. "Light-Matter Interactions in Plasmonic Nanocavities," April 23, 2015. [**Distinguished Lecture Series**]
105. University of Arkansas, Fayetteville, AR. "Gold Nanostar Probes for Imaging and Therapeutics," April 13, 2015.
104. Dow Chemical Company, Midland, MI. "Hierarchical Nanomanufacturing," April 7, 2015.
103. Gettysburg College, Gettysburg, PA. "Gold Nanostars as Probes for Imaging and Therapeutics," March 31-April 1, 2015.
102. Columbia University (Chemistry), New York, NY. "Gold Nanostars as Probes for Imaging and Therapeutics," February 19, 2015. [**Student Sponsored Seminar**]
101. University of South Carolina, Columbia, SC. "Gold Nanostars as Probes for Imaging and Therapeutics," February 13, 2015.
100. Oklahoma State University, Tulsa, OK. "Gold Nanostars as Probes for Imaging and Therapeutics," November 6, 2014.
99. University of Nebraska, Lincoln, NE. "Gold Nanostars as Probes for Imaging and Therapeutics," October 24, 2014.
98. University of Toronto, Toronto, Canada. "Gold Nanostars as Probes for Imaging and Therapeutics," October 21, 2014.
97. Illinois State University, Normal, IL. "Gold Nanostars as Probes for Imaging and Therapeutics," September 19, 2014.
96. BioNanotechnology Summer Institute 2014, UIUC, Champaign, IL. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," July 29, 2014.
95. ICFO, Barcelona, Spain. "Enhanced Light-Matter Interactions in Strongly Coupled Nanoparticle Arrays," June 25, 2014. [cancelled because of flight issues]
94. Georgia Tech (Chemical and Bioengineering), Atlanta, GA. "Making Precious Metals More Precious," May 21, 2014.
93. University of California at Santa Barbara (Chemistry), Santa Barbara, CA. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," May 15, 2014. [**DOW Distinguished Lecturer**]
92. Lehigh University (Chemistry), Bethlehem, PA. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," April 9, 2014.
91. Florida State University (Chemistry), Tallahassee, FL. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," December 6, 2013.

90. Massachusetts Institute of Technology (Materials Science), Cambridge, MA. "Enhanced Light-Matter Interactions in Unconventional Nanocavities," November 21, 2013.
89. Northwestern University (Cancer Center), Chicago, IL. "Nano Boot Camp for Clinicians," November 1, 2013.
88. Chalmers University (Applied Physics), Gothenburg, Sweden. "Nanolasers the Size of Virus Particles," May 23, 2013.
87. University of California (Chemistry), Berkeley, CA. "Dalton Award Lecture," May 10, 2013.
86. Stanford University (Materials Science and Engineering), Stanford, CA. "Nanolasers with Unconventional Cavity Architectures," May 3, 2013.
85. Georgia Tech (Chemistry), Atlanta, GA. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," April 18, 2013.
84. University of Texas at Austin (Center for Nanomaterials), Austin, TX. "Nanolasers the Size of Virus Particles," March 27, 2013.
83. University of Rochester (Chemistry), Rochester, NY. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," March 20, 2013.
82. Hope College (Chemistry), Holland, MI. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," February 1, 2013.
81. Calvin College, Grand Rapids, MI. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," January 31, 2013.
80. Radcliffe Institute of Advanced Study, Harvard University, Cambridge, MA. "Making Precious Metals more Precious," May 7, 2012.
79. University of Chicago (Chemistry), Chicago, IL. "Plasmonic Whiplash: Ultra-fast Excitation of Metal Nanoparticles for Drug Delivery and Nanolasing," March 12, 2012.
78. University Pierre and Marie, Paris, France. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," January 12, 2012.
77. Boston University (Chemistry), Boston, MA. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," December 2, 2011.
76. University of Akron (Chemistry), Akron, OH. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," November 29, 2011.
75. University of Colorado (Physics), Boulder, CO. "Nanoplasmonics: New Ways to Trap and Squeeze Light in Subwavelength Volumes," November 11, 2011.
74. Harvard University (Chemistry), Cambridge, MA. "Accessing the Dark Side of Plasmons through SANE Lithography," September 8, 2011.
73. Imperial College (Physics), London, UK. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," July 13, 2011.
72. University of Pennsylvania, Philadelphia, PA. "Accessing the Dark Side of Plasmons through SANE Lithography," April 21, 2011.
71. Simon Fraser University (Chemistry), BC, Canada. "All Things Pyramids: New Platforms for Sensing," February 23, 2011.

70. University of British Columbia (Chemistry), Vancouver, BC, Canada. "All Things Pyramids: New Platforms for Imaging and Sensing," February 22, 2011.
69. University of Victoria (Chemistry), BC, Canada. "All Things Pyramids: New Platforms for Imaging and Sensing," February 21, 2011.
68. Carnegie Mellon University (Materials Science), Pittsburg, PA. "Superlattice and Quasi-3D Plasmonic Crystals," November 12, 2010.
67. University of Texas, San Antonio (Physics), San Antonio. "Broadband and 3D Plasmonics: Holes Redux," November 5, 2010.
66. University of Buffalo, SUNY (Chemistry), Buffalo, NY. "All Things Pyramids: New Platforms for Real-time Sensing and Imaging," October 22, 2010.
65. Indiana University (Chemistry), Bloomington, IN. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," May 19, 2010.
64. Western Washington University (Materials After Dark), Bellingham, WA. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," May 12, 2010.
63. University of Minnesota (Nano), Twin Cities, MN. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," May 3, 2010.
62. Boston College (Chemistry), Chestnut Hill, MA. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," April 29, 2010.
61. Stevens Institute of Technology (Nano), Hoboken, NJ. "Designing Broadband Plasmonic Crystals," March 3, 2010.
60. Purdue University (Chemistry), West Lafayette, IN. "Design and Assembly of Multifunctional Nanopyramidal Shells," February 24, 2010.
59. Rensselaer Polytechnic Institute (Physics), Troy, NY. "Superlattice and 3D Plasmonics," February 17, 2010.
58. Swarthmore College (Physics and Chemistry), Swarthmore, PA. "All Things Pyramids: a New Nanostructure Shape for Diagnostics and Therapeutics," November 19, 2009.
57. Rice University (Chemistry), Houston, TX. "Pyramidal Shells: A Multifunctional, Plasmonic System," November 4, 2009.
56. National Institutes of Science and Technology (NIST), Gaithersburg, MD. "Building a Plasmonic Library: Creating Standards for Plasmonic Materials," October 23, 2009.
55. Cornell University (Materials Science), Ithaca, NY. "Toward Broadband Plasmonics: Tuning Dispersion in Plasmonic Crystals," October 8, 2009.
54. CNSI University of California at Los Angeles, Los Angeles, CA. "Multifunctional Plasmonic Nanopyramids: Opportunities for Biomedical Applications," June 2, 2009.
53. Carolina Center of Cancer Nanotechnology Excellence (CCNE), University of North Carolina, Chapel Hill, Chapel Hill, NC. "Diagnostics and Therapeutics using Multifunctional Nanopyramid Probes," May 12, 2009.
52. Case Western University (Physics), Cleveland, OH. "Screening Plasmonic Materials using Pyramidal Gratings," April 6, 2009.
51. University of Texas A&M (Chemistry), College Station, TX. "Nanoscale Pyramids: A Unique Platform for Creating Multifunctional Nanomaterials," November 4, 2008.

50. University of California at Riverside (Chemistry), Riverside, CA. "Pyramids: A Unique Platform for Creating Multifunctional Nanomaterials," October 29, 2008.
49. MIT (Optics and Quantum Electronics), Cambridge, MA. "Designing Hierarchical Plasmonic Metamaterials," October 22, 2008.
48. Penn State University (Physics), University Park, PA. "Designing Hierarchical Plasmonic Materials," September 18, 2008.
47. New York University (Physics), New York, NY. "Squeezing Light through Tiny Holes," September 11, 2008.
46. University of Stuttgart, Stuttgart, Germany. "Designing New Types of Hierarchical Plasmonic Materials," May 20, 2008.
45. University of Belfast, Queen's Nanoscience Forum and the Centre for Nanostructured Media, Belfast, Northern Ireland. "Multiscale Fabrication of Plasmonic Structures," May 15, 2008.
44. Rutgers University (Chemistry), New Brunswick, NJ. "Nanoscale Pyramids: A Multifunctional Plasmonic System," April 22, 2008.
43. Vanderbilt University (VINSE), Nashville, TN. "Multiscale Patterning of Plasmonic Metamaterials," April 2, 2008.
42. California Institute of Technology (Applied Physics), Pasadena, CA. "Multiscale Patterning of Plasmonic Metamaterials," January 31, 2008.
41. New York University (Chemistry), New York, NY. "Chemical Nanofabrication: A Bottom-up meets Top-down Approach to Functional Nanomaterials," January 23, 2008.
40. Princeton University (Mechanical Engineering), Princeton, NJ. "Making Something out of Nothing: The Hole Story," January 3, 2008.
39. Columbia University (Chemistry), New York City, NY. "Making Something out of Nothing: The Hole Story," November 26, 2007.
38. University of Northern Iowa (Physics), Cedar Falls, IA. "Plasmonic Metamaterials," October 10, 2007.
37. University of Washington (Nano Center), Seattle, WA. "Multiscale Patterning of Plasmonic Metamaterials," October 2, 2007.
36. West Virginia University (Chemistry), Morgantown, WV. "Chemical Nanofabrication," September 26, 2007.
35. University of South Carolina (Chemistry), Columbia, SC. "Making Something out of Nothing: The Hole Story," September 14, 2007.
34. Penn State University (Chemistry), "Manipulating Light at the Nanoscale with Plasmonic Structures," University Park, PA. April 25, 2007.
33. University of Utah (Chemistry), Salt Lake City, UT. "Manipulating Light at the Nanoscale with Plasmonic Structures," April 16, 2007.
32. University of Notre Dame (Chemistry), Notre Dame, ID. "Manipulating Light at the Nanoscale with Plasmonic Structures," March 8, 2007.
31. University of Wisconsin at Madison (Materials Chemistry), Madison, WI. "Manipulating Light in Nanohole Arrays and Pyramids," December 14, 2006.

30. Purdue University (Materials Chemistry), West Lafayette, ID. "Manipulating Light in Nanohole Arrays and Pyramids," December 7, 2006.
29. Harvard University (Chemistry), Cambridge, MA. "Manipulating Light in Arrays of Nanoholes and Nanoparticles," November 9, 2006.
28. Duke University (Chemistry), Durham, NC. "Manipulating Light in Nanohole Arrays and Pyramids," November 7, 2006.
27. University of Delaware (Chemistry), Newark, DE. "The Shape of Things Nano," November 1, 2006.
26. University of Pennsylvania (Chemistry), Philadelphia, PA. "The Shape of Things Nano," October 31, 2006.
25. University of Illinois at Urbana Champaign (Chemistry), Champaign, IL. "Manipulating Light in Nanohole Arrays and Pyramids," October 25, 2006.
24. University of Texas at Austin (Chemical Engineering), Austin, TX. "Manipulating Light in Nanohole Arrays and Pyramids," October 18, 2006.
23. California Institute of Technology (Chemical Physics), Pasadena, CA. "Manipulating Light in Nanohole Arrays and Pyramids," October 4, 2006.
22. University of California at San Diego (Chemistry), San Diego, CA. "The Shape of Things Nano," October 3, 2006.
21. Northwestern University (Chemistry Colloquia), Evanston, IL. "Manipulating Light in Nanohole Arrays and Pyramids," September 22, 2006.
20. Harvard University (NNI: Synergy between Experiment and Computation in Nanoscale Science), Cambridge, MA. "Manipulating Light in Anisotropic Nanostructures: Hole Arrays and Pyramids," May 31, 2006.
19. Stanford University (Chemistry), Stanford, CA. "Manipulating Light in Nanohole Arrays and Nanoparticles," May 15, 2006.
18. University of California at Berkeley (Chemistry), Berkeley, CA. "Manipulating Light in Nanohole Arrays and Nanoparticles," May 8, 2006.
17. Northwestern University (Materials Science & Engineering Colloquia), Evanston, IL. "Manipulating Light in Nanohole Arrays and Nanoparticles," April 25, 2006.
16. Louisiana State University (Chemistry), Baton Rouge, LA. "The Shape of Things," April 19, 2006.
15. University of Michigan (Chemistry), Ann Arbor, MI. "Manipulating Light in Nanohole Arrays and Nanoparticles," April 7, 2006.
14. Illinois Institute of Technology (Chemistry), Chicago, IL. "Manipulating Light in Nanohole Arrays and Nanoparticles," April 4, 2006.
13. Princeton University (Chemical Engineering), Princeton, NJ. "Manipulating Light in Nanohole Arrays and Nanoparticles," March 13, 2006.
12. University of Alberta (Chemistry), Edmonton, Canada. "Manipulating Light in Nanohole Arrays and Nanoparticles," January 24, 2006.
11. University of Victoria (Chemistry), British Columbia, Canada. "Manipulating Light in Nanohole Arrays and Nanoparticles," January 23, 2006.

10. Columbia University (Applied Physics), New York, NY. "Manipulating Light in Nanohole Arrays and Nanoparticles," November 30, 2005.
9. City College of New York (Chemistry), New York, NY. "Manipulating Light in Nanohole Arrays and Nanocrystals," November 7, 2005.
8. University of Massachusetts at Amherst (Polymer Chemistry), Amherst, MA. "Nanoscale Materials: Synthesis, Patterning, and Photonics," April 28, 2005.
7. Marquette University (Chemistry), Milwaukee, WI. "Chemical Synthesis meets Nanofabrication: A New Approach to Patterned Nanostructures," December 8, 2004.
6. University of Pennsylvania (Physics Condensed Matter), Philadelphia, PA. "Nanoscale Materials: Synthesis, Patterning, and Photonics," November 16, 2004.
5. Northwestern University (MRC and ESAM), Evanston, IL. "Synthesis and Assembly of Inorganic Nanoscale Materials," August 12, 2004.
4. University of Chicago (MRSEC seminar), Chicago, IL. "Chemical Synthesis meets Nanofabrication: A New Approach to Patterned Nanostructures," June 28, 2004.
3. University of Missouri-Rolla (Chemistry), Rolla, MO. "STM Studies of Single Walled Carbon Nanotubes and Unconventional Nanoscale Patterning," November 28, 2003.
2. Northwestern University (Physics Colloquia), Evanston, IL. "STM Studies of Single Walled Carbon Nanotubes and Unconventional Nanoscale Patterning," October 30, 2003.
1. Kalamazoo College (Chemistry), Kalamazoo, MI. "Nanoscale and Mesoscale Science," October 4, 2003.

Symposia, Workshops, and Conferences (229)

229. 2020 Makhlouf Haddadin Symposium, American University of Beirut, Beirut, Lebanon. "TBD," October 8 – 9, 2020.
228. Spanish Conference on Nanophotonics, Pontevedra, Spain. "TBD," May 31 – June 5, 2020.
227. MRS Spring Meeting, Phoenix, AZ. "TBD," April 13 – 17, 2020.
226. ACS Spring Meeting, Philadelphia, PA. "TBD," March 22 – 26, 2020.
225. 2020 Pittsburgh Conference (Pittcon 2020), Pittsburgh, PA. "TBD," March 1 – 5, 2020.
224. The Winter Colloquium on the Physics of Quantum Electronics (PQE), Snowbird, UT. "TBD," January 5 – 10, 2020.
223. 10th International Conference of the African Materials Research Society (AMRS2019), Arusha, Tanzania. "TBD," December 10 – 13, 2019.
222. 2019 Conference on Optics, Atoms and Laser Applications (KOALA), Dunedin, New Zealand. "TBD," December 2 – 6, 2019. [**Plenary Address**]
221. Monte Verità 2019 (Frontiers in Nanophotonics), Ascona, Switzerland. "TBD," August 31 – September 5, 2019.
220. Nano Assembly 2040, Shanghai, China. "TBD," August 2-4, 2019.
219. NWPU – INSA Lyon Tribology Workshop, Xi'an, China. "TBD," July 3 – 4, 2019. [**Keynote Address**]

218. GRC on Clusters and Nanoparticles, Les Diablerets, Switzerland. "Plasmonic Nanoparticle Arrays and Stretchable Nanolasers," June 16 – 20, 2019.
217. SPP 9, Copenhagen, Denmark. "Conformal Solid-state Emitters Coupled to Plasmonic Nanoparticle Arrays," May 26 – 31, 2019.
216. 2019 OSA Conference on Lasers and Electro-Optics (CLEO 2019), San Jose, CA. "Reconfigurable Nanoparticle Optics," May 5 – 10, 2019.
215. MRS Spring Meeting, Phoenix, AZ. "Flexible and Reconfigurable Plasmonics," April 22 – 26, 2019.
214. ACS Spring Meeting, Orlando, FL. "Transforming 2D Films into 3D Surfaces," March 31 – April 4, 2019. [Francis P. Garvan-John M. Olin Medal in honor of Lisa McElwee-White]
213. ACS Spring Meeting, Orlando, FL. "Deconstructing Nanoconstructs," March 31 – April 4, 2019. [COLL – Surface Chemistry of Colloidal Nanocrystals]
212. ACS Spring Meeting, Orlando, FL. "Engineered Nanoconstructs for Intracellular Imaging and Targeting," March 31 – April 4, 2019. [INOR – Functional Metal Nanoconstructs for Biomedical Applications]
211. ACS Spring Meeting, Orlando, FL. "Follow the Nano-Brick Road," April 1, 2019. [Eminent Scientist Lecturer for the Undergraduate Program]
210. The Winter Colloquium on the Physics of Quantum Electronics (PQE), Snowbird, UT. "Quantum Atom-Plasmon Interactions," January 7 – 8, 2019.
209. Australian Institute of Physics (AIP) Bi-Annual Meeting, Perth, Australia. "Reconfigurable Flat Nanoparticle Optics," December 9-13, 2018. [**Plenary Address**]
208. OSA Frontiers in Optics + Laser Science 2018: Nanophotonics and Plasmonics, Washington DC. "Peering through the Looking Glass: the Next Frontier in Nano-optics," September 16-20, 2018. [**Visionary Plenary Address**]
207. Packard Foundation 30th Reunion Meeting, San Diego, CA. "Functional and Hierarchical Nanoscale Metamaterials," September 5-8, 2018.
206. NFO-15, Troyes, France. "Programmable and Reconfigurable Plasmonics," August 26-31, 2018. [Withdrawn]
205. ACS Fall Meeting, Boston, MA. "Spatial and Temporal Coherence of Ultrafast Plasmon Nanolasers," August 22, 2018. [Nanophotonics]
204. ACS Fall Meeting, Boston, MA. "Reconfigurable Plasmons," August 20, 2018. [Future of Nanoscience, Nanotechnology, and Beyond] ACS Fall Meeting, Boston, MA.
203. ACS Fall Meeting, Boston, MA. "Controlling Nanoscale Disorder in Soft Materials," August 20, 2018. [Women in Nanoscience]
202. "Designer Nanoparticles for Intracellular Targeting and Delivery," August 19, 2018. [Understanding Nano-Bio Interactions: Implications for Bio-Imaging, Diagnosis, and Treatment]
201. ACS Publications Symposium: Innovative Materials for a Sustainable World, Shanghai, China. "Programmable and Reconfigurable Nanoparticle Optics," July 29-31, 2018.
200. Cottrell Scholars Conference, Tucson, AZ. "TREE Award Presentation," July 11-13, 2018.

199. Gordon Research Conference, Noble Metal Nanoparticles, South Hadley, MA. "Making, Measuring, and Modeling of Non-Noble Metal Nanostructures," June 17-22, 2018.

198. Gordon Research Conference, Lasers in Micro, Nano, and Bio, Waterville Valley, ME. "Ultrafast Nanoscale Plasmon Lasers," June 17-22, 2018.

197. CBP2018 Chemical Biophysics Symposium, University of Toronto, Toronto, Ontario, Canada. "Single-Nanoparticle Sensors of Nano-bio Interactions," May 4-6, 2018.

196. MRS Spring Meeting, Phoenix, AZ. "Multiscale Patterning of Conformable Deformable Thin Materials," April 2-6, 2018.

195. ACS National Spring Meeting, New Orleans, LA. "Evolutionary and Concurrent Design of Photonic Nanostructures," March 18-22, 2018.

194. Atlantic Basin Conference on Chemistry (ABCChem), Cancún, Mexico. "Super-structured Nanomaterials," January 26-28, 2018.

193. MRS Fall Meeting, Boston, MA. "Gold Nanostar Probes for Imaging and Therapeutics," November 26-30, 2017.

192. IPOS Symposium 2017, Institute of Photonics and Optical Science, University of Sydney, Sydney, Australia. "Programmable Multiscale Nanoparticle Optics," November 21, 2017.

191. American Vacuum Society, Tampa, FL. "Evolutionary Design of Multifunctional Optical Metasurfaces," October 29 – November 2, 2017.

190. IEEE Photonics, Orlando, FL. "Designing Gold Nanostar Probes for Optical and Magnetic Resonance Imaging," October 2-4, 2017.

189. ChinaNano 2017, Beijing, China. "Multi-scale Nanoscale Metamaterials," August 29-31, 2017. [**2017 ACS Nano Lectureship Award**]

188. ACS National Meeting, Washington, DC. "Understanding the Lasing Mechanism of Plasmonic Nanoparticle Arrays," August 22, 2017. [COLL: Photo-responsive Nanoparticles: from Fundamentals of Excitation to Applications]

187. ACS National Meeting, Washington, DC. "Controlling and Exploiting Nanoscale Curvature in Gold Nanostars," August 21, 2017. [COLL: Colloidal Metal and Semiconductor Nanostructures: Theory, Synthesis, and Application]

186. ACS National Meeting, Washington, DC. "Single-particle Sensors for Nano-Bio Interactions," August 20, 2017. [ACS Inorganic Nanoscience Award: Shana Kelley]

185. SPIE Optics + Photonics 2017, San Diego, CA. "Plasmonic Metasurfaces by Evolutionary Design," August 6-10, 2017.

184. SPIE Optics + Photonics 2017, San Diego, CA. "Controlled and Tunable Multi-modal Lasing from Plasmonic Superlattices," August 6-10, 2017.

183. META 2017, Incheon, Korea. "Controlled Multi-modal Nanolasing from Plasmonic Superlattices," July 28-29, 2017.

182. Cottrell Scholar Conference, July 12-14, 2017.

181. ICPN (International Conference on Nanophotonics) 10, Recife, Brazil. "Collective Nanoparticle Optics," July 2-5, 2017. [**Keynote Address**]

180. NOMA (Novel Optical Materials and Application), Cetraro, Italy. "Plasmonic Metasurfaces by Evolutionary Design," June 4-10, 2017.

179. Brookhaven National Lab User's Meeting, Upton, NY. "Making and Measuring (and Modeling) in 4D: Nanoparticle Lasing Spasers," May 16, 2017. [**Plenary Address**]
178. CRC 951, Berlin, Germany. "Lasing Spaser Nanoparticle Arrays," April 25-28, 2017.
177. MRS Spring 2017 Meeting, Phoenix, AZ. "Multi-modal Lasing from Plasmonic Superlattices, April 17-21, 2017. [ED10: Material Platforms for Plasmonics and Metamaterials]
176. MRS Fall 2016 Meeting, Boston, MA. "Programmable Multi-scale Nanoparticle Metasurfaces," November 28 – December 1, 2016. [EM7]
175. IUSSTF Quantum Plasmonics of Hybrid Nano-Assembles, Bangalore, India. "Lasing Spaser Nanoparticle Arrays," November 17-18, 2016.
174. NTU-Northwestern Institute for Nanomedicine (NNIN), Santa Barbara, CA. "An Integrated Antibacterial Nanotherapy for Infections of the Skin and Subcutaneous Tissue," November 15-16, 2016.
173. SPIE Optics + Photonics 2016, San Diego, CA. "Designer Nanocavities for Room-temperature Plasmon Nanolasers," August 28, 2016.
172. SPIE Optics + Photonics 2016, San Diego, CA. "How Negative Curvature Interfaces Improve the Imaging Properties of Gold Nanoparticles," August 30, 2016.
171. SPIE Optics + Photonics 2016, San Diego, CA. "Engineering Ultra-narrow Plasmon Resonances," August 29, 2016.
170. PIERS Shanghai, China. "Tunable Nanoparticle Spasers," August 7-10, 2016.
169. PKU International Nanophotonics Workshop, Beijing, China. "Nanoscale Lasers," August 5-6, 2016.
168. META 2016, Malaga, Spain. "Real-time Tunable Nanoparticle Spasers," July 25-28, 2016. [**Keynote talk**]
167. EMP16 International Conference on Energy, Materials, and Photonics, Troyes, France. July 10-13, 2016.
166. Royal Society Seminar, Chicheley Hall, Buckinghamshire, England. "Nanoparticle Lasing Spasers," June 28-29, 2016.
165. JUAMI (Joint Undertaking for the Africa Materials Institute), Tanzania. "3D Hierarchical Materials by Memory-based, Sequential Wrinkling" June 6, 2016.
164. 2016 International Nanotoxicology Congress, Boston, MA. "Overcoming the Endosomal Escape Problem: Lysosome-Targeting Gold Nanostar Nanoconstructs," June 1-4, 2016.
163. Annual Conference of the Society of Plastics Engineers (ANTEC), Indianapolis, IN. "3D Hierarchical Materials by Memory-based, Sequential Wrinkling," May 23-25, 2016.
162. NSF MPS Site Visit, Northwestern University, Evanston, IL. "Nanoscale Curvature Effects in Anisotropic Nanomaterials," April 21, 2016.
161. DSSG 30th Anniversary Symposium, Washington, DC. March 30-31, 2016.
160. Materials Research Society Spring Meeting, Phoenix, AZ. "Designer Nanocavities for Room-temperature Plasmon Lasing," March 28-April 1, 2016. [NT1: Functional nanostructures and metamaterials for solar energy and novel optical phenomena]

159. Materials Research Society Spring Meeting, Phoenix, AZ. March 28-April 1, 2016. [SM7: Future Healthcare Needs through Biomaterials, Bioengineering and the Cellular Building Block] [student Duncan H.M. Dam presented]
158. APS March Meeting 2016, Baltimore, MD. "Nanoparticle Lasing Spasers," March 14-18, 2016.
157. Pittcon 2016, Atlanta, GA. "Real-time Tunable Emission from Plasmonic Nanolasers," March 6-10, 2016.
156. IEEE-Nanomed 2015, Waikiki Beach, Hawaii. "Gold Nanostars as Probes for Imaging and Therapeutics," November 15-18, 2015. [**Keynote speaker**].
155. International Materials Research Congress (IMRC), Cancun, Mexico. "Enhanced Light-Matter Interactions in Nanoparticle Arrays," August 16-20, 2015. [**Plenary speaker**].
154. META 15, New York City, NY. "Nano-apertures and Applications." August 5, 2015.
153. Taiwan Biannual Plasmonics Symposium, Taipei, Taiwan. "Tunable Nanoparticle Lasing Spasers," June 15, 2015. [**Plenary speaker**].
152. SPP7, Jerusalem, Israel. "Real-time Tunable Lasing from Plasmonic Nanocavities." May 31-June 5, 2015.
151. 2015 APS/CNM User's Meeting, "Room Temperature Lasing from Nanoparticle Arrays." May 11, 2015. [**Invited speaker**]
150. Northwestern representative for NSF lobbying event at Congress. Washington, DC. "Structured Nanoscale Materials with Extraordinary Properties," April 29, 2015.
149. Robert H. Lurie Cancer Center Symposium, Evanston, IL. "Investigating Protein-Ligand Interactions via Gold Nanostar Probes." April 10, 2015.
148. ACS Spring Meeting, Denver, CO. "Energy Conversion within a Single Nanocavity Structure" [PHYS], March 22-25, 2015.
147. ACS Spring Meeting, Denver, CO. "Enhanced Light-Matter Interactions in Nanoparticle Arrays" [COLL, Metallic Nanostructures for Optical &electrochemical Sensing and Alternative Energy Conversion], March 22-25, 2015.
146. ACS Spring Meeting, Denver, CO. "Plasmonic Hetero-Oligomer Nanoparticle Arrays for Hydrogen Sensing" [COLL, Plasmonic Catalysis and Sensing], March 22-25, 2015.
145. NanoMeta, Seefeld (Tirol), Austria. "Tunable Nanoparticle Lasing Spasers," January 5-8, 2015.
144. NSF Nano Grantees Conference, Arlington, VA. "Prospects in Plasmonics," December 9-10, 2014.
143. AVS 61st International Symposium & Exhibition, Baltimore, MD. "Enhanced Light-Matter Interactions in Nanoparticle Arrays," November 10, 2014.
142. IEEE Photonics Meeting, San Francisco, CA. "Room Temperature Plasmonic Nanolasers," October 13, 2014.
141. NCI Alliance Meeting, Bethesda, MD. "Rational Design of Nanomaterials," October 1-3, 2014.
140. Blavatnik Young Scientists Symposium, New York, NY. September 15, 2014.

139. NFO-13, Snowbird, UT. "Heterogeneous Plasmonic Oligomers," September 1-3, 2014.
138. ACS Fall Meeting, San Francisco, CA. "Gold Nanostars as Probes for Imaging and Therapeutics," August 10-14, 2014.
137. Research Corporation Cottrell Scholars, Tucson, AZ. July 10-12, 2014.
136. Gordon Research Conference, Plasmonics, Newry, ME. "Fabrication of Unconventional Nanocavity Architectures," July 6-11, 2014.
135. Gordon Research Conference, Noble Metal Nanoparticles, South Hadley, MA. "Designer Gold Nanostars for Imaging and Therapeutics," June 15-20, 2014.
134. 6th International Symposium on Bioanalysis, Biomedical Engineering and Nanotechnology 2014, Changsha, China. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," May 29-June 1, 2014.
133. MRS Spring Meeting, San Francisco, CA. "Enhanced Light-Matter Interactions in Unconventional Nanocavities," April 21-25, 2014.
132. APS March Meeting, Denver, CO. "Prospects of Omnidirectional Substrates for Light Trapping," March 3-7, 2014.
131. ASME 2014 3rd Global Congress on NanoEngineering for Medicine and Biology (NEMB2014), San Francisco, CA. "Gold Nanostars as Drug Delivery Agents for Nanomedicine," February 2-5, 2014.
130. US-France Nanophotonics Workshop, Troyes, France. "Enhanced Light-Matter Interactions in Unconventional Nanocavities," November 3-7, 2013.
129. American Vacuum Society, Long Beach, CA. "Plasmonic Quasicrystals," October 27-30, 2013. *Alex Hryn substituted.*
128. Research Corporation Scialog, Tucson, AZ. "Prospects of Omnidirectional Substrates for Light Trapping," October 15-18, 2013.
127. 25th Packard Fellows Reunion, Denver, CO. "Manipulating Light at the Nanoscale," September 11-15, 2013.
126. ACS Fall Meeting, Indianapolis, ID. "Multi-scale Plasmonic Nanoparticles and the Inverse Problem," September 9-12, 2013.
125. SPIE Plasmonics, San Diego, CA. "Enhanced Light-Matter Interactions in Nanoparticle Arrays," August 25-29, 2013.
124. Quantum Plasmonics, Washington DC. "Lattice Plasmon Nanolasers," August 21-23, 2013.
123. Research Corporation Cottrell Scholars, Tucson, AZ. July 10-13, 2013.
122. US-Israel Kavli Frontiers of Science Symposium, Irvine, CA. "Nanolasers the Size of Virus Particles," June 17-18, 2013. *Sponsored by the NAS and Kavli Foundation.*
121. Faculty Opponent for Chalmers University PhD Defense, Gothenburg, Sweden. "Biosensor Sense," May 24, 2013.
120. AMN-6 conference, Auckland, New Zealand. "Nanolasers the Size of Virus Particles," February 11-15, 2013. [**Plenary speaker**]

119. IUMRS-ICEM 2012, Yokohama, Japan. "Nanoplasmonics: New Ways to Trap and Squeeze Light into Subwavelength Volumes," September 23-28, 2012. [**Plenary speaker**] *Robert P.H. Chang substituted.*

118. ACS Fall Meeting, Philadelphia, PA. "Room Temperature Plasmonic Nanolasers," August 24-29, 2012.

117. Gordon Research Conference, Noble Metal Nanoparticles, South Hadley, MA. "Room Temperature Plasmonic Lasers," June 17-22, 2012.

116. Gordon Research Seminar, Noble Metal Nanoparticles, South Hadley, MA. "Gold Nanostars as Tiny Hitchhikers for Cancer Therapeutics," June 16-17, 2012. [**Keynote speaker**]

115. International Conference on the Nanostructure-Enhanced Photo-Energy Conversion (Yamada Conference LXVI), Tokyo, Japan. "Plasmonic Nanolasers," June 3-6, 2012.

114. E-MRS Spring Meeting, Strasbourg, France. "Extraordinary Nonlinear Absorption in 3D Bowtie Nanoantennas," May 14-20, 2012.

113. META 12, Paris, France. "Light Trapping in Nanoparticle Arrays beyond the Quasistatic Limit," April 19-22, 2012.

112. META 12, Paris, France. "Programmable Soft Lithography for Scalable Plasmonics," April 19-22, 2012.

111. ACS Spring Meeting, San Diego, CA. "Plasmonic Nanocavities: New Ways to Squeeze Light into Subwavelength Volumes," March 28, 2012.

110. ACS Spring Meeting, San Diego, CA. "Towards Omnidirectional Plasmonic Substrates for Light Trapping," March 27, 2012.

109. African MRS Meeting, Victoria Falls, Zimbabwe. "Benchtop Photolithography," December 15, 2011.

108. ACS Akron Section Award, Akron, OH. "All that Glitters is Nanoscale Gold," November 29, 2011.

107. AVS Meeting, Nashville, TN. "A SANE Approach to Programmable Soft Lithography," November 1-4, 2011.

106. AIChE Meeting, Minnesota, MN. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," October 16-20, 2011.

105. NIH Director's Pioneer Meeting, Bethesda, MA. "Designing Plasmonic Lenses for Optical Bioimaging," September 20-21, 2011.

104. Optics of Surfaces and Interfaces 9, Akumal, Mexico. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," September 19-23, 2011.

103. US-China International Materials Institute Meeting, Sichuan University, Chengdu, China. "Sustainable, Scalable Generation of Nanostructured Surfaces," September 15-16, 2011.

102. ACS Fall Meeting, Denver, CO. "Trapping Light in Strongly Coupled Nanoparticle Arrays by Dark Plasmons," August 29, 2011.

101. ACS Fall Meeting, Denver, CO. "Designing Multi-scale Nanomaterials for Sensing and Imaging," August 30, 2011.

100. ACS Fall Meeting, Denver, CO. "Controlling Protein-Ligand Kinetics using 3D Plasmonic Materials," August 30, 2011.

99. Cottrell Scholars Conference, Tucson, AZ. July 6-8, 2011.
98. NSF Summer Institute on Nanomechanics, Nanomaterials, and Micro/Nanomanufacturing, Chicago, IL. "Nanomanufacturing of Nanostructured Surfaces for Energy Applications," June 30, 2011.
97. Northwestern University Clinical and Translational Sciences, Evanston, IL. "Identifying Cancer Cells: Multifunctional Gold Nanopyramid Probes," May 18, 2011.
96. STEM and Nanoscience, Washington, DC. May 12-13, 2011.
95. NIH Innovation Brainstorm: Transforming Discovery into Impact, Potomac, MD. May 4-6, 2011.
94. Society of Manufacturing Engineers, Chicago, IL. "Programmable Soft Lithography: Solvent-Assisted Nanoscale Embossing," April 5, 2011.
93. 3M, Minneapolis, MN. "Programmable Soft Lithography: Solvent-Assisted Nanoscale Embossing," March 31, 2011.
92. ACS Chicago Section, Chicago, IL. "All Things Pyramids: New Platforms for Imaging and Sensing," February 24, 2011.
91. Pacifichem 2010, Honolulu, HI. "Concentrating Light using Anisotropic Nanopyramidal Shells" in *Nanostructure-Enhanced Photochemical Reactions*, December 15-20, 2010.
90. Pacifichem 2010, Honolulu, HI. "Designing Plasmonic Crystal Platforms for Ultra-sensitive Biosensing" in *Molecular Photonics*, December 15-20, 2010.
89. Japanese-American Kavli Frontiers of Science Symposium, Kanagawa, Japan. December 2-5, 2010. *Sponsored by the NAS, Kavli Foundation, and JSPS.*
88. National Academies Keck Future Initiatives 2010 Imaging Sciences, Irvine, CA. November 17-19, 2010. *Sponsored by the National Academies and Keck Foundation.*
87. Chicago Section of the Society of Applied Spectroscopy (SAS), Chicago, IL. November 9, 2010.
86. AVS Meeting, Albuquerque, NM. "Unconventional and Broadband Plasmonics," October 17-20, 2010.
85. NIH Director's Pioneer Meeting. September 30-October 1, 2010.
84. International Materials Institute, 3rd US-China Meeting, Beijing, China. September 18-24, 2010.
83. ISACS2 2010, Budapest, Hungary. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," July 13-16, 2010. [**Keynote Lecture**]
82. CSC 2010, Toronto, Canada. "Concentrating Light in 3D using Anisotropic Gold Nanopyramids," May 29-June 1, 2010.
81. 3M, Twin Cities, MN. "Superlattice and Quasi-3D Plasmonic Crystals," May 4, 2010.
80. Transition Metal Chalcogenide and Halide Nanostructures 2010, Tel Aviv, Israel. "Synthesizing TaS_2 Nanotubes Starting from Ta_2O_5 Nanotube Templates," April 25-27, 2010. [**Keynote Lecture**]
79. SPIE Europe 2010, Brussels, Belgium. "Superlattice and Low Symmetry Plasmonic Crystals," April 12-16, 2010.

78. MRS Spring Meeting 2010, San Francisco, CA. "Controlling Dispersion in Nanoparticle Arrays," April 4-8, 2010.

77. EUROPT(R)ODE X, Prague, Czech Republic. "Designing Plasmonic Crystals for Ultra-sensitive Molecular Sensing," March 28-31, 2010. [**Keynote Lecture**]

76. Africa MRS Meeting, Abuja, Nigeria. "Unconventional Plasmonic Materials," December 14-18, 2009.

75. Fourth Annual NCI Alliance for Nanotechnology in Cancer Investigators Meeting, Manhattan Beach, CA. "Wide Field Imaging of Nanopyramid Probes to Detect Biomarkers," October 21, 2009.

74. NIH Director's Pioneer Meeting, Bethesda, MD. "Sub-cellular Imaging using Plasmonic Lenses," September 24-25, 2009.

73. JNCASR-NU Workshop, Bangalore, India. "Screening Materials with Nanopyramid Arrays," September 1-2, 2009.

72. ACS Fall Meeting 2009, Washington, DC. "Nanopyramidal Gratings as Ultrasensitive Detection Platforms," August 16-20, 2009.

71. SPIE Plasmonics: Nanoimaging, Nanofabrication, and their Applications IV, San Diego. "Designing Hierarchical Plasmonic Materials," August 2-6, 2009.

70. Clusters, Nanocrystals, and Nanostructures Gordon Research Conference, New London, CT. "Materials Expansion and Applications of Quasi-3D Plasmonic Lattices," July 19-24, 2009.

69. NSF CMMI Engineering Research and Innovation Conference 2009, Honolulu, HI. June 22-25, 2009.

68. German-American Kavli Frontiers of Science Symposium, Irvine, CA. "Are We There Yet? On the Road to a Technology Based on Nanoscience," June 5-7, 2009. *Sponsored by the NAS, Kavli Foundation, and von Humboldt Foundation*.

67. EIPBN Meeting 2009, Marco Island, FL. "Designing Hierarchical and Quasi-3D Plasmonic Lattices," May 26-29, 2009.

66. George C. Schatz 60th Birthday Celebration, Evanston, IL. "The Hole Story: Working with George in New Directions," April 17, 2009.

65. MRS Spring Meeting 2009, San Francisco, CA. "Designing Asymmetric and Multifunctional Plasmonic Particles," April 16, 2009.

64. MRS Spring Meeting 2009, San Francisco, CA. "Screening Plasmonic Materials using Quasi-3D Plasmonic Lattices," April 14, 2009. [**MRS Outstanding Young Investigator Award address**]

63. ACS Spring Meeting 2009, Salt Lake City, UT. "National Fresenius Award Symposium," March 22-26, 2009. [**National Fresenius Award address**]

62. Japan-American Kavli Frontiers of Science (FOS) Symposium, Irvine, CA. December 5-7, 2008. *Sponsored by the NAS, Kavli Foundation, and JSPS.*

61. NSF-MEXT Young Researchers Exchange Program, Japan. October 5-11, 2008.

60. NIH Director's Pioneer Award Symposium, Bethesda, MA. September 22-23, 2008.

59. 2008 Packard Foundation Fellows Meeting, Park City, UT. "Squeezing Light through Tiny Holes," September 3-6, 2008.

58. SPIE Plasmonics: Nanoimaging, Nanofabrication, and their Applications IV, San Diego. "Designing Hierarchical Plasmonic Materials," August 10-14, 2008.
57. Solid State Chemistry Gordon Research Conference, New London, NH. "Chemical Nanofabrication," July 27 – August 1, 2008.
56. EPSCOR Program Review, Oak Ridge National Lab, Oak Ridge, TN. "Directing Matter and Energy: Five Challenges for Science and the Imagination," July 23, 2008.
55. Integrated Photonics and Nanophotonics Research and Applications Topical Meeting, Boston, MA. "Multiscale Fabrication and Properties of Plasmonic Nanostructures," July 13-16, 2008.
54. Center for Nanoscale Materials Users Facility Meeting, Argonne National Labs. May 7, 2008.
53. ACS Spring Meeting 2008, New Orleans, LA. "Refractive Index Sensing with Plasmonic Metamaterials," April 6-10, 2008.
52. Jawaharlal (JNC, India)-Northwestern Workshop on Advanced Materials, Evanston, IL. "Chemical Nanofabrication: A New Route to Inorganic Nanomaterials," March 31-April 1, 2008.
51. MRS Spring Meeting 2008, San Francisco, CA. "Plasmonic Metamaterials: Fabrication and Characterization," March 24-28, 2008.
50. NSF-MEXT Young Researchers Exchange Program Symposium, Northwestern University, Evanston, IL. "Pyramidal Nanoparticles: A New Plasmonic System," March 11-12, 2008.
49. Indo-US Science and Technology, Bhubaneshwar, India. "Science and Technology at Nano-Bio Interface," February 19-22, 2008.
48. African Materials Research Society, Dar-Es-Salaam, Tanzania. "Plasmonic Metamaterials," December 10-14, 2007.
47. Japan-American Kavli Frontiers of Science (FOS) Symposium, Kanagawa, Japan. "Frontiers in Optical Materials," December 1-3, 2007.
46. Northwestern University (Small Business Evaluation and Entrepreneur), Evanston, IL. "Multiscale Fabrication of Plasmonic Structures," November 12, 2007.
45. Rohm and Haas, Marlborough, MA. "Multiscale Patterning of Plasmonic Metamaterials," September 17, 2007.
44. 2007 Packard Foundation Fellows Meeting, Monterey, CA. September 5-8, 2007.
43. ACS Fall Meeting, Boston, MA. "Multi-scale Fabrication of Plasmonic Metamaterials," August 19-23, 2007.
42. Electronic Materials Gordon Conference, South Hadley, MA. July 22-27, 2007.
41. Inorganic Chemistry Gordon Conference, Newport, RI. July 15-20, 2007.
40. Cottrell Scholar Conference, Tucson, AZ. July 6-7, 2007.
39. SPP3 Conference, Dijon, France. "Large-area Fabrication of Nanohole Arrays and Nanoparticles," June 17-22, 2007.
38. Northwestern University (Industrial Associates Meeting), Evanston, IL. "NanoManufacturing of Plasmonic Structures," May 10, 2007.
37. The Electrochemical Society (ECS), "Nanoscale Pyramids: Fabrication, Manipulation, and Functionalization," Chicago, IL. May 7, 2007.

36. FNANO07, Snowbird, UT. "Plasmonic Nanostructures: Arrays of Holes and Particles," April 18-21, 2007.
35. Materials Research Society (MRS) Spring Meeting, San Francisco, CA. "Large-area Nanofabrication of Plasmonic Nanostructures," April 13, 2007.
34. ACS Spring Meeting, Chicago, IL. "Pyramidal Nanoparticles: Fabrication, Characterization, and Functionalization," March 25, 2007.
33. Society of Manufacturing Engineers Conference, Chicago, IL. "Large-Area NanoManufacturing of Photonic and Plasmonic Nanostructures," March 14, 2007.
32. Africa-US Workshop on Frontiers in Materials Research and Education, Abuja, Nigeria. "Synthesis of Functional Nanostructures," January 21-25, 2007.
31. DuPont, Philadelphia, PA. "Chemistry meets Nanofabrication: Patterned Nanoscale Materials," October 30, 2006.
30. US-Ireland Nanotechnology Workshop (NSF), Belfast, UK. "Directed Assembly of Nanostructures over Large Areas," October 22-23, 2006.
29. ACS Fall Meeting (ExxonMobil Solid State Chemistry Symposium), San Francisco, CA. "Chemistry meets Fabrication: Patterned Nanoscale Materials," September 12, 2006.
28. Packard Foundation Fellows Meeting, Monterey, CA. September 6-9, 2006.
27. Plasmonics Gordon Research Conference (GRC), Keene, NH. "Large-area Subwavelength Hole Arrays," July 27, 2006.
26. Nanostructure Fabrication Gordon Research Conference (GRC), Tilton, NH. "Large-area Patterning of Optical Nanostructures," July 20, 2006.
25. German-American Frontiers of Science (FOS) Symposium, "Manipulating Light in Nanohole Arrays and Pyramids," June 23-25, 2006. [**Selected as one of top 40 young U.S. scientists; sponsored by the NAS and Alexander von Humboldt Foundation**]
24. Society of Manufacturing Engineers Conference, Los Angeles, CA. "Innovative Approaches to Nanofabrication and Assembly using Top-down and Bottom-up Manufacturing Methods," March 28, 2006.
23. US-China Nanotechnology Workshop (NSF), Washington, DC. "Manipulating Light in Nanohole Arrays," March 23, 2006.
22. NSF Workshop: Synthesis of Complex Chemical Systems, Oxford, England. "Pyramidal Nanoparticles," March 19-21, 2006. [**Selected as one of twelve young U.S chemists for workshop**]
21. 13th Annual Foresight Conference, San Francisco, CA. "Novel Methods of Nanoscale Fabrication and Assembly," October 27, 2005.
20. Packard Foundation Fellows Meeting, Monterey, CA. September 7-10, 2005.
19. National Nanotechnology Initiative (NNI) Workshop: X-rays and Neutrons: Essential Tools for Nanoscience Research, Washington, DC, "Synthesis of Nanostructures: Opportunities for Scattering Methods," July 16, 2005.
18. Emerging Technologies for Bio and Chemical Sensing (US Government), Washington, DC. "Nanotechnologies for Sensor Applications," June 15, 2005.

17. NIH Director's Pioneer Meeting, Bethesda, MD. "Sub-cellular Imaging using Plasmonic Lenses," September 24-25, 2009.
16. CERC3 – Young Chemists Workshop (NSF), Baden-Baden, Germany. "Nanoscale Materials: Synthesis, Patterning, and Photonics," May 2-5, 2005. [**Nominated by NSF and selected by European organizing committee as one of four U.S. young chemists**]
15. GDEST: Sensors and Sensor Systems: A US-Japan Dialogue, "Nanomaterials meets Nanofabrication: Prospects for Sensor Applications," February 28 – March 2, 2005. [**Sponsored by the National Academy of Sciences (NAS)**]
14. Argonne National Lab (Materials Science), Argonne, IL. "New Approaches to the Synthesis and Assembly of Nanoscale Materials," November 15, 2004.
13. Packard Foundation Fellows Meeting, Monterey, CA. "Synthesis and Patterning of Nanoscale Materials," September 1-4, 2004.
12. German-American Frontiers of Chemistry Symposium, Munich, Germany. "Nanoscale Photonics," July 11-13, 2004. [**Selected as one of top 25 young U.S. chemists; sponsored by the NSF and German Chemical Society**]
11. US-UK Frontiers of Science (FOS) Symposium, Cambridge, England. "Optical Properties of Surface Patterned Nanostructures," June 19-22, 2004. [**Selected as one of top 40 young U.S. scientists; sponsored by NAS and the Royal Society**]
10. US-China Nanotechnology Forum (NSF), Beijing, China. "Optical Properties of Surface Patterned Nanostructures," May 13, 2004.
9. International Nanotech Workshop, Venice, Italy. "Institute for Nanotechnology," March 15, 2004.
8. ACS Chicago Section Meeting, Chicago, IL. "Nanoscale and Mesoscale Science," January 23, 2004.
7. 1st Korea-US NanoForum (NSF), Seoul, Korea. "Nanoscale Science and Engineering Center," October 10-13, 2003.
6. 77th ACS Colloid and Surface Chemistry Symposium, Atlanta, GA. "STM Studies of Single Walled Carbon Nanotubes," June 2003. [**Plenary talk for Victor K. LaMer award for best thesis in surface chemistry**]
5. ACS Greater Lakes Meeting, Chicago, IL. "Generation of 30-50 nm Structures using Composite PDMS Masks," June 2, 2003.
4. World Chemistry Congress/IUPAC Joint Meeting, Brisbane, Australia. "Electronic Properties of Single Walled Carbon Nanotubes," June 28 – July 9, 2001. [**IUPAC Prize for best international thesis in the chemical sciences**]
3. American Physical Society (APS) March Meeting, Seattle, WA. "STM Studies of Single Walled Carbon Nanotubes," March 23, 2000.
2. Molecular Electronics 2000, Kona, HI. "Single-Walled Carbon Nanotubes: From Fundamental Properties to New Device Concepts," December 10, 2000.
1. American Chemical Society (ACS) Fall Meeting, Boston, MA. "Electronic Properties of Single Walled Carbon Nanotubes," August 24, 1998.

Research Presentations (Contributed)

9. Near-field Optics (NFO-13), Snowbird, Utah. "Heterogeneous Plasmonic Oligomers," August 31- September 4, 2014.
8. ACS Fall Meeting, Boston, MA. "Infinite and Microscale Patches of Nanohole Arrays: A Scalable Platform for Refractive Index Sensing with Increased Sensitivity," August 20, 2007.
7. MRS Spring Meeting, San Francisco, CA. "Soft Interference Lithography," April 13, 2007.
6. Clusters, Nanocrystals, and Nanostructures Gordon Research Conference, New London, CT. "Patterned Nanoscale Materials and Structures," July 31 - August 5, 2005.
5. Purdue-INAC Workshop, West Lafayette, ID. "Metallic Nanostructures: Pyramids and Nanohole Arrays," July 25, 2005.
4. ACS Spring Meeting, San Diego, CA. "Mass-limited Growth in zL-Beakers: A General Approach for the Synthesis of Nanocrystals," March 16, 2005.
3. ACS Spring Meeting, San Diego, CA. "Synthesis of Nanoscale Metal Chalcogenides by Soft Chemical Methods," March 15, 2005.
2. Solid State Chemistry I Gordon Research Conference, New London, NH. July 25-30, 2004.
1. Clusters and Nanocrystals Gordon Research Conference, New London, CT. August 3-8, 2003.

Education and Outreach Presentations (Accepted): 64 to date, 11 international

64. Universidade de São Paulo, São Paulo, Brazil. "ACS on Campus: Copyright and Ethics," May 15, 2019.
63. Universidade de São Paulo, São Paulo, Brazil. "ACS on Campus: 10 Tips for Scholarly Publishing," May 15, 2019.
62. Federal University of Minas Gerais, Minas Gerais, Brazil. "ACS on Campus: Creating Effective Graphical Abstracts," May 14, 2019.
61. Federal University of Minas Gerais, Minas Gerais, Brazil. "ACS on Campus: 10 Tips for Scholarly Publishing," May 14, 2019.
60. Federal University of São Paulo, São Paulo, Brazil. "ACS on Campus: Copyright and Ethics," May 13, 2019.
59. Federal University of São Paulo, São Paulo, Brazil. "ACS on Campus: 10 Tips for Scholarly Publishing," May 13, 2019.
58. gradSWE, Northwestern University, Evanston IL. "Advocating for Oneself as a Woman in Academia," February 2, 2019.
57. Biotechnology Training Program (BTP), Northwestern University, Evanston, IL. "Rigor and Reproducibility from the Perspective of a Journal Editor," June 5, 2018.
56. Society of Asian Scientists and Engineers (SASE), Northwestern University, Evanston, IL. "Brown Bag Lunch Discussion," February 21, 2018.
55. University of Amherst, Amherst, MA. "It takes a Village: How your Community Affects your Success," November 10, 2017.
54. WISER Fall Reception, Northwestern University, Evanston, IL. "Welcome Remarks," October 10, 2017.

53. Nano-scout Day hosted by the IIN, Northwestern University, Evanston, IL. "Introduction to Nano," April 8, 2017.
52. ACS on Campus, "Top Ten Tips for Preparing your Manuscript," Panel discussion, Northwestern University, November 9, 2016.
51. Public Voices Fellowship Alumni Panel, Northwestern University. November 4, 2016.
50. Chemistry Graduate Students, Northwestern University. "Taking Graduate Student Training Seriously," July 19, 2016.
49. World Intellectual Property Organization (WIPO) visit to the International Institute for Nanotechnology (IIN), Northwestern University, Evanston, IL. "A Gentle Introduction to Nano," June 16, 2016.
48. Senate Science Forum, Washington, DC. May 10, 2016.
47. Investiture Ceremony for Endowed Chairs, Evanston, IL. "The Story of Us: The Making of a Late-Bloomer Scientist and Professor," April 26, 2016.
46. Chicago Collaboration for Women in STEM (CWIS) Career Development and Leadership Retreat, Naperville, IL. March 3-4, 2016.
45. Publishing High Impact Panel, Northwestern University Postdoctoral Forum, Evanston, IL. February 29, 2016.
44. We Will Campaign, Traveling Classroom, Los Angeles, CA. "Making Precious Metals More Precious," February 20, 2016.
43. Gettysburg College, Gettysburg, PA. "The Colorful Nanoworld," March 31, 2015.
42. University of California at Santa Barbara, Santa Barbara, CA. "It takes a Village: How your Community Affects your Success," May 16, 2014.
41. IUMRS-ICEM 2012, Yokohama, Japan. "Educational Forum: Benchtop Nanoscale Experiments," September 26, 2012. [**Keynote Speaker**] *Christina Sweeney substituted.*
40. Northwestern University, Evanston, IL (MRSEC REU program). "Odom Group Research: Making Precious Metals more Precious," April 28, 2012.
39. Research Corporation Cottrell Scholars Conference, Tucson, AZ. "Taking Graduate Student Training Seriously," July 22-24, 2010.
38. Symposium on Undergraduate Nano-Education: Addressing the Challenges of Nanoscale Science & Engineering Education, SUNY-Albany, NY. August 5-9, 2009.
37. Current Events Class of Evanston, Evanston, IL. "Nano and You: Evaluating the Promise of Nanotechnology," May 21, 2009.
36. Fireside at Slivka Hall, Northwestern University, Evanston, IL. "Nanotechnology and Color," May 20, 2009.
35. FNANO09, Snowbird, UT. "Designing Research-based Courses for Undergraduates, Nanoscience Modules for High School Students, and Hands-on Activities for the Developing World," April 20-21, 2009.
34. Science Café at the Wilmette Public Library, Wilmette, IL. "The Colorful Nanoworld," March 11, 2009.

33. Undergraduate Chemistry Council, Northwestern University, Evanston, IL. "Nanoscale Pyramids: New Opportunities for Multifunctional Nanomaterials," February 26, 2009.
32. Survival Skills Program, Women's Center, Northwestern University, Evanston, IL. February 25, 2009.
31. 1st Alexandria International Congress on Tissue Engineering, Alexandria, Egypt. "Benchtop Nanoscale Experiments," February 14-16, 2009.
30. Global Nanoscale Science and Engineering Education (NSEE) Workshop, Washington, DC. "Nanopatterning: Plasmonics and the NCLT," November 13, 2008.
29. 2008 Chicago Humanities Festival: THINKING BIG, Chicago, IL. November 2, 2008.
28. Cottrell Scholars Symposium, Tucson, AZ. July 10-11, 2008.
27. Research Experience for Undergraduates and Teachers Program, Evanston, IL "The Colorful Nanoworld," July 9, 2008.
26. Science Research Workshops, Northwestern University, Evanston, IL. "How to Write Undergraduate Research Proposals," February 27, 2008.
25. Museum of Science and Industry and University of Chicago, Chicago, IL. "Innovations in Nanotechnology," January 26, 2008.
24. Africa MRS 2007, Dar Es Salaam, Tanzania. "Nanoscale Patterning using Soft Lithography," December 10-15, 2007.
23. Sigma Xi Lecture, University of Northern Iowa, Cedar Falls, IA. "The Colorful Nanoworld," October 9, 2007.
22. Undergraduate Chemistry Council, Northwestern University, Evanston, IL. "Plasmonic Metamaterials," May 17, 2007.
21. ACS Spring Meeting, Chicago, IL. "Nanotechnology Research-based Courses for Freshmen and Sophomores," March 25, 2007
20. Compton Lecture Series, University of Chicago, Chicago, IL. "The Colorful Nanoworld," October 28, 2006.
19. Chicago Science Expedition: Nanotechnology: Thinking Big and Building Small, Harold Washington College, Chicago, IL. "The Colorful Nanoworld," October 5, 2006.
18. NCLT Professional Development, Evanston, IL. "Introduction to Nanofabrication," August 8, 2006.
17. NSF Summer Institute on Micro and Nanodevices, Evanston, IL. "Large Scale NEMS Fabrication – Directed Self-Assembly," August 7, 2006.
16. Cottrell Scholars Symposium (keynote speaker), Tucson, AZ. "Designing Research-based Courses at the Undergraduate Level," July 6, 2006.
15. ACS Fall Meeting (NSF Broader Impacts Symposium), Washington, DC. "Research Experience for Teachers Program," August 28-September 1, 2005.
14. Materials World Network: Next 10 Years, Cancun, Mexico. "Strategy Summary for Next Ten Years," August 22, 2005.
13. Nanoscale Center for Learning and Teaching (NCLT) Professional Development, Evanston, IL. "Introduction to Nanofabrication," July 22, 2005.

12. ASME Nano Bootcamp, Evanston, IL "Nanowires and Nanoparticles," June 15, 2005.
11. Research Experience for Undergraduates (REU) and RET Program, Evanston, IL "Nanoscience and Nanotechnology: An Introduction," June 29, 2005.
10. NSF Summer Institute on NanoMechanics and Materials, Evanston, IL. "Methods of Nanoscale Synthesis and Characterization," June 20, 2005.
9. 3rd International Workshop to Develop a Global Nanotechnology Network, Saarbrucken, Germany. "Nanoscience Education and Nanotechnology at Northwestern," May 25-27, 2005.
8. Undergraduate Chemistry Council, Northwestern University, Evanston, IL. "Synthesis and Patterning of Nanomaterials," April 21, 2005.
7. American Institute of Chemical Engineers (AIChE) Chicago Section, Chicago, IL. "Introduction to Nanotechnology: Synthesis and Assembly of Nanomaterials," April 20, 2005.
6. Research Experience for Teachers (RET) Program, Evanston, IL. "Nanoscience and Nanotechnology: An Introduction," June 28, 2004.
5. ASME Nano Bootcamp, Evanston, IL "Nanowires and Nanoparticles," June 14, 2004.
4. ACS Spring Meeting, Los Angeles, CA. "Educational Outreach through the Center for Integrated Nanopatterning and Detection Technologies," March 29, 2004.
3. Lawrence University (Keynote speaker for Nanoscience in Education), Appleton, WI. "Research and Education in Nanoscale Science," March 17, 2004.
2. NSF RET Workshop for High School Teachers, Illinois Institute of Technology, Chicago, IL. "Research Experience for Teachers," September 8, 2003.
1. American Society of Mechanical Engineers (ASME) Nano Bootcamp, Evanston, IL. "Nanowires and Nanoparticles," July 11, 2003.

Educational Hands-on and Online Video Modules (selected)

1. NSF Materials World Modules (MWM) on *Nanopatterning*: http://www.materialsworldmodules.org/modules/nanopatterning.shtml
2. Unconventional patterning at the nanoscale (online lab module): http://community.nsee.us/index.php?option=com_content&view=article&id=330
3. Microcontact printing and replica molding (online lab module): http://community.nsee.us/index.php?option=com_content&view=article&id=251 as well as pdf copy of notebook.

Recorded and Posted Lectures

1. Odom's gave a FiO+LS Visionary Talk on Peering Through the Looking Glass: The Next Frontier in Nano-Optics (September 18, 2018)
2. Odom's Personal Story of Discovery featured by ACS Publications highlights student mentoring and why we do what we do.
3. Odom gave an ACS webinar on National Nanotechnology Day (October 9, 2017) (Nano 2.0: Multi-scale Nanomaterials)
4. Odom's teaching innovation in freshmen-designed videos on nanoscience (December 2016) is highlighted by Digital Learning at Northwestern.

5. Public Voices Fellowship 2014-2015
6. Frontiers in optical materials (Japan-American Kavli Frontiers of Science 2007, Frontiers in Optical Materials)
7. Are we there yet? The road to a technology based on nanoscience (German-American Kavli Frontiers of Science 2009, Nanotechnology: Dream or Reality?)
8. Nanolasers the size of virus particles (US-Israel Kavli Frontiers of Science 2013, Nanophotonics and the Art of Invisibility)
9. Nano-basics for clinicians and gold nanostars as tiny hitchhikers for cancer therapeutics (International Institute for Nanotechnology 2013 Nanotechnology Boot Camp for Clinicians)
10. Odom's teaching integrated a wide-range of technologies into freshmen chemistry, including Lecture Capture, Clickers, Document Camera, and Voice-over Worked Problems

OTHER PUBLICITY

1. Odom interviewed by an undergraduate in Physics Today on scientists who work combines physics and biology (Finding the road to interdisciplinary research)
2. Our work on reconfigurable, imaging metalenses is highlighted by Northwestern Now (Tiny optical elements could one day replace traditional refractive lenses)
3. As the Eminent Scientist Lecturer for the 2019 ACS Spring Meeting, Odom was interviewed by inChemistry, the ACS Student Member Magazine (Eminent Scientist Teri Odom Talks about Her Journey to the Brilliant Science of Thinking Small)
4. Our collaborative work on the non-linear properties of gold nanoparticle arrays for sensing advances is highlighted in ScienceDaily.com (Ultra-sensitive Sensor with Gold Nanoparticle Array)
5. Our work on optical metamaterials was highlighted by Photonics.com (The Dawn of New Optics: Emerging Metamaterials)
6. Odom, Mirkin, and Jewett were featured in a video highlighting the Center of Excellence Center for Advanced Bioprogrammable Nanomaterials (C-ABN) with the Air Force Research Laboratory (AFRL).
7. Odom was highlighted in a special virtual issue, Bioconjugate Chemistry: Celebrating Women Scientists (September 2018).
8. Odom's Visionary Talk for the OSA Annual Meeting is summarized in the article Through the Nano-Optics Looking Glass on September 18, 2018.
9. Our work on stretchable lasing was highlighted on the cover of Laboratory News (The Chameleon and the Crystal Maze) on September 17, 2018.
10. Odom gave an interview as part of the OSA Senior Member series (Teri Odom on being an Advocate) posted on August 21, 2018.
11. Our work on stretchable nanolasing was highlighted by numerous news outlets, including Northwestern Now (Chameleon-inspired nanolaser changes colors), Electronics Weekly (Laser tunes like chameleon skin), Physics World (Chameleons inspire mechanochromic nanolaser), Business Standard (Now, a laser with colour-changing feature), WTTW (Northwestern's New Chameleon-inspired Laser Changes Colors), Optics & Photonics News (A Chameleon-Inspired Tunable Nanolaser), C&E News (Chameleon-inspired Laser).

12. Odom, Mirkin, Silverman were featured in a North by Northwestern article (Chemistry, but Make it Small) in Winter 2018.
13. Odom's Personal Story of Discovery featured by ACS Publications launched at the Spring 2018 ACS Meeting with a large advertising picture of transformative work. Highlighted by DoD Basic Research and on Northwestern Now (March 23, 2018). Also featured throughout Chicago on area advertisements such as Divvy bike stations at the intersection of Fairbanks Ct. and Grand Ave. (April 2018) and at MBTA green-line stations in Boston (August 2018).
14. "Manipulating the Optical Properties of Pyramidal Nanoparticle Arrays" was included in a special collection of papers honoring the 150th birthday of Marie Curie, as well as highlighting the science and publications by 66 women scientists and researchers who have published in *The Journal of Physical Chemistry* on November 2, 2017.
15. Odom and Mirkin were featured in a Northwestern Now article (Titans of nanotechnology: The next big thing is very small) on October 9, 2017.
16. Our work on quasi-random photonic nanostructures was highlighted by numerous news outlets, including Nanowerk.com (Nanomanufacturing approach to rapidly optimize and fabricate quasi-random photonic nanostructures), Nanotechnology Now (Simultaneous Design and Nanomanufacturing Speeds Up Fabrication: Method enhances broadband light absorption in solar cells), Northwestern Engineering News (Simultaneous Design and Nanomanufacturing Speeds Up Fabrication), Nanotechweb.com (Photonic nanostructures by design), Engineering 360 (Design + Nanomanufacturing = Optimal Solar Cell Material), LaserFocusWorld (Machine learning and wrinkle lithography speed up fabrication of broadband light absorbing surfaces for solar cells), EurekAlert! (Simultaneous design and nanomanufacturing speeds up fabrication), and ScienceDaily (Simultaneous design and nanomanufacturing speeds up fabrication) in August 2017.
17. Our work on multi-color nanoscale lasing was highlighted by German news pro-physik.com (Multimodale Mini-Laser) on July 12, 2017.
18. Our work on multi-color nanoscale lasing was released to the press by Northwestern (New laser design offers more inexpensive multi-color output) on July 11, 2017.
19. Our work on band-edge engineering for multi-modal lasing was highlighted in Nanowerk.com (Controlling multi-modal nanolasing with plasmonic superlattices), Opli (New laser design offers more inexpensive multi-color output), Photonics Media (New Laser Design Offers Multicolor Output of Tissue in Real Time), Digital Journal (Laser technology helps medics track tumor growth), AZO Optics (New Laser Design Controls Color, Intensity of Light by Varying Cavity Architecture), and *Nature Nanotechnology*'s News and Views (Nanolasing: Multimode superlattice arrays) in July, 2017.
20. Our work on single crystalline titanium nitride lattice optics was highlighted in MRS Bulletin (Unconventional TiN nanohole arrays bring new dynamic to plasmonic metamaterials) on March 3, 2017.
21. Our work on evolutionary design of titanium nitride metasurfaces was highlighted in Nanowerk.com (Computational and patterning approaches to realize metasurfaces in novel plasmonic materials) on January 27, 2017.
22. Our work on programmable plasmons was highlighted in Nanotechweb.org (Programmable plasmon modes could help make ultrasensitive molecular sensors) on December 7, 2016.

23. Our work on programmable plasmon modes was highlighted in Nanowerk.com (Programmable plasmons by strain engineering) on November 29, 2016.
24. Odom and spouse are featured in a Northwestern Couples podcast: a second-chance encounter on November 2, 2016.
25. Our work on achromatic nanoparticle lenses was highlighted in Nanowerk.com (Ultra-thin achromatic lenses optimized by an evolutionary algorithm on October 28, 2016.
26. Odom is featured in WIA Report as one of ten women named as a Fellow of ACS in 2016.
27. Our work on how size and shape affect the properties of nanoparticles is highlighted in Chemistry World in August 2016, Volume 13, Issue 8.
28. Odom received a Cottrell Scholars SEED award and election as an ACS Fellow was highlighted in the August 2016 Northwestern Research News.
29. Odom and Mirkin are featured in the cover story of Northwestern Research Magazine for Spring and Summer 2016.
30. Our collaborative work with Wei Chen received the *Best Paper Award* at the 42th ASME Design Automation Conference: Yu, S., Zhang, Y., Wang, C., Lee, W-K, Dong, B., Sun, C., Odom, T., and Chen, W., "Characterization and Design of Functional Quasi-Random Nanostructured Materials using Spectral Density Function" (2016).
31. Our work on stretchable superhydrophobicity was highlighted in Nanowerk.com (Nanowrinkles are key to stretchable superhydrophobic surfaces) on May 5, 2016.
32. Odom quoted in work focused on "Seeing Nanoparticles in 3D within Animal Tissues" from medGadget, April 29, 2016.
33. Odom discusses promise and pitfalls of nanoscience as part of an ACS White Paper published in 2016.
34. Our work on hierarchical, sequential wrinkling was featured in MRS Materials 360 online. September 24, 2015.
35. Our work on sequential nanowrinkling was featured in Science, August 21, 2015 and Nanowerk.com (3D nanopatterning with memory-based, sequential wrinkling)
36. Odom discussed significance of a WSe_2 monolayer-photonic crystal cavity laser with Gabriel Spitzer and KPLU (one of the NPR stations in Seattle) on March 25, 2015.
37. Our work on how gold nanostars can enhance the relaxivity of MRI contrast agents was awarded the cover of *ACS Nano* and was featured in nanowerk.com (Nanoparticle shape can drastically enhance MRI signals, March 23, 2015) as well as nanotechweb.org (Gold nanostars enhance MRI signal, March 26, 2015).
38. Our work on lattice opto-materials was featured in the Woman in Nanoscience Blog (Teri Odom's new algorithm speeds the discovery of new materials, March 19, 2015).
39. Our work on lattice opto-materials was highlighted in February 2015 *MRS Bulletin* [volume 40, p. 103].
40. We were featured as the December 2014 profile for AWIS (Association for Women in Science, Chicago). http://www.awis-chicago.org/community/scientist-of-the-month/december-2014-sotm-teri-odom

41. Our work on lattice opto-materials as ultra-flat lenses is highlighted in Materials Today (Metallic lattices offer new approach to super thin lenses, December 3, 2014)
42. Our work on lattice opto-materials that can focus light anywhere in 3D is highlighted in nanotechweb.org (Only the fittest lattice optics will survive, November 13, 2014)
43. Our work on nanoparticle oligomers is highlighted as an *ACS Nano* August 2014 podcast. My student Ankun Yang conducts the interview with the managing editor of *ACS Nano*.
44. Our work on designing new types of hydrogen sensors based on nanoparticle oligomers is highlighted in nanotechweb.org. (Nanoparticle oligomers detect hydrogen, July 11, 2014)
45. Our receipt of the 2014IPMI Carol Tyler award is posted: www.youtube.com/watch?v=eM7aN_JQX8g
46. Our work on delivery of gold nanostar constructs to the nucleus is mentioned in CNN. http://www.cnn.com/interactive/2014/04/health/the-cnn-10-healing-the-future/ (story 2).
47. Our work on high drug loading on gold nanostars increasing efficacy was highlighted in nanotechweb.org (Loaded nanostars kill cancer cells, April 16, 2014) and nanowerk.com (A novel approach to designing drug-loaded nanoconstructs, April 9, 2014)
48. Our work on lattice plasmon lasers based on arrays of plasmonic nanoparticles was highlighted in nanotechweb.org (Lattice plasmons help make for new nanolaser)
49. Our work on nanolasers based on 3D bowties is highlighted in Discover Magazine (June 2013)
50. Our work on the delivery of drugs to the cancer nucleus using drug-loaded gold nanostars ("tiny hitchhikers") was highlighted in numerous media outlets, including *Chemical & Engineering News* (2 April **2012**, *90*, 25) and Northwestern University News (Tiny Hitchhikers Attack Cancer Cells: Gold Nanostars First to Deliver Drug Directly to Cancer Cell Nucleus). Distinct other press includes: Fierce Drug Delivery (Hitchhiking Gold Nanostars Can Sneak into Cancer Cells), Gizmag (Gold nanostars deliver drugs directly to cancer cell nucleus), UPI (Drug sent to a cancer cell's nucleus), Medical News Today (Nanostars Deliver Cancer Drugs Direct To Nucleus), AZO Nano (Drug-Loaded Gold Nanostars Hitchhike into Cancer Cell Nucleus), Futurity (Gold nanostars hitch a ride to attack cancer), Phys.Org (Tiny Hitchhikers attack Cancer Cells), TG Daily (These nanoparticles attack cancer cells), Nanowerk.com (Gold nanostars first to deliver drug directly to cancer cell nucleus) and Gizmodo.
51. Our work on fabricating moiré nanolattices was highlighted in nanotechweb.org (Nanofabrication reaches new complexity, 12 September 2012).
52. Our work on plasmonic nanostructures—both fabrication and synthesis work—was highlighted in Chemistry World (Plasmons with a Purpose, 2 August 2012)
53. Our opinion and review on printable color was highlighted in multiple media outlets: Discovery News (Nanoprinter Achieves Insane Resolution, 13 August 2012), Scientific American (Highest Possible Resolution Color Images Achieved, 13 August 2012), NBC News.com (Best possible high-res printing achieved, Best possible high-res printing achieved, 14 August 2012)
54. Our work on liquid metal plasmonics was highlighted in RSC.org (Liquid gallium lights up, August 8, 2012)
55. Our work on the aptamer-nanostar drug delivery system continues to receive press months after the paper was accepted: Pharmaceutical Technology (Nanotechnology: is the elusive cure for cancer in sight? 14 June 2012), Nanotechnology Now (Delivering Nanoparticles to the Cell

Nucleus, 14 May 2012), National Cancer Institute (Delivering Nanoparticles to the Cell Nucleus)

56. Our invention of solid state photolithography (SSP) was highlighted in Nanowerk.com and in an SPIE Newsroom article (DOI: 10.1117/2.1201202.004132)
57. Our work on strongly coupled nanoparticle arrays and dark plasmons was highlighted in MRS Materials 360 in the June 2011, Volume 11, Issue 11.
58. One of 60 women in chemistry selected to describe in 60 seconds today's major issues and opportunities facing women in chemistry and the sciences for the International year of Chemistry, http://www.futurewecreate.com/women/
59. Programmable soft lithography based on Solvent-Assisted Nanoscale Embossing (SANE) work was highlighted in numerous media outlets, including *Chemical & Engineering News*, *NSF News from the Field,* and Northwestern University (as listed in publications section). Distinct other press includes: Physics World, nanowerk.com, Laboratory Equipment (Scientist of the Week), R&D Magazine, Science Daily, Physorg.com, Futurity.org (Nanopatterns on the cheap)
60. Our work on nanopyramids and their application in cancer research was featured on the cover of the National Nanotechnology Initiative (NNI) Supplement to the President's FY 2011 Budget. http://nano.gov/
61. Our work in research and teaching is highlighted by the Research Corporation
62. NCLT Press Release Highlight on our Nanobiotechnology and Materials Workshop in Alexandria, Egypt.
63. Nanopatterning workshop in Africa highlighted in *Adv. Mater.* **20**, 1 (2008)
64. Soft Interference Lithography (SIL) work highlighted in numerous media outlets, including *NSF Press Release, Nature Nanotech*, and *Science* (as listed in publications section). Others, including: Science Daily, Physorg.com, Nanotechnology Now, Semiconductor International, Nanotechwire.com, NaniteNews.com, ZDnet.com, Daily Science News (Nanomaterials with a Bright Future), Popular Mechanics
65. Tips for writing a journal article, *C&E News,* August 13, 2007, volume 85, pages 46-49.
66. "Science as Art" First Place Winner at the MRS Spring 2007 Meeting
67. NCLT Press Release Highlight on our work with New Trier High School teachers and benchtop nanoscale patterning
68. Pyramid picture selected as part of the Nanostructure Fabrication Gordon Research Conference 2006 Flyer and T-shirt
69. Odom Interview by Foresight Institute: Why Care about Nanotechnology?
70. Odom Interview on National Public Radio Earth & Sky: Nanopatterning
71. Weblog on talk at the Foresight Conference on Nanotechnology
72. Work on imaging photocurrent in CdS nanowires photodetectors highlighted in *Photonics Spectra*, September 2005, p. 106.
73. Nanocrystals in nanowells work highlighted in *Nature Materials*
74. Nanopicture of the Day: July 2004

75. Beating the Odds article in *Chronicle of Higher Education* on Odom being offered a faculty position while still a graduate student

PEER-REVIEW AND RELATED ACTIVITIES

Journal Reviewer

1. Accounts of Chemical Research
2. ACS Applied Materials and Interfaces
3. ACS Nano
4. Acta Biomaterialia
5. Advanced Functional Materials
6. Advanced Materials
7. Advanced Materials Interfaces
8. Advanced Optical Materials
9. Angewandte Chemie International Edition
10. Applied Physics Letters
11. Chemical Communications
12. Chemical Science
13. Chemistry of Materials
14. ChemPhysChem
15. Chemical Physics Letters
16. Crystal Growth and Design
17. European Journal of Inorganic Chemistry
18. IEEE Proceedings
19. IEEE Transactions in Nanotechnology
20. International Journal of Nanotechnology
21. International Network for Engineering Education and Research (iNEER)
22. Journal of the American Chemical Society
23. Journal of Chemical Education
24. Journal of Materials Chemistry
25. Journal of Materials Research
26. Journal of Nanoengineering and Nanosystems
27. Journal of Nanophotonics
28. Journal of Optics
29. Journal of Physical Chemistry B
30. Journal of Physical Chemistry C
31. Journal of Physical Chemistry Letters
32. Journal of Raman Spectroscopy
33. Journal of Solid State Chemistry
34. Journal of Vacuum Science and Technology B
35. Langmuir
36. Laser and Photonics Reviews
37. Materials Research Bulletin
38. Materials Science and Engineering B
39. MicroNano Letters
40. Materials Today
41. Nano Letters

42. Nanomedicine
43. Nanoscale
44. Nano Research
45. Nanotechnology
46. Nature
47. Nature Communications
48. Nature Materials
49. Nature Nanotechnology
50. Nature Photonics
51. Optics Letters
52. Optics Express
53. Organic Electronics
54. Physica E
55. Physical Chemistry Chemical Physics
56. Physical Review Applied
57. Physical Review B
58. Proceedings of the National Academy of Sciences
59. Recent Patents in Anti-cancer Therapy
60. Science
61. Scientific Reports
62. Small
63. Talanta
64. Thin Solid Films

Proposal Reviewer

1. NIH Enabling Bioanalytical and Imaging Technologies (EBIT) Chair (2016 – 2018)
2. NIH EBIT Standing Member (2012 – 2016)
3. Co-Chair EBIT October 2014
4. Chair EBIT special emphasis panel on microscopy and imaging (June 2015)
5. American Chemical Society (ACS)-Petroleum Research Fund (PRF) G
6. ACS-PRF AC
7. NSF: Analytical and Surface Chemistry
8. NSF: Experimental Physical Chemistry
9. NSF: Solid State and Materials Chemistry (CAREER)
10. NSF: Molecular, Supra, and Nanochemistry (CAREER)
11. NSF: Division of Materials Research (individual PI and MRSEC proposals)
12. NSF: Division of Materials Research Electronic and Photonic Materials *Panel*
13. NSF: Division of Materials Research MRSEC *Panel*
14. NSF: Division of Materials Research CAREER *Panel*
15. NSF: Collaborative Research Centers in Chemistry
16. NSF: Research Experience for Undergraduates (REU) *Panel*
17. NSF: Hierarchical Nanomanufacturing NIRT *Panel*
18. NSF: Analytical and Surface Chemistry CAREER *Panel*
19. NSF: NanoManufacturing CAREER *Panel*
20. U.S. Civilian and Research Development Foundation (CDRF)
21. Research Corporation: Cottrell Scholars Program

22. Research Corporation: Cottrell College Program
23. Department of Energy
24. Center for Materials Innovation (CMI) at University of Washington
25. National Science Engineering Research Canada (NSERC): Inter-American Collaboration in Materials
26. European Research Council
27. Gordon Research Conferences
28. Stanford/Global Climate and Energy Project (GCEP)
29. Research Corporation's Scialog Program
30. Consolider-Ingenio 2010 Programme (Spanish Government)

Book Reviewer

Bridging the Micro-Nano Interface for the journal Small

PROFESSIONAL AFFILIATIONS AND SERVICE

Member: American Chemical Society (ACS), American Physical Society (APS), American Vacuum Society (AVS), Materials Research Society (MRS), Optical Society of American (OSA), Society of Photographic Instrumentation Engineers (SPIE), American Association of Arts and Sciences (AAAS)

Session Chair

1. IIN Symposium, Northwestern University, 2017: "Session II"
2. Board of Trustees Meeting with Faculty Chairs, September 2017 (Academic Facilitator)
3. SPP7, 2015: "Plasmonic Spectral and Spatial Beam Shaping"
4. NFO-13, 2014: "Nanogaps and Hot Spots"
5. SPIE Optics and Photonics, 2013: "Nanoplasmonic Resonances"
6. AMN-6 Meeting, 2013: "Nanoscale Systems"
7. ACS Fall Meeting, 2012: "Inorganic Nanoscience Award to Daniel R. Gamelin"
8. ACS Fall Meeting, 2012: "Synthesis, Spectroscopy, Theory and Applications of Nanocrystals and Nanowires"
9. Yamada Conference LXVI, 2012: "Nanostructure-Enhanced Photo-energy Conversion"
10. European Materials Research Society (E-MRS), 2012: "Optical Nanoantennas"
11. META12, 2012: "Large-area Nanofabrication for Plasmonics and Photonics"
12. EUROPT(R)ODE X, 2010: "Nanostructures for Sensing"
13. Indo-US Meeting, 2009: "Advanced Materials Research"
14. MRS Spring Meeting, 2009: "Session Y7: Functional Nanostructure Fabrication"
15. NCI Alliance for Nanotechnology in Cancer Investigators Meeting, 2008: Poster judge
16. SPIE Optics and Photonics, 2008: "Session 6: Nanosensing"
17. IIN Symposium, Northwestern University, 2007: "Session III: Nanodevices"
18. Japan-American Kavli Frontiers of Science (FOS) Symposium, 2007: "Frontiers in Optical Materials"
19. ASME Nano Bootcamp, 2005: "Synthesis and Devices"
20. German-American Frontiers of Chemistry Meeting, 2005: "Photonics"
21. ACS Spring Meeting, 2005: "Nanocrystal Synthesis"
22. ACS 35th Greater Lakes, 2003: "Nanotechnology"
23. APS March Meeting, 2001: "Carbon Nanotubes"

Symposium Organizer

1. Vice Co-Chair of *new* Gordon Research Conference on "Lasers in Micro, Nano & Bio Systems," 2018.
2. SPIE 2017 Committee Member, Quantum Nanophotonics.
3. Near-field Optics (NFO-14), International Program Committee, Hamamatsu, Japan, September 4-8, 2016.
4. American Physical Society (APS), "Plasmonics and Beyond," March 14-18, 2016.
5. Near-field Optics (NFO-13), Snowbird, Utah. August 31- September 4, 2014.
6. ACS Fall 2012 Meeting, ACS Inorganic Nanoscience Award Symposium, Philadelphia, PA, August 21, 2012.
7. Member of Topical Program Committee, Meta12, Paris, France, April 19-22, 2012.
8. Chair for *new* Gordon Research Conference on "Noble Metal Nanoparticles," June 20-25, 2010.
9. Member of Program Committee for Nanophotonics Topical Sub-Committee for the IEEE Photonics Society 2009, Belek-Antalya Turkey. October 4-8, 2009.
10. Member of Program Committee for Surface Plasmon Polariton (SPP)-4 Meeting, Amsterdam, Netherlands, 2009.
11. Chair for International Institute for Nanotechnology (IIN) Symposium, Evanston, IL, November 20, 2008.
12. NSF-MEXT (US-Japan) Young Researchers Exchange Program, Japan. October 4-12, 2008.
13. NSF-MEXT (US-Japan) Young Researchers Exchange Program, Evanston, IL, March 11-12, 2008.
14. ACS Fall 2006 Meeting, ExxonMobil Solid State Chemistry Symposium, San Francisco, CA, September 12, 2006

TEACHING AND ADVISING

Areas of Teaching

Physical (quantum) chemistry, nanotechnology and nanopatterning, materials chemistry, general chemistry

Courses

Winter 2018	CHEM 131: General Chemistry	Undergrad
Winter 2017	CHEM 105: Freshman Seminar	Undergrad
Winter 2017	CHEM 102: General Chemistry	Undergrad
Winter 2016	CHEM 105: Freshman Seminar	Undergrad
Winter 2016	CHEM 102: General Chemistry	Undergrad
Winter 2015	CHEM 105: Freshman Seminar	Undergrad
Winter 2015	CHEM 102: General Chemistry	Undergrad
Winter 2014	CHEM 105: Freshman Seminar	Undergrad
Winter 2014	CHEM 102: General Chemistry	Undergrad
Spring 2013	CHEM 360: Nanopatterning	Undergrad/Graduate
Winter 2011	CHEM 360: Nanopatterning	Undergrad/Graduate
Winter 2011	CHEM 102: General Chemistry	Undergrad
Winter 2010	CHEM 360: Nanopatterning	Undergrad/Graduate
Winter 2010	CHEM 102: General Chemistry	Undergrad
Winter 2009	CHEM 250: Nanopatterning	Undergrad
Winter 2009	CHEM 102: General Chemistry	Undergrad
Winter 2008	CHEM 445: Optical Materials and Nanophotonics	Graduate
Winter 2008	CHEM 250-1: Sophomore Seminar in Nanopatterning	Undergrad

Spring 2007	CHEM 445: Optical Materials and Nanophotonics	Graduate
Winter 2007	CHEM 250-1: Nanopatterning	Undergrad
Spring 2006	CHEM 250-2: Sophomore Seminar in Nanopatterning	Undergrad
Winter 2006	CHEM 250-1: Sophomore Seminar in Nanopatterning	Undergrad
Winter 2006	CHEM 442-2: Advanced Quantum II	Graduate
Winter 2005	CHEM 442-2: Advanced Quantum II	Graduate
Spring 2004	GEN-LA 395-21: Nanoscale Patterning and Systems	Undergrad
Spring 2004	CHEM 445: Science and Technology at the Nanoscale	Graduate/Undergrad
Winter 2004	CHEM 442-2: Advanced Quantum II	Graduate
Spring 2003	CHEM 445: Science and Technology at the Nanoscale	Graduate/Undergrad
Winter 2003	CHEM 442-2: Advanced Quantum II	Graduate

Curriculum Development

1. CHEM 105 (Winter 2017), NUIT highlighted innovations in my freshman seminar on creating nanoscience experts
2. CHEM 105 (Winter 2014), a freshman seminar focused on The Hope and Hype of Nanotechnology, had as their final project to construct a video describing a concept in nanoscience. Student Joshua Kim and team made a terrific YouTube video called "What Color is Gold?"
3. CHEM 102 (Winter 2010) integrated several aspects of technology into freshmen chemistry, including Lecture Capture, Clickers, Document Camera, and Voice-over Worked Problems (ProfCast). A video showing the use of the technology plus student interviews can be found here. Aspects were also highlighted in a newsletter by Northwestern University's Information Technology (NUIT).
4. CHEM 250 was funded by an NSF-Nanotechnology in Undergraduate Education Award. This research-based course was two quarters and designed for freshman and sophomores. Video-lab modules were developed and can be found at: http://www.nanoed.org/courses/nano_experiments_menu.html.
5. GEN-LA 395-21 was developed in response to a call from the Dean of WCAS to design *Junior Seminars*. Ours was one of three selected for the inaugural year, and the only science one. This lab-based course in nanotechnology had sophomores and juniors from chemistry, biology, English, and materials science.
6. CHEM 445 was designed for advanced undergraduates and graduate students and had instrumentation training so students could obtain training on sophisticated nanoscale instrumentation. A Hewlett Award for Innovations in Undergraduate Teaching was used to fund these nano-training activities.
7. Other courses benefited from the seminars and workshops attended as a Searle Fellow (2004) as part of the Searle Center for Excellence in Teaching.
8. I have contributed two chapters to different books in Nanoscale Education on the design of research-based courses in nanotechnology.

Undergraduate Students Advised in Research

1. Christian Jacobson (WCAS, 2016)	Ph.D. program, Rice University (2016)
2. Stephanie Werner (WCAS, 2016)	Ph.D. program, U Wisconsin (2016)
3. Alice Ou (McC, 2014)	

4.	Raymond Lee (WCAS, 2014)	Applying to medical school
5.	Hope Caughron (McC, 2014)	Medical school
6.	Ruilong Ma (McC, 2013)	Ph.D. program, Georgia Tech
7.	Kelsey Stoerzinger (McC, 2010)	Assistant Professor, Oregon State (2018)
8.	Matt Chia (WCAS, 2009)	Applying to medical school
9.	Tom McDonald (WCAS, 2007)	Ph.D. program, UC Berkeley
10.	Numrin Thaitrong (WCAS, 2006)	Ph.D. program, UC Berkeley
11.	Scott Price (WCAS, 2006)	Ph.D. program, UC Santa Barbara
12.	Laura Hughes (WCAS, 2006)	Ph.D. program, Stanford University
13.	Jeffrey Wille (WCAS, 2004)	Forensics Master's Program, UIC

Undergraduate Student Awards

Hope Caughron

Undergraduate Research Sumer Grant, Northwestern University (2013)

Matt Chia

NSEC REU Academic Year Program (2008)

Laura Hughes

NSF Predoctoral Fellowship (2007)
Gates Cambridge Scholar (2006)
Sarrett Award, Northwestern University (2005)
MathCAD Award, Northwestern University (2005)
Barry A. Goldwater Fellowship (2005)
Undergraduate Research Grant, Northwestern University (2004)

Christian Jacobson

Undergraduate Research Summer Grant, Northwestern University (2013)
DAAD Rise Fellowship (2014)

Raymond Lee

Undergraduate Research Summer Grant, Northwestern University (2013)

Ruilong Ma

ISEN Undergraduate Research Fellowship (2010)
NSEC REU Academic Year Program (2010)

Thomas McDonald

REU Solid State Chemistry Fellowship (2006)

Scott Price

Undergraduate Research Summer Grant, Northwestern University (2005)
Undergraduate Research Grant, Northwestern University (2004)

Terrence Stilson

Chemistry of Life Processes Institute Lambert Fellowship (2017)

Kelsey Stoerzinger

DOE Predoctoral Fellowship (2011)
NSF Predoctoral Fellowship (2011)
Churchill Fellowship (2010)
University Guild Scholarship (2009)

ASM Chicago Regional Carl Samans Award (2009)
Society of Women Engineers Caterpillar Scholarship (2008)
ASM Materials Education Foundation Outstanding Scholar Award (2008)
MRSEC REU Academic Year Program (2008)

Numrin Thaitrong

Undergraduate Research Summer Grant (2005)

M.S. Students

1.	Phoebe Li	December 2009	Chemical Engineering
2.	David Karlin	August 2014	Chemistry

Ph.D. Students

1.	Jingtian Hu	June 2019	Postdoctoral Fellow, Northwestern
2.	Danqing Wang	June 2019	Miller Fellow, UC Berkeley
3.	Won-Kyu Lee	June 2018	Postdoctoral Fellow, Harvard University
4.	Michael Knudson	December 2017	Research Scientist, Intel
5.	Weijia Wang	December 2017	Research Scientist, Lam Research
6.	Kavita Chandra	December 2017	Boston Consulting Group
7.	Kayla Culver	June 2017	TBD
8.	Alex Hryn	December 2016	Research Scientist, Intel
9.	Ankun Yang	June 2016	Postdoctoral Fellow, Stanford University
10.	Cliff Engel	July 2015	Research Scientist, Intel
11.	Yi Hua	June 2015	Research Scientist, Intel
12.	Mark Huntington	January 2015	McKinsey and Company
13.	Duncan Dam	December 2014	Postdoctoral Fellow, Northwestern
14.	Steven Lubin	December 2013	Research Scientist, Intel
15.	Julia Lin	December 2012	Research Scientist, Intel
16.	Wei Zhou	December 2012	Assistant Professor, Virginia Tech
17.	Eunah You	June 2012	Research Scientist, KRISS
18.	Christina Sweeney	June 2011	Research Scientist, Intel
19.	Min Hyung Lee	June 2010	Assistant Professor, Kyung Hee U
20.	Warefta Hasan	December 2009	AuraSense, Chicago, IL
21.	Hanwei Gao	June 2009	Assistant Professor, Florida State U
22.	Christopher Stender	December 2008	MicroLink Devices, Chicago, IL
23.	Jeremy Barton	June 2008	Postdoctoral Fellow, UC Berkeley
24.	Joel Henzie	December 2007	MANA-NIMS Staff, Tokyo, Japan
25.	Yelizaveta Babayan	December 2007	Research Scientist, Eli Lily

Ph.D. Candidates

1.	Huanbo Jiang	(Ph.D. expected 2023)
2.	Lele Mathis	(Ph.D. expected 2023)
3.	Yi Wang	(Ph.D. expected 2023)
4.	Xitlali Juarez	(Ph.D. expected 2022)
5.	Alex Sample	(Ph.D. expected 2022)
6.	Jenny Wang	(Ph.D. expected 2022)
7.	Priscilla Choo	(Ph.D. expected 2021)

8. Jun Guo (Ph.D. expected 2021)
9. Lucy Lee (Ph.D. expected 2021)
10. Nic Watkins (Ph.D. expected 2021)
11. Thaddeus Reese (Ph.D. expected 2020)
12. Emma Coughlin (Ph.D. expected 2020)
13. Ran Li (Ph.D. expected 2020)
14. Dongjoon Rhee (Ph.D. expected 2020)
15. Tingting Liu (Ph.D. expected 2020)

Graduate Student Awards

Yelizaveta Babayan

First place poster prize at Industrial Associates meeting (2007)

Jeremy Barton

NSEC Fellow (2005)
NSEC Fellow (2004)
NSEC Fellow (2003)

Kavita Chandra

Biotechnology Cluster Fellow (2013)
Hierarchical Materials Cluster Program Fellow (2013)

Kayla Culver

NDSEG Graduate Fellowship (2012)
NSF Graduate Fellowship, Honorable Mention (2012)
Biotechnology Cluster Fellow (2011)
NSF Graduate Fellowship, Honorable Mention (2011)

Duncan Dam

Malkin Scholar Award (2012)
Hierarchical Materials Cluster Program Fellow (2010)

Cliff Engel

Northwestern Ryan Fellowship (2012)
NSF Graduate Fellowship, Honorable Mention (2012)
Hierarchical Materials Cluster Program Fellow (2011)
NSF Graduate Fellowship, Honorable Mention (2011)

Hanwei Gao

MRSEC Fellow (2007)
Link Foundation Fellowship (Honorable Mention, 2007)

Joel Henzie

Award for Distinction in Graduate Research, thesis prize (2008)
First prize in "Science as Art" competition at Spring 2007 MRS Meeting
Selected as one of 50 U.S.-participants in Nobel Laureates meeting in Lindau, Germany (2006)
MRSEC Fellow (2006)
MRSEC Fellow (2005)
Suchanski Prize (2005)

Alex Hryn

NDSEG Graduate Fellowship (2012)
Hierarchical Materials Cluster Program Fellow (2011)
NSF Graduate Fellowship, Honorable Mention (2011)

Jingtian Hu

International Institute for Nanotechnology (IIN) Research Award (2017)

Mark Huntington

Northwestern Presidential Fellowship (2013)
Dow Sustainability Challenge, First Place (2011)
NDSEG Fellowship (2010)
Northwestern Ryan Fellow (2010)

Michael Knudson

NDSEG Graduate Fellowship (2014)
Hierarchical Materials Cluster Program Fellow (2013)

Min Hyung Lee

Outstanding NSEC Research Award (2007)
NSEC Fellow (2006)

Won-Kyu Lee

MRS Graduate Student Gold Award (2017)
International Institute for Nanotechnology (IIN) Research Award (2016)
Northwestern Ryan Fellow (2016)
Best Paper Award, 42th ASME Design Automation Conference, for paper Yu, S., Zhang, Y., Wang, C., Lee, W-K, Dong, B., Sun, C., Odom, T., and Chen, W., "Characterization and Design of Functional Quasi-Random Nanostructured Materials using Spectral Density Function" (2016)

Julia Lin

Institute of International Nanotechnology (IIN) Research Award (2010)
NSEC Fellow (2010)
NSEC Fellow (2009)
NSEC Fellow (2008)

Steven Lubin

Hierarchical Materials Cluster Program Fellow (2009)

Dongjoon Rhee

International Institute for Nanotechnology (IIN) Research Award (2018)

Danqing Wang

Miller Postdoctoral Fellowship (2019)
MRS Graduate Student Silver Award (2018)
IPMI Student Award, Honorable Mention (2018)
Chinese Government Award for Outstanding Students Abroad by the China Scholarship Council (2017)
International Institute for Nanotechnology (IIN) Research Award (2017)

Nicholas Watkins

NSF Graduate Student Fellow (2018)

Ankun Yang

Chinese Government Award for Outstanding Students Abroad by the China Scholarship Council (2016)
MRS Graduate Student Silver Award (2015)
Institute of International Nanotechnology (IIN) Research Award (2015)
IPMI Student Award, Honorable Mention (2014)
MRSEC Fellow (2013)
Chinese Government Award for Outstanding Students Abroad by the China Scholarship Council (2016)

Wei Zhou

Chinese Government Award for Outstanding Students Abroad by the China Scholarship Council (2012)
Institute of International Nanotechnology (IIN) Research Award (2011)
MRSEC Fellow (2011)
MRSEC Fellow (2010)
Northwestern Ryan Fellow (2009)
MRSEC Fellow (2009)
MRSEC Fellow (2008)

Other Activities Involving Undergraduates

1. **Advisor in the Center REU summer programs (NSEC, MRSEC, PSOC) since 2004**
2. **Participant in the NSF NUE Peer Evaluation Collaborative**
   SUNY Binghamton, NY (July 2004)

OUTREACH TO PUBLIC

Public Lectures in Chicago and other US Cities

1. Northwestern We Will Campaign, Los Angeles, CA. "Making Precious Metals More Precious," February 20, 2016.
2. Current Events Class of Evanston, Evanston, IL. "Nano and You: Evaluating the Promise of Nanotechnology," May 21, 2009.
3. Science Café at the Wilmette Public Library, Wilmette, IL. March 11, 2009.
4. 2008 Chicago Humanities Festival: THINKING BIG, Chicago, IL. November 2, 2008.
5. Museum of Science and Industry and University of Chicago, Chicago, IL. "Innovations in Nanotechnology," January 26, 2008.
6. Compton Lecture Series, University of Chicago, Chicago, IL. "The Colorful Nanoworld," October 28, 2006.
7. Chicago Science Expedition: Nanotechnology: Thinking Big and Building Small, Harold Washington College, Chicago, IL. "The Colorful Nanoworld," October 5, 2006.

Research Experience for Teachers (RET) Program

Program Director for RET Program for NSEC, 2003, 2004, 2005
Program Director for RET Program for MRSEC, 2003

High School Teachers and Students

Every year since 2004, a high school teacher (previously an RET participant) and his students from New Trier High School visit the lab for a half day symposium. This field trip consists of presentations from my graduate students as well as tours of our lab and the facilities in Cook Hall. In 2006, we tested some of our benchtop nanoscale experiments with the high school students. We have hosted students every year since 2007, where we continue to test benchtop nanoscale experiments with high school teachers from New Trier.

Tutorials and Workshops for Scientists and Engineers

Every year since 2003, I have given tutorials on the synthesis and assembly of nanowires and nanotubes through the ASME Nano Bootcamp program. I have also been invited to give tutorials on the synthesis and characterization of nanostructures and nanofabrication as part of the NSF Summer Institute at Northwestern in 2005 and 2006. Seminars on "Introduction to Nanofabrication" are also presented to high school teachers and REU students as part of my participation in the NCLT in 2005 and 2006.

Department, University, National and International Service

Departmental Service

2018 –	(**Chair**) Department Administration
2018	Edmund W. Gelewitz Award Interview Committee
2016 – 2017	(**Chair**) Faculty Search Committee
2016 – 2017	Strategic Hiring Plan Committee
2015 – 2018	(**Associate Chair**) Department Administration
2015 – 2016	(**Chair**) Faculty Search Committee
2014	Edmund W. Gelewitz Award Interview Committee
2013 – 2016	Faculty Senate Representative
2013 – 2014	Faculty Search Committee, Materials Science and Engineering
2012 – 2014	Junior Faculty Mentoring Committee
2010 – 2012	Vision Committee
2010 – 2011	(**Chair**) Junior Faculty Mentoring Committee
2009 – 2010	Junior Faculty Search Committee
2008 – 2011	(**Chair**) Physical Chemistry Division
2007 – 2009	Chemical Diversity Committee
2006 – 2007	Faculty Search Committee
2004 – 2006	Colloquium and Seminar Committee
2004 – 2006	Executive Committee
2003 – 2004	(**Chair**) Graduate Student Advising Committee
2003 – 2005	(**Chair**) Webpage Committee
2003 – 2004	Physical Chemistry Winter Quarter Seminar Organizer
2003	Finance Committee
2003	Stockroom Committee
2002 – 2005	Graduate Admissions Committee
2002 – 2003	Departmental Fall Picnic Committee

College Service

2007 – 2009	WCAS Curriculum Committee
2007	Ad hoc Committee for Tenure Review

University Service

2019 Limited Submissions for Packard Fellowship
2018 (**Chair**) Honorary Degree Committee
2018 Limited Submissions for Packard Fellowship
2017 – Honorary Degree Committee
2017 Limited Submissions for Packard Fellowship
2016 – 2018 (**Associate Director**) International Institute for Nanotechnology (IIN)
2016 – 2017 (**Chair**) Faculty Search Committee, IIN
2016 Limited Submissions for Packard Fellowship
2015 – 2017 Provost Initiative on Support for Faculty Excellence
2015 – American Cancer Society Institutional Research Grant Review Committee
2015 – Biotechnology Training Program (BTP) Executive Committee
2015 Limited Submissions for Packard Fellowship
2014 Weinberg College Dean Search Committee
2014 Senior Vice President (SVP) Search Committee
2014 Office of Research Integrity Investigation Committee
2014 Limited Submissions for Packard Fellowship
2014 – 2016 NU Micro/nanofabrication Facility Oversight Committee
2013 – 2016 Chicago Collaboration for Women in STEM
2013 Limited Submissions for Packard Fellowship
2013 Limited Submissions NSF Scalable Nanomanufacturing Proposal
2012 Limited Submissions for Packard Fellowship
2011 – 2013 (**Chair**) NU Micro/nanofabrication Facility Oversight Committee
2011 Limited Submissions for Packard Fellowship
2010 (**Co-Chair**) Areas of Distinction Committee, Strategic Planning for University
2010 – 2011 Cook Microfabrication Facility Faculty Oversight Committee
2010 – 2011 NUFAB Facility Faculty Oversight Committee
2010 Limited Submissions for Packard Fellowship
2010 – 2018 Ryan Fellowship Selection Committee
2009 Limited Submissions Major Research Instrumentation
2006 – 2009 Limited Submissions Committee
2006 – 2017 MRSEC Shared Facilities Committee
2006 – 2007 Microfabrication and Nanofabrication Committee
2005 – Keck-II Facility Faculty User Committee

National Service

2019 National Nanotechnology Initiative (NNI) Q Committee, Member
2019 STAR / IMPACT Research Corporation Award Selection Committee, Member
2018 (**Chair**) ACS Photonics Young Investigator Award
2017 Newcomb Cleveland Prize Selection Committee (*Science*, AAAS), Member
2017 HHMI Professors Reviewer
2016 NSF Chemistry Committee of Visitors (COV), Member
2016 TREE Research Corporation Award Selection Committee, Member
2016 – 2018 (**Chair**) NIH EBIT Study Section
2015 – 2018 (**Chair**) MRS Innovation in Outstanding Young Investigator Subcommittee
2014 NSF Grantees Nano Meeting, co-organizer

2012 – 2016 NIH EBIT Study Section, Standing Member
2012 – 2015 ACS Graduate Education Advisory Board (GEAB)
2012 ACS Postdoc-to-Faculty Advisor at ACS Fall 2012 Meeting
2012 ACS Division of Inorganic Chemistry (DIC) Nanoscience Subdivision Chair
2012 ACS DIC Young Investigator Award Committee Member
2012 Cottrell Scholar Collaborative New Faculty Workshop Mentor
2011 – 2015 Cottrell Scholar Advisory Council (CSAC), Research Corporation
2011 ACS Career Pathways Working Group (Academe), American Chemical Society
2011 ACS Division of Inorganic Chemistry (DIC) Nanoscience Subdivision Chair-elect
2011 Co-editor of a special issue on "Plasmonics" for *Chemical Reviews*
2010 NSF Macromolecular, Supramolecular and Nanochemistry (MSN) Workshop Moderator
2010 PeerChoice experiment with Chemical Physics Letters
2010 Japanese-American Kavli Frontiers of Science (JAFOS) Planning Group Member
2010 Cottrell Scholar 2010 Conference Program Committee
2008 – Tenure and Promotion Review External Letter Writer
2008 Japanese-American Kavli Frontiers of Science (JAFOS) Planning Group Member
2007 – 2008 Cottrell Scholar 2008 Conference Program Committee
2007 – 2010 Center for Nanoscale Materials (CNM) User Executive Committee at Argonne National Laboratory
2006 – 2008 Co-editor of a special issue on "Frontiers in Nanoscience" for *Accounts of Chemical Research*, December 2008
2006 – 2007 Member of Basic Energy Science Advisory Committee (BESAC) Grand Challenges Subcommittee for the Department of Energy (DOE). Involves constructing document containing Grand Challenges and participating in the DOE workshops (August 3-5, 2006, Washington, DC; October 6-7, 2006, Evanston, IL; July 31 – August 2, 2007, Washington, DC; August 20-21, 2007, Boston, MA)

Professional Service and Boards

2019 – MIT Technology Review - Innovators Under 35 Judge
2019 – Joseph Fraunhofer Award / Robert M. Burley Prize Award Committee (OSA), Member
2019 – Defense Sciences Study Group (DSSG) Alumni Board
2018 – Editorial Advisory Board, *Bioconjugate Chemistry* (ACS)
2013 – Executive Editor, *ACS Photonics* (ACS)
2017 – (**Chair**) Scialog Advisory Council, Research Corporation for Science Advancement
2017 Committee for Full Professor of Physical Chemistry (University of Vienna)
2016 – International Science Advisory Board, MacDiarmid Institute
2016 – 2019 Advisory Board, *Chemical Society Reviews* (RSC)
2015 – Editorial Committee, *Annual Review of Physical Chemistry*
2014 – International Advisory Board, *ChemNanoMat* (Wiley-VCH)
2013 – Advisory Board Member, *Materials Horizons* (Royal Society of Chemistry, RSC)
2013 – Editorial Advisory Board, *Nanospectroscopy*
2010 – 2011 MRS Africa Subcommittee on Africa MRS activities
2010 – 2013 Associate Editor, *Chemical Science* (RSC)
2010 – Editorial Advisory Board, *Nano Letters* (ACS)
2010 – Editorial Advisory Board, *ACS Nano* (ACS)

2009 – 2018 Advisory Editorial Board, *Chemical Physics Letters* (Elsevier)
2009 – 2011 Editorial Advisory Board, *Journal of Physical Chemistry* (ACS)
2008 – 2010 Associate Editor for "Nanostructured Surfaces," in Comprehensive Nanoscience and Technology (Elsevier)