

Exponent®
Engineering & Scientific Consulting

Sumit Chaudhary, Ph.D.

Principal | Electrical Engineering
Menlo Park
+1-650-688-6706 | schaudhary@exponent.com

Professional Profile

Dr. Chaudhary's multidisciplinary expertise and over 15 years of broad technical experience cross-cuts fields of electrical engineering, optics, materials engineering, and physical sciences. From electrical engineering perspective, he has extensive experience in solar cells, light-emitting diodes and displays, capacitors, memories, transistors, sensors, and circuits.

Dr. Chaudhary's materials background includes organic and inorganic semiconductors, metals, nanomaterials, biomaterials, thin-films, and material interfaces. He specializes in device physics, materials and thin-film processing, device fabrication, improving functional performance, analyzing failures, and understanding process-structure-property-performance relationships across material, component, device, and system levels. His characterization tool skill-set includes a wide range of electrical, optical, microscopic, and spectroscopic techniques.

Prior to joining Exponent, Dr. Chaudhary was Assistant Professor and Associate Professor at Iowa State University, where he was the head of the Nano Architectonics and Organic Electronics Laboratory, and Associate at the US Department of Energy Ames Laboratory. During this period, he developed new materials processing approaches and optical architectures to improve efficiency of thin-film solar cells. His photovoltaic material expertise includes conjugated polymers/molecules, cadmium telluride, perovskite, and silicon material systems. He also made multiple contributions in the area of defect characterization in semiconductor thin-films. His other key works include projects on titania based memory devices, optical and bio(chemical) sensors, organic thin-film transistors, organic light-emitting displays, and photonic components such as waveguides, anti-reflection coatings, transparent electrodes, and plasmonic structures. For characterization purposes, Dr. Chaudhary has extensively utilized a wide range of electrical, optical, microscopic, and spectroscopic techniques. During his doctoral studies, he worked with materials such as organic semiconductors, quantum dots, carbon nanotubes, nanotemplates, and biomolecules on developing functional hybrids and embodiments pertinent to consumer electronics, nanotechnology, and biotechnology.

Dr. Chaudhary has assisted clients in developing metrology solutions for opto-electronic thin-films, investigating performance bottlenecks in solar cells, and characterizing new synthetic materials for consumer electronic device applications. He has also consulted for edtech clients and has over 8 years of experience teaching courses on electric circuits, semiconductor materials and devices, flexible electronics, and energy systems. Dr. Chaudhary has published 50 peer-reviewed research articles in top international journals and presented his work in major international conferences. He has received several awards and honors during his career, including the nationally prestigious US National Science Foundation CAREER Award.

© 2026 Exponent, Inc. All Rights Reserved

Academic Credentials & Professional Honors

Ph.D., Electrical Engineering, University of California, Riverside, 2006

B.Tech., Electrical Engineering, Indian Institute of Technology, 2001

Languages

Hindi

Patents

US Patent 7, 132, 787: Multilayer polymer-quantum dot light emitting diodes and methods of making and using thereof, November 2006 (Ozkan M, Chaudhary S).

Publications

El-Henawey MI, Gebhardt RS, El-Tonsya MM, Chaudhary S. Organic solvent vapor treatment of lead iodide layers in the two-step sequential deposition of CH3NH3PbI3-based perovskite solar cells. Journal of Materials Chemistry A 2016; 4:1947-1952.

Muntasir T, Chaudhary S. Defects in solution-processed dithienylsilole-based small-molecule photovoltaic thin-films. Journal of Applied Physics 2016; 119(2):025501.

Shen K, Yang R, Wang D, Jeng M, Chaudhary S, Ho KM, Wang D. Stable CdTe solar cell with V¬2O5 as a back contact buffer layer. Solar Energy Materials and Solar Cells 2016; 144:500-508.

Bhuwalka A, Ewan M, Elshobaki M, Mike JF, Tlach B, Chaudhary S, Jeffries-EL M. Synthesis and photovoltaic properties of 2, 6-bis (2-thienyl) benzobisazole and 4, 8-bis (thienyl)-benzo [1, 2-B: 4, 5-B'] dithiophene copolymers'', Journal of Polymer Science A: Polymer Chemistry 2016; 54(3):316-324.

Muntasir T, Chaudhary S. Understanding defect distributions in polythiophenes via comparison of regioregular and regiorandom species. Journal of Applied Physics 2015; 118(20):205504.

Carr JA, Elshobaki M, Chaudhary S. Deep defects and the attempt to escape frequency in organic photovoltaic materials. Applied Physics Letters 2015; 107:203302.

Lindemann WR, Philiph RL, Chan DWW, Ayers CT, Perez EM, Beckman SP, Strzalka J, Chaudhary S, Vaknin D. Oriented polyvinylidene fluoride-trifluoroethylene (P(VDF-TrFE)) films by Langmuir-Blodgett deposition: a synchrotron X-ray diffraction study. Physical Chemistry Chemical Physics 2015; 17:29335-29339.

Gebhardt R, Du P, Peer A, Rock M, Kessler MR, Biswas R, Ganapathysubramanian B, Chaudhary S. Utilizing wide band gap, high dielectric constant nanoparticles as additives in organic solar cells. The Journal of Physical Chemistry C 2015; 119(42):23883-23889.

Bhuwalka A, Ewan M, Mike JF, Elshobaki M, Kobilka B, Chaudhary S, Jeffries-EL M. Synthesis, characterization and photovoltaic properties of dithienylbenzobisazole-dithienylsilole copolymers. Journal of Polymer Science A: Polymer Chemistry 2015; 53:1533-1540.

Chen Y, Elshobaki M, Gebhardt R, Bergeson S, Park JM, Hillier AC, Ho KM, Biswas R, Chaudhary S. Reducing optical losses in organic solar cells using microlens arrays: theoretical-experimental investigation of microlens dimensions. Physical Chemistry Chemical Physics 2015; 17:3723-3730.

Lesoine M, Bobbitt J, Carr JA, Elshobaki M, Chaudhary S, Smith E. Quantitative comparison of organic

photovoltaic bulk heterojunction photostability under laser illumination. The Journal of Physical Chemistry C 2014; 118 (51):30229-30237.

Bobbitt J, Weibel S, Elshobaki M, Chaudhary S, Smith E. Fourier transform-plasmon waveguide spectroscopy: A non-destructive multi-frequency method for simultaneously determining polymer thickness and apparent index of refraction. Analytical Chemistry 2014; 86(24):11957-11961.

Elshobaki M, Anderegg J, Chaudhary S. Efficient polymer solar cells fabricated on poly(3,4-ethylenedioxythiophene):poly(styrenesulfonate)-etched old indium tin oxide substrates. ACS Applied Materials & Interfaces 2014; 6(15):12196-12202.

Mahadevapuram RC, Car JA, Chen Y, Bose S, Nalwa KS, Petrich JW, Chaudhary S. Low-boiling-point solvent additives can also enable morphological control in polymer solar cells. Synthetic Metals 2013; 185-186:115-119.

Carr JA, Chaudhary S. The identification, characterization and mitigation of defects in organic photovoltaic devices: a review and outlook. Energy & Environmental Science 2013; 6(12):3414-3438.

Meyer M, Larson K, Mahadevapuram RC, Lesoine M, Carr JA, Chaudhary S, Smith E. Scanning angle-Raman spectroscopy of poly(3-hexylthiophene)-based films on indium tin oxide, gold and sapphire surfaces. ACS Applied Materials & Interfaces 2013; 5:8686-8693.

Carr JA, Chaudhary S. On the identification of deeper defect levels in organic photovoltaic devices. Journal of Applied Physics 2013; 114:064509 (7pp).

Mahadevapuram RC, Dalal VL, Chaudhary S. Effect of a-Si:H-polymer interface on the behavior of hybrid solar cells. Nanomaterials and Energy 2013; 2(4):186-193.

Carr JA, Chaudhary S. Response to "Comment on ‘On accurate capacitance characterization of organic photovoltaic devices'". Applied Physics Letters 2013; 102:076102.

Chen Y, Elshobaki M, Z Ye, Park JM, Ho KM, Chaudhary S. Microlens array induced light absorption enhancement in polymer solar cells. Physical Chemistry Chemical Physics 2013; 15:4297-4302.

Kuang P, Park JM, Liu G, Z Ye, Leung W, Chaudhary S, Lynch D, Ho KM, Constant K. Metal-nanowall grating transparent electrodes: Achieving high optical transmittance at high incident angles with minimal diffraction. Optics Express 2013; 21(2):2393-2401.

Wodo O, Tirthapura S, Chaudhary S, Ganapathysubramanian B. Computational characterization of bulk heterojunction nanomorphology. Journal of Applied Physics 2012; 112:064316(1-6).

Kobilka BM, Dubrovskiy AV, Ewan MD, Tomlinson AL, Larock RC, Chaudhary S, Jeffries-El M. Synthesis of 3,7-diiodo-2,6-di(thiophen-2-yl)benzo[1,2-b:4,5-b0]difurans: functional building blocks for the design of new conjugated polymers. Chemical Communications 2012; 48:8919-8921.

Carr JA, Nalwa KS, Mahadevapuram RC, Chen Y, Anderegg J, Chaudhary S. Plastic-syringe induced silicone contamination in organic photovoltaic fabrication: implications for small-volume additives. ACS Applied Materials & Interfaces 2012; 4(6):2831-2835.

Carr JA, Chaudhary S. On accurate capacitance characterization of organic photovoltaic cells. Applied Physics Letters 2012; 100:213902(1-4).

Zhuo Y, Chaudhary S, Kuang P, Ho KM. Broadband light absorption enhancement in polymer photovoltaics using metal nanowall gratings as transparent electrodes. Optics Express 2012; 20(11):12213-12221.

Wodo O, Tirthapura S, Chaudhary S, Ganapathysubramanian B. A graph-based formulation for computational characterization of bulk heterojunction morphology. Organic Electronics 2012; 13(6):1105-1113.

Nalwa KS, Carr JA, Mahadevapuram R, Kodali HK, Bose S, Chen Y, Petrich JW, Ganapathysubramanian B, Chaudhary S. Enhanced charge separation in organic photovoltaic films doped with ferroelectric dipoles. Energy & Environmental Science 2012; 5(5):7042-7049.

Carr JA, Chen Y, Elshobaki M, Mahadevapuram R, Chaudhary S. Controlling nanomorphology in plastic solar cells. Nanomaterials and Energy 2012; 1(1):18-26.

Nalwa KS, Kodali HK, Ganapathysubramanian B, Chaudhary S. Dependence of recombination mechanisms and strength on processing conditions in polymer solar cells. Applied Physics Letters 2011; 99:263301.

Kuang P, Park JM, Leung W, Mahadevapuram RC, Nalwa KS, Chaudhary S, Ho KM, Constant K. A new architecture for transparent electrodes: Relieving the trade-off between electrical conductivity and optical transmittance. Advanced Materials 2011; 23:2469-2473.

Nalwa KS, Mahadevapuram RC, Chaudhary S. Growth rate dependent trap density in polymer:fullerene solar cells and its implications. Applied Physics Letters 2011; 98:093306.

Mike JF, Nalwa KS, Makowski A, Putnam D, Tomlinson AL, Chaudhary S, Jeffries-El M. Synthesis, characterization and photovoltaic properties of poly(thiophenevinylene-alt-benzobisoxazoles). Physical Chemistry Chemical Physics 2011; 13:1338-1344.

Nalwa KS, Park JM, Ho KM, Chaudhary S. On realizing higher efficiency polymer solar cells using a textured substrate platform. Advanced Materials 2011; 23:112-116.

Nalwa KS, Cai Y, Thoeming AL, Shinar J, Shinar R, Chaudhary S. Polythiophene-fullerene based photodetectors: tuning of spectral response and application in photoluminescence based bio(chemical) sensors. Advanced Materials 2010; 22:1-5.

Miller K, Nalwa KS, Bergured A, Neihart N, Chaudhary S. Memristive behavior in thin anodic titania. IEEE Electron Device Letters 2010; 31(7):737-739.

Nalwa KS, Chaudhary S. Design of light-trapping microscale-textured surfaces for efficient organic solar cells. Optics Express 2010; 8 (5):5168-5178.

Vengasandra S, Chaudhary S. Nano-mechano-electrical characterization applications in fuel cells and organic photovoltaics. Materials Today 2010; 13:28-32.

Park JM, Nalwa KS, Leung W, Constant K, Chaudhary S, Ho KM. Fabrication of metallic nanowires and nanoribbons using laser interference holography and shadow lithography. Nanotechnology 2010; 21:215301(6pp).

Chaudhary S, Müller AM, Huang W, Al-Kaysi RO, Bardeen CJ, Ozkan CS, Ozkan M. Effects of solvent and annealing on photophysical properties of polythiophene photovoltaic cells. Advanced Science Letters 2009; 2(1):14-20.

Chaudhary S, Lu H, Müller AM, Bardeen CJ and Ozkan M. Hierarchical placement and associated optoelectronic impact of carbon nanotubes in polymer:fullerene solar cells. Nano Letters 2007; 7(7):1973-1979.

Lu H, Chaudhary S, Müller AM, Bardeen CJ and Ozkan M. Effects of plasma exposure on the active-layer in polythiophene:fullerene bulk-heterojunction solar cells. Journal of Nanoelectronics and Optoelectronics

2007; 2:278-281.

Chaudhary S, Ozkan M. Self-organization dependent optical emission of luminescent polymers in nanoporous alumina templates. Journal of Nanoelectronics and Optoelectronics 2007, 2:282-286.

Kim JH, Chaudhary S, Ozkan M. Multicolor hybrid nanoprobes of molecular beacon conjugated quantum-dots for FRET and gel electrophoresis assisted DNA detection. Nanotechnology 2007; 18:195105(7pp).

Chaudhary S, Kim JH, Ozkan M. Controlled electron-beam-induced large-scale alignment of carbon nanotubes at metal electrodes. Journal of Nanoelectronics and Optoelectronics 2006; 1 (2):211-214.

Yilmaz OF, Chaudhary S, Ozkan M. Hybrid organic-inorganic electrode for efficient charge injection or collection in organic optoelectronic devices. Nanotechnology 2006; 17:3662-3667.

Portney NG, Singh KV, Chaudhary S, Destito G, Schneemann A, Manchester M, Ozkan M. Organic and inorganic nanoparticle hybrids. Langmuir 2005; 21:2098-2103.

Chaudhary S, Kim JH, Singh KV, Ozkan M. Fluorescent microscopy visualization of single-walled carbon nanotubes using semiconductor nanocrystals. Nano Letters 2004; 4:2415-2419.

Chaudhary S, Chan WCW, Ozkan M. Trilayer hybrid polymer-quantum dot light-emitting diodes. Applied Physics Letters 2004; 84:2925-2927.

Ravindran S, Chaudhary S, Colburn B, Ozkan M, Ozkan CS. Covalent coupling of quantum-dots to multiwalled carbon nanotubes for electronic device applications. Nano Letters 2003; 3:447-453.

Presentations

Gebhardt R, Du P, Rock M, Ganapathysubramanian B, Chaudhary S. Insulating, wide-band-gap high dielectric constant nanoparticles as additives in organic solar cells. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2015.

Muntasir T, Elshobaki M, Gebhardt R, Chaudhary S. Probing defects in polyhexylthiophene: comparison between regio-regular and regio-random species. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2015.

Carr JA, Elshobaki M, Chaudhary S. Deep defect levels and the prefactor of trap emission in organic photovoltaic devices. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2014.

Elshobaki M, Chaudhary S. Electric field effect on the growth of organic thin films and their optoelectronic devices: The first demonstration. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2014.

Elshobaki M, Anderegg J, Chaudhary S. Reusing ITO from old organic solar cells: Is PEDOT:PSS really bad for ITO?. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2014.

Carr JA, Chaudhary S. Steps towards understanding of defects in organic photovoltaic devices. 247th ACS National Meeting & Exhibition, Dallas, TX, 2014.

Chaudhary S. Plastic solar cells: Accomplishments, challenges, and strategies. Department of Metallurgical and Materials Engineering, University of Alabama, Tuscaloosa, AL, 2013.

Elshobaki M, Gebhardt R, Chaudhary S. Our hair reacts to a charged carpet or static electricity - so does nanomorphology in organic photovoltaic films: The first demonstration. Materials Science & Technology Conference & Exhibition, Montreal, Canada, 2013.

Chen Y, Elshobaki M, Gebhardt R, Bergeson S, Park JM, Ho KM, Biswas R, Chaudhary S. Reducing optical losses in organic photovoltaics using microlens arrays: experiments and simulations. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2013.

Carr JA, Chaudhary S. Accurate capacitance characterization and digging into deep defects in polymer solar cells. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2012.

Chen Y, Elshobaki M, Ye Z, Park JM, Noack M, Ho KM, Chaudhary S. Microlens array induced optical absorption enhancement in polymer solar cells. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2012.

Nalwa KS, Carr JA, Mahadevapuram RC, Kodali HK, Bose S, Chen Y, Petrich JW, Ganapathysubramanian B, Chaudhary S. Enhanced exciton dissociation in organic photovoltaic layers doped with ferroelectric dipoles. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Chaudhary S. Photonic and electrostatic approaches to minimize losses in organic solar cells. US-Egypt Solar Workshop, Cairo, Egypt, 2012.

Nalwa KS, Carr JA, Mahadevapuram RC, Kodali HK, Ganapathysubramanian B, Chaudhary S. More efficient polymer solar cells by doping with ferroelectric dipoles. TMS Annual Meeting & Exhibition, Orlando, FL, 2012.

Chen Y, Mahadevapuram RC, Chaudhary S. Effect of annealing and additives on defects and recombination in polymer photovoltaic layers. TMS Annual Meeting & Exhibition, Orlando FL, 2012.

Nalwa KS, Carr JA, Mahadevapuram RC, Kodali HK, Bose S, Chen Y, Petrich JW, Ganapathysubramanian B, Chaudhary S. Enhanced exciton dissociation in organic photovoltaic layers doped with ferroelectric dipoles. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Nalwa KS, Kodali HK, Ganapathysubramanian B, Chaudhary S. Processing conditions of active-layer determine whether the dominant recombination mechanism in polymer solar cells is bimolecular or interfacial. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Carr JA, Nalwa KS, Mahadevapuram RC, Chen Y, Chaudhary S, Plastic-syringe induced silicone contamination in organic photovoltaic device fabrication: a second look at its implications on device performance. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Mahadevapuram RC, Chen Y, Carr JA, Nalwa KS, Chaudhary S. Uncovering some more realities of solvent-additives in organic solar cells. 2011 Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Thoeming AL, Carr JA, Mahadevapuram RC, Chaudhary S. Further investigation into the paintbrush deposition technique for P3HT:PCBM based organic solar cells. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Chen Y, Mahadevapuram RC, Nalwa KS, Chaudhary S. Revealing the pros-and-cons of different annealing treatments in polymer solar cells. Materials Research Society Fall Meeting and Exhibit, Boston, MA, 2011.

Chaudhary S. Organic photovoltaics: present, and future prospects. Materials Science & Technology Conference and Exhibition, Columbus, OH, 2011.

Chaudhary S. Accomplishments, challenges, and innovative approaches in organic solar cells. 22nd National NSF EPSCoR Conference, Moscow, ID, 2011.

Kuang P, Park JM, Leung W, Constant K, Chaudhary S, Ho KM. High aspect ratio nanoscale metallic

structures: a platform for photonic devices. SPIE Optics + Photonics Conference, San Diego, CA, 2011.

Wodo O, Tirthapura S, Chaudhary S, Ganapathysubramanian B. Graph and computational homology concepts to streamline process-structure-property relationships: Application to organic thin film devices. 11th US National Congress on Computational Mechanics, Minneapolis, MN, 2011.

Chaudhary S, Neihart NM. Facile, scalable and ambient - electrochemical route for titania memristor fabrication. CMOS Emerging Technologies Workshop, Whistler, British Columbia, Canada, 2011.

Wodo O, Tirthapura S, Chaudhary S, Ganapathysubramanian B. Morphology descriptors of bulk heterojunctions in thin film organic solar cells. Materials Research Society Spring Meeting and Exhibit, San Francisco, CA, 2011.

Nalwa KS, Mahadevapuram RC, Chaudhary S. Controlling defect density in polymer-fullerene bulk-heterojunction solar cells by optimizing growth conditions. TMS Annual Meeting & Exhibition, San Diego, CA, 2011.

Mahadevapuram RC, Nalwa KS, Dalal VL, Chaudhary S. Photovoltaics using doped and undoped amorphous silicon heterojunctions with conjugated polymers. TMS Annual Meeting & Exhibition, San Diego, CA, 2011.

Jeffries-El M, Mike M, Nalwa KS, Makowski A, Putnam D, Chaudhary S. Design and synthesis

of new thiophene containing polymers for use in photovoltaic applications. American Chemical

Society 239th National Meeting, San Francisco, CA, 2010.

Chaudhary S. Organic Photovoltaics@Ames. National Renewable Energy Laboratory, Golden, CO, 2010.

Thoeming AL, Nalwa KS, Liu R, Shinar J, Shinar R, Chaudhary S. Single substrate integration of organic light-emitting diode, organic photodetector and sensing element for photoluminescence based bio(chemical) sensors. SPIE Optics+Photonics, San Diego, CA, 2010.

Nalwa KS, Cai Y, Thoeming AL, Shinar R, Shinar J, Chaudhary S. Photoluminescence based sensors on all organic platform (organic-light-emitting-diode/dye:analyte/organic-photodetectors). Materials Research Society Spring Meeting, San Francisco, CA, 2010.

Miller K, Nalwa KS, Bergured A, Neihart N, Chaudhary S. Tunable anodized titania memristors: Study on effects of annealing and extent of anodization. Materials Research Society Spring Meeting, San Francisco, CA, 2010.

Mahadevapuram RC, Nalwa KS, Dalal VL, Chaudhary S. Intrinsic and doped amorphous silicon hybridized with polymer-based photovoltaics: Status, our results, and opportunities. Materials Research Society Spring Meeting, San Francisco, CA, 2010.

Nalwa KS, Park JM, Leung W, Constant K, Ho KM and Chaudhary S. Textured substrate based organic solar cell for higher absorption and improved performance. Materials Research Society Fall Meeting, Boston, MA, 2009.

Nalwa KS, Cai Y, Thoeming AL, Shinar R, Shinar J, Chaudhary S. Polymer-based photodetectors for structurally integrated photoluminescence based oxygen sensors. SPIE Optics+Photonics, San Diego, CA, 2009.

Nalwa KS and Chaudhary S. Design of Three-Dimensional Textured Organic Solar Cell. Materials Research Society Spring Meeting, San Francisco, CA, 2009.

Chaudhary S. Carbon nanotubes in polymer-fullerene solar cells. Organic Microelectronics and Optoelectronics Workshop IV (IEEE/MRS/ACS), San Francisco, CA, 2008.

Chaudhary S, Lu H, Yengel E, Muller A, Bardeen CJ, Ozkan CS, Ozkan M. High efficiency polymer-fullerene solar cells by incorporating carbon nanotube charge collectors. TechHorizons Conference, University of California, Riverside, CA, 2008.

Lu H, Chaudhary S, Müller, Bardeen CJ, Ozkan CS, Ozkan M. Hierarchical placement and

associated optoelectronic impact of carbon nanotubes in polymer-fullerene solar cells. Tech Horizons Conference, University of California, Riverside, 2007.

Chaudhary S. Solar cells: Present, and the path ahead," Seminar at IBM T. J. Watson Research Center, Yorktown Heights, NY, 2006.

Kim JH, Chaudhary S, Stephens JP, Singh KV, Ozkan M. Applications of quantum-dots for analysis of nanosystems by either utilizing or preventing FRET. SPIE Nanobiophotonics

and Biomedical Applications, San Diego, CA, 2005.

Chaudhary S, Kim JH, Singh KV, Ozkan M. Fluorescent labeling of carbon nanotubes by

quantum-dots. Materials Research Society Spring Meeting, San Francisco, CA, 2005.

Portney NG, Singh KV, Chaudhary S, Destito G, Schneemann A, Manchester M, Ozkan M. Organic and inorganic nanocrystal hybrids. Materials Research Society Spring Meeting, San Francisco, CA, 2005.

Ozkan CS, Ravindran R, Chaudhary S, Ozkan M. Multifunctional nanomaterials and nanosystems. Materials Research Society Fall Meeting, Boston, MA, 2003.

Ravindran S, Chaudhary S, Ozkan M, Ozkan CS. Heterostructures of nanomaterials and

organic-inorganic nanoassemblies. BioMEMS and Biomedical Nanotechnology Conference, Washington, DC 2003.

Chaudhary S, Kim JH, Ozkan M. Diverse applications of quantum-dots from devices to bioimaging. Association for Lab Automation - Small Talk, San Jose, CA, 2003.

Chaudhary S, Ozkan CS, Ozkan M. Tunable color electroluminescence from array of quantum dots/polymer composites. Materials Research Society Spring Meeting, San Francisco, CA, 2003.

Ravindran S, Chaudhary S, Ozkan M, Ozkan CS. Functionalization of carbon nanotubes for self

assembly applications," Materials Research Society Spring Meeting, San Francisco, CA, 2003.