

Curriculum Vitae

Angel A. Martí

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PERSONAL DATA

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PROFESIONAL EXPERIENCE

July 2015 – Present *Associate Professor of Chemistry and Bioengineering, Rice University, Houston, TX*

July 2008 – June 2015 *Assistant Professor of Chemistry and Bioengineering, Rice University, Houston, TX*

August 2004 – June 2008 *Post-Doctoral Research Associate, Columbia University, New York, NY, Advisor: Nicholas J. Turro*

EDUCATION

August 2004 – June 2008 *Post-Doctoral Research Scientist, Columbia University, New York, NY, Advisor: Nicholas J. Turro*

August 1999 – May 2004 *Ph.D., Inorganic Chemistry, University of Puerto Rico, Río Piedras Campus, Advisor: Prof. Jorge L. Colón*

August 1994 – May 1999 *BS, Chemistry, University of Puerto Rico, Río Piedras Campus, 1999*

TEACHING EXPERIENCE

August 2002 – August 2004 *Workshop speaker, Puerto Rico Statewide Systemic Initiative (PRSSI) and Puerto Rico-2000 Institute (PR-2000)*

August 2000 – May 2002 *Science consultant, University of Puerto Rico (GK-12 fellow) and Department of Education*

August 2000 – August 2004 *Workshop speaker, PR LS-AMP*

August 1999 – May 2000 *Teacher assistant, University of Puerto Rico, Río Piedras: General Chemistry*

Biography

Angel A. Martí obtained his Ph.D degree in 2004 from the University of Puerto Rico in Río Piedras with Prof. Jorge Colón, where he held the NSF Graduate Teaching Fellowship in K-12 Education and NIH-RISE fellowship; here he studied the photophysical properties of metal complexes immobilized in layered zirconium phosphate materials. In 2004 he joined Prof. Nicholas Turro's research group at Columbia University, in New York, as a postdoctoral research scientist, where he worked in the development of fluorescent probes for the detection of trace amounts of DNA and RNA in vivo and in vitro, and in supramolecular systems. In July 2008, Dr. Angel Martí joined the department of Chemistry at Rice University in Houston and has been working in developing

multifunctional photoactive molecules with applications in oligonucleotide detection, medical treatments, proteolysis and sensors, and in the development of new nanomaterials. In 2013 he received the Inter-American Photochemical Society Young Investigator Award and in 2014 the New Investigator Award from the American Society for Photobiology.

PUBLICATIONS (with affiliation to Rice University, * denotes corresponding author)

97. Jiang, B.; Augustine, A.; Pennington, C.; Sharma, G.; Prabhakar, R.; Martí, A. A.* Understanding the Interactions Between Small Molecules and Soluble Amyloid- β Monomers, **2019**, *in preparation*.
96. Smith McWilliams, A. D.; Tang, Z.; Ergülen, S.; de los Reyes, C. A.; Pasquali, M.; Martí, A. A.* Real-Time Visualization and Dynamics Boron Nitride Nanotubes, **2019**, *in preparation*.
95. Ware, M. J.; Newton, J.; Krzykawska-Serda, M.; Ho, J.; Law, J.; Anderson, A. O.; Byrd, H. F.; Herbst, M.; McDowell, M. W.; Martí, A. A.; Agha, M.; Jain, S.; Mohammad, S.; Rajapakshe, K.; Coarfa, C.; Huang, S.; Edwards, D. P.; Godin, B.; Curley, S.; Corr, S. J. Incremental Gemcitabine Dose Regimen for the Isolation of Drug Resistant Pancreatic Ductal Adenocarcinoma Subpopulations, *RSC Adv.* **2019**, *submitted*.
94. Yadav, R. M.; Kumar, R.; Aliyan, A.; Dobal, P. S.; Biradar, S.; Vajtai, R.; Singh, D. P.; Martí, A. A.*; Ajayan, P. M.* Facile Synthesis of Highly Fluorescent Free-Standing Films Comprising of Graphitic Carbon Nitride (g-C₃N₄) Nanolayers, **2019**, *submitted*.
93. Jiang, B.; Aliyan, A.; Cook, N. P.; Augustine, A.; Bhak, G.; Maldonado, R.; Smith McWilliams, A.; Flores, E.; Mendez Dinamarca, N. G.; Godoy, F.; Montenegro, J.; Gonzalez-Moreno, I.; Martí, A. A.* Detection of Oligomeric Amyloid Aggregates in Real-Time using Photoluminescence Anisotropy, *J. Am. Chem. Soc.* **2019**, *under revision*.
92. Liang, J.; Han, X.; Yang, J.; Zhang, B.; Fang, Q.; Zhang, J.; Zhao, Y.; Martí, A. A.; Lou, J. Defect Engineering Enabled High-Efficiency All-Inorganic Perovskite Solar Cells, *Adv. Mater.* **2019**, *submitted*.
91. Aliyan, A.; Cook, N. P.; Martí, A. A.* Interrogation of Amyloid Aggregates using Molecular Probes, *Chem. Rev.* **2019**, *under revision*.
90. Ogle, M. M.; Smith McWilliams, A. D.; Ware, M. J.; Curley, S.; Corr, S.; Martí, A. A.* Sensing Temperature in vitro and in Cells Using a BODIPY Molecular Probe, *J. Phys. Chem. B* **2019**, *accepted*.
89. de los Reyes, C.; Smith McWilliams, A. D.; Hernández, K.; Mitra, K. L. W.; Pasquali, M.; Martí, A. A.* Tunable Alkylation of White Graphene (Hexagonal-Boron Nitride) using Reductive Conditions, *J. Phys. Chem. C* **2019**, *accepted*.
88. Han, X.; Liang, J.; Yang, J.; Soni, K.; Fang, Q.; Wang, W.; Zhang, J.; Jia, S.; Martí, A. A.; Zhao, Y.; Lou, J. Lead-Free Double Perovskite Cs₂SnX₆: Facile Solution Synthesis and Excellent Stability, *Small* **2019**, 1901650.
87. Smith McWilliams, A. D.; Ergülen, S.; Ogle, M. M.; de los Reyes, C. A.; Pasquali, M.; Martí, A. A.* Fluorescent Surfactants from Common Dyes – Rhodamine B and Eosin Y, *Pure Appl. Chem.* **2019**, DOI: 10.1515/pac-2019-0219.
86. Kumar, K. D.; Suazo-Davila, D.; García-Torres, D.; Cook, N. P.; Ivaturi, A.; Hsu, M.-H.; Martí, A. A.; Cabrera, C. R.; Chen, B.; Bennett, N.; Upadhyaya, H. M. Low Temperature Titania-Graphene Quantum Dots Paste for Flexible Dye Sensitized Solar Cell Applications, *Electrochim. Acta* **2019**, 305, 278-284.

85. Smith McWilliams, A. D.; de los Reyes, C.; Liberman, L.; Ergülen, S.; Talmon, S.; Pasquali, M.; Martí, A. A.* Surfactant-Assisted Individualization and Dispersion of Boron Nitride Nanotubes, *Nanoscale Adv.* **2019**, *1*, 1096-1103.
84. Marincel, D. M.; Adnan, M.; Ma, J.; Bengio, E. A.; Trafford, M. A.; Kleinerman, O.; Kosynkin, D.; Chu, S.-H.; Park, C.; Hocker, S. J. A.; Fay, C. C.; Arepalli, S.; Martí, A. A.; Talmon, Y.; Pasquali, M. Scalable Purification of Boron Nitride Nanotubes via Wet Thermal Etching, *Chem. Mater.* **2019**, *31*, 1520-1527.
83. de los Reyes, C.; Smith McWilliams, A. D.; Hernández, K.; Mitra, K. L. W.; Ergülen, S.; Pasquali, M.; Martí, A. A.* Adverse Effect of PTFE Stir Bars on the Covalent Functionalization of Carbon and Boron Nitride Nanotubes Using Billups–Birch Reduction Conditions, *ACS Omega* **2019**, *4*, 5098–5106.
82. Liu, Y.; Liang, C.; Wu, J.; Varma, S. J.; Nakanishi, Y.; Aliyan, A.; Martí, A. A.; Wang, Y.; Xie, B.; Kumar, J.; Layne, K.; Chopra, N.; Odeh, I.; Vajtai, R.; Thomas, J.; Peng, X.; Yang, W.; Ajayan, P. M. Reflux Pretreatment-Mediated Sonication: A New Universal Route to Obtain 2D Quantum Dots, *Mater. Today* **2019**, *22*, 17-24.
81. Radhakrishnan, S.; Park, J. H.; Neupae, R.; de los Reyes, C.; Sudeep, P. M.; Paulose, M.; Martí, A. A.; Tiwary, C. S.; Khabashesku, V. N.; Varghese, O. K.; Kaiparettu, B. A.; Ajayan, P. M. Fluorinated Boron-Nitride Quantum Dots: A New 0D Material for Energy Conversion and Detection of Cellular Metabolism, *Part. Part. Syst. Char.* **2018**, 1800346.
80. Balan, A. P.; Radhakrishnan, S.; Neupane, R.; Yazdi, S.; Deng, L.; de los Reyes, C. A.; Apte, A.; Puthirath, A. B.; Rao, B. M.; Paulose, M.; Vajtai, R.; Chu, C.-W.; Martí, A. A.; Varghese, O. K.; Tiwary, C. S.; Anantharaman, M. R.; Ajayan, P. M. Magnetic Properties and Photocatalytic Applications of 2D Sheets of Nonlayered Manganese Telluride by Liquid Exfoliation, *ACS Appl. Nano Mater.* **2018**, *1*, 6427–6434.
79. Balan, P. A.; Radhakrishnan, S.; Kumar, R.; Neupane, R.; Sinha, S. K.; Deng, L.; de los Reyes, C. A.; Apte, A.; Rao, B. M.; Paulose, M.; Vajtai, R.; Chu, C. W.; Costin, G.; Martí, A. A.; Varghese, O. K.; Singh, A. K.; Tiwary, C. S.; Anantharaman, M. R.; Ajayan, P. M. A Non-van der Waals 2D Material From Natural Titanium Mineral Ore Ilmenite, *Chem. Mater.* **2018**, *30*, 5923–5931.
78. de los Reyes, C. A.; Walz-Mitra, K.; Smith, A. D.; Yazdi, S.; Frankovsky, F.; Ringe, E.; Pasquali, M.; Martí, A. A.* Chemical Decoration of Boron Nitride Nanotubes Using the Billups-Birch Reaction: Toward Enhanced Thermostable Reinforced Polymer and Ceramic Nanocomposites, *ACS Appl. Nano Mater* **2018**, *1*, 2421–2429.
77. Meiyazhagan, A.; Aliyan, A.; Anumary, A.; Moreno-Gonzalez, I.; Susarla, S.; Yazdi, S.; Cuanalo-Contreras, K.; Vajtai, R.; Martí, A. A.; Ajayan, P. M. Soft Lithographic Patterning of Luminescent Carbon Nanodots Derived from Collagen Waste, *ACS Appl. Mater. Interfaces* **2018**, *10*, 36275–36283.
76. Radhakrishnan, S.; Das, D.; Deng, L.; Sudeep, P. M.; Colas, G.; de los Reyes, C.; Chu, C.-W.; Martí, A. A.; Filleter, T.; Chandra, S. T.; Singh, A. K.; Ajayan, P. M. An Insight into the Phase Transformation of WS₂ upon Fluorination, *Adv. Mater.* **2018**, *30*, 1803366.
75. Balan, P. A.; Radhakrishnan, S.; Woellner, C. F.; Sinha, S. K.; Deng, L.; de los Reyes, C.; Rao, B. M.; Paulose, M.; Neupane, R.; Apte, A.; Kochat, V.; Vajtai, R.; Harutyunyan, A. R.; Chu, C.-W.; Costin, G.; Galvao, D. S.; Martí, A. A.; van Aken, P. A.; Varghese, O. K.; Tiwary, C. S.; Anantharaman, M. R.; Ajayan, P. M. Exfoliation of a non-van der Waals material from iron ore hematite, *Nature Nanotechnol.* **2018**, *13*, 602-609.
74. McDowell, M.; Metzger, D.; Wang, C.; Bao, J.; Tour, J. M.*; Martí, A. A.* Singular Wavelength Dependence on the Sensitization of Lanthanides by Graphene Quantum Dots, *Chem.*

- Commun.* **2018**, *54*, 4325-4328.
73. Liu, Y.; Liang, C.; Wu, J.; Sharifi, T.; Nakanishi, Y.; Yang, Y.; Aliyan, A.; Martí, A. A.; Xie, B. Chopra, N.; Odeh, I.; Vajtai, R.; Yang, W.; Ajayan, P. M. Atomic Layered Titanium Sulfide Quantum Dots as Electrocatalysts for Enhanced Hydrogen Evolution Reaction, *Adv. Mater. Interfaces* **2018**, *5*, 1700895.
 72. Ye, R.; Han, X.; Kosynkin, D. V.; Li, Y.; Jiang, B.; Martí, A. A.*; Tour, J. M.* Laser-Induced Conversion of Teflon into Fluorinated Nanodiamonds or Fluorinated Graphene, *ACS Nano*, **2018**, *12*, 1083-1088.
 71. Aliyan, A.; Paul, T. J.; Jiang, B.; Pennington, C.; Sharma, G.; Prabhakar, R.*; Martí, A. A.* Photochemical Identification of Molecular Binding Sites on the Surface of Amyloid- β Aggregates, *Chem* **2017**, *3*, 898-912.
 70. Klockner, W.; Yadav, R. M.; Yao, J.; Lei, S.; Aliyan, A.; Wu, J.; Martí, A. A.; Vajtai, R.; Ajayan, P. M.; Denardin, J. C.; Serafini, D.; Melo, F.; Singh, D. P. Acetonitrile mediated facile synthesis and self-assembly of silver vanadate nanowires in to 3D spongy like structure as a cathode material for lithium ion battery, *J. Nanopart. Res.* **2017**, *19*, 288.
 69. Radhakrishnan, S.; Das, D.; Samanta, A.; de los Reyes, C.; Deng, L.; Alemany, L. B.; Weldeghiorghis, T. K.; Khabashesku, V. N.; Jin, Z.; Kochat, V.; Sudeep, P. M.; Martí, A. A.; Chu, C. -W.; Roy, A.; Tiwary, C. S.; Singh, A. K.; Ajayan, P. M. Fluorinated h-BN as magnetic semiconductor, *Sci. Adv.* **2017**, *3*, e1700842.
 68. García-Lopez, V.; Alemany, L. B.; Chiang, P. -T.; Sun, J.; Chu, P. -L.; Martí, A. A.; Tour, J. M. Synthesis of a Light-Driven Motorized Nanocar for Linear Trajectories and their Detailed NMR Structural Determination, *Tetrahedron* **2017**, *73*, 4864-4873.
 67. Abdolvahabi, A.; Shi, Y.; Rasouli, S.; Aliyan, A.; Croom, C. M.; Martí, A. A.; Shaw, B. F. Kaplan-Meier Meets Chemical Kinetics: Intrinsic Rate of SOD1 Amyloidogenesis Decreased by Subset of ALS Mutations and Cannot Fully Explain Age of Disease Onset *ACS Chem. Neurosci.* **2017**, *8*, 1378-1389.
 66. Gupta, B. K.; Singh, S.; Kedawat, G.; Kanika; Kumar, P.; Gangwar, A. K.; Narayanan, T. N.; Martí, A. A.; Vajtai, R.; Ajayan, P. M. A Novel Electroluminescent Device Based on Reduced Graphene Oxide Wrapped Phosphor (ZnS:Cu, Al) and Hexagonal-Boron Nitride for High-Performance Luminescence, *Nanoscale* **2017**, *9*, 5002-5008.
 65. Xie, Z.; Jiang, C.; Xu, W.; Cui, X.; de los Reyes, C. A.; Martí, A. A.*; Wang, Y.* Facile Self-Assembly Route to Co₃O₄ Nanoparticles Confined into Sheet-Like SWCNT Matrix for Highly Reversible Lithium Storage, *Electrochim. Acta* **2017**, *235*, 613-622.
 64. Jiang, C.; Peng, Z.; de los Reyes, C.; Young, C. C.; Tsentelovich, D.; Ajayan, P. M.; Tour, J. M.; Pasquali, M.; Martí, A. A.* Increased Solubility and Fiber Spinning of Graphenide Dispersions Aided by Crown-Ethers, *Chem. Commun.* **2017**, *53*, 1498-1501.
 63. Gupta, B. K.; Singh, S.; Kumar, P.; Lee, Y.; Kedawat, G.; Narayanan, T. N.; Vithayathil, S. A.; Ge, L.; Zhan, X.; Gupta, S.; Martí, A. A.; Vajtai, R.; Ajayan, P. M.; Kaiparettu, B. A. Bifunctional Luminomagnetic Rare-Earth Nanorods for High-Contrast Bioimaging Nanoprobes, *Sci. Rep.* **2016**, *6*, 32401.
 62. Aliyan, A.; Kirby, B.; Pennington, C.; Martí, A. A.* Unprecedented Dual-Light Switching Response of a Metal Dipyrrophenazine Complex Towards Amyloid- β Aggregation, *J. Am. Chem. Soc.* **2016**, *138*, 8686-8689.
 61. Huang, K.; Saha, A.; Dirian, K.; Chu, P.-L. E.; Tour, J. M.; Jiang, C.; Guldi, D. M.*; Martí, A. A.* Carbon Nanotubes Dispersed in Aqueous Solution by Ruthenium(II) Polypyridyl Complexes,

- Nanoscale*, **2016**, 8, 13488-13497.
60. García-Lopez, V.; Joffe, J.; Kuwahara, S.; Martí, A. A.; Ebenstein, Y.; Tour, J. M. Synthesis and Photostability of Unimolecular Submersible Nanomachines: Toward Single-Molecule Tracking in Solution, *Org. Lett.* **2016**, 18, 2343-2346.
59. Kovalchuk, A.; Huang, K.; Xiang, C.; Martí, A. A.; Tour, J. M. Luminescent Polymer Composite Films Containing Coal-Derived Graphene Quantum Dots, *ACS Appl. Mater. Interfaces*, **2015** 7, 26063-26068.
58. García-Lopez, V.; Chiang, P.-T.; Chen, F.; Ruan, G.; Martí, A. A.*; Kolomeiski, A. B.*; Wang, G.*; Tour, J. M.* Unimolecular Submersible Nanomachines. Synthesis, Actuation and Monitoring, *Nano Lett.* **2015**, 15, 8229-8239.
57. Ohata, J.; Vohidov, F.; Aliyan, A.; Huang, K.; Martí, A. A.; Ball, Z. T. Luminogenic Iridium Azide Complexes, *Chem. Commun.* **2015**, 51, 15192-15195.
56. García-Lopez, V.; Chu, P.-L. E.; Chiang, P.-T.; Sun, J.; Martí, A. A.*; Tour, J. M.* Synthesis of a Light-Driven Motorized Nanocar, *Asian J Org. Chem.* **2015**, 4, 1308-1314.
55. Jiang, C.; Saha, A.; Martí, A. A.* Carbon Nanotubes: An Alternative for Dispersion, Functionalization and Composites Fabrication, *Nanoscale* **2015**, 7, 15037-15045.
54. Godoy, J.; García-López, V.; Wang, L.-Y.; Rondeau-Gagné, S.; Link, S.; Martí, A. A.*; Tour, J. M.* Synthesis of a Fluorescent BODIPY-Tagged ROMP Catalyst and Initial Polymerization-Propelled Diffusion Studies, *Tetrahedron* **2015**, 71, 5965-5972.
53. Ahmed, Z.; Timsah, Z.; Suen, K. M.; Leonard, P. G.; Cook, N. P.; Lee, G. R.; Lin, C.-C.; Gagea, M.; Martí, A. A.; Ladbury, J. E. Grb2 Monomer-Dimer Equilibrium Determines Normal versus Oncogenic Function, *Nat. Commun.* **2015**, 6, 7354.
52. Martí, A. A.* Photoluminescent Metal Complexes and Time-Resolved Spectroscopy for Sensing Applications, Invited Featured Article, *J. Photochem. Photobiol. A*, **2015**, 307, 35-47.
51. Ye, R.; Peng, Z.; Metzger, A.; Lin, J.; Mann, J. A.; Huang, K.; Xiang, C.; Fan, X.; Samuel, E. L. G.; Alemany, L. B.; Martí, A. A.*; Tour, J. M.* Bandgap Engineering of Coal-Derived Graphene Quantum Dots, *ACS Appl. Mater. Interfaces* **2015**, 7, 7041-7048.
50. Abdolvahabi, A.; Shi, Y.; Rhodes, N. R.; Cook, N. P.; Martí, A. A.; Shaw, B. F. Arresting Amyloid with Coulomb's Law: Acetylation of ALS-Linked SOD1 by Aspirin Impedes Aggregation, *Biophys. J.* **2015**, 108, 1199-1212.
49. Huang, K.; Jiang, C.; Martí, A. A.* Ascertaining Free Histidine from Mixtures with Histidine-Containing Biomolecules using Time-Resolved Photoluminescence Spectroscopy, *J. Phys. Chem. A* **2014**, 118, 10353 – 10358.
48. Jiang, C.; Saha, A.; Young, C. C.; Hashim, D. P.; Ramirez, C.; Ajayan, P. M.; Pasquali, M.; Martí, A. A.* Macroscopic Nanotube Fibers Spun from Single-Walled Carbon Nanotube Polyelectrolytes, *ACS Nano* **2014**, 8, 9107 – 9112.
47. Saha, A.; Jiang, C.; Martí, A. A.* Carbon Nanotube Networks on Different Platforms, *Carbon* **2014**, 79, 1 – 18.
46. Mondal, P.; Ghosal, K.; Bhattacharyya, S. K.; Das, M.; Bera, A.; Ganguly, D.; Kumar, P.; Dwivedi, J.; Gupta, R. K.; Martí, A. A.; Gupta, B. K.; Maiti, S. Formation of a Gold-Carbon Dot Nanocomposite with Superior Catalytic Ability for the Reduction of Aromatic Nitro Groups in Water, *RSC Adv.* **2014**, 4, 25863 – 25866.
45. Hwang, C.-C.; Ruan, G.; Wang, L.; Zheng, H.; Samuel E. L. G.; Xiang, C.; Wei, L.; Kasper, W.;

- Huang, K.; Peng, Z.; Schaefer, Z.; Kan, A. T.; Martí, A. A.; Wong, M. S.; Tomson, M. B.; Tour, J. M. Carbon-based Nanoreporters Designed for Subsurface Hydrogen Sulfide Detection, *ACS Appl. Mater. Interfaces* **2014**, *6*, 7652 – 7658.
44. Ye, R.; Xiang, C.; Lin, J.; Peng, Z.; Huang, K.; Yan, Z.; Cook, N. P.; Samuel, E. L. G.; Hwang, C. - C.; Ruan, G.; Ceriotti, G.; Raji, A. -R. O.; Martí, A. A.; Tour, J. M. Coal as an Abundant Source of Graphene Quantum Dots, *Nature Commun.* **2013**, *4*, 2943.
43. Saha, A.; Panos, Z.; Hanna, T.; Huang, K.; Hernández-Rivera, M.; Martí, A. A.* 3-Dimensional Solvent Vapor Map Generated by Supramolecular Metal Complex Entrapment, *Angew. Chem. Int. Ed.* **2013**, *52*, 12615 – 12618.
42. Shi, Y.; Rhodes, N. R.; Abdolvahabi, A.; Kohn, T.; Cook, N. P.; Abdovahabi, A.; Mowery, R. A.; Martí, A. A.; Shaw, B. F. Deamidation of Asparagine to Aspartate Destabilizes Cu, Zn Superoxide Dismutase, Accelerates Fibrillization and Mirrors ALS-Linked Mutations, *J. Am. Chem. Soc.* **2013**, *135*, 15897 – 15908.
41. Cook, N. P.; Ozbil, M.; Katsampes, C.; Prabhakar, R.*; Martí, A. A.* Unraveling the Photoluminescence Response of Light-Switching Ruthenium(II) Complexes Bound to Amyloid- β , *J. Am. Chem. Soc.* **2013**, *135*, 10810 – 10816.
40. Jiang, C.; Saha, A.; Changsheng, X.; Young, C.; Tour, J. M.; Pasquali, M.; Martí, A. A.* Increased Solubility, Diameter Selectivity and Liquid Crystalline Phase of Single-Walled Carbon Nanotube Polyelectrolyte Dispersions, *ACS Nano* **2013**, *7*, 4503 – 4510.
39. Diaz, A.; Mosby, B.; Bakhmutov, V.; Martí, A. A.; Batteas, J.; Clearfield, A. Self Assembled Monolayers Based Upon a Zirconium Phosphate Platform, *Chem. Mater.* **2013**, *25*, 723 – 728.
38. Cook, N. P.; Archer, C. M.; Fewver, J. N.; Schall, H. E.; Rodriguez-Rivera, J.; Dineley, K. T.; Martí, A. A.; Murray, V. J. Ruthenium Red Colorimetric and Birefringent Staining of Amyloid β Aggregates *In Vitro* and in Tg 2576 Mice, *ACS Chem. Neurosci.* **2013**, *4*, 379 – 384.
37. Cook, N. P.; Kilpatric, K.; Segatori, L.*; Martí, A. A.* Detection of α -Synuclein Amyloidogenic Aggregates *In Vitro* and in Cells using Light-Switching Dipyridophenazine Ruthenium(II) Complexes, *J. Am. Chem. Soc.*, **2012**, *134*, 20776 – 20782.
36. Huang, K.; Bulik, I.; Martí, A. A.* Time-Resolved Photoluminescence Spectroscopy for the Detection of Cysteine and Other Thiol Containing Amino Acids in Complex Strong Autofluorescent Media, *Chem. Commun.* **2012**, *48*, 11760 – 11762.
35. Cook, N. P.; Martí, A. A.* Facile Methodology for Monitoring Amyloid- β Fibrillization, *ACS Chem. Neurosci.* **2012**, *3*, 896 – 899.
34. Gupta, B. K.; Narayanan, T. N.; Vithayathil, S. A.; Lee, Y.; Koshy, S.; Reddy, A. L. M.; Saha, A.; Shanker, V.; Singh, V. N.; Kaiparettu, B. A.; Martí, A. A.; Ajayan, P. M. Highly Luminescent-Paramagnetic Nanophosphor Probes for *In Vitro* High-Contrast Imaging of Human Breast Cancer Cells, *Small* **2012**, *8*, 3028 – 3034.
33. Huang, K.; Martí, A. A.* Optimizing the Sensitivity of Photoluminescent Probes using Time-Resolved Spectroscopy: A Molecular Beacon Case Study, *Anal. Chem.* **2012**, *84*, 8075 – 8082.
32. Saha, A.; Ghosh, S.; Weisman, R. B.; Martí, A. A.* Films of Bare Single-Walled Carbon Nanotubes from Superacids with Tailored Electronic and Photoluminescence Properties, *ACS Nano*, **2012**, *6*, 5727 – 5734.
31. Reddy, A. L. M.; Gupta, B. K.; Narayanan, T. N.; Martí, A. A.; Ajayan P. M.; Walker, G. C. Probing on Time-Resolved and Photoluminescence Spectroscopy of Ni Encapsulated Ferromagnetic Boron Nitride Nanotubes, *J. Phys. Chem. C* **2012**, *116*, 12803 – 12809.

30. Peng, J.; Gao, W.; Gupta, B. K.; Liu, Z.; Romero-Aburto, R.; Ge, L.; Song, L.; Alemany, L. B.; Zahn, X.; Gao, G.; Vithayathil, S. A.; Kaiparettu, B. A.; Martí, A. A.; Hayashi, T.; Zhu, J. -J.; Ajayan, P. M. Graphene Quantum Dots Derived from Carbon Fibers, *Nano Lett.* **2012**, *11*, 5227 – 5233.
29. Huang, K.; Martí, A. A.* Newer Trends in Molecular Beacons Design and Application, *Anal. Bioanal. Chem.* **2012**, *402*, 3091 – 3102.
28. Gupta, B. K.; Thanikaivelan, P.; Narayanan, T. N.; Song, L.; Gao, W.; Hayashi, T.; Saha, A.; Shanker, V.; Endo, M.; Martí, A. A.; Ajayan, P. M. Optical Bi-functionality of Europium Complexed Luminescent Graphene Nanosheets, *Nano Lett.* **2011**, *11*, 5227 – 5232.
27. Cook, N.; Torres, V.; Jain, D.; Martí, A. A.* Sensing Amyloid- β Aggregation using Luminescent Dipyrrophenazine Ruthenium (II) Complexes, *J. Am. Chem. Soc.* **2011**, *133*, 11121 – 11123.
26. Saha, A.; Ghosh, S.; Behabtu, N.; Pasquali, M.; Martí, A. A.* Single-Walled Carbon Nanotubes Shell Decorating Porous Silicate Materials: A General Platform for Studying the Interaction of Carbon Nanotubes with Photoactive Molecules, *Chem. Sci.* **2011**, *2*, 1682 – 1687.
25. Gupta, B. K.; Rathee, V.; Narayanan, T. N.; Thanikaivelan, P.; Saha, A.; Govind, S.; Singh, P.; Shanker, V.; Martí, A. A.; Ajayan, P. M. Probing a Bifunctional Luminomagnetic Nanophosphor for Biological Applications: a Photoluminescence and Time-Resolved Spectroscopic Study, *Small* **2011**, *7*, 1767 – 1773.
24. Jain, D.; Saha, A.; Martí, A. A.* Non-Covalent Ruthenium Polypyridyl Complexes-Carbon Nanotubes Composites: An Alternative for Functional Dissolution of Carbon Nanotubes in Solution, *Chem. Commun.* **2011**, *47*, 2246 – 2248.
23. Martí, A. A.; Colón J. L. Photophysical Characterization of the Interactions among Tris(2,2'-bipyridine)ruthenium(II) Ion-Exchanged into Zirconium Phosphate, *Inorg. Chem.* **2010**, *49*, 7298 – 7303.
22. Chen, J. Y. -C.; Martí, A. A.; Turro, N. J.; Komatsu, K.; Murata, Y.; Lawler, R. G. Comparative NMR Properties of H₂ & HD in Toluene-d⁸ and H₂/HD@C₆₀, *J. Phys. Chem. B* **2010**, *114*, 14689 – 14695.
21. Turro, N. J.; Chen, J.; Sartori, E.; Ruzzi, M.; Martí, A. A.; Lawler, R.; Jockusch, S.; Lopez-Gejo, J.; Komatsu, K.; Murata, Y. "The Spin Chemistry and Magnetic Resonance of H₂@C₆₀. From the Pauli Principle to Trapping a Nuclear Excited State Inside a Buckyball", *Acc. Chem. Res.* **2010**, *43*, 335 – 345.
20. Martí, A. A.*; Turro, N. J. Fluorescent Responsive Probes for Oligonucleotide Detection, In *Chemical Evolution II: From Origins of Life to Modern Society*; American Chemical Society: Washington DC, **2009**, vol. 1025, Chapter 14, 269 – 282.
19. O'Connor, N., Stevens, N., Samaroo, D., Solomon, M., Martí, A. A., Dyer, J., Vishwasrao, H., Akins, D. L., Kandel, E. R., Turro, N. J. Photophysical Characterisation of a Covalently Linked Phenanthridine-Ruthenium(II) Complex Fluorescent RNA Probe, *Chem. Commun.* **2009**, *45*, 2640 – 2642.

PUBLICATIONS (with affiliation to the University of Puerto Rico and Columbia University, NY)

18. Lancaster, J. R.; Martí, A. A.; López-Gejo, J.; Jockusch, S.; O'Connor, N., Turro, N. J. Non-radiative Deactivation of Singlet Oxygen (¹O₂) by Cubane and its Derivatives, *Org. Lett.* **2008**, *10*, 5509 – 5512.
17. Turro, N. J.; Martí, A. A.; Chen, J. Y. -C.; Jockusch, S.; Lawler, R. G.; Ruzzi, M.; Sartori, E.; Chuang, S. -C.; Komatsu, K.; Murata, Y. Demonstration of a Chemical Transformation inside a Fullerene.

- The Reversible Conversion of the Allotropes of H₂@C₆₀, *J. Am. Chem. Soc.* **2008**, *130*, 10506 – 10507.
16. Wakata, A.; Cahill, S. M.; Blumenstein, M.; Gunby, R. H.; Jockusch, S.; Martí, A. A.; Cimbri, B. Gambacorti-Passerini, C.; Donella-Deana, A.; Pinna, L. A.; Turro, N. J.; Lawrence, D. S. A Mechanistic Design Principle for Protein Tyrosine Kinase Sensors: Application to a Validated Cancer Target, *Org. Lett.* **2008**, *10*, 301 – 304.
 15. Conlon, P.; Yang, C. J.; Wu, Y.; Chen, Y.; Martinez, K.; Tan, W.; Stevens, S.; Martí, A. A.; Jockusch, S.; Turro, N. J. Excimer Signaling Molecular Beacons for Probing Nucleic Acids, *J. Am. Chem. Soc.* **2008**, *130*, 336 – 342.
 14. López-Gejo, J.; Martí, A. A.; Ruzzi, M.; Jockusch, S.; Komatsu, K.; Murata, Y.; Turro, N. J. Can H₂ Inside C₆₀ Communicate With the Outside World?, *J. Am. Chem. Soc.* **2007**, *129*, 14554 – 14555.
 13. Martí, A. A.; Puckett, C.; Dyer, J.; Stevens, N.; Jockusch, S.; Ju, J.; Barton, J. K.; Turro, N. J. Inorganic-Organic Hybrid Luminescence Binary Probe for DNA Detection Based on Spin-Forbidden Resonance Energy Transfer *J. Am. Chem. Soc.* **2007**, *129*, 8680 – 8681.
 12. Stevens, N.; Dyer, J.; Martí, A. A.; Solomon, M.; Jockusch, S.; Turro, N. J. FRETView: a Computer Program to Simplify the Process of Obtaining Fluorescence Resonance Energy Transfer Parameters, *Photochem. Photobiol. Sci.* **2007**, *6*, 909 – 911.
 11. Martí, A. A.; Jockusch, S.; Stevens, N.; Ju, J.; Turro, N. J. Fluorescent Hybridization Probes for Sensitive and Selective DNA and RNA Detection, *Acc. Chem. Res.* **2007**, *40*, 402 – 409.
 10. Martí, A. A.; Rivera, N.; Soto, K.; Maldonado, L.; Colón, J. L. Intercalation of Re(phen)(CO)₃Cl in a Zirconium Phosphate Framework: a Water Insoluble Inorganic Complex Immobilized in a Highly Polar Lamellar Matrix, *J. Chem. Soc. Dalton Trans.*, **2007**, 1713 – 1718.
 9. Martí, A. A.; Li, X.; Jockusch, S.; Stevens, N.; Li, Z.; Raveendra, B.; Kalachikov, S.; Morozova, I.; Russo, J. J.; Akins, D. L.; Ju, J.; Turro, N. J. Design and Characterization of Two-Dye and Three Dye Binary Fluorescent Probes for mRNA Detection, *Tetrahedron* **2007**, *63*, 3591 – 3600.
 8. Martí, A. A.; Paralifici, G.; Maldonado, L.; Colón, J. L.; Photophysical Characterization of Methyl Viologen Ion-Exchanged into a Zirconium Phosphate Framework, *Inorg. Chim. Acta* **2007**, *360*, 1535 – 1542.
 7. Tremblay, M. S.; Zhu, Q.; Martí, A. A.; Dyer, J.; Halim, M.; Jockusch, S.; Turro, N. J.; Sames, D. Phosphorylation State-Responsive Lanthanide Peptide Conjugates: a Luminescence Switch Based on Reversible Complex Reorganization, *Org. Lett.* **2006**, *8*, 2723-2726.
 6. Li, X.; Li, Z.; Martí, A. A.; Jockusch, S.; Stevens, N.; Akins, D. L.; Turro, N. J.; Ju, J. Combinatorial Fluorescence Energy Transfer Molecular Beacon for Probing Nucleic Acid Sequences, *Photochem. Photobiol. Sci.* **2006**, *5*, 896 - 902.
 5. Martí, A. A.; Li, X.; Jockusch, S.; Li, Z.; Raveendra, B.; Kalachikov, S.; Russo, J. J.; Morozova, I.; Puthanveetil, S. V.; Ju, J.; Turro, N. J. Pyrene Binary Probes for Unambiguous Detection of mRNA Using Time-Resolved Fluorescence Spectroscopy, *Nucleic Acids Res.* **2006**, *34*, 3161 - 3168.
 4. Jockusch, S.; Martí, A. A.; Turro, N. J.; Li, Z.; Li, X.; Ju, J.; Stevens, N.; Akins, D. L. Spectroscopic Investigation of a FRET Molecular Beacon Containing Two Fluorophores for Probing DNA/RNA Sequences, *Photochem. Photobiol. Sci.* **2006**, *5*, 493 - 498.
 3. Martí, A. A., Jockusch, S., Li, Z., Ju, J., Turro, N. J. Molecular Beacons with Intrinsically Fluorescent Deoxyribonucleic Acids Bases, *Nucleic Acids Res.* **2006**, *34*, e50.

2. Martí, A. A.; Mezei, G., Maldonado, L.; Paralifici, G.; Raptis, R. G.; Colón, J. L. Structural and Photophysical Characterization of *fac*-Tricarbonylchloro-1,10-phenanthroline-5,6-epoxiderhenium(I), *Eur. J. Inorg. Chem.* **2005**, 2005, 118 - 124.
1. Martí, A. A.; Colón, J. L. Direct Ion Exchange of Tris(2,2'-bipyridine)ruthenium(II) into an Alpha-Zirconium Phosphate Framework, *Inorg. Chem.* **2003**, 42, 2830 - 2832.

PATENTS:

1. Marti-Arbona, A. A.; Saha, A.; Pasquali, M. Immobilized Carbon Nanotubes on Various Surfaces; United State Patent and Trademark Office; 9,095,876, **2015**.
2. Marti-Arbona, A. A.; Jiang, C.; Saha, A.; Pasquali, M.; Young, C. Liquid Crystals from Single-Walled Carbon Nanotube Polyelectrolytes and Their Use for Making Materials; United State Patent and Trademark Office; 9,249,023, **2016**.
3. Marti-Arbona, A. A.; McDowell, M.; Tour, J. M.; Metzger, A. B. Graphene quantum dots-rare earth conjugates with unique photoluminescent signatures for identification and anti-counterfeiting applications, Invention disclosure, TechID 2018-051, **2018**.
4. Marti-Arbona, A. A.; McWilliams, A.; Ergülen, S. Fluorescent surfactants for domestic and industrial applications, Invention disclosure, TechID 2019-051, **2019**.

AWARDS AND HONORS:

- Guess Editor, Dalton Transactions Issue on Porous and Lamellar Materials, Feb. 2020.
- Presidential Mentoring Award, Rice University, May 2019.
- Advisory Board, Inter-American Photochemical Society, 2018.
- Korea Lasertronix Young Chemists Lecture, 45th IUPAC World Congress, 2015.
- Proctor & Gamble Lecture; UCLA Organization for Cultural Diversity in Science, UCLA, Los Angeles, 2014.
- American Society for Photobiology New Investigator Award, 2014
- Inter-American Photochemical Society Young Investigator Award, 2013
- Diversity Students Hosted-Seminar Speaker, Texas A&M, College Station, 2013.
- Sigma Xi Full Member, 2011
- Norman Hackerman-Welch Young Investigator, 2008
- Carl Storm Underrepresented Minority Fellowship, Gordon Research Conference on Photochemistry, Rhode Island, 2007.
- Best Poster in Inorganic Chemistry, 60th Puerto Rico Chemical Conference, PRCHEM 2003, Río Grande, PR 2003.
- American Chemical Society, Division of Inorganic Chemistry Travel Award, ACS National Meeting, Boston, 2002.
- NIH/RISE research fellowship, 2002-2004
- NSF GK-12 graduate fellowship 2000-2002
- Alliance for Minority Participation (AMP) Excellence award, 1996-1999.
- NIH/SUBE research fellowship, 1996-1999.

PROFESIONAL MEMBERSHIPS

- American Chemical Society, 2001-present
- Sigma Xi, 2011-present
- Inter-American Photochemical Society, 2012-present
- American Society for Photobiology, 2013-present

ORAL PRESENTATIONS

1. Martí, A. A. Elucidating Binding Sites in Amyloid- β using Photoactive Rhenium(II) Dipyridophenazine Complexes, 256 ACS National Meeting; Orlando, FL, April 2019.
2. Martí, A. A. Dispersion, Characterization, and Diffusion of Boron-Nitride Nanotubes in Aqueous Solution, 256 ACS National Meeting; Orlando, FL, April 2019.
3. Martí, A. A. 28th Photoactive Rhenium Carbonyl Complexes as Sensors for Protein Aggregation and Photochemical Footprinting, Winter Meeting of the Inter-American Photochemical Society; Sarasota, FL, January, 2019.
4. Martí, A. A. Photoactive Rhenium Carbonyl Complexes as Sensors for Protein Aggregation and Photochemical Footprinting; Universidad de Santiago de Compostela, Santiago, Spain; October, 2018.
5. Martí, A. A. Reductive Chemistry for the Production and Manipulation of Nanoscale Building Blocks, Université Bordeaux-I, Bordeaux, France; October, 2018.
6. Martí, A. A. Light-Driven Processes in Nanomaterials of Multiple Dimensions, 4th International Conference on Bioinspired and Biobased Chemistry & Materials, Nice, France. October 2018; *Keynote speaker*.
7. Martí, A. A. Interaction Between Materials and Metal Complexes in Multiple Dimensions, American Society for Photobiology: Special Session Organic and Inorganic Photochemistry of Functional Materials: A Panamerican Perspective, Tampa, FL. May 2018.
8. Martí, A. A. Reductive Chemistry for the Production and Manipulation of Nanoscale Building Blocks, University of North Texas, Denton, TX. April, 2018.
9. Martí, A. A. Grafting Organic Functionalities to Boron Nitride Nanotubes Using Billups-Birch Reaction, 255th ACS National Meeting, New Orleans, LA. March 2018.
10. Martí, A. A. Photoactive Rhenium Dipyridophenazine Carbonyl Complexes as Sensors for Protein Aggregation and Photochemical Footprinting, 255th ACS National Meeting, New Orleans, LA. March 2018.
11. Martí, A. A. Photoactive Rhenium Carbonyl Complexes as Sensors for Protein Aggregation and Photochemical Footprinting, Universidad de Santiago, Chile, March, 2018.
12. Martí, A. A. Photoactive Rhenium Carbonyl Complexes as Sensors for Protein Aggregation and Photochemical Footprinting, University of Connecticut, Storrs, CT. November 2017.
13. Martí, A. A. Macroscopic Carbon-Based Materials from Nanoscale Building Blocks, University of Texas - El Paso, El Paso, TX. April 2017.
14. Martí, A. A. Sensing Amyloid Aggregation using Metal Complexes, University of Puerto Rico – Humacao, Humacao, PR. March, 2017.
15. Martí, A. A. Monitoring the Formation of Pre-Fibrillar Amyloid Aggregates using Fluorescence Anisotropy, 72nd ACS Southwestern Regional Meeting, Galveston, TX. November 2016.

16. Martí, A. A. Sensing Amyloid Aggregation using Metal Complexes, 72nd ACS Southwestern Regional Meeting, Galveston, TX. November 2016.
17. Martí, A. A. Macroscopic Carbon-Based Materials from Nanoscale Building Blocks, Louisiana State University, Baton Rouge, LA. September 2016.
18. Martí, A. A. Metal Complexes Sensors for Protein Aggregation, Inter-American Photochemistry Society Meeting, Santiago de Chile, Chile. May 2016.
19. Martí, A. A. Searching for Biomolecules Using Light and Time: A Tale Told by Metals, University of California San Diego, San Diego CA; May 2016.
20. Martí, A. A. Metal Complexes, Amyloid Diseases and Protein Aggregation: The Good, the Bad, and the Ugly, University of California Riverside, Department of Bioengineering, Riverside CA; February 2016.
21. Martí, A. A. Interrogating Biomolecules Using Light and Time: A Tale Told by Metals, University of California Riverside, Department of Chemistry, Riverside CA; February 2016.
22. Martí, A. A. Supramolecular organization of photoactive metal complexes in 1-3D, Pacificchem 2015, Honolulu, Hawaii; December 2015.
23. Martí, A. A. Interrogating Biomolecules Using Luminescent Probes: A Tale Told by Metals, Trinity University, San Antonio, TX; September 2015.
24. Martí, A. A. Shifting the Paradigm for Molecular Detection using Photoluminescent Metal Complexes and Time-Resolved Spectroscopy, 45th IUPAC World Chemistry Congress, Busan, Korea; August 2015.
25. Martí, A. A. Changing the Paradigm for the Detection of Biomolecules: a Story of Metals, Light, and Time, 35th Puerto Rico Interdisciplinary Scientific Meeting & 50th Junior Technical Meeting, San Juan PR, March 2015: *Plenary speaker*.
26. Martí, A. A. Photoluminescent Metal Complexes as Probes for Biologically Relevant Molecules, 248th ACS National Meeting, San Francisco, CA August 2014.
27. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, American Society for Photobiology 37th Conference, San Diego, CA, June 2014.
28. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, University of California, Los Angeles, Los Angeles, CA, April 2014.
29. Martí, A. A. Supramolecular Organization of Metal Complexes in One, Two and Three Dimensions, 247th ACS National Meeting, Inorganic Supramolecular Chemistry Symposium, Dallas, TX, March 2014.
30. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, University of Sao Carlos, Sao Carlos, Brazil, February 2014.
31. Martí, A. A. Interrogating Biomolecules Using Photoluminescent Metal Complexes, ACS South Western Regional Meeting, Waco, TX, November 2013.
32. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, University of Texas, Austin, TX, November 2013.
33. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, Johns Hopkins University, Baltimore, MD, October 2013.
34. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, University of Miami, Miami, FL, September 2013.

35. Martí, A. A. Metal Complexes as Photoluminescent Probes: A Tale of Metals, Light and Time, CASE Western Reserve University, Cleveland, OH, September 2013.
36. Martí, A. A. Photoluminescent Metal Complexes to Monitor the Formation Amyloid Aggregates, 245 ACS National Meeting, New Orleans, LA, April 2013.
37. Martí, A. A. Light Switching Complexes, Neurodegenerative Diseases and Amyloid Aggregates: The Good, the Bad, and the Ugly, University of Chicago, Chicago, IL, March 2013.
38. Martí, A. A. Photoluminescent Light-Switching Complexes as Probes for the Aggregation of Amyloid Proteins, Diversity Student-Hosted Seminar, Texas A&M, College Station, TX, February 2013.
39. Martí, A. A. Photoluminescent Light-Switching Complexes as Probes for the Aggregation of Amyloid Proteins, University of Houston, Houston, TX, January 2013.
40. Martí, A. A. Recent Advances in the Use of Photoluminescent Ruthenium(II) Dipyridophenazine Complexes to Monitor Different Aggregation States of Amyloid β Peptides, 68th Southwest Regional Meeting: Symposium - Chemical and Structural Biology: New Frontiers in Therapeutic Development, Baton Rouge, TX, November 2012.
41. Martí, A. A. Light Switching Complexes, Neurodegenerative Diseases and Amyloid Aggregates: The Good, the Bad, and the Ugly, Baylor University, Waco, TX, October 2012.
42. Martí, A. A. Light Switching Complexes, Neurodegenerative Diseases and Amyloid Aggregates: The Good, the Bad, and the Ugly, Texas State University-San Marcos, TX, October 2012.
43. Martí, A. A. Telling the Secrets of Time-Gating for the Enhancement of the Sensitivity of Photoluminescent Probes, Instrumentation and Applications of Fluorescence Spectroscopy Symposium, Houston, TX, September 2012.
44. Martí, A. A. Light Switching Complexes, Neurodegenerative Diseases and Amyloid Aggregates: The Good, the Bad, and the Ugly, North Dakota State University, September 2012.
45. Martí, A. A. Monitoring of Amyloid Protein Fibrillization using Dipyridophenazine Ruthenium (II) Complexes, West Michigan University, Kalamazoo, MI, November 2011.
46. Martí, A. A. Superacids, Supramolecular Frameworks and Super-Duper Carbon Nanotechnology, University of Puerto Rico, Río Piedras, August 2011.
47. Martí, A. A. Monitoring of Amyloid Protein Fibrillization using Dipyridophenazine Ruthenium (II) Complexes, Gordon Research Conference (Photochemistry), Stonehill College, MA, July 2011.
48. Martí, A. A. Amyloid Degradation by Artificial Peptidases, Invited by programs Marc and Sube, University of Puerto, Río Piedras, November 2009.
49. Martí, A. A.; Turro, N. J.; Chen, J. Y.-C.; Jockusch, S.; Ruzzi, M.; Sartori, E.; Lawler, R. G.; Chuang, S.-C.; Komatsu, K.; Murata, Y. Conversations Between Molecular Hydrogen and Oxygen Through the Walls of C₆₀. The Reversible Conversion of the Allotropes of H₂@C₆₀. Presented at the Symposium on H₂@C₆₀, Columbia University, New York, NY, August 2008.
50. Martí, A. A.; Turro, N. J. Fluorescent Responsive Molecular Probes for Oligonucleotide Detection. Presented at the 235th ACS National Meeting, Chemical Evolution II Symposium, New Orleans, April 2008.
51. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, Rice University, Houston, TX, January 2008.

52. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, UCLA, Los Angeles, CA, January 2008.
53. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, University of Miami, Miami, FL, December 2007.
54. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, University of Georgia, Athens, GA, November 2007.
55. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, College of Staten Island, New York, NY, November 2007.
56. Martí, A. A. (Faculty Interview) Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy, Hunter College, New York, NY, September 2007.
57. Martí, A. A.; Puckett, C.; Dyer, J.; Stevens, N.; Jockusch, S.; Ju, J.; Barton, J. K.; Turro, N. J. Spin-Forbidden Resonance Energy Transfer Probes for DNA Detection. Presented at the Ninth Annual Wyeth/Columbia Workshop, Columbia University, New York, NY, May 2007.
58. Martí, A. A.; Li, X.; Li, Z.; Jockusch, S.; Ju, J.; Turro, N. J. Unambiguous Detection of Specific mRNA Sequences Using Binary Probes and Time-Resolved Fluorescence Spectroscopy. Presented at the Department of Chemistry, Columbia University, New York, NY, April 2006.
59. Martí, A. A.; Li, X.; Li, Z.; Jockusch, S.; Ju, J.; Turro, N. J. Pyrene-Based Binary Probes for Oligonucleotides Detection. Presented at the Eighth Annual Wyeth/Columbia Workshop, Columbia University, New York, NY, May 2006.
60. Martí, A. A.; Jockusch, S.; Li, Z.; Li, X.; Stevens, N.; Akins, D. L.; Turro, N. J.; Ju, J. The Design of Molecular Beacons for mRNA Analysis. Seventh Annual Wyeth/Columbia Workshop, Columbia University, New York, NY, May 2005.
61. Martí, A. A.; Li, Z.; Jockusch, S.; Ju, J.; Turro, N. J. DNA Detection Using Molecular Beacons with Fluorescent Bases. Presented at the Summer Summit of the Center of Excellence in Genomic Sciences, San Juan, PR, June 2005.
62. Martí, A. A. Photophysical and Photochemical Studies of Luminescent Molecules Directly Intercalated into Zirconium Phosphate. University of Puerto Rico, Río Piedras, PR, May 2004 (*Thesis defense*).
63. Martí, A. A.; Colón, J. L. Nanoencapsulation of Tris(2,2'-bipyridyl)ruthenium(II) by an Alpha-Zirconium Phosphate Framework: Toward Long-Lived Light-Induced Charge Separation. Presented at the Puerto Rico ACS Local Section Meeting, Isabela PR, 2004.
64. Martí, A. A.; Colón, J. L. Direct intercalation and spectroscopic characterization of luminescent molecules in alpha-zirconium phosphate materials. Presented at the SACNAS National Conference, Albuquerque, NM, 2003.

POSTER PRESENTATIONS

1. Martí, A. A.; Smith, A. D.; Tang, Z.; de los Reyes, C.; Marincel, D. M.; Pasquali, M. Photophysics of Boron Nitride Nanotubes, Presented at the Gordon Research Conference on Photochemistry, Lewiston, ME, July 2017.

2. Aliyan, A.; Kirby, B.; Pennington, C.; Paul, T.; Prabhakar, R. Unconventional Photoluminescence Response of a Rhenium Dipyridophenazine Complex Towards Amyloid-Beta: A Dual Light Switching Mechanism. Presented at the Gordon Research Conference on Photochemistry, Easton, MA, July 2015.
3. Martí, A. A.; Cook, N. P. Understanding the Interactions between Light-Switching Ruthenium Complexes and Amyloid- β , Presented at the Gordon Research Conference on Photochemistry, Easton, MA, July 2013.
4. Martí, A. A.; Puckett, C.; Dyer, J.; Stevens, N.; Jockusch, S.; Ju, J.; Barton, J. K.; Turro, N. J. Spin-Forbidden Resonance Energy Transfer Probes for DNA Detection, Presented at the Gordon Research Conference on Photochemistry, Smithfield, RI, July 2007.
5. Martí, A. A.; Li, Z.; Dyer, J.; Jockusch, S.; Puckett, C.; Stevens, N.; Kalachikov, S.; Morozova, I.; Russo, J.; Lovell, P.; Ha, T.; Kohn, A.; Barton, J.; Moroz, L.; Turro, N. J.; Ju, J. Novel fluorescent probes for the detection of mRNA in living cells. Presented at the NIH Centers of Excellence in Genomic Science Fourth Annual Grantee Meeting at the University of Southern California, Los Angeles, CA, September 2006.
6. Martí, A. A.; Li, X.; Li, Z.; Raveendra, B.; Jockusch, S.; Kalachikov, S.; Morozova, I.; Russo, J.; Lovell, P.; Heyland, A.; Kohn, A.; Puthanveetil, S.; Kandel, E.; Moroz, L.; Turro, N. J.; Ju, J. Unambiguous Detection of Sensorin mRNA Using Binary Probes. Presented at the NIH Centers of Excellence in Genomic Science Third Annual Grantee Meeting at YALE, New Haven, CT, November 2005.
7. Martí, A. A.; Colón, J. L. Nanoencapsulation of Tris(2,2'-bipyridyl)ruthenium(II) by an α -Zirconium Phosphate Framework: Toward Long-Lived Light-Induced Charge Separation. Presented at 227th ACS National Meeting, Anaheim, CA, 2004, Poster INOR 557.
8. Martí, A. A.; Colón, J. L. Nanoencapsulation of Tris(2,2'-bipyridyl)ruthenium(II) by an α -Zirconium Phosphate Framework: Toward Long-Lived Light-Induced Charge Separation. Presented at the 60th Puerto Rico Chemical Conference, PRCHEM 2003, Río Grande, PR, 2003; INOR 14.
9. Martí, A. A.; Colón, J. L. Ion Exchange of Tris(2,2'-bipyridine)ruthenium(II) into an Alpha-Zirconium Pphosphate Framework. Presented at The 2nd RISE Area Conference Bioactive Molecules from Nature: The Road To Drug Discovery Design, University of Puerto Rico, Río Piedras Campus, PR, 2003.
10. Martí A. A.; Colón J. L. Ion Exchange of Tris(2,2'-bipyridine)ruthenium(II) into an Alpha-Zirconium Pphosphate Framework. Presented at the Annual Biochemistry Research Conference for Minority Students, New Orleans, LA, 2002; Poster 497.
11. Martí A. A.; Rivera, N.; Paraliticci, G.; Soto, K.; Colón, J. Direct Ion Exchange of Tris(2,2'-bipyridine)ruthenium(II) into an Alpha-Zirconium Phosphate Framework. Presented at the SACNAS National Conference, Anaheim, CA, 2002; Poster 209.
12. Martí A. A.; Rivera, N.; Paraliticci, G.; Soto, K.; Colón, J. Direct Intercalation and Spectroscopic Characterization of Luminescent Molecules in α -Zirconium Phosphate Material. Presented at the 224th ACS National Meeting, Boston, MA, 2002; Poster INOR 0084.