

Juan Claudio Nino

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PROFESSIONAL EXPERIENCE

Co-founder and Chief Scientific Advisor <i>Rain Neuromorphics, Inc., Redwood City, California, USA</i>	October 2017 – present
Professor, Materials Science and Engineering <i>University of Florida, Gainesville, Florida, USA</i>	August 2013 – present
Associate Professor, Materials Science and Engineering <i>University of Florida, Gainesville, Florida, USA</i>	August 2008 – July 2013
Assistant Professor, Materials Science and Engineering <i>University of Florida, Gainesville, Florida, USA</i>	August 2003 – July 2008
Postdoctoral Scholar, Materials Research Institute <i>The Pennsylvania State University, University Park, Pennsylvania, USA</i>	August 2002 – May 2003

EDUCATION

Doctor of Philosophy, Materials Science and Engineering <i>The Pennsylvania State University, University Park, Pennsylvania, USA</i> <i>Dissertation Title: Fundamental Structure-Property Relationships towards Engineering of an Integrated NPO Capacitor for Bismuth Pyrochlore Systems</i>	May 2002
Bachelor of Science, Mechanical Engineering <i>Universidad de los Andes, Bogotá, COLOMBIA</i>	September 1997

PUBLICATION SUMMARY

3	Plenary, Distinguished, or Key Note Lectures at technical meetings		
153	Peer-reviewed Journal Publications	30	Invited Seminars (18 international)
9	Patents (3) and Patent Applications (6)	202	Presentations at Conferences
35	Invited International Presentations	41	ISI h-index (GS i10-index = 99)

FUNDING SUMMARY

Principal Investigator Awards (US \$7.6 M) <i>US National Science Foundation</i> <i>US Department of Energy</i> <i>US Department of Defense</i> <i>US Defense Threat Reduction Agency</i> <i>US National Aeronautics and Space Administration</i> <i>US Department of Commerce</i>	<i>Florida Board of Governors</i> <i>Bill and Melinda Gates Foundation</i> <i>John Hauck Foundation</i> <i>Sumicol</i> <i>Mainstream Engineering</i>	2003 – present
Co-Principal Investigator Awards (US \$15.3 M) <i>US National Science Foundation</i> <i>US Department of Energy</i> <i>US Defense Threat Reduction Agency</i>	<i>Florida Department of Transportation</i> <i>University of Florida Opportunity Seed Fund</i> <i>Florida High Tech Corridor</i>	2003 – present

PROFESSIONAL HONORS & AWARDS

Emergent Technologies Technical Advisory Committee <i>US Department of Commerce</i>	2020-Present
Jefferson Science Fellow <i>US National Academies of Science, Engineering and Medicine</i>	2018-2019
Richard E. Tressler Lecture Award <i>The Pennsylvania State University, State College, Pennsylvania</i>	April 2018

Expert – Division of Materials Research	April - September 2016
<i>US National Science Foundation</i>	
Technology Innovator Award	2016
<i>Office of Technology Licensing – University of Florida</i>	
Fulbright US Scholar - Innovation & Technology Award	2014-2015
<i>US Department of State</i>	
University of Florida Research Foundation Professorship	2010-2012
<i>University of Florida, Gainesville, Florida</i>	
American Competitiveness and Innovation Fellowship	2009
<i>US National Science Foundation</i>	
The J. Bruce Wagner, Jr. Young Investigator Award	2009
<i>The Electrochemical Society (ECS)</i>	
CAREER Award	2005
<i>US National Science Foundation, Division of Materials Research</i>	

SELECTED PEER-REVIEWED PUBLICATIONS AND PATENTS

Five Recent Publications

1. S.R. Xie, P. Kotlarz, R.G. Hennig, and **J.C. Nino**, "Machine learning of octahedral tilting in oxide perovskites by symbolic classification with compressed sensing," *Computational Materials Science* **180** 109690 (2020).
2. H. Maruyama, S. Zeljković, and **J.C. Nino**, "Solvent-deficient method lowers grain-boundary resistivity of doped ceria," *Journal of the American Ceramic Society* **103** [2] 819-830 (2020).
3. P.M. Johns and **J.C. Nino**, "Room temperature semiconductor detectors for nuclear security," *Journal of Applied Physics* **126** [4] 040902 (2019).
4. S.S. Sulekar, J.E. Ordonez, I.C. Arango, M.E. Gomez, and **J.C. Nino**, "Effect of a DC bias on the conductivity of gadolinia doped ceria thin films," *Electrochimica Acta* **303** 275-283 (2019).
5. H. Maruyama, G. Baure, T. Jones, J. Nikkel, M.M. Moharam, V. Craciun, M. Mihai, D. Pantelica, J.L Jones, and **J.C Nino**, "Effect of Pt₃Pb on the permittivity and conductivity of lead zirconate titanate thin films," *Thin Solid Films* **685** 420-427 (2019).

Five Highly Cited Publications (per Google Scholar GS and Web of Science WoS)

6. W. Sigmund, J. Yuh, H. Park, V. Maneeratana, G. Pyrgiotakis, A. Daga, J. Taylor, and **J.C. Nino**, "Processing and Structure Relationships in Electrospinning of Ceramic Fiber Systems," *J Amer Ceram Soc* **89** [2] 395-407 (2006). <http://dx.doi.org/10.1111/j.1551-2916.2005.00807.x>. **406 GS and 281 WoS Citations**
7. I. Levin, T.G. Amos, **J.C. Nino**, T.A. Vanderah, C.A. Randall, and M.T. Lanagan, "Structural Study of an Unusual Cubic Pyrochlore Bi_{1.5}Zn_{0.92}Nb_{1.5}O_{6.92}," *J Solid State Chem* **168** [1]69–75 (2002). <http://dx.doi.org/10.1006/jssc.2002.9681>. **229 GS and 192 WoS Citations**
8. D. Zhao, M. Sexton, H.-Y. Park, G. Baure, **J.C. Nino**, and F. So, "High-Efficiency Solution-Processed Planar Perovskite Solar Cells with a Polymer Hole Transport Layer," *Adv Energy Mater* **5** 1401855 (2015). <http://dx.doi.org/10.1002/aenm.201401855>. **246 GS and 192 WoS Citations**
9. A. Pramanick, D. Damjanovic, J.E. Daniels, **J.C. Nino**, and J.L. Jones, "Origins of Electro-Mechanical Coupling in Polycrystalline Ferroelectrics during Subcoercive Electrical Loading," *J Amer Ceram Soc* **94** [2] 293-309 (2011). <http://dx.doi.org/10.1111/j.1551-2916.2010.04240.x>. **238 GS and 186 WoS Citations**
10. **J.C. Nino**, M.T. Lanagan, and C.A. Randall, "Dielectric Relaxation in Bi₂O₃-ZnO-Nb₂O₅ Cubic Pyrochlore," *J Appl Phys* **89** [8] 4512-4516 (2001). <http://dx.doi.org/10.1063/1.1357468>. **201 GS and 150 WoS Citations**

Five Selected Patents

11. "MEMRISTIVE NANOFIBER NEURAL NETWORKS" **Juan Claudio Nino** and Jack Kendall, USPTO **10,198,691**, issued February 5, 2019.
12. "PLURIPOTENT TISSUE HARVESTER AND METHODS OF MANUFACTURE THEREOF" Mina Hanna and **Juan Claudio Nino**, USPTO **10, 160,946**, issued December 25, 2018.
13. "DEEP LEARNING IN BIPARTITE MEMRISTIVE NETWORKS," Jack D. Kendall, **Juan Claudio Nino**, and Laura E. Suarez, US Utility Application Serial No. **15/985,212**, filed May 18, 2018, Published by USPTO November 22, 2018.
14. "OPTOELECTRONIC NUCLEAR BATTERIES BASED ON RADIONUCLIDE NANOENCAPSULATION AND ORGANIC PHOTODIODES," **Juan Claudio Nino**, Paul M. Johns, James E. Baciak. US Patent Application **15/709,782**, filed September 20, 2017.
15. "METHOD AND APPARATUS FOR IMAGING UTILIZING AND ULTRASONIC IMAGING SENSOR ARRAY," Frankie So and Juan Claudio Nino," USPTO **7,893,474**, Issued February 22, 2011.