

PRADEEP HALDAR

CURRICULUM VITAE

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I. NAME, ADDRESS AND PERSONAL INFORMATION

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Citizenship: USA; **Marital Status:** Married; **Date of Birth:** August 29, 1962

II. EARNED DEGREES

1997-99	Rensselaer Polytechnic Institute, Troy, NY Executive MBA
1984-88	Northeastern University, Boston, MA Ph.D., Materials Science & Engineering and Solid-State Chemistry
1979-84	Indian Institute of Technology, BHU, Varanasi, India B.Tech., Metallurgical Engineering

III. EMPLOYMENT BACKGROUND

2019 – Present	University of South Florida, Patel College of Global Sustainability, Tampa, FL. <i>Director of Sustainable Business, Adjunct Professor</i>
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Teach and mentor students on Sustainable Business, Energy Policy, Research Methods, Sustainable Economics and Finance. Perform community outreach; strategic market assessment; develop innovative technologies, generate practical knowledge to foster social, economic, and environmental sustainability both globally and locally. Collaborate with regional municipalities, utilities and local counties or cities to perform cost-benefit analysis, create case studies and toolkits for solar PV, energy storage and GHG emissions for resiliency. Projects include ESG report evaluation, GHG inventories, materiality assessments, SBTi based net-zero plans, Life Cycle Analysis, etc. Review case studies to analyze GRI, SASB and TCFD reports. As part of Fulbright scholar provided sustainable innovation and entrepreneurship expertise to PSG Institute in India.

- Collaborated with businesses (Publix, Tampa International Airport, TD Synnex, Jabil, Ygrene) on their sustainability and ESG plans. Reviewed, benchmarked, and recommended approaches to account for Scope 1, 2 and 3 greenhouse gas (GHG) emissions, to measure carbon footprint and offsets, to assess materiality and risk, to manage environmental regulation, to implement Science Based Targets for net-zero, and to perform cost/benefit and life cycle analysis.
- Conducted detailed financial and environmental impact studies for regional cities/counties (Hillsborough, Pinellas, Manatee, Largo) with ROI analysis for projects involving renewable energy (solar and storage), energy efficiency and electrification of transportation fleets.
- Coordinated with Tampa Bay Regional Planning Council, U.S. Department of Energy and National Renewable Energy Laboratory (NREL) to plan and grow an industry cluster for resilient microgrid technologies to enable clean energy generation with zero emission transportation using solar, energy storage and EV charging infrastructure in the Tampa Bay region.

2019 – Present	Halovation LLC, Land O Lakes, FL. <i>President</i>
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Clean Tech/Sustainability, business, strategy, and technology consultant to executive management with extensive experience in strategic planning, technology transitions, financial analysis and validation, competitive intelligence, project, and engineering management. Focused on clean energy, energy efficiency and nanotechnology industry sectors including implementation of solar PV, energy storage, EV charging, power electronics, fuel cells, green hydrogen production, LED lighting, superconductors.

- Analyzed technology roadmaps, product-market-fit and cost-benefit analysis for power converters, hydrogen electrolyzers, power quality devices, optical high voltage sensors, and energy storage systems for use in utility, semiconductor, data center and pharmaceutical industry sectors to recommend prioritized approach to scale commercially.
- Established and supported technology commercialization plans for Aclectic’s adaptive photonic controller to market and sell innovative solutions for HVAC systems through ESCOs to enhance indoor air quality in buildings.
- Worked with multiple developers, contractors, and technology providers to approve and demonstrate projects/products in New York, Massachusetts and Connecticut associated with Solar PV, Long Duration Energy Storage, Micro-Grids, Power Quality, Energy Efficiency and EV charging in coordination with National Grid, New York Power Authority (NYPA), Con Edison, New York State Energy Research and Development Authority (NYSERDA) and Electric Power Research Institute (EPRI).
- Provided consulting services for sustainability strategy, clean energy implementation, economic development, public-private partnerships, open innovation, strategic alliances, business and technology strategy, and technology portfolio management.

2018 – 2019 **Dais Corporation, Odessa, Florida**
President/Chief Operating Officer

Dais is a publicly traded entity and offers “industry-changing” nanotechnology applications that address the growth of global water and energy demand. Furthering Dais’ proven ability to create eco-friendly heating and cooling products, the company is now innovating cost-effective and energy-efficient methods for both water purification and energy storage solutions.

- Responsibilities included supervising team of 14 administrative, engineering and finance staff. Established strategy/business plan, managed financial and operational performance, implemented plans for North American business development, marketing, sales, technology development and product engineering for multiple products.
- Established formal policies and processes for customer/client engagement, follow-up and closure to increase monthly, quarter and annual revenue. Managed product development activities, revenue growth and cost reduction initiatives by tracking budgets, expenses, schedules technical progress etc.

2019 – 2022 **U.S. Department of State**
Fulbright Scholar

Provide research, innovation and entrepreneurship expertise at PSG Institute of Advanced Studies (PSG-IAS), Coimbatore, India as part of the U.S. Department of State and the J. William Fulbright Foreign Scholarship Board Award to India in Academic and Professional Excellence.

UNIVERSITY AT ALBANY and SUNY Polytechnic Institute’s Colleges of Nanoscale Science & Engineering (CNSE), Albany NanoTech Complex, State University of New York (SUNY) (2001-2019)
CNSE at SUNY is New York’s globally recognized, high-tech educational ecosystem. It is the first college in the world dedicated to research, development, education, and deployment in the emerging disciplines of nanoscience, nanoengineering, nanobioscience, and nanoeconomics that was established at the University at Albany. CNSE boasts more than \$43 billion in high-tech investments, over 300 corporate partners, and maintains a statewide footprint. The 1.3 million-square-foot Albany NanoTech megaplex is home to more than 3,500 scientists, researchers, engineers, students, faculty, and staff.

2010 – 2018

Colleges of Nanoscale Science & Engineering, SUNY

Professor of Nanoengineering and Nanoeconomics; Vice President of Entrepreneurship, Innovation and Clean Energy Research Programs; Research Committee, CNSE Faculty Senate (Retired).

Develop relationships with federal and state agencies as well as private industry collaborations. Develop and maintain internationally recognized research programs and assist faculty to partner with industry for establishing multi-disciplinary programs for multi, single investigator, career award grants and large research centers (E2TAC, NISE, NENY, NSF PFI, NSF AIR, PVMC and other Manufacturing Consortia) related to clean energy and nanotechnologies. Provide faculty or student-based entrepreneurs, scientists, engineers, inventors, and innovators the highest levels of commercialization assistance, including access to world-class facilities and equipment, prototyping and advanced development capabilities, manufacturing, and training expertise, along with executive mentoring and entrepreneurship education and outreach programs. Offer a critical platform for CNSE that fosters integration between education and research by growing public-private partnerships and funding. Provide CNSE resource access to industry to leverage its intellectual power base and state-of-the-art infrastructure and support innovation, economic development, and commercialization opportunities by working closely with academic deans, faculty and students. Examples of achievements include the following:

- Created a vision and established several new innovative research/educational training initiatives, consortia, centers, and programs by collaborating with over 100 universities, industry and government organizations. Successful examples include creation of centers for photovoltaics (USPVMC), power electronics (PEMC), clean energy (E2TAC), platform energy technologies (New Energy New York) and Zero Energy NanoTech (ZEN) facilities amongst others.
- Served as principal investigator and chief operating officer of a major \$62.5M grant awarded by the U.S. Department of Energy in partnership with SEMATECH to create the U.S. Photovoltaic Manufacturing Consortium with over 40+ US based industry partners.
- Negotiated partnership agreements worth over \$200M with government and industry partners. This included developing relationships with federal agencies including DARPA, NASA, DOE, ONR, ARPA-E, NYSERDA and others to receive research awards exceeding \$100M to build the largest university based clean energy research and development center in New York State.
- Raised sponsorship for multiple events hosted and coordinated by the college including the annual First Robotics Challenge, New York State Business Plan Competition and New Energy Symposia. I worked closely with our institutional development office when funds were solicited from Industry, State and Federal government entities as part of endowments, scholarships or workforce and economic development activities.
- Directed technology transfer related incubation and acceleration programs (iCLEAN and Tech Valley Certified Incubator); an entrepreneurship-in-residence (EIR) effort; the Tech-Valley Innovation Pipeline (Tech-VIP), a Technology Accelerator Fund (TAF) at SUNY Polytechnic Institute; a partnership with Albany Law School (NextTech); the New York's Business Plan Competition and the Empire Innovation Challenge (EIC). Led the spin-out and creation of start-ups in multiple solar PV, energy storage, energy efficiency and bioengineering technologies developed at the Albany Nanotech complex.
- Promoted diversity, by focusing on building a strong culture of acceptance and inclusion that creates an enriching environment for all. I participated in multiple search committees and proactively committed to ensuring that women and minorities were considered for key leadership roles. I have a track record of recommending equal pay for women faculty and staff. I've also endorsed the need to communicate effectively to educate others about differences in traditions and approaches as well as participated in multicultural events on campus.

2014- 2017

College of Nanoscale Engineering and Technology Innovation, SUNY Poly

Interim Dean

Provided leadership and direction to faculty, staff and students in newly established college with responsibility for all academic, financial and engagement/development activities. Establish relationships with various stakeholders to achieve excellence in the college's teaching, research, and service activities.

Developed and implement strategic plan, recruit and retain top-notch faculty, increase research enterprise and quality of education/training for undergraduate and graduate students, provide oversight for ABET accreditation. Managed state, federal, and private resources provided to the College strategically, and effectively. Develop and implement strategies to effectively recruit, retain and evaluate faculty and staff, and to encourage professional development.

- Worked collaboratively as team member and directly involved with supervising faculty and students; providing strategic planning and execution; managing fiscal and personnel matters; offering entrepreneurial and visionary leadership; and fostering excellence.
- Worked closely with faculty and industry partners, to develop a unique graduate and undergraduate curriculum for nanoengineering and nanosciences with concentrations in nanoelectronics, clean energy, bioengineering, optoelectronics, and related disciplines.
- Assisted in creation of by-laws, charter and an industrial advisory board for the newly established college and led the establishment of the strategic plan in consultation with faculty and administrators. The programs received State Education Board and ABET approvals.
- College is now widely acclaimed at an international level as a pre-eminent research and educational center. Emphasis on applied learning and hands-on project-based education to solve real world engineering challenges utilizing industrial internships, co-op assignments, capstone projects, summer camps and collaborative research activities at the undergraduate and graduate level has created a strong demand for our students and significantly improved our ranking.

2011 – 2017

U.S. Photovoltaic Consortium (PVMC), CNSE, SUNY Poly

Chief Operating and Technology Officer; Principal Investigator, Founder, Board Member

Spearheaded a unique \$100M+ consortium created by CNSE, SEMATECH and the U.S. Department of Energy for cooperative R&D among industry, university, and government partners to accelerate the development, commercialization, and manufacturing of next-generation solar photovoltaic (PV) systems. Partnered with over 60 industry members to provide solutions to solar energy's most pressing challenges through collaboration, innovation, and excellence.

2001 – 2017

Energy and Environmental Technology Applications Center, University at Albany, SUNY

Director

Expand CNSE's resources and capabilities and its establishment as the showcase for its leadership role in creating the high-tech R&D, prototyping, and business infrastructure that unify the requirements for a clean energy and environment technologies and the needs for education, training, economic outreach and job creation.

2001 - 2010

College of Nanoscale Science & Engineering, University at Albany, SUNY

Professor and Head, Nanoengineering Constellation

Supervised faculty and staff in NanoEngineering to create and grow education and research programs in nanoengineering that applies nanoscience principles to practical ends, such as the design, manufacture, and operation of efficient and functional structures, machines, processes, and systems on the atomic scale.

INTERMAGNETICS (now PHILIPS), Latham, New York (1990-2001)

Intermagnetics, originally a spin-off from General Electric, was recently acquired by Philips for \$1.3 B. A series of business divestitures and acquisitions transformed it to an important player in the diagnostic medical device business with world leadership in superconducting technology through the design and manufacture of magnets for MRI systems and applications in energy technology.

2000 – 2001

IGC-SuperPower (now Philips), Schenectady, NY

Founder, Director of Technology and General Manager

Responsible for formation and startup of rapidly growing SuperPower, a new subsidiary of Intermagnetics General Corporation. SuperPower is involved in commercializing state-of-the-art superconductor components for use in the electric utility industry. Created strategy and business plan for fast growing subsidiary for spin-off from parent company. Established aligned workforce through high performance team building, employee training programs, appropriate incentives and fostering a culture of commitment and success within the organization.

1996 – 1999 **Intermagnetics General Corporation (now Philips), Latham, NY**
Manager and Head, Technology Development Organization

Managed the R&D group with P&L responsibility to guide a market driven, new technology strategy for this component manufacturer with core capabilities in high tech materials, electromagnetic devices and system integration. Developed prototype products for the computer/semiconductor, medical devices and electric power industries. Performed business assessment, championed the introduction of new products and performed due diligence and market analysis for new product introduction.

1990 – 1995 **Intermagnetics General Corporation (GE spin-off), Latham, NY**
Senior Engineer and Project Manager, High Temperature Superconductor Group

Manages several multi-million-dollar projects to develop prototype superconductor products. Analyzed new business opportunities in horizontal and vertical markets, defined product specifications and market segmentation. Assembled an outstanding technical team to manage the product development life cycle.

1988 – 1990 **Johnson Matthey Electronics (now Honeywell), Spokane, WA**
Development Engineer, Research & Development Group

Directed the development of innovative processes, technology and products for electronic components. Provided TQM and Zero-defect product support to customers that included Motorola, AMD and Intel

1984 – 1988 **Northeastern University (Barnett Institute), Boston, MA**
Research & Teaching Assistant
Thesis Advisor: Professor Bill C. Giessen

1986 **Energy Materials Corporation, South Lancaster, MA**
Engineering Intern

IV. HONORS AND RECOGNITION

IV.1. AWARDS/APPOINTMENTS

2023 Excellence in Community Engagement Award (2023), *University of South Florida*
2019 - 2022 Fulbright Scholar Award (2019-2020), *US Department of State*
2018 Guest of Honor, *Indo-US Bilateral Workshop on Nanotechnology for clean energy generation and storage & NanoChallenge*, PSG IAS, Coimbatore, India
2018 - Present Advisory Board, *SeedSprint – Technology Commercialization*, New York, NY
2017 Business Review *Technology Award for Energy/Sustainability*, Albany, NY
2017 Certificate of *Special U.S. Congressional Recognition* by Paul Tonko, Albany, NY
2016 Guest of Honor, Indian Student Organization, *University at Albany, SUNY*, Albany NY
2014 - Present Distinguished Visiting Professor, *PSG College of Technology*, Coimbatore, India

2014 - 2018 Executive Advisory Board/Judge, *NY Tech Valley First Robotics Competition*
 2014 - 2016 Chair, Board of Trustees, *Academy of Holy Names, Albany, NY*
 2014 - 2017 Board Chair, *Children's Museum of Science & Technology*
 2013 Distinguished Alumnus Award, *IIT (BHU) Varanasi*
 2013 - 2019 Board Member, *Albany Symphony Orchestra*
 2011 - 2017 Board Member, *U.S. Photovoltaic Manufacturing Consortium*
 2011 - 2016 Board of Trustees, *Academy of Holy Names, Albany, NY*
 2011 Board of Directors, *Technology Transfer Society*
 2010 - 2012 Director, *New York Partnerships for Innovation and Clean Energy Incubator Programs*
 2010 Founder, *Center for Intelligent Power*, in Partnership with CG Power 2010
 2010 *MIT Clean Energy Prize*, Judging Team, 2010
 2010 Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2010
 2010 Review Panelist, *President's Council of Advisors for Science & Technology*, to review the National Nanotechnology Initiative
 2009 *Renewable Energy Task Force* for New York Legislator's Energy Committee
 2009 Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2009
 2009 - 2010 Governance Committee, New York – *Battery and Energy Storage Technology Consortium*
 2009 - 2018 Advisory Board Member, *Magnolia Solar*, Massachusetts
 2008 - 2016 Advisor for Technology Due Diligence, *Salem Financial*, New York
 2008 President's Excellence in Research Award, *University at Albany, SUNY*
 2008 Advisor, New York City Economic Development Corporation Green Sector Study
 2008 Consultant, solar industry due diligence *Interlachen Capital Group*, Minnesota
 2008 Judge: New York Academy of Sciences *Blavatnik Awards for Young Scientists* 2008
 2007 Co-Founder, *National Institute of Sustainable Energy*, with Einhorn Yaffee and Prescott Architecture & Engineering
 2007 Emerging Technology and Renewables Committee, *PowerGen International*
 2007 Coordinator, *Solar Initiative of New York*, in partnership with NYSEIA
 2007 – 2018 Senior Member, *Institute of Electrical and Electronics Engineers*
 2006 – Present Technical Advisory Board Member, *Earthrise Capital*
 2006 – 2008 Chair, *U.S. DOE NREL's Clean Energy Alliance (CEA)*
 2003 – 2007 Board Member, *Coalition for Commercial Applications of Superconductivity (CCAS)*
 2002 – 2017 Founder, Board Member and Executive Director, *New Energy New York (NENY) Consortium*
 2002 – 2010 Advisory Board, *Annual Clean Energy Industry Growth Forum*
 2006 Nominated by NYSTAR for U.S. Department of Energy's *Orlando Lawrence Award*
 2006 Finalist, *Small Times Innovator of the Year Award*
 2005 – 2006 Vice Chair, *U.S. DOE's Clean Energy Alliance (CEA)*
 2005 Promising Inventor Award, *The Research Foundation, SUNY*
 2005 Co-founder, *New York Fuel Cell Network (NYFCN)*
 2005 MIKE Award, *Albany-Colonie Chamber of Commerce* with Albany NanoTech Executive team
 2004 – 2005 Coordinator, *State Vision and Roadmap for the Hydrogen Economy*
 2004 Founder, *NY Loves Energy Initiative*
 2004 Member, Technology Council of the *Center for Economic Growth (CEG)*
 2003 – 2004 Coordinator, *New York State Superconductor Outreach Program*
 2002 – 2005 Advisory Board, *Inverters Unlimited, Inc (IUI)*.
 2002 *Business Review* 40 under forty award
 2002 Expert Witness for the *US Patent and Trademark Office (USPTO)*
 2001 Fellow, *Institute of Physics (IoP)*
 2001 *The Metallurgical Society (TMS)* – Structural Materials Division & Electronic, Magnetic & Photonic Materials Division, Exemplary Service as Chairperson
 2000 – 2004 Editorial Board, *Superconductor Science and Technology*

2000 *The Metallurgical Society (TMS)* – Certificate of Recognition for Services to Society
 1996 – 2000 Industrial Oversight Committee Member for the *U.S. DOE National Lab's*
 Superconductivity programs
 1994 – 2000 Regularly Rated 1st or 2nd place in *U.S. DOE's Annual Peer Review for the*
Superconductivity Program in Materials and Applications Development
 1994 *Materials Research Society* – Recognition for Service to Society
 1992 – 1993 *Oxford Who's Who* in Engineering Professionals
 1989 – 1999 *Marquis Who's Who* in Science and Engineering
 1989 *Johnson Matthey* Research Award
 1988 *Johnson Matthey* Quality Award (R&D)
 1988 *Gustel Giessen* Research Award

IV.2. PROFESSIONAL AFFILIATIONS

2008 – 2017 Member, The New York Academy of Sciences
 2004 – 2018 Member, The American Institute of Aeronautics and Astronautics (AIAA)
 2000 – 2018 Senior Member, Institute of Electric and Electronics Engineers (IEEE)
 2000 – 2006 Member, Institute of Electric and Electronics Engineers (IEEE)
 1994 – 2005 Fellow, Member, Institute of Physics, UK (IOP)
 1992 – 2000 Member, The Metallurgical Society (TMS)
 1988 – 2002 Member, Materials Research Society (MRS)
 1988 – 1996 Member, The American Association for the Advancement of Science (AAAS)

V. RESEARCH ACTIVITIES

Established a collaborative, interdisciplinary, research program focused on solving fundamental and practical engineering problems to develop novel devices and systems for energy and environmental technology applications that provide higher energy efficiencies, better performance and at lower costs. The center's efforts go beyond fundamental research and cover technology transfer, education & outreach and business acceleration efforts as described below:

Research and Development:

Advanced Photovoltaics: Efforts include development of a new generation of solar cells, based on crystalline silicon, thin film materials (CuInGaSe), nanocrystalline Silicon, thin film Si cells and conducting polymeric films. These offer the prospects of cheaper materials, higher efficiency and flexible features.

Advanced Fuel Cells: R&D activities include short and long term materials development, core-shell catalyst and electrode optimization utilizing 3-D architectures, integration of design, speed of manufacturing and materials selection for PEM and SOFC based fuel cells.

Next Generation Superconductors: High temperature superconductors based on YBCO need increased critical current and current density while reducing cost. Activities are focused on process and performance improvements through pinning, lowering ac losses and characterization.

Electrical Double Layer Capacitors: Electrical double layer capacitors built using new designs with local alignment and patterns can produce electrodes exhibiting very high specific power density of about 30 kW kg⁻¹. The preparation procedure uses novel processing approaches and has the potential for highly efficient manufacturing of high power density supercapacitors and other similar electronic devices.

Energy Efficiency: The goal is to primarily identify energy savings resulting from conservation efforts, and/or energy produced by newly installed alternative energy systems in large commercial/science buildings through demonstrations, data monitoring, control and analysis.

Education & Outreach:

New Energy New York: A new energy consortium, "New Energy New York" (NENY), founded by Dr. Haldar was established in December 2002. The organization champions New York's leadership in the energy field and market New York's emerging energy technology industries. The consortium includes about 50 industry organizations involved in various aspects of alternative and new energy technologies.

Tech Valley Energy Forum (TVEF): Dr. Haldar works closely with the U.S Department of Commerce and New York State's Empire State Development, schedules regular energy forums to introduce Tech Valley organizations to opportunities, issues and challenges in the energy industry. A select group of executives are invited, allowing an opportunity to increase networking and collaboration within the energy sector and to provide solutions to common problems of suppliers, both manufacturers and service providers.

Hydrogen Energy Roadmap: Dr. Haldar worked with Energetics and the National Hydrogen Association to develop a Roadmap for the Hydrogen Economy in New York State. New York State is a national leader in promoting the use of advanced energy technologies, such as those involved in a hydrogen economy. A hydrogen economy offers the promise of a clean, reliable, and affordable energy system.

Solar Roadmap: Dr. Haldar worked closely with the Solar Industry Association in New York and over 20 industrial and academic organizations to develop a 10 year policy plan for implementing solar photovoltaic

technology in New York by addressing interconnect issues, incentive programs and economic development clusters.

Zero Energy Nano (ZEN) Facility and Alternate Energy Test Farm: At the core of Dr. Haldar's Energy related program activities is the creation of a \$195 million, zero energy nano (ZEN) facility and the completion of an Alternative Energy Test Farm in a new NanoFab East building at CNSE that serves as a proving ground for education, training, demonstration and deployment of a variety of power technologies including fuel cells, micro-turbines, solar cells, and hydrogen and natural gas distribution.

Business Acceleration:

NY Loves Energy: NY Loves Energy is an initiative, created by Dr. Haldar, consisting of organizations that have joined forces to promote New York's energy industry. The initiative is designed to promote the awareness of the advantages of starting, growing and building energy-related companies in New York State. The goal is to bring New York's energy companies together to brand New York as the hot spot for energy industries.

Expanding Renewable Energy Businesses Dr. Haldar has worked with NYSERDA to expand the renewable energy business in New York State. The work will focus on encouraging economic development and developing specific renewable technology industry clusters around (1) solar cells, (2) power electronics and (3) advanced materials.

V.1. ENTREPRENEURSHIP AND TECH TRANSFER ACTIVITIES

- | | |
|-------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018 | Advisor to CEO and Board of Directors, Dais Corporation (DLYT), public company to focus on business development, product commercialization, operations, revenue and seeking private/public investments. |
| 2018 | Partnered with Nanotech Research, Innovation and Incubation Centre and PSG Institute of Advanced Studies to host and NanoChallenge 2017: A national level competition in nanotechnology applications held at Coimbatore, India. |
| 2017 | Spin-off of Lux Semiconductor from CNSE to commercialize next generation substrates for high efficiency, flexible solar cells and light emitting diodes. |
| 2014- 2017 | Directed the re-funded iCLEAN Incubator that played a vital role in fostering the development of New York's clean energy and advanced technology innovation ecosystem, directly incubating 50 companies to date and providing commercialization assistance and entrepreneurship programs to more than 1600 companies in the past decade. In just the past four years, CNSE's iCLEAN Incubator have directly assisted companies to raise over \$40M in private capital and \$51M in government grants. Moreover, clean energy technology ventures that have participated in the programs created and deployed by CNSE and its iCLEAN Incubator have raised more than \$1.5B in funding to date. |
| 2015 | Established SPARC: SUNY Poly: Advancing Research & Commercialization – Network of Business Incubators covering Clean Energy, BioTech and Advanced NanoTechnology; Includes Tech – VIP (Tech Valley Innovation Pipeline) and the Entrepreneurship in Residence Program |
| 2014 | Spin-off of Glauconix from CNSE to commercialize nanostructured 3D tissue meshwork for high throughput drug development. |
| 2013 | Spin-off of Eonix from CNSE to commercialize Ionic Liquid Electrolytes for Electric Double Layer Supercapacitors |
| 2010 - 2014 | Entrepreneurship, Innovation and Incubation (iCLEAN)
Directed the incubator, in partnership with Hudson Valley Center for Innovation & NYSERDA/Saratoga Technology Energy Park. iCLEAN incubates clean energy and |

nanotechnology startups with the goal of providing assistance in technology and business development, commercialization acceleration, education and training.

- iCLEAN worked with **34 ventures**.
- iCLEAN member companies **raised over \$106M** in private and public investment to date, created or retained over **137 new jobs** and introduced 16 new products.

- 2010-2016 ***New York State Business Plan Competition***, in partnership with the Syracuse University, School of Business and UAlbany, Albany, NY
One of the nation's largest student business competitions, with over 500 teams from 60 colleges and universities across New York State competes for more than \$500,000 in cash and in-kind prizes to a judging panel of over 40 regional and national venture capitalists, angel investors, investment bankers, other sophisticated private and public investors, and seasoned entrepreneurs
- 2011 Spin-off of ***BESS Technologies*** from CNSE to commercialize Lithium ion battery anodes based on silicon nanowire technology
- 2010 ***Tech Valley Business Plan Competition***, in partnership with the RPI, Union College, School of Business and UAlbany, Albany, NY
- 2005 – 2009 Founded and helped manage the national ***Clean Energy Alliance*** along with seventeen other clean energy incubator institutions from around the country. The Alliance was created to focus on accelerating the development of energy-related start-up firms and counts some of America's leading energy producers, investors and companies among its supporters.
- 2009 Established Memorandum of Understanding with ***NYSERDA's Saratoga Technology Energy Park*** to assist in technology deployment and commercialization for seed stage and start-up companies involved with Clean Energy Technologies
- 2009 Mentor for the following companies at the ***22nd National Renewable Energy Laboratory's Industry Growth Forum***, Denver, CO
Ener-g-Rotors – Waste to Energy Conversion
Ecovative Design – Biodegradable materials
- 2008 Mentor for the following companies at the ***21st National Renewable Energy Laboratory's Industry Growth Forum***, Denver, CO
QM Power – Efficient Motors
Zeropoint Energy – Biomass to energy conversion
- 2008 Organized and Hosted Venture Capitalist Investment Presentations by 11 clean energy, start-up organizations at the New Energy Symposium
- 2008 Recommend IP strategy for licensing and partnerships with industry
- 2007 Project Mentor for team at the ***Materials Research Society Entrepreneurship Challenge***, San Francisco, CA
Surya Solar – Thin film silicon solar cells
- 2006 Mentor for the following companies at the ***19th National Renewable Energy Laboratory's Industry Growth Forum***, Philadelphia, PA
Custom Electronics – Back-up Power for Wind Turbines
- 2006 Project Mentor for team selected for finals at the ***Materials Research Society Entrepreneurship Challenge***, San Francisco, CA
BioGenerator - Thermoelectric generator for pace makers
- 2005 Mentor for the following companies at the ***18th National Renewable Energy Laboratory's Industry Growth Forum***, San Francisco, CA
Prism Solar technologies – Advanced Solar Modules
Nextek Power Technologies – Power Electronics for Generation Systems
Ener-G-Rotors, Inc. - Low-grade waste heat recovery power generation
Custom Electronics - Manufacturer of high voltage mica paper capacitors
- 2004 Mentor for the following companies at the ***17th National Renewable Energy Laboratory's Industry Growth Forum***, Orlando, FL

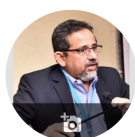
- Princeton Power Systems – Large Power Electronics for Distributed Generation Systems
- 2001-2004 Advisory Board Member – *Inverters Unlimited Inc.*, Created strategic business plan for photovoltaic inverters
- 2002-2005 Collaborator – *MTech Laboratories*, Assisted in creating technology and commercialization roadmap for cryogenic power electronic devices
- 2002 Mentor for the following companies at the *15th NREL Industry Growth Forum*
 Starfire – polymers for Silicon Carbide based advanced materials
 Canrom Photovoltaics – thin film solar cells
- 2000 Negotiated exclusive licenses from Los Alamos National Laboratory to commercialize second generation high temperature superconductors for *IGC-SuperPower*
- 1999 Founder, *IGC-SuperPower* – Established new subsidiary of Intermagnetics General Corporation for spin-off

V.2. SELECTED RESEARCH ACHIEVEMENTS

Summary of Achievements:

- **Output:** Over 212 publications in premier journals and conference proceedings; 4 book chapters; over 190 invited or contributed talks across the U.S, Europe, and Asia. h-Index 35 (Google Scholar). 10 US patents and disclosures.
- **Students:** 19 Masters degrees awarded, 13 Ph.D.'s awarded.
- **Selected Awards:** Fellow, Institute of Physics (2001); Promising Inventor Award, The Research Foundation, SUNY (2005); President's Excellence in Research Award, University at Albany, SUNY (2008); Distinguished Alumnus Award IIT BHU Varanasi (2013); Business Review Technology Award for Energy/Sustainability (2017)
- **Selected Invited Keynotes & Plenaries:** 2009 Mid Atlantic MEMS Alliance Symposium Washington D.C. (Keynote); 2011 US-Japan Workshop on Nanotechnology, Japan (Keynote); 2012 Department of Energy Distinguished Lecture, Washington D.C.; 2012 SEMI North American PV Fab Managers Forum, California; 2012 Conference on Advanced NanoMaterials, India (Keynote); 2012 National Clean Energy Workforce Education Conference, New York (Plenary); 2013 IEEE PVMC Florida (Plenary) 2013 SolarCon, India (Keynote Speaker)

Google Scholar Citations Summary:



PRADEEP HALDAR ✎

Halovation

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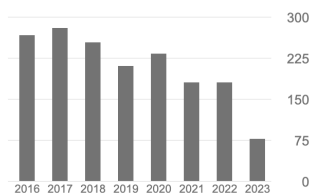


Cited by

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	All	Since 2018
Citations	5148	1137
h-index	38	19
i10-index	105	28

TITLE	CITED BY	YEAR
<input type="checkbox"/> Electrochemical oxidation behavior of titanium nitride based electrocatalysts under PEM fuel cell conditions B Avasarala, P Haldar Electrochimica Acta 55 (28), 9024-9034	320	2010
<input type="checkbox"/> Surface oxidation of carbon supports due to potential cycling under PEM fuel cell conditions B Avasarala, R Moore, P Haldar Electrochimica Acta 55 (16), 4765-4771	206	2010



Summary of Technical Accomplishments:

- Improved efficiencies of wafer based conventional and n-type silicon solar cells utilizing light induced electroplating for metallization and using low cost spin-on dopant diffusion processes.
- Developed new and unique oxygen containing Room Temperature Ionic Liquids and novel electrodes for use in ultracapacitor based storage devices with improved capacitance and energy density.
- Demonstrated, for the first time, 13x improvement in on-resistance for high-performance integrated power modules to be used in a cryogenic inverter. The integrated power module is compatible with liquid nitrogen environment surviving over 100 thermal cycles.
- Demonstrated, for the first time, an approach to fabricate multilayer quantum well architectures of n-type Si/SiC films deposited by sputtering on 6" substrates to produce large area thermoelectric generators.
- Prepared new nanostructured platinum electrodes by a nanotemplating based electro-deposition process to be used as catalysts in electrodes for proton exchange membrane fuel cells.
- Demonstrated the novel integration of aligned nanostructures including carbon nanotubes and metallic nanorods in to photovoltaic devices.
- Identified the mechanism, using nuclear reaction analysis, that revealed the removal of fluorine from a solution based process using trifluoroacetate precursors for Yttrium Barium Copper Oxide (YBCO) based coated conductors.
- Discovered the existence of a "dead layer" when YBCO films are grown beyond a specific thickness using metal organic chemical vapour deposition (MOCVD) techniques.
- Demonstrated for the first time the fabrication of high current (Over 1 MA/cm²) YBCO superconducting films by MOCVD process on flexible metal substrates.
- Demonstrated the world's largest Bi-2223 high temperature superconductor coils, over 1 meter in diameter, 0.75 meter long and designed to carry over 2000 A of current for fault current limiter applications.
- Developed the world's first 15 kV superconducting fault current limiter using Bi-2223 superconductor operating at 35 K.
- Demonstrated the world's first 12.4 kV high temperature superconducting power cable capable of carrying over 1250 A made from Bi-2223 superconductor.
- Demonstrated thermoelectric measurements of self field ac losses, external magnetic field losses and the angular dependence of ac losses in superconducting Bi-2223 tapes at power frequencies.
- Demonstrated for the first time the use of magneto-optical imaging techniques in an applied magnetic field to understand the relation between current flow and microstructure in mono and multifilament composites of Bi-2223 superconductors.
- Demonstrated world's longest multifilamentary Bi-2223 superconducting tapes for electric power applications with enhanced transport current properties through optimized processing
- Demonstrated for the first time that synchrotron x-ray scattering techniques can be effectively used to characterize the structural properties of Bi-2223 tapes in situ.
- Identified for the first time the existence of a mixed state in the Bi-2223 superconductor by applying the critical scaling analysis to the critical current measured in various magnetic fields.
- Demonstrated the superconducting current path in Bi-2223 tapes and identified the anisotropy ratio of the resistivity along the rolling plane to the resistivity perpendicular to the rolling plane to be between 4 to 10.
- Discovered bulk superconductivity at 122 K in Thallium based material with four consecutive copper layers.

V.3. RESEARCH GRANTS AWARDED

Funding Summary:

- Approximately \$186M+ funding raised as PI at University at Albany, SUNY Polytechnic Institute and Intermagnetics out of ~\$202M overall (including collaboration with others and roles as co-PI). Successfully attracted funding from U.S. gov't (e.g. DOE, DOD, NASA, NSF), industrial consortia (e.g.,

- PVMC, NY-PEMC, NY-BEST), New York State (NYSERDA, ESD, NYSTAR) and direct industrial support (e.g., National Grid, SoloPower Systems, Global Solar Energy, General Electric etc.).
- Founding PI, COO and CTO of the US Photovoltaic Manufacturing Consortium (PVMC) in 2011. Successfully managed a multi-industry and multi-university consortium led by CNSE addressing next-generation Solar PV thin film manufacturing technologies. \$62.5M over 5 years.

VI. TEACHING ACTIVITIES

VI.1. ACADEMIC COURSES TAUGHT AT UALBANY/SUNY Poly

NENG 423	Renewable and Alternate Energy Nanotechnologies
NNSE 664	Innovation and Entrepreneurship in Nanotechnology
NNSE 565	Managing the Adoption of Technology Innovation
NSCI 101	Survey of Nanotechnology; Energy Applications
CNSE 519	Principles of Materials Nanoengineering
CNSE 695	Introduction to Research Programs
CNSE 680	Seminar in Nanosciences
CNSE 756	Nanomaterials for Nanotechnology
CNSE 731	Current Topics in Materials and Architectures
CNSE 810	Research in Nanosciences
SNNE 784	Special Topics in Nanosciences
SNNE 818	Research in Nanomaterials

VI.2. OTHER STUDENT LECTURES

2014	Law and Entrepreneurship (with Albany Law), Marketing Strategies, Albany, New York
2014	Research to Business – sharing of experiences, PSG Tech University, Coimbatore, India
2012	Clean Tech and Innovation Lectures, PSG Tech University, Coimbatore, India
2008	Clean Energy Technologies, G3, MBA Program, School of Business, University at Albany
2006	Educating the Workforce for the New NanoTechnology Industry, IIT Delhi, India
2006	The Business of NanoTechnology, Leboeuf Lamb Program on NanoTech Issues
2006	Superconductivity Opportunities, Lecture at Rensselaer Polytechnic Institute
2006	Management of NanoTechnology, Lecture at the School of Business, University at Albany as part of Operations Management Course for the Zurich MBA program
2005	Management of NanoTechnology, Lecture at the School of Business, University at Albany as part of Operations Management Course
2004	Future Prospects of Superconductivity, Lecture at Rensselaer Polytechnic Institute
2001	Superconductivity, General Electric and Intermagnetics, Lecture at Rensselaer Polytechnic Institute

Teaching Assistant:

1984 – 1986 General Chemistry for Engineers I and II, Northeastern University, Boston, MA

VI.3. STUDENT ADVISEMENT

Ph.D Students (Completed)

2012 – 2018	Don Derosa	Research Assistant – SuperCapacitors (now at ORNL)
2012 – 2017	Adam Schulz	Research Assistant – SuperCapacitors (now at NEC)
2014 – 2016	Sravan Sunkoju	Research Assistant – Metrology for Solar Cells (now at Global Foundries)
2010 – 2016	J Nicholas Alexander	Research Assistant - Solar Cells (CIGS) (now at Global Foundries)
2006 – 2012	Sean Teehan	Research Assistant – Thermoelectrics

		(now at IBM)
2006 – 2012	Fernando Gomez-Baquero	Research Assistant – NanoEconomics (now at Technion-Cornell Institute)
2005 – 2012	Thamarai Devarajan	Research Assistant - SuperCapacitors (now at IBM)
2005 – 2012	Anh Viet Nguyen	Research Assistant - Solar Cells (Si) (now at CSR/CNSE)
2007 – 2011	Dan Dwyer	Research Assistant - Solar Cells (CIGS) (now at SoloPower Systems)
2006 – 2011	Bharat Avasarala	Research Assistant - Fuel Cells (now at Apple)
2005 – 2011	Changwoo Lee	Research Assistant - Power Electronics (now at LAM Research)
2005 – 2010	Seth Knupp	Research Assistant - Fuel Cells (now at LAM Research)
2003 – 2008	Odysseas Paschos	Research Assistant - Fuel Cells (now at BMW)

M.S Students (Completed)

2009 – 2011	Nicholas Querques	Research Assistant – MBA (2011)
2007 – 2009	Samir Hanssen	Research Assistant – Solar Cells (2009)
2006 – 2008	Chris Dangler	Research Assistant - Capacitors (2008)
2006 – 2008	Mark Yurkewecz	Research Assistant – MBA (2008)
2005 – 2007	Jennifer Wolf	Research Assistant – MBA (2007)
2005 – 2007	Pamela Lee	Research Assistant - Solar Cells (2007)
2005 – 2007	Lynn Rice	Research Assistant - Solar Cells (2007)
2005 – 2007	Padmaja Nagaiah	Research Assistant - Solar Cells (2007)
2005 – 2007	Ming Di	Research Assistant – Fuel Cells (2007)
2004 – 2006	Nipun Tandon	Research Assistant - Capacitors (2006)
2004 – 2006	Adela Dalmau	Research Assistant - MBA (2006)
2004 – 2006	Emily Riley	Research Assistant - MBA (2006)
2003 – 2005	Susan Huang	Research Assistant - Organic Solar Cells (2005)
2003 – 2005	Sumit Kumar	Research Assistant - Superconductors (2005)
2003 – 2005	Rashi Garg	Research Assistant - Power Electronics (2005)
2003 – 2005	Musa Agamirzoyev	Research Assistant - MBA (2005)
2003 – 2005	Jason Fuleihan	Research Assistant - MBA (2005)
2002 – 2004	Kevin French	Research Assistant - MBA (2004)
2002 – 2004	Dan Fisher	Research Assistant - Superconductors (2004)

Undergraduate Interns

2016	Cammi De La Cruz	Intern (from Rensselaer Polytechnic Institute)
2016	Carl Lu Yin	Intern (University of California, San Diego)
2016	Dan Kaloustian	Intern (SUNY Poly)
2015	Frank Cone	Intern (from SUNY Poly)
2015	Jimmy Ding	Intern (from Northwestern)
2015	Jean Brownell	Intern (from University of Rochester)
2015	Stephanie Acquario	Intern (from UAlbany)
2015	Vertis McMillan	Intern (from UAlbany)
2014	Nick Padula	Intern (from UAlbany)
2014	Richard Houanche	Intern (from UAlbany)

2013	Kathleen Horvath	Intern (from UAlbany)
2013	Munzerin Uddin	Intern (from UAlbany)
2013	Alex De Palma	Intern (from UAlbany)
2012	Robert Wilbur	Intern (from UAlbany)
2012	John Bossung	Intern (from UBuffalo)
2011	Adam Schultz	Intern (from UAlbany)
2009 – 2011	Don Derosa	Intern (from UAlbany)
2008	J Nicholas Alexander	Intern (from UAlbany)
2008	Michael Rizzuto	Intern (from UAlbany)
2008 - 2009	Nicholas Querques	Intern (from UAlbany)
2008	Erin Bradford	Intern (from University of Waterloo)
2007	Brittany Higgins	Intern (from Alfred University)
2007	Erin Bradford	Intern (from University of Waterloo)
2007	Matt Ryan	Intern (from UAlbany)
2006	Mark Black	Intern (from Rensselaer Polytechnic Institute)
2005 – 2008	Jeff Wells	Intern (from Rensselaer Polytechnic Institute)
2006	Michael Sockin	Intern (from Columbia University)
2006	Samir Hanssen	Intern (from Fontys University, Netherlands)
2005	Johanna Miller	Intern (from University of Delaware)
2004 – 2005	Mike Abbott	Intern (from Rochester Institute of Technology)
2003	Sumit Gupta	Intern (from Rochester Institute of Technology)
2002	Tim Morrisey	Intern (from Binghamton University)
2002 – 2003	Christian Vogels	Intern (from Fontys University, Netherlands)

Ph.D./MS Thesis Committee

2014	Norb Biderman	Ph.D. Thesis Committee at CNSE
2009	Phillip Rogers	Ph.D. Thesis Committee at CNSE
2007	Brenan Tarrier	M.S. Thesis Committee at CNSE
2006	Rezina Siddique	M.S. Thesis Committee at CNSE
2006	Jaap Verheggen	M.S. Thesis Committee at CNSE
2006	George Sirinakis	Ph.D. Thesis Committee at CNSE
2005	Katarzyna Topol	M.S. Thesis Committee at CNSE
2003	Peter Sutherland	Ph.D. Thesis Committee at Rensselaer Polytechnic Institute

VI.4. SUPERVISING VISITING SCIENTISTS AND OTHERS

Visiting Scientists

2015	K. Balachander	Thin Film Solar Cells and ARCs (from PSG IAS, India)
2011 – 2013	Yoshimi Ohta	High efficiency Solar Cells (from Nissan, Japan)
2006 – 2008	Wentao Wang	Fuel Cells and Capacitors (from University of South Carolina)
2004 – 2007	Pyongyo Choi	Fuel Cells (from Worcester Polytechnic Institute)
2006 – 2007	Hee Gyon Lee	Solar Cells (from Korea Polytechnic University)
2005 – 2006	Hee Gyon Lee	Superconductors and Solar Cells (from Korea Polytechnic University)
2005	Lihong Teng	Solar Cells – Completed (from University at Buffalo, SUNY)
2004 – 2006	Hua Ye	Power Electronics (from University at Buffalo, SUNY)
2002 – 2003	Hee Gyon Lee	Superconductors and Solar Cells (from Korea Polytechnic University)
2002 – 2004	Manisha Rane	Fuel Cells and Superconductors (from GE Global Research)

Scientists/Engineer/Project Manager/Lab Technician/Business Development

2014 – 2017	Ashley Stuart
2012 – 2014	Ashley Lee
2012 – 2016	Eric Holton
2011 – 2014	Nicholas Querques
2009 – Present	Seiichiro Higashiya
2009 – 2010	Samir Hanssen
2007 – Present	Zhouying Zhao
2007 – 2008	Wenzhen Li
2006 – Present	Michael Gardner
2006 – 2017	Emily Behnke
2006 – 2008	Hua Ye
2005 – 2008	Martin Weloth
2005 – 2008	Jeremy Snyder
2005 – 2008	Randy Simon
2005 – 2017	Manisha Rane-Fondacaro

VII. SERVICE ACTIVITIES

VII.1. SERVICE TO THE UNIVERSITY/COLLEGE

2010 – 2018	CNSE, Research Committee Leadership, Faculty Senate
2012 – 2015	CNSE, Tenure and Promotions Committee
2010 – 2016	CNSE, Faculty Senate
2009 – 2012	CNSE, Research Committee
2010 - 2011	UAlbany, Senate Executive Committee
2010 - 2011	Chair, University Senate Committee on Academic Freedom, Freedom of Expression, and Community Responsibility (CAFFECOR)
2009	Established MBA Nanotrack program in collaboration with School of Business
2010 – Present	Committee Member, Tenure and Promotions Committee for the CNSE, UAlbany
2008 - 2009	University Senate Committee on Academic Freedom, Freedom of Expression, and Community Responsibility (CAFFECOR)
2008	Participant, UAlbany Day
2008	Member, University at Albany Provost's Going Forward Plan
2008 - Present	CNSE Faculty Council
2008	School of Business, University at Albany, Panel for Going Green Globally (G3)
2007 - Present	CNSE NanoEngineering Faculty Search Subcommittee
2007 - Present	CNSE NanoEngineering Qualifying Exam Subcommittee
2007	Academic Partnership with Syracuse University
2007	CNSE Undergraduate NanoEngineering Curriculum Committee
2007	School of Business, University at Albany, Panel for Going Green Globally (G3)
2007	CNSE Open House Participant
2006	CNSE NanoCareer Day Participant
2006	Chair, Search Committee, Dean, School of Business, UAlbany
2006 – 2008	Committee Member, Scientific Equipment Advisory Committee for UAlbany
2005 – 2009	Committee Member, Tenure and Promotions Committee for the CNSE, UAlbany
2005 – 2008	Lead the development of the Compact Plan for the NanoEngineering Constellation, CNSE
2004 – Present	Head, NanoEngineering Constellation, College of Nanoscale Science and Engineering,
2003 – Present	Advisory Board, Information Technology Management, School of Business, UAlbany
2005	UAlbany's Energy Expert
2005	Founder, Nano+MBA program, Dual Degree, Joint Program with School of Business and the College of Nanoscale Science and Engineering
2004 – 2005	Provost's Assessment Advisory Committee, UAlbany
2004	Reviewer of UAlbany's Mission Review II Document
2004	Founding Professor, College of Nanoscale Science and Engineering, UAlbany

VII.2. EXTERNAL REVIEWER ACTIVITIES

- National Science Foundation, SBIR Pilot Review Pane: Semiconductors, Photonics, IoT (2015)
- National Science Foundation, SBIR/STTR Phase I PV Cells (2015)
- Qatar National Research Fund – National Priorities Research Program Reviewer (2015)
- National Science Foundation, SBIR/STTR Phase I PV Systems Reviewer (2014)
- National Science Foundation, SBIR Phase I Photovoltaics and Solar Applications Reviewer (2014)
- Qatar National Research Fund – National Priorities Research Program Reviewer (2014)
- Qatar National Research Fund – National Priorities Research Program Reviewer (2013)
- Qatar National Research Fund – National Priorities Research Program Reviewer (2011)
- Qatar National Research Fund – National Priorities Research Program Reviewer (2010)
- Danish National Research Foundation – Danish Chinese National Research Program Reviewer (2009)

- Qatar National Research Fund – National Priorities Research Program Reviewer (2009)
- National Science Foundation, Entrepreneurship Education Applications (2009)
- National Science Foundation SBIR Phase I Commercial Reviewer – Electronic Materials (2009)
- Advanced Energy Consortium (Texas), Micro- and Nanosensors for Oil and Gas Exploration and Production Applications (2008)
- National Science Foundation SBIR/STTR Phase I Commercial Reviewer – Nanotechnology enabled components and systems (2008)
- National Science Foundation SBIR/STTR Phase I Commercial Reviewer - Software Tools I (2008)
- National Science Foundation, SBIR/STTR Phase I Electronics Program, Commercial Reviewer (2007)
- National Science Foundation, DMR, Electronics Materials Program (2007)
- National Science Foundation, Electronics Materials Program (2007)
- California Energy Commission EISG Grant Program (2006)
- U.S. Civilian Research and Development Foundation, Cooperative Grants Program (2006)
- National Science Foundation Review Panel; NSF-Division of Electrical Communications Systems; Electronics, Photonics, and Device Technologies program (2006)
- Field Projects, Information Technology Management, School of Business, UAAlbany (2005)
- Consultant Reviewer and Council Member, Gerson Lehrman Group (2005)
- Cottrell College Science Awards, Research Corporation, State of Arizona (2005)
- Expert Witness for the US Patent and Trademark Office (2002)
- Proposals for Materials Research Activities in the State of Texas (2001)
- Proposals for U.S. DOE, U.S. DOD, NYSERDA, SBIR and University programs
- UAAlbany Energy Expert Reviewer for various News and Trade Press including Times Union, Fuel Cell Review, Business Review (2001-2006)
- Journals:
 - Applied Physics Letters
 - Applied Surface Science
 - Superconductor Science and Technology
 - Physica C
 - IEE Proceedings of Circuits, Devices & Systems
 - International Journal of the Applied Ceramic Technology
 - Journal of the American Ceramic Society
 - Journal of Materials Synthesis
 - Journal of Materials Research
 - Journal of Physical Chemistry
 - Applied Superconductivity
 - Advances in Cryogenic Engineering
 - IEEE Transactions on Applied Superconductivity
 - Nanoscale Review Letters, Springer
 - Nanoscale Research Letters

VII.3. CONFERENCE ORGANIZING ACTIVITIES

- | | |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018 | Co-Host: “Indo-US bilateral conference on Nanomaterials and Nanotechnologies for clean energy generation and storage” and NanoChallenge 2017 at PSG-IAS, Coimbatore, India |
| 2017 | Moderator/Host, New York Business Plan Competition, Albany, New York |
| 2016 | Host, USPVMC Workshop: “How the Convergence of Energy, Data Analytics, and the IoT will change the Solar Market”, InterSolar, San Francisco, CA |
| 2016 | Co-host: “4 th PSG-CNSE Seminar Series on Solar Energy Systems, Innovations & Business Entrepreneurship” at PSG-IAS, Coimbatore, India |
| 2016 | Moderator/Host, New York Business Plan Competition, Albany, New York |

- 2015 Co-host: Solar Installations, Economics, Business Opportunities and New Trends in Solar Energy Systems” at PSG-IAS, Coimbatore, India
- 2015 Host, USPVMC Thought Leadership Forum, InterSolar, San Francisco, CA
- 2015 Moderator/Host, New York Business Plan Competition, Albany, New York
- 2015 Moderator, Northeast SEMI Supply Conference, Albany, New York
- 2014 Co-host: “Seminar on New Technologies, Business and Entrepreneurship in Solar Energy Systems” at PSG-IAS, Coimbatore, India
- 2014 Moderator/Host, New York Business Plan Competition, Albany, New York
- 2013 Host, SunShot Prize Workshop: West Coast, InterSolar, San Francisco, CA
- 2013 Moderator, 4th SEMI North American PV Fab Managers Forum, InterSolar, San Francisco, CA
- 2013 Host, Building the US Based Ecosystem for Thin Film Manufacturing, IEEE PVSC, Tampa, FL
- 2013 Moderator/Host, New York Business Plan Competition, Albany, New York
- 2012 Moderator/Host, New York Business Plan Competition, Albany, New York
- 2012 Session Chair, 4th International Conference on Advanced NanoMaterials (ANM 2012) Chennai, India
- 2012 Moderator Host, DOE SunShot Northeast Photovoltaic Roundtable, Albany, NY
- 2012 Moderator, Host, Seventh New Energy Symposium and Expo, New York, NY
- 2011 Moderator Host, New York Business Plan Competition, Albany, New York
- 2010 Moderator Host, New York Business Plan Competition, Albany, New York
- 2010 Moderator, Host, Fifth New Energy Symposium and Expo, New York, NY
- 2009 Panelist, Moderator, NREL’s 22nd Industry Growth Forum, Denver, CO
- 2009 Moderator, Host, Fourth New Energy Symposium and Expo, New York, NY
- 2009 Organizer, Session on Investment and Market Opportunities for Solar Cells, American Solar Energy Society (ASES) Conference, April 1009, Buffalo, NY
- 2009 Host, 13th, 14th, Tech Valley Energy Forum, Albany, NY
- 2009 Organizer, Host ASM Capital Region Meeting Albany, NY
- 2008 Moderator, NREL’s 21st Industry Growth Forum, Denver, CO
- 2007 Host, 10th, 11th, 12th, Tech Valley Energy Forum, Albany, NY
- 2008 Co-Chair, Technology Transfer Society Annual Conference, Albany, NY
- 2008 Moderator, Chair, Third New Energy Symposium and Solar Expo, Albany, NY
- 2007 International Committee, Metallo’07, IIT Kanpur, India
- 2007 Host, Chair, Second New Energy Symposium and Hydrogen Expo, Albany, NY
- 2007 Host, 8th and 9th, Tech Valley Energy Forum, Albany, NY
- 2007 Organizer, IEEE and ASME Schenectady Monthly Meeting, Albany, NY
- 2007 Host, Solar Initiative of New York, Albany, NY
- 2006 Organizer, 2nd New York Fuel Cell Network, Rochester, NY
- 2006 Session Chairman, 19th NREL Industry Growth Forum, Philadelphia, PA
- 2006 Host, 7th Tech Valley Energy Forum, Albany, NY
- 2006 Host, 6th Tech Valley Energy Forum, Albany, NY
- 2006 Host, Chair, First New Energy Symposium, Albany, NY
- 2005 Host, 4th and 5th Tech Valley Energy Forum
- 2004 Session Chairman, Applied Superconductivity Conference, Jacksonville, FL
- 2004 Organizing Committee, DCAM-2004 (Advanced Materials Conference) Varanasi, India
- 2003 Host, General Motor’s Technology Tour Event, Troy, NY
- 2002 Co-chairman, NREL’s 15th Industry Growth Forum, Albany, NY
- 2000 Session Chairman, Applied Superconductivity Conference, Virginia Beach, VA
- 2000 Symposium Organizer, Materials Research Society, Spring Meeting, San Francisco, CA
- 1996 Symposium Organizer, Materials Research Society, Spring Meeting, San Francisco, CA
- 1995 Session Chairman, International Cryogenic Materials Conference, Columbus, Ohio
- 1995 Session Chairman, Materials Research Society, Spring Meeting, San Francisco, CA
- 1995 Session Chairman, The Metallurgical Society Annual Conference, Las Vegas, NV
- 1994 Session Chairman, Materials Research Society, Spring Meeting, San Francisco, CA

- 1993 Session Chairman, Materials Research Society, Fall Meeting, Boston, MA
1993 Session Chairman, International Symposium on Superconductivity'93, Hiroshima, Japan
1993 Session Chairman, International Cryogenic Materials Conference, Albuquerque, NM
1992 Session Chairman, Applied Superconductivity Conference, Chicago, IL

VIII. SCHOLARLY ACTIVITIES

VIII.1. BOOK CHAPTERS

“Review of Graphene Technology and Its Applications for Electronic Devices”

Ashok K Sood, Isaac Lund, Yash R Puri, Harry Efstathiadis, Pradeep Haldar, Nibir K Dhar, Jay Lewis, Madan Dubey, Eugene Zakar, Priyalal Wijewarnasuriya, Dennis L Polla, Michael Fritze
INVITED Chapter in “Graphene - New Trends and Developments”, InTech Publications (2015)

“SiGe Based Visible-NIR Photodetector Technology for Optoelectronic Applications”

Ashok K. Sood, John W. Zeller, Robert A. Richwine, Yash R. Puri, Harry Efstathiadis and Pradeep Haldar, Nibir K. Dhar, Dennis L. Polla
INVITED Chapter in “Optical Fiber”, ISBN 978-953-51-4134-1, InTech Publications (2015)

“Proton Exchange Membrane Cells”

P. Choi, P. Haldar and R. Datta

INVITED Chapter in Encyclopedia of Chemical Processing, pp. 2501-2530, Taylor and Francis (2006)

“Fabrication and Characterization of HTSC Coils Made from Bi-2223 Conductors”

U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo

INVITED Chapter in Bismuth-based High-Temperature Superconductors, pp. 499-523, eds. H. Maeda and K. Togano, Marcel Drekker. Inc., New York (1995)

VIII.2. REPORTS

“Shopping Bag Life Cycle Analysis”, D. Ribeiro De Souza Bianco, Y. Gebrai, K. Ghebremichael, P. Haldar (2023).

“Installation of PV Solar Systems at TPA”, C. Chavez, S. Chikane, R. Hooker, P. Haldar (2022).

“Energy Efficiency Program”, F. Mohsen, Z. Alswellem, P. Khanna, P. Haldar (2022).

“Electrification of TPA’s Fleet”, S. Beaver and A. Fama, P. Haldar (2022)

“Creating a More Resilient Florida with PACE”, Z. Oliphant, T.H. Culhane, P. Haldar (2021).

“Public Impacts of Florida’s Property Assessed Clean Energy (PACE) Program”, Z. Oliphant, T.H. Culhane, P. Haldar (2020).

“Hydrogen and Fuel Cell Development Plan: New York – Hydrogen Economy (Economic Development, Environmental Performance and Energy Reliability)” with Emily Behnke and Northeast Electrochemical Energy Storage Cluster (2014)

“New York 2.0 Solar Roadmap - A plan for energy reliability, security, environmental responsibility and economic development in New York State”, with Unni Pillai (June 2012)

“New York’s Energy Technology Clusters - Leveraging New York State’s Intellectual Resources for Producing Clean Energy Technology” (December 2007)

“New York’s Solar Roadmap - A plan for energy reliability, security, environmental responsibility and economic development in New York State”, with NYSEIA (May 2007)

“New York State Hydrogen Energy Roadmap”, with Energetics and the National Hydrogen Association (October 2005)

VIII.3. PATENTS

“Method for improvement of electrochemical energy storages using oxygen-containing onium salts”
Seiichiro Higashiya, Manisha V. Rane-Fondacaro, Pradeep Haldar
Disclosure submitted (Nov 2012)

“UV-sensitive solar cells and photodetectors using a graphene transparent electrode, and methods”
J. Fite, Z. Zhao, P. Haldar, and J.U. Lee
Disclosure submitted (June 2012)

“A novel structured amorphous thin film solar cell with embedded Si nanowire arrays in absorber layer of a planar pin solar cells”
C. Lee, J.H. Lee, H. Efstathiadis and P. Haldar
Disclosure submitted (Nov 2010)

“All superconducting motor with integrated power electronics”
Don Gubser, Mike Hennessy, P. Haldar
Disclosure submitted (Mar 2006)

“Direct Powering of Implantable BioMedical devices with Thermoelectric Generator”
P. Haldar and H. Efstathiadis
Disclosure submitted (Feb 2006)

“Improving flexible substrate surface quality for photovoltaic applications by electro-polishing, electrodeposition or by applying uniform buffer layer coatings”
P. Haldar and H. Efstathiadis
Disclosure submitted (Nov 2004)

“Synthesis of engineered nanoarrays of platinum based metals for fuel cell applications”
P. Choi, O. Paschos, and P. Haldar
Disclosure submitted (Oct 2004)

“Thermomechanical means to improve the critical density of BSCCO Tapes”
U. Balachandran, R. B. Poeppel, P. Haldar, and L. Motowidlo
U.S. Patent No. 6,240,619
Issued June 5, (2001)

“Superconductor tapes and coils and method of manufacture”
L. Motowidlo and P. Haldar
U.S. Patent No. 5,550,103
Issued August 27, (1996)

“Method for manufacturing high t_c superconductor coils”
L. Motowidlo and P. Haldar
U.S. Patent No. 5,434,129
Issued July 18th, (1995)

VIII.4. REFEREED ARTICLES

Publications:

1. S Higashiya, AP Schulz, DM DeRosa, MV Rane-Fondacaro, P Haldar, "Synthesis, Thermochemical, and Thermomechanical Characterization of High Conductivity 4-Azoniaspiro [3, 4] octane Salts", *Organic Preparations and Procedures International* 50 (3), pages 323-331(2018).
2. Shanika Amarakoon, Cyril Vallet, Mary Ann Curran, Pradeep Haldar, David Metacarpa, David Fobare, Jennifer Bell, "Life cycle assessment of photovoltaic manufacturing consortium (PVMC) copper indium gallium (di) selenide (CIGS) modules", *The International Journal of Life Cycle Assessment*, 23 (4), pages 851-866 (2018).
3. Adam Schulz, Donald DeRosa, Seiichiro Higashiya, Manisha Rane-Fondacaro, Hassaram Bakhru, Pradeep Haldar, "Evaluating the effect of solid electrolyte interphase formers on lithium depth profiles of the solid electrolyte interphase layer and bulk electrode material in LiNi_{0.4}Mn_{0.4}Co_{0.2}O₂/graphite pouch cells obtained with lithium nuclear reaction analysis", *Journal of Energy Storage* 14, pages 106–111 (2017).
4. Seiichiro Higashiya, Adam P. Schulz, Donald M. DeRosa, Manisha V. Rane-Fondacaro, and Pradeep Haldar, "Synthesis, Thermochemical, and Thermomechanical Characterization of High Conductivity 4-Azoniaspiro [3,4]octane Salts", *Organic Preparations and Procedures International*, Volume 50, Pages 323–331, (2018).
5. Donald DeRosa, Seiichiro Higashiya, Adam Schulz, Manisha Rane-Fondacaro, Pradeep Haldar, "High performance spiro ammonium electrolyte for Electric Double Layer Capacitors" *Journal of Power Sources*, Volume 360, pages 41-47 (2017).
6. Gopal G. Pethuraja, John W. Zeller, Roger E. Welsler, Harry Efstathiadis, Pradeep Haldar, Priyalal S. Wijewarnasuriya, Nibir K. Dhar, Ashok K. Sood, "Development of Nanostructured Antireflection Coatings Infrared Technologies and Applications", *Proceedings Volume 10404, Infrared Sensors, Devices, and Applications VII; 104040S; doi: 10.1117/12.2277957* (2017)
7. Adam Schulz, Hassaram Bakhru, Don DeRosa, Seiichiro Higashiya, Manisha Rane-Fondacaro, Pradeep Haldar, "Quantifying lithium in the solid electrolyte interphase layer and beyond using Lithium- Nuclear Reaction Analysis technique." *Journal of Power Sources* Volume 360, pages 129-135 (2017).
8. Ashok K. Sood, John W. Zeller, and Yash R. Puri, Caitlin Rouse, Pradeep Haldar, and Harry Efstathiadis, Nibir K. Dhar, Priyalal S. Wijewarnasuriya, "SiGe Focal Plane Array Detector Technology for Near-Infrared Imaging." *International Journal of Engineering Research and Technology*, ISSN 0974-3154, Volume 10, Number 1 pages 81-103 (2017).
9. Shanika Amarakoon, Cyril Vallet, Mary Ann Curran, Pradeep Haldar, David Metacarpa, David Fobare, Jennifer Bell, "Life cycle assessment of photovoltaic manufacturing consortium (PVMC) copper indium gallium (di) selenide (CIGS) modules", *The International Journal of Life Cycle Assessment*, pages 1-16, <https://doi.org/10.1007/s11367-017-1345-4> (2017).
10. Sravan Sunkoju, Sandra Schujman, Dhairya Dixit, Alain Diebold, Jian Li, Robert Collins, Pradeep Haldar, "Spectroscopic ellipsometry studies of 3-stage deposition of CuIn_{1-x}Ga_xSe₂ on Mo-coated glass and stainless steel substrates", *Thin Solid Films*, Volume 606, pages 113-119 (2016).
11. Jesse Claypoole, Steve Novak, Mark Altwerger, Dan Dwyer, Pradeep Haldar, Matt Eisaman, Harry

- Efstathiadis, "Sputter rate measurements of Cu(In,Ga)Se₂ absorber layers with varied Ga ratios, primary voltage, and angle of incidence by secondary ion mass spectrometry", *Journal of Alloys and Compounds*, Volume 696, Pages 808-813 (2016)
12. R Sundaramoorthy, Jim Lloyd, David Metacarpa, Pradeep Haldar, "Comparison of performance of PV modules subjected to "solar thermal humidity cycles" with modified and extended IEC protocols" *IEEE Photovoltaic Specialists Conference (43rd PVSC)*, pages 0921-0924 (2016).
 13. David Fobare, Shanika Amarakoon, Pradeep Haldar, David Metacarpal Jennifer Bell, Cyril Vallet, "Life cycle assessment study highlights for new york state based PVMC modeled thin film roll-to-roll CIGS process", *IEEE Photovoltaic Specialists Conference (43rd PVSC)*, pages 2161-2163 (2016).
 14. Sandra Schujman, Jonathan Mann, Amara Conteh, Crispin Rice, David Metacarpa, Pradeep Haldar, "Outdoor performance prediction of photovoltaic modules based on indoor measurements", *IEEE Photovoltaic Specialists Conference (43rd PVSC)*, pages 2718-2720 (2016).
 15. Jean M. Brownell, Sandra Schujman, Jonathan Mann, Crispin Rice, Linda LaQue, Gary Dufresne, David Metacarpa and Pradeep Haldar. "Effects of Pre-Conditioning and Testing Protocols on Performance of Different PV Technologies", *IEEE Photovoltaic Specialists Conference (43rd PVSC)*, pages 1538-1540 (2016).
 16. Scott McWilliams, R Sundaramoorthy, David Metacarpa, Pradeep Haldar, "PV single axis tracker array tests in the Northeast US with CIGS", *IEEE Photovoltaic Specialists Conference (43rd PVSC)*, pages 3328-3330 (2016).
 17. Gopal G Pethuraja, John W. Zeller, Roger E Welsler, Ashok K Sood, Harry Efstathiadis, Pradeep Haldar, Eric A. DeCuir, Priyalal S Wijewarnasuriya, Nibir K Dhar, "Development of nanostructured antireflection coatings for infrared image sensing technologies" *Proc. SPIE 10209, Image Sensing Technologies: Materials, Devices, Systems and Applications IV*, 102090D doi:10.1117/12.2268856 (2017).
 18. John W Zeller, Caitlin Rouse, Harry Efstathiadis, Pradeep Haldar, Jay S Lewis, Nibir K Dhar, Priyalal Wijewarnasuriya, Yash R Puri, Ashok K Sood, "Development of silicon-germanium visible-near infrared arrays", *SPIE Commercial+ Scientific Sensing and Imaging*, pages 985408-985408-9 (2016).
 19. Ashok K Sood, Isaac Lund, John W Zeller, Yash R Puri, Harry Efstathiadis, Pradeep Haldar, Nibir K Dhar, Jay Lewis, Priyalal Wijewarnasuriya, "Development of graphene based detectors for EO/IR applications", *SPIE Commercial+ Scientific Sensing and Imaging*, pages 98540D-98540D-18 (2016).
 20. Caitlin Rouse, John W Zeller, Harry Efstathiadis, Pradeep Haldar, Jay S Lewis, Nibir K Dhar, Priyalal Wijewarnasuriya, Yash R Puri, Ashok K Sood, "Development of Low Dark Current SiGe Near-Infrared PIN Photodetectors on 300 mm Silicon Wafers", *Optics and Photonics Journal*, Vol 6, Issue 05, Pages 61(2016).
 21. NJ Biderman, R Sundaramoorthy, Pradeep Haldar, JR Lloyd, "Dissociative diffusion mechanism in vacancy-rich materials according to mass action kinetics", *AIP Advances*, Vol 6, Issue 5, Pages 055211 (2016).
 22. Sravan Sunkoju, Sandra Schujman, Dhairya Dixit, Alain Diebold, Jian Li, Robert Collins, Pradeep Haldar, "Spectroscopic ellipsometry studies of 3-stage deposition of CuIn_{1-x}GaxSe₂ on Mo-coated glass and stainless steel substrates", *Thin Solid Films*, Volume 606, Pages, 113-119 (2016)

23. Bernadette Peace, Jesse Claypoole, Neville Sun, Dan Dwyer, Matthew D Eisaman, Pradeep Haldar, Harry Efstathiadis, "Characterization of Cu (In, Ga) Se 2 (CIGS) films with varying gallium ratios", *Journal of Alloys and Compounds*, Volume 657, Pages 873-877 (2016)
24. N. J. Biderman, Steven W. Novak, R. Sundaramoorthy, Pradeep Haldar and J. R. Lloyd, "Insights into cadmium diffusion mechanisms in two-stage diffusion profiles in solar-grade Cu(In,Ga)Se₂ thin films", *Appl. Phys. Lett.* 107, 232104 (2015)
25. Bernadette Peace, Jesse Claypoole, Neville Sun, Dan Dwyer, Matthew D Eisaman, Pradeep Haldar, Harry Efstathiadis, "Characterization of Cu (In, Ga) Se 2 (CIGS) films with varying gallium ratios", *Journal of Alloys and Compounds*, 657, 873-877 (2016)
26. NJ Biderman, Steven W Novak, T Laursen, R Sundaramoorthy, Pradeep Haldar, JR Lloyd, "Experimental Evidence of Multiple Diffusion Mechanisms in Thin-Film Cu (In, Ga) Se 2", *IEEE Journal of Photovoltaics*, 5, 5, 1497-1502 (2015)
27. John W Zeller, Caitlin Rouse, Harry Efstathiadis, Pradeep Haldar, Nibir K Dhar, Jay S Lewis, Priyalal Wijewarnasuriya, Yash R Puri, Ashok K Sood, "Design and development of wafer-level near-infrared micro-camera", *Proceedings of the SPIE Optical Engineering and Applications*, International Society for Optics and Photonics, 960900-960900-9 (2015)
28. J Nicholas Alexander, Neville Sun, Richard Sun, Harry Efstathiadis, Pradeep Haldar, "Development and characterization of transparent and conductive InZnO films by magnetron sputtering at room temperature", *Journal of Alloys and Compounds*, 633, 157-164 (2015)
29. Gopal G Pethuraja, Roger E Welser, John W Zeller, Yash R Puri, Ashok K Sood, Harry Efstathiadis, Pradeep Haldar, Jennifer L Harvey, "Advanced Flexible CIGS Solar Cells Enhanced by Broadband Nanostructured Antireflection Coatings", *MRS Proceedings*, Cambridge University Press, 1771, mrss15-2134661 (2015)
30. Gopal G Pethuraja, Roger E Welser, John W Zeller, Yash R Puri, Ashok K Sood, Harry Efstathiadis, Pradeep Haldar, Jennifer L Harvey, "Antireflection coatings for solar panel power output enhancement", *MRS Proceedings*, Cambridge University Press, 1771, mrss15-2134573 (2015)
31. Gopal G Pethuraja, Roger E Welser, John W Zeller, Yash R Puri, Ashok K Sood, Harry Efstathiadis, Pradeep Haldar, Nibir K Dhar, Priyalal Wijewarnasuriya, "Nanostructured Antireflection Coatings for Optical Detection and Sensing Applications", *MRS Proceedings*, Cambridge University Press, 1805, mrss15-2137947, (2015)
32. John W Zeller, Harry Efstathiadis, Gourav Bhowmik, Pradeep Haldar, Nibir K Dhar, Jay Lewis, Priyalal Wijewarnasuriya, Yash R Puri, Ashok K Sood, "Development of Ge PIN Photodetectors on 300 mm Si wafers for Near-infrared Sensing", *International Journal of Engineering*, 8, 1, pages 23-33 (2015)
33. John W Zeller, Yash R Puri, Ashok K Sood, Shane McMahon, Harry Efstathiadis, Pradeep Haldar, Nibir K Dhar, "Design and development of SiGe based near-infrared photodetectors", *International Society for Optics and Photonics, SPIE Optical Engineering and Applications*, 922006-922006-8 (2015)
34. Ashok K Sood, Gopal Pethuraja, Roger E Welser, Yash R Puri, Nibir K Dhar, Priyalal S Wijewarnasuriya, Jay Lewis, Harry Efstathiadis, Pradeep Haldar, E Fred Schubert, "Development of large area nanostructured antireflection coatings for EO/IR sensor applications", *SPIE Optical Engineering+ Applications*, pages 96090D-96090D-10 (2015)

35. Ankush Halbe, Kevin Sharpe, Graeme Housser, David Metacarpa, Pradeep Haldar, “Demonstration of PV modules with lightweight mounting systems on commercial rooftops”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference, pages 1-4 (2015).
36. Sravan Sunkoju, Sandra B. Schujman, Jonathan R. Mann, John Wax, David J. Metacarpa, Pradeep Haldar, “Optical Model Derivation for CIGS and Application to an Optical Monitoring System”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference (2015).
37. Sandra B. Schujman, Jonathan R. Mann, Gary Dufresne, Linda M. LaQue, Crispin Rice, John Wax, David J. Metacarpa, Pradeep Haldar, “Evaluation of Protocols for Temperature Coefficient Determination”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference (2015).
38. David J Metacarpa, David Fobare, Adam A Garney, Fadong Yan, Daniel J Dwyer, Eric Holton, Pradeep Haldar, “A cost analysis was completed using PVMCs Balance of System Cost Analysis Tool (BOS-CAT) for Lightweight PV (LPV) applications to evaluate mounting installation methods and associated BOS costs of flat membrane commercial roofs”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference (2015).
39. R Sundaramoorthy, John Delallo, James Alexander, John Wax, Kevin Sharpe, David Taylor, David Metacarpa, Jim Lloyd, Pradeep Haldar, “Correlation of power loss to string and module level performance of arrays of c-Si, CIGS technologies in North East climate”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference (2015).
40. Graeme Housser, Ankush Halbe, Kevin Sharpe, Pradeep Haldar, Francis Babineau, “Lightweight, Zero-Penetration, Pre-formed Support Molds Adapted for Rigid Thin-Film Solar Modules”, Proceedings of the 42nd IEEE Photovoltaic Specialist Conference (2015).
41. Isaac N. Lund, Jae Ho Lee, Harry Efstathiadis, Pradeep Haldar, and Robert Geer, “The Cycling Performance and Surface Passivation Qualities of a Heterogeneous Amorphous NiSiOy/ Polycrystalline NiSi₂ Core Shell Nanowire Used as a Li-Ion Battery Anode”, Journal of The Electrochemical Society, 161 (12) A1772-A1776 (2014)
42. Ashok K. Sood, Isaac Lund, Yash R. Puri , Harry Efstathiadis, Pradeep Haldar, Nibir K. Dhar, Dennis L. Polla, Madan Dubey and Eugene Zakar “A Review of Growth, Functionalization, and use of Graphene for Detection Applications”, International Journal of NanoScience and Nanotechnology, ISSN 0974-3081 Volume 5, Number 2 (2014), pp. 133-150 (2014)
43. Ashok K. Sood, Isaac Lund and Yash R. Puri, Harry Efstathiadis and Pradeep Haldar, Nibir K. Dhar, Dennis L. Polla, Madan Dubey and Eugene Zakar, “A Review of Growth, Functionalization, and use of Graphene for Detection Applications”, International Journal of NanoScience and Nanotechnology, ISSN 0974-3081, Volume 5, Number 2, pages 133-150 (2014).
44. J. Nicholas Alexander, Seiichiro Higashiya, Douglas Caskey Jr, Harry Efstathiadis, Pradeep Haldar, “Deposition and characterization of cadmium sulfide (CdS) by chemical bath deposition using an alternative chemistry cadmium precursor”, Solar Energy Materials & Solar Cells, Volume 125, Pages 47–53 (2014)
45. David Fobare, Pradeep Haldar, Harry Efstathiadis, David Metacarpa, John Wax, John Olenick, Viswanathan Venkateswaran, Kathy Olenick, “Novel Application of Yttria Stabilized Zirconia as a Substrate for Thin Film CIGS Solar Cells”, Proceedings of the 40th IEEE Photovoltaic Specialist Conference, pages 0341-0344, 10.1109/PVSC.2014.6924927 (2014).

46. Eric Holton, Ankush Halbe, Adam Garney, Jake Whitbeck, Kevin Sharpe, David Metacarpa, Pradeep Haldar, “Cost and Market Analysis of Integrative Lightweight PV Systems for Low-Slope Commercial Rooftops”, Proceedings of the 40th IEEE Photovoltaic Specialist Conference, pages 2740-2742, 10.1109/PVSC.2014.6925495 (2014).
47. Ankush Halbe, Jennifer Novak, Chris Hull, Kevin Sharpe, Pradeep Haldar, “Evaluation of mounting mechanisms for the installation of lightweight PV systems on commercial rooftops”, Proceedings of the 40th IEEE Photovoltaic Specialist Conference, pages 3539 – 3542, 10.1109/PVSC.2014.6924873 (2014).
48. Rajalakshmi Sundaramoorthy, Nicholas J Alexander, David Metacarpa, Jim R Lloyd, Pradeep Haldar “Identification of changes in power through DC string monitoring”, Proceedings of the 40th IEEE Photovoltaic Specialist Conference, pages 3220-3225, 10.1109/PVSC.2014.6925621, (2014).
49. Sandra B. Schujman, Jonathan R. Mann, Christopher Hull, John Wax, Linda M. LaQue, Gary Dufresne, Crispin Rice, David Taylor, Milo Tallon, Alex Bialy, Alex Novicki, David J. Metacarpa, Pradeep Haldar, “Effects of light-soaking and temperature on different PV technologies”, Proceedings of the 40th IEEE Photovoltaic Specialist Conference, pages 2626-2629, 10.1109/PVSC.2014.6925468 (2014).
50. Daniel J. Dwyer, Jennifer A. Novak, David J. Metacarpa, Sandra B. Schujman and Pradeep Haldar, “Selenium flux effects on Cu(In,Ga)Se₂ growth rate, and control by in-line X-ray fluorescence”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, pages 1957-1960, INSPEC 14116454 (2013).
51. N.J. Biderman, Steven W. Novak, T. Laursen, R. Sundaramoorthy, A.C. Diebold, Timothy Groves, Makoto Hirayama, Ankush Halbe, Sandra Schujman, John Wax, Michael Gardner, David Fobare, David Metacarpa, Pradeep Haldar, J.R. Lloyd, “Diffusion Activation Energy of Cadmium in Thin Film CuInGaSe₂ Photovoltaics”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, pages 1836-1841, INSPEC 14116317 (2013).
52. Ankush Halbe, Graeme Housser, Michael Gardner, Timothy Groves, Pradeep Haldar, “Evaluation of reactive sputtering of ZnS in Ar-O₂ environment as a pathway to Zn(O,S) thin-films”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, Pages 1972-1976, INSPEC 14115812 (2013).
53. Upendra Avachat, Fadong Yan, David Metacarpa and Pradeep Haldar, “Impacts of Humidity and Temperature on the Performance of Transparent Conducting Indium Tin Oxide and Electrical Interconnects for Solar Applications”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, Pages 2983-2986, INSPEC 14116000 (2013).
54. Daniel J Dwyer, Amara F Conteh, J Nicholas Alexander, Jonathan Mann, David J Metacarpa, Pradeep Haldar, “Evaluation of two-stage CuInGaSe₂evaporation for manufacturing scale-up”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, 978-1-4799-3299-3/13, pages 2576-2580 (2013).
55. Fadong Yan, David J. Metacarpa, R. Sundaramoorthy, Dave Fobare, and Pradeep Haldar, “Evaluation of CIGS Cell Interconnection Methods”, Proceedings of the 39th IEEE Photovoltaic Specialist Conference, Pages 2064-2067, INSPEC 14116525 (2013).
56. R. Perez, T. Thompson, T. E. Hoff, L. Rawlings, K. Zweibel, P. Haldar and R. Lewandowski, “Why a Smart FiT Is Smart Policy”, Solar Today, January/February, 18-21 (2013).

57. I.N. Lund, J.H. Lee, H. Efstathiadis, P. Haldar, and R. Geer, "Influence of catalyst layer thickness on the growth of nickel silicide nanowires and its application for Li-ion batteries", *Journal of Power Sources*, Volume 246, Pages 117-123, 15 January (2014).
58. Z. Zhao, L. Rice, H. Efstathiadis, P. Haldar, "Annealing and thickness related performance and degradation of polymer solar cells", *Microelectronics Reliability*, 53, 123–128, (2013)
59. Z. Zhao, J. D. Fite, P. Haldar, and J.U. Lee, "Enhanced ultraviolet response using graphene electrodes in organic solar cells", *Applied Physics Letters*, 101, 063305 (2012).
60. A.K. Sood, A.W. Sood, R.E. Welser, G.G. Pethuraja, Y.R. Puri, X. Yan, D.J. Poxson, J. Cho, E.F. Schubert, N.K. Dhar, D.L. Polla, P. Haldar, J.L. Harvey, "Development of Nanostructured Antireflection Coatings for EO/IR Sensor and Solar Cell Applications", *Materials Sciences and Applications*, 2012, 3, 633-639 (2012).
61. P. Haldar, U. Pillai, "Vertical Specialization and the Role of Consortia in the Solar Photovoltaic Industry", 1-8, *Future Photovoltaics*, August (2012).
62. S. Higashiya, T. Devarajan, M. V. Rane-Fondacaro, P. Haldar, "Eutectic mixtures of ionic liquids electrolytes for electric double layer capacitors", *ECS Transactions*, 41 (31) 103-109 (2012).
63. G. G. Pethuraja, R. E. Welser, A. K. Sood, C. Lee, N. J. Alexander, H. Efstathiadis, P. Haldar, J. L. Harvey, "Current-Voltage Characteristics of ITO/p-Si and ITO/n-Si Contact Interfaces", *Advances in Materials Physics and Chemistry*, Vol. 2 No. 2, 2012, pp. 59-62. (2012)
64. G. G. Pethuraja, R.E. Welser, A.K. Sood, C. Lee, N.J. Alexander, H. Efstathiadis, P. Haldar, J.L. Harvey, "Effect of Ge incorporation on band gap and photosensitivity of amorphous SiGe thin films", *Materials Sciences and Applications*, 2012, 3, 67-71. (2012)
65. R. E. Welser, G. G. Pethuraja, A. K. Sood, O. A. Laboutin, M. Chaplin, V. Un, and W. Johnson, A. W. Sood, D. J. Poxson, J. Cho, and E. F. Schubert, P. Haldar, J. L. Harvey "High Voltage Quantum Well Waveguide Solar Cells", *Next Generation (Nano) Photonic and Cell Technologies for Solar Energy Conversion II*, edited by Loucas Tsakalakos, *Proc. of SPIE Vol. 8111, 81110I* · © 2011 SPIE · CCC code: 0277-786X/11/\$18 · doi: 10.1117/12.894682
66. M.S. Hanssen, H. Efstathiadis, P. Haldar, "Development of smooth CuInGa precursor films for CuIn_{1-x}Ga_xSe₂ thin film solar cell applications", *Thin Solid Films*, Volume 519, Issue 19, 29 July 2011, Pages 6297-6301 (2011).
67. B. Avasarala, P. Haldar, "On the stability of TiN-based electrocatalysts for fuel cell applications", *International Journal of Hydrogen Energy*, *International Journal of Hydrogen Energy*, Volume 36, Issue 6, March 2011, Pages 3965-3974 (2011)
68. C. Dangler, M. V. Rane-Fondacaro, T. Devarajan, S. Higashiya, J. Snyder and P. Haldar, "Role of conducting carbon in electrodes for electric double layer capacitors", *Materials Letters* 65, 300–303 (2011).
69. S. Teehan, H. Efstathiadis, P. Haldar, "Enhanced power factor of Indium co-doped ZnO:Al thin films deposited by RF sputtering for high temperature thermoelectric, *Journal of Alloys and Compounds*", 509, 1094–1098 (2011)
70. P. Haldar, P. Abetti, "Superconductivity's first century", *IEEE Spectrum*, March 2011, pp 50-60 (2011)

71. W. Li, P. Haldar, "Highly active carbon supported core-shell PtNi@Pt nanoparticles for oxygen reduction reaction", *Electrochemical and Solid-State Letters* volume 13, issue 5, pp. B47 - B49 (2010).
72. B. Avasarala, P. Haldar, "Electrochemical oxidation behavior of titanium nitride based electrocatalysts under PEM fuel cell conditions", *Electrochimica Acta*, Volume 55, Issue 28, 1 December 2010, pp 9024-9034 (2010).
73. A. Nguyen, M.V. Rane-Fondacaro, H. Efstathiadis, P. Haldar, L. Michaelson, C. Wang, K. Munoz, T. Tyson, A. Gallegos, "Formation of a Low Ohmic Contact Nickel Silicide Layer on Textured Silicon Wafers Using Electroless Nickel Plating", *Proceedings of the 25th European Photovoltaic Solar Energy Conference and Exhibition, held in Valencia, Spain, Pages 2672-2675, ISBN 3-936338-26-4* (2010).
74. B. Avasarala, R. Moore and P. Haldar, "Surface Oxidation of Carbon Supports due to Potential Cycling under PEM Fuel Cell Conditions", *Electrochimica Acta*, Volume 55, Issue 16, 30 June 2010, pp 4765-4771 (2010).
75. S. L. Knupp, M. B. Vukmirovic, P. Haldar and R. Adzic, "Platinum Monolayer Electrocatalysts for O₂ Reduction: Pt Monolayer on Carbon-Supported PdIr Nanoparticles", *Electrocatalysis* (2010) 1: pp. 213-223, November 23, (2010).
76. Z. Zhao, R. Teki, N. Koratkar, H. Efstathiadis, P. Haldar, "Metal Oxide Buffer Layer for Improving Performance of Polymer Solar Cells", *Applied Surface Science*, 256, pp 6053-6056 (2010).
77. D. Dwyer, I. Repins, H. Efstathiadis, P. Haldar, "Selenization of Co-sputtered CuInAl Precursors", *Solar Energy Materials and Solar Cells*, 94, pp 598-605, (2010).
78. D. Dwyer, R. Sun, H. Efstathiadis, P. Haldar, "Characterization of Chemical Bath Deposited Buffer Layers for Thin Film Solar Cell Applications", *Phys. Status Solidi A* 207, No. 10, 2272–2278 (2010).
79. S. Higashiya, A. S. Filatov, C. C. Wells, M. V. Rane-Fondacaro, P. Haldar, "Crystal structures and quantitative structure–property relationships of spirobipyrolidinium and the oxygen-containing derivatives", *Journal of Molecular Structure*, 984, 300–306 (2010).
80. S. Higashiya, T.S. Devarajan, M.V. Rane-Fondacaro, C. Dangler, J. Snyder, and P.Haldar, "Synthesis of oxygen-containing spirobipyrolidinium salts for high conductivity room temperature ionic liquids", *Helvetica Chimica Acta – Vol. 92* pp. 1600 (2009).
81. T. Devarajan, S. Higayashi, C. Dangler, M. Rane-Fondacaro, J. Snyder, P. Haldar, "Novel Ionic Liquid Electrolyte for Electrochemical Double Layer Capacitors", *Electrochemistry Communications* 11, pp. 680–683 (2009).
82. N. Querques, P. Haldar, U. Pillai, "Venture Capital Investment into Thin Film Solar Photovoltaics – Where is it Going and Why?" *6 Nanotechnology Law & Business* 408 (Fall 2009).
83. Z. Zhao, L. Rice, H. Efstathiadis and P. Haldar, "Thickness Dependent Effects of Thermal Annealing and Solvent Vapor Treatment of Poly(3-hexylthiophene) and Fullerene Bulk Heterojunction Photovoltaics", *Mater. Res. Soc. Symp. Proc. Vol. 1123*, Materials Research Society (2009).
84. E. Stinzianni, K. Dunn, Z. Zhouying, M. Rane-Fondacaro, H. Efstathiadis, and P. Haldar, "Relationship of aluminum grain size to the grain size of polycrystalline silicon produced by the aluminum induced

- crystallization of amorphous silicon,” Photovoltaic Specialists Conference (PVSC), 2009 34th IEEE, Pages 001643-001648 (2009).
85. A. Nguyen, A. Fioramonti, D. Morrissey, H. Efstathiadis, Z. Zhouying, and P. Haldar, “Feasibility of Improving Front Metallization Lines for Photovoltaic Devices”, Photovoltaic Specialists Conference (PVSC), 2009 34th IEEE, Pages 000312-000315 (2009).
 86. D. Dwyer, I. Repins, H. Efstathiadis, P. Haldar, “Deposition of CuInAlSe₂ films using co-sputtered precursors and selenization”, Photovoltaic Specialists Conference (PVSC), 2009 34th IEEE, Pages 000247-000251 (2009).
 87. C. Lee, H. Efstathiadis, J. E. Reynolds, P. Haldar, “Two-dimensional Computer Modeling of Single Junction a-Si:H Solar Cells”, Photovoltaic Specialists Conference (PVSC), 2009 34th IEEE, Pages 001118-001112 (2009).
 88. E. A. Stinzianni, H. Efstathiadis, K. A. Dunn, and P. Haldar, “Role of Temperature and Duration of the Crystallization Anneal in the Texture Development of YBCO Prepared by TFA-MOD”, IEEE Transactions on Applied Superconductivity, Vol. 19, Issue 3, Part 3, pp. 2877-2881, June (2009).
 89. A.M. Patel, S.Y. Gui, A.P. Stavrides. J.A. Cambridge, L.T. Le, H. Efstathiadis, P. Haldar and A.E. Delahoy, “Deposition of Large Area, Directly Textured, ZnO:Al films by Reactive-Environment, Hollow Cathode Sputtering”, Photovoltaic Specialists Conference, 2008. PVSC '08. 33rd IEEE pp. 1 - 5, 11-16 May (2008)
 90. B. Avasarala, W. Li and P. Haldar, “Durable Electrocatalysts based on Titanium Nitride Nanoparticles for Proton Exchange Membrane Fuel Cells”, Journal of Materials Chemistry, 19, pp. 1803-1805 (2009).
 91. B. Avasarala and P. Haldar, “Effect of surface roughness of composite bipolar plates on the contact resistance of a proton exchange membrane fuel cell”, Journal of Power Sources, 188, pp. 225-229 (2009).
 92. H. Ye, C. Lee, R. Simon, P. Haldar, “Development of Cryogenic Power Modules for Superconducting Hybrid Power Electronic System”, International Journal of Materials and Product Technology, Vol. 34, No. 1/2, pp. 188-199, (2009).
 93. V. Jindal, N. Tripathi, M. Tungare, O. Paschos, P. Haldar, F. Shahedipour-Sandvik, ”Selective Area Heteroepitaxy of low dimensional a-plane and c-plane InGaN Nanostructures using pulsed MOCVD”, Physica Status Solidi, (C), pp. 1-3, DOI 10.1002/pssc.20077859,9 (2008).
 94. P. Abetti and P. Haldar, “One hundred years of superconductivity: Science, Technology, Products and industry structure,” International Journal of Technology Management, Vol. 48, No. 4, pp. 423-447 (2009).
 95. S.L. Knupp, W. Li, O. Paschos, T. Murray, J. Snyder, and P. Haldar, “Synthesis and Parametric Effects on Carbon Nanotube/Nanofiber Supported Platinum via Polyol Processing Techniques” Carbon 46, pp. 1276-1284 (2008)
 96. H.Ye, P. Haldar, “Optimization of the Porous-Silicon-Based Superjunction Power MOSFET”, IEEE Transactions on Electron Devices, Vol. 55, Issue 8, pp. 2246-2251 (2008)

97. H.Ye, P. Haldar, "A MOS Gated Power Semiconductor Switch Using Band-to-Band Tunneling and Avalanche Injection Mechanism" IEEE Transactions on Electron Devices, Vol. 55, Issue 6, pp.1524-1528 (2008)
98. P. Haldar, "The Power of Nanotechnology", Power Engineering, pp. 10, July (2007)
99. O. Paschos, S. L. Knupp, P. Choi, J. Snyder, S. J. Buelte, N. Merchant, Z. Qi, and P. Haldar, "Carbon Nanotube-Supported Platinum Electrode for Oxygen Reduction Reaction in Phosphoric Acid Solution: Effect of PTFE Content and Annealing Temperature", Electrochemical and Solid-State Letters, 10 (9), pp. B147-B149 (2007)
100. O. Paschos, P. Choi, H. Efstathiadis and P. Haldar, "Synthesis of Platinum Nanoparticles by Aerosol Assisted Deposition Method", Thin Solid Films, Vol. 516, Issue 12, pp. 3796-3801 (2008)
101. C. Varanasi, P.N. Barnes, J. Burke, L. Brunke, I. Maartense, T. Haugan, E. Stinzianni, K. Dunn, P. Haldar, "Flux Pinning Enhancements in $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films with BaSnO_3 Nanoparticles", Supercond. Sci. Technol. 19, No. 10, pp. L37-L41, (2006)
102. H. Ye, C. Lee, J. Raynolds, H. Efstathiadis, P. Haldar, M. J. Hennessy and E. K. Mueller, "Silicon Power MOSFET at Low Temperatures: a Two-Dimensional Computer Simulation Study", Cryogenics, 47, pp. 243-251 (2007)
103. J.H. Ahn, B.J. Kim, J.G. Kim, H.J. Kim, G.W. Hong, H.G. Lee, J.M. Yoo, P. Haldar, "Effects of Oxidation Conditions on the Microstructure and Texture of NiO in a cube-textured Polycrystalline Nickel Substrate", Physica C, Vol. 445-448, pp. 620-624 (2006)
104. S.Y. Lee, S.A. Song, B.J. Kim, J.A. Park, H.J. Kim, G.W. Hong, H. G. Lee, S.H. Jang, J. Joo, J.M. Yoo, P. Haldar, "Effects of Precursor Composition on J_c Enhancement of YBCO film Prepared by TFA-MOD Method", Physica C, Vol. 445-448, pp. 578-581 (2006)
105. H. Ye, C. Lee, R. Simon, P. Haldar, M.J. Hennessy, and E. K. Mueller, "Liquid-Nitrogen Cooled Integrated Cryogenic Power Module", Applied Physics Letters, Vol. 89, pp. 192107-1-3 (2006)
106. Hua Ye, P. Haldar, and Harry Efstathiadis, "Numerical Thermal Simulation of Cryogenic Power Modules Under Liquid Nitrogen Cooling", Journal of Electronic Packaging, Vol. 128, pp. 267-272 (2006)
107. M. V Rane, H. Bakhru, M. W. Rupich, X. Li, W. Zhang, T. Kodenkandath and P. Haldar, "Fluorine analysis and microstructural evolution in coated YBCO conductor deposited by metal Trifluoroacetate process", IEEE Applied Superconductivity Transactions, Vol.15, (2), pp. 2368-2641 (2005)
108. P. Haldar, H. Ye, H. Efstathiadis, J. Raynolds, M. J. Hennessy, O. M. Mueller, and E. K. Mueller, "Improving Performance of Cryogenic Power Electronics", IEEE Transactions on Applied Superconductivity, Vol. 15, (2), pp. 2370-2375 (2005)
109. M.S. Hatzistergos, H.E. Efstathiadis, J.L. Reeves, V.S. Selvamanickam, L.P. Allen, E. Lifshin, P. Haldar, "Microstructural and compositional analysis of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ films grown by MOCVD before and after GCIB smoothing", Physica C, Vol. 405, (3-4), pp. 179-186 (2004)
110. U.K. Sinha, D.T Lindsay, R. Hughey, J.P. Stovall, M. Gouge, J.W. Lue, P. Haldar, V, Selvamanickam, N. Vo, "Development and test of world's first industrial high temperature superconducting (HTS) power cable", IEEE Power Engineering Society, Vol. 2, pp. 442- 447 (2001)

111. V. Selvamanickam, G. Carota, M. Funk, N. Vo, P. Haldar, U. Balachandran, M. Chudzik, P. Arendt, J. Groves, R. DePaula, B. Newnam, "High-current Y-Ba-Cu-O coated conductor using metal organic chemical-vapor deposition and ion-beam-assisted deposition", IEEE Transactions on Applied Superconductivity, Vol. 11, (1), pp. 3379-3381 (2001)
112. M. Lelovic, R. Koritala, B. L. Fisher, U. Balachandran; N. Vo, V. Selvamanickam, and P. Haldar, "Novel Technique for Improving Field Dependence in Bi-2223 Superconducting Tapes at 77 K", IEEE Transactions on Applied Superconductivity, Vol. 11, (1), pp. 3349-3352 (2001)
113. L.R. Motowidlo, V. Selvamanickam, G. Galinski, N. Vo, P. Haldar, R.S. Sokolowski, "Recent progress in high-temperature superconductors at Intermagnetics General Corporation", Physica C, Vol. 335, (1), pp. 44-50 (2000)
114. E. Leung, B. Burley, P. Haldar, D. Morris, A. Langhorn, Y. Coulter, E. Roth, M. Gruszczynski, "Testing of the world's largest Bi-2223 high temperature superconducting coil", IEEE Transactions on Applied Superconductivity, Vol. 10, (1), pp. 865-868 (2000)
115. E. Leung, B. Burley, N. Chitwood, H. Guro, G. Miyata, D. Morris, L. Ngyuen, B. Oapos Hea, D. Paganini, S. Pidcoe, P. Haldar, P. M. Gardner, D. Peterson, H. Beonig, J. Cooley, Y. Coulter, W. Hults, C. Mielke, E. Roth, J. Smith, S. Ahmed, A. Rodriguez, A. Langhorn, M. Gruszczynski, J. Hoehn, "Design and development of a 15 kV, 20 kA HTS fault current limiter", IEEE Transactions on Applied Superconductivity, Vol. 10, (1), pp. 832-835 (2000)
116. V. Selvamanickam, G. Galinski, G. Carota, J. DeFrank, C. Trautwein, P. Haldar, U. Balachandran, M. Chudzik; J. Y. Coulter, P. N. Arendt, S. R. Foltyn, B. Newnam, and D. E. Peterson, "High-Current Y-Ba-Cu-O Conductor by Metal Organic Chemical Vapor Deposition on Metal Substrates", Physica C, Vol. 333, (3-4), pp. 155-162 (2000)
117. M. Lelovic, S. Mench, T. Deis, N. G. Eror, U. Balachandran, V. Selvamianickam, and P. Haldar, "AC Magnetic Field Losses in BSCCO-2223 Superconducting Tapes", Advances in Cryogenic Eng. Materials, Vol. 44B, pp. 715-722, eds. U. Balachandran et al. (1999)
118. U. Balachandran, M. Lelovic, T. Deis, N. G. Eror, P. Haldar, and V. Selvamanickam, "Recent Advances in Processing of Ag-Clad Bi-2223 Superconductors", Advances in Cryogenic Eng. Materials, Vol. 44B, pp. 525, eds. U. Balachandran et al. (1999)
119. V. Selvamanickam, G. Galinski, J. DeFrank, C. Trautwein, P. Haldar, U. Balachandran, M. T. Lanagan, and M. Chudzik, "Y-Ba-Cu-O Film Deposition by Metal Organic Chemical Vapor Deposition on Buffered Metal Substrates", IEEE Transactions on Applied Superconductivity, Vol. 9, (2), pp. 1523-1526 (1999)
120. L. M. Fisher, A. V. Kalinov, S. E. Savel'ev, and I. F. Voloshin, P. Haldar, H. W. Myron and U. Balachandran, "AC Losses in Bi-2223 Tapes and in the 1-kA Transmission Line Model", IEEE Transactions on Applied Superconductivity, Vol. 9, (2), pp. 1265-1268 (1999)
121. U. Balachandran, M. Lelovic, and B. C. Prorok; N. G. Eror, V. Selvamanickam and P. Haldar, "Advances in Fabrication of Ag-Clad Bi-2223 Superconductors", IEEE Transactions on Applied Superconductivity, Vol. 9, (2), pp. 2474-2479 (1999)
122. N.T. Cherpak, A.A. Lavrinovich, T.A. Smirnova, P. Haldar, D. Hazelton, "HTS Bi-2223/Ag tape-based Troxel magnetic system", Cryogenics, 39, (9) pp. 791-793 (1999)

123. B.A. Merisov, G. Ya. Khadjai, and M. A. Obolensky, N. T. Cherpak, P. Haldar and D. Hazelton, "Kinetic properties of the HTSC compound Ag-Bi2223", *Low Temperature Physics*, Vol. 25, (6), pp. 472-474 (1999)
124. T. Chiba, Q. Li, S.P. Ashworth, M. Suenaga, P. Haldar, "Angular dependence of AC losses at power frequencies for a stack of Bi2223/Ag tapes", *IEEE Transactions on Applied Superconductivity*, Vol. 9, (2), pp. 2143-2146 (1999)
125. L. M. Fisher, A. V. Kalinov, S. E. Savel'ev, I. F. Voloshin, P. Haldar, and U. Balachandran, "Losses in Bi-2223/Ag Tapes and in the 1-kA AC Transmission Line Model", *Superconductor Science and Technology*, 12, pp. 24-35 (1999)
126. T. Chiba, Y-L. Wang, R.L. Sabatini, Qiang Li, L.J. Wu, M. Suenaga, P. Haldar, K. Noto, "Enhanced critical current in (Bi,Pb)₂Sr₂Ca₂Cu₃O₁₀ /Ag tapes by a low-temperature intermediate heat treatment", *Physica C Superconductivity*, Vol. 308, (1-2), pp. 40-54 (1998)
127. M. Lelovic, N. G. Eror, U. Balachandran, B. C. Prorok, V. Selvamanickam, P. Haldar, J. Talvacchio, and R. Young, "Shielded High-Tc (Bi,Pb)₂Sr₂Ca₂Cu₃O_y (Bi-2223) Superconducting Tapes", *Superconductor Science and Technology*, 11, pp. 1255-1260 (1998)
128. U. Balachandran, V. Selvamanickam, P. Haldar, M. Lelovic, and N. G. Eror, "Development of Ag-Clad Bi-2223 Superconductors for Electric Power Applications", *INVITED PAPER: Superconductor Science and Technology*, 11, pp. 978-981 (1998)
129. V. Selvamanickam, D. W. Hazelton, L. Motowidlo, F. J. Krahula, H. G. Hoehn, M. S. Walker, P. Haldar, "High-Temperature Superconductors for Electric Power and High-Energy Physics", *Journal of Metals*, pp.27-31, October (1998)
130. M. Suenaga, Y. Fukomoto, H. J. Weismann, P. Haldar and R. C. Budhani, "Effects of ac transport currents on ac losses by the magnetically induced current in a Ag sheathed Bi(2223) tape", *IEEE Transactions on Applied Superconductivity* Vol. 7, (2), pp. 1674-1678 (1997)
131. E.Chesneau, J.Kvitkovic, B.A.Glowacki, M.Majoros, P.Haldar, "Hall probe measurements and analysis of the remnant magnetic field above a multifilamentary superconducting tape", *Institute of Physics Conference Series*, No.158, pp. 1009-1013 (1997)
132. V. Selvamanickam, K. Pfaffenbach, D. Kirchoff, K.M. Cardner, D.W. Hazelton, P. Haldar, "Development of Tl-1223 conductors for 77 K HTS applications", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2) pp. 1953-1956 (1997)
133. D.W. Hazelton, M.T. Gardner, J.A. Rice, M.S. Walker, C.M. Trautwein, P. Haldar, D.U. Gubser, M. Superczynski, D. Waltman, "HTS coils for the Navy's superconducting homopolar motor/generator", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2) pp. 664-667 (1997)
134. S.P. Ashworth, B.A. Glowacki, M. Cizek, E.C.L. Chesneau and P. Haldar, "Connectivity between filaments in BSCCO-2223 multi-filamentary tape", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2), pp. 1662-1665 (1997)
135. L. Wu, Y. Wang, W. Bian, Y. Zhu, T.R. Thurston, R.L. Sabatini, P. Haldar, M. Suenaga, "Kinetics of the alignment and the formation of the Bi(2223) platelets in the powder-in-tube processed Bi(2223)/Ag composite tapes", *Journal of Materials Research*, 12, (11) pp. 3055-3073 (1997)

136. S. Mench, M. Lelovic, T. Deis, N. G. Eror, U. Balachandran; and P. Haldar, "Losses in AC of BSCCO-2223 Superconducting Monofilament and Multifilament Tapes at Power Frequencies", *Journal of Materials Research*, 12, (11), pp. 3085-3089 (1997)
137. U. Balachandran, A. N. Iyer, K. C. Goretta, and P. Haldar, "Processing and Fabrication of High-Tc Superconductors for Electric Power Applications", *Applied Superconductivity*, Vol. 5, (1-6), pp. 187-191 (1997)
138. M. Cizek, B. A. Glowacki, A. M. Campbell, S. P. Ashworth, W. Y. Liang, P. Haldar, and V. Selvamanickam, "Influence of external magnetic field and its orientation on transport AC losses in Bi-2223 and Tl-1223 silver sheathed tapes", *IEEE Transactions Applied Superconductivity*, Vol. 7, (2), pp. 314-317 (1997)
139. U. Balachandran, A. N. Iyer, R. Jammy, and M. Chudzik; M. Lelovic, P. Krishnaraj, and N. G. Eror, P. Haldar, "Processing and Characterization of Ag-Clad Bi-2223 Superconductors", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2), pp. 2207-2210 (1997)
140. R. C. Budhani, J. O. Willis, M. Suenaga, M. P. Maley, J. Y. Coulter, H. Safar, and J. L. Ullmann, P. Haldar, "Studies of flux pinning by proton-induced fission tracks in multifilamentary tapes of $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ /Ag superconductors", *Journal of Applied Physics*, 82, (6), pp. 3014-3018 (1997)
141. M. Lelovic, S. Mench, T. Deis, N.G. Eror, U. Balachandran, V. Selvamanickam, P. Haldar, "AC Losses of BSCCO-2223 Superconducting tapes at power frequencies (monofilament vs. multifilament)", *Journal of Materials Research*, 12, pp. 3085-3089 (1997)
142. R.Hershtig, J. Pond, E. K. Moser, P. Haldar, "Cooled Filter/LNA Assembly Enhances Cellular Coverage", *Microwaves & RF*, Vol. 36, (8), pp. 172-178, August (1997)
143. T.R. Thurston, P. Haldar, Y.L Wang, M. Suenaga, N.M. Jisrawi, U. Wildgruber, "In Situ Measurements of Texture and Phase Development in $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ -Ag tapes", *Journal of Materials Research*, 12, (4), pp. 891-905 (1997)
144. M.K. Al-Mosawi, A. Crisan, C. Beduz, D. Phillips, P. Haldar, "Current-voltage characteristics of long BSCCO/Ag multifilamentary tapes at different bending strains", *Physica C: Superconductivity*, Vol. 289, (1-2), pp. 63-69 (1997)
145. A.E. Mahdi, T. Hughes, C. Beduz, Y. Yang, R. Stoll, J. Sykulski, P. Haldar, R.S. Sokolowski, and A. Power, "Thermometric measurements of the self-field losses in silver sheathed PbBi2223 multifilamentary tapes", *IEEE Transactions on Applied Superconductivity* Vol. 7, (2), pp. 1658-1661 (1997)
146. V. Selvamanickam, K. Pfaffenbach, D. Kirchoff, M. Gardner, D. Hazelton, P. Haldar, "Development of Tl-1223 conductors for 77 K HTS Applications", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2), pp. 1953-1956 (1997)
147. M. Cizek, B.A. Glowacki, A.M. Campbell, S.P. Ashworth, W.Y. Liang, P. Haldar, V. Selvamanickam, "Influence of external magnetic field and its orientation on transport AC losses in Bi-2223 and Tl-1223 Silver sheathed tapes", *IEEE Transactions on Applied Superconductivity*, Vol. 7, (2), pp. 314-317 (1997)

148. K.G. Herd, L. Salasoo, E.T. Laskaris, R.A. Ranze, C.G. King, P. Haldar, J.G. Hoehn, "Development and fabrication of a Bi-2223 racetrack coil for generator applications", IEEE Transactions on Applied Superconductivity, Vol. 7, (2), pp. 531-534 (1997)
149. D.W. Hazelton, M.T. Gardner, J.A. Rice, M.S. Walker, C.M. Trautwein, P. Haldar, D. Gubser, M. Superczynski, D. Waltman, "HTS Coils for the Navy's Superconducting Homopolar Motor/Generator", IEEE Transactions on Applied Superconductivity, Vol. 7, (2), pp. 664-667 (1997)
150. Y. Yang, T. Hughes, D.M. Spiller, C. Beduz, M Penny, R G Scurlock, P Haldar and R S Sokolowski, "Measurements of the self-field a.c. losses in PbBi2223 tapes with different core/sheath configurations", Superconductor Science and Technology, 9, pp. 801-805 (1996)
151. M. Suenaga, Y. Fukumoto, H.J. Wiesmann, P. Haldar, "Comparison of magnetically induced and transport current ac losses in silver-sheathed (Bi,Pb)₂Sr₂Ca₂Cu₃O₁₀ tapes", Physica C, Vol. 269, (3), 1, pp. 349-353 (1996)
152. M. Ciszek, S.P. Ashworth, B.A. Glowacki, A.M. Campbell, P. Haldar, "Transport AC losses in multifilamentary Ag/Bi-2223 tapes in low external DC magnetic fields", Physica C, Vol. 272, (3), 1, pp. 319-325 (1996)
153. M. Lelovic, T. A. Deis, and N. G. Eror, U. Balachandran; and P. Haldar, "The Effect of Cooling Rates on Transport Current Properties and Critical Temperature of Ag-Sheathed BSCCO-2223 Superconducting Tapes", Superconductor Science and Technology, 9, pp. 965-970 (1996)
154. U. Balachandran, R. Jammy, M. Chudzik, A. N. Iyer, and P. Haldar, "Advances in Processing and Characterizing Bi-Based Superconductors", Journal of Metals, 48, (10), pp. 19-23 (1996)
155. U. Balachandran, A. N. Iyer, R. Jammy, P. Haldar, and M. Suenaga, "Advances in Fabrication of Mono- and Multifilament Ag-clad BSCCO Superconductors", Advances in Cryogenic Engineering, Vol. 42, pp. 753-760 (1996)
156. A. N. Iyer, J. Y. Huang, R. Jammy, U. Balachandran, P. Haldar, and J. G. Hoehn, Jr., "Fabrication of Superconducting Joints for Ag-Clad BSCCO Conductors", Advances in Cryogenic Engineering, Vol. 42, pp. 769--777 (1996)
157. M. Suenaga, Y. Fukumoto, H.J. Weismann, P. Haldar, "Comparison of magnetically induced and transport current ac losses in silver sheathed (Bi,Pb)₂Sr₂Ca₂Cu₃O₁₀ tapes", Physica C, Vol. 269, (3), pp. 349-353 (1996)
158. V. Selvamanickam, T. Finkle, K. Pfaffenbach, P. Haldar, E. Peterson, K. Salazaar, E. Roth, J.E. Tkaczyk, "Processing of thallium-based superconducting tapes for high current density", Physica C, Vol. 260, No. 3, (10), pp. 313-320 (1996)
159. T. R. Thurston, U. Wildgruber, N. Jisrawi, P. Haldar, M. Suenaga and Y. L. Wang, "Synchrotron x-ray scattering measurements of bulk structural properties in superconducting (Bi,Pb)₂Sr₂Ca₂Cu₃O₁₀-Ag tapes", Journal of Applied Physics, 79, (6) pp. 3122-3132 (1996)
160. Y. Yang, T. Hughes, D.M. Spiller, C. Beduz, M. Penny, R.G. Scurlock, P. Haldar, "Measurements of the self-field AC losses in PbBi2223 tapes with different core/sheath configurations", Superconductor Science and Technology, 9, pp. 801-805 (1996)

161. U. Welp, D. O. Gunter, G. W. Crabtree, W. Zhong, U. Balachandran, P. Haldar, R. S. Sokolowski, V. K. Vlasko-Vlasov, and V. I. Nikitenko, "Imaging of Transport Currents in $(\text{BiPb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ High Temperature Superconducting Composites", *Nature*, 376, pp. 44-46 (1995)
162. J. Y. Huang, A. N. Iyer, R. Jammy, U. Balachandran, P. Haldar, and J. G. Hoehn, "Fabricating Superconducting Joints Between Ag-Clad BSCCO Conductors", *Applied Superconductivity*, Vol. 3, (4), pp. 207-211 (1995)
163. U. Balachandran, A. Iyer, R. Jammy, P. Haldar, J.G. Hoehn, M. Suenaga, "Advances in Fabrication of Mono- and Multifilament Ag-Clad BSCCO Superconductors", *Advances in Cryogenic Engineering*, Vol. 42B, pp. 17-21 (1995)
164. J. Y. Huang, R. Jammy, A. N. Iyer, U. Balachandran, P. Haldar, "Superconducting joints for silver-clad BSCCO tapes", *Journal of Electronic Materials*, 24, (12) pp. 1793-1796 (1995)
165. A. N. Iyer, R. Jammy, U. Balachandran, M. Suenaga, and P. Haldar, "Recent Issues in Fabrication of Ag-Clad BSCCO Superconductors", *Journal of Electronic Materials*, 24, (12), pp. 1873-1876 (1995)
166. M. Suenaga, Y. Fukumoto, P. Haldar, T.R. Thurston, U. Wildgruber, "Effects of axial tensile and bending strains on critical currents of mono- and multicored $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ -Ag tapes", *Applied Physics Letters*, 67, (20), pp. 3025-3027 (1995)
167. Y. Fukumoto, H.J. Wiesmann, M. Garber, M. Suenaga, P. Haldar, "Alternating-current losses in silver-sheathed $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ tapes II: Role of interfilamentary coupling", *Applied Physics Letters*, 61, (21), pp. 3180-3182 (1995)
168. Y. Fukumoto, H.J. Wiesmann, M. Garber, M. Suenaga, P. Haldar, "Alternating current losses in mono- and multicored silver sheathed $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ tapes at $T=27$ K in direct current magnetic fields", *Journal of Applied Physics*, 78, (7), pp. 4584-4590 (1995)
169. Y. Fukumoto, Q. Li, Y. L. Wang, and M. Suenaga, P. Haldar, "Very low level residual resistivity in silver-sheathed $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ tapes", *Applied Physics Letters*, 66, (14), pp. 1827-1829 (1995)
170. Q. Li, H.J. Wiesmann, M. Suenaga, L. Motowidlo, P. Haldar, "Vortex phase diagram and J_c limiting factor in high T_c $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ /Ag superconducting tapes", *Applied Physics Letters*, 66, (5), pp. 637-639 (1995)
171. Qiang Li, H. J. Wiesmann, and M. Suenaga, L. Motowidlo, P. Haldar, "Low-temperature vortex state of the high- T_c superconductor $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ in high magnetic fields", *Phys. Rev. B* 51, pp. 701-704 (1995)
172. R.S. Sokolowski, V. Selvamanickam, D.W. Hazelton, L.R. Motowidlo, M.S. Walker, P. Haldar, "Superconductivity research and applications development at IGC", *Journal of Metals*, 47, (8), pp. 61-64 (1995)
173. S.W. Schwenterly, J.W. Lue, M.S. Lubell, M.S. Walker, D.W. Hazelton, P. Haldar, J.A. Rice, J.G. Hoehn, L.R. Motowidlo, "Performance of pancake coils of parallel co-wound Ag/BSCCO tape conductors in static and ramped magnetic fields", *IEEE Transactions on Applied Superconductivity*, Vol. 5, (2), pp 507-511 (1995).

174. K. Salazar, E. Peterson, T. Holesinger, B. Bingham, Y. Coulter, R. Sebring, J. Voigt, E. Roth, P. Haldar, "Effects of oxygen partial pressure and mechanical deformation on (Tl,Pb)(Ba,Sr)₂Ca₂Cu₃O_y Ag-sheathed tapes", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 1494-1497 (1995)
175. M. Maley, J. Cho, Y. Coulter, J. Willis, L. Bulaevskii, L. Motowidlo, P. Haldar, "Anisotropy of transport properties normal and parallel to the tape plane in Bi-2223/Ag tapes", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 1290-1293 (1995)
176. P. Haldar, J.G. Hoehn, Y. Iwasa, H. Lim, M. Yunus, "Development of Bi-2223 HTS high field coils and magnets", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 512-515 (1995)
177. Qiang Li, H.J. Wiesmann, M. Suenaga, L. Motowidlo, P. Haldar, "Vortex solid-liquid phase transition, J_c limiting factor, and vortex pinning force in superconducting Bi₂Sr₂Ca₂Cu₃O₁₀/Ag tape", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 1713-1716 (1995)
178. S.W. Schwenterly, J. W Lue, M.S. Lubell, M.S. Walker, D.W. Hazelton, P. Haldar, J.A. Rice, J.G. Hoehn, L.R. Motowidlo, "Performance of pancake coils of parallel co-wound Ag/BSCCO tape conductors in static and ramped magnetic fields", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 507-511 (1995)
179. M.P. Maley, J.H. Cho, J.Y. Coulter, J.O. Willis, L.N. Bulaevskii, P. Haldar, L.R. Motowidlo, "Anisotropy of transport properties normal and parallel to the tape plane in Bi-2223/Ag tapes", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 1290-1293 (1995)
180. M. Suenaga, P. Haldar, L. Motowidlo, "In situ critical current measurements of Bi(2223:2212)/Ag composite tapes under tensile strain", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), (1995)
181. E. Peter Roth, J.A. Voigt, E.L. Venturini, P. Haldar, "The effects of Stoichiometry in the (Tl,Pb)₁(Sr,Ba)₂Ca₂Cu₃O_x System on the Transport properties of Ag-clad tapes", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 2025-2028 (1995)
182. A. Goyal, M. Paranthaman, Q. He, F.A. List, E.D. Specht, D.K. Christen, D.M. Kroeger, J. E. Tkaczyk, P. Haldar, "Fabrication, Processing and Properties of Tl-1223 Conductors", IEEE Transactions on Applied Superconductivity, Vol. 5, (2), pp. 1405-1408 (1995)
183. Q. Li, H.J. Wiesmann, M. Suenaga, L. Motowidlo, P. Haldar, "Observation of vortex-glass-to-liquid transition in the high-T_c superconductor BiSrCaCuO", Phys. Rev. B, Rapid Communications, 50, (6), pp. 4256-4259 (1994)
184. J. H. Cho, M.P. Maley, J.O. Willis, J.Y. Coulter, L.N. Bulaevskii, P. Haldar, L. Motowidlo, "Determination of the superconducting current path in Bi-2223/Ag tapes", Applied Physics Letters, 64, (22), pp. 3030-3032 (1994)
185. K. Shibusani, H.J. Wiesmann, R. Sabatini, M. Suenaga, S. Hayashi, R. Ogawa, Y. Kawate, L. Motowidlo, P. Haldar, "Comparative study of J_c-H characteristics for silver-sheathed superconducting Bi(2:2:1:2) and Bi(2:2:2:3) tapes", Applied Physics Letters, 64, (7), pp. 924-926 (1994)
186. U. Balachandran, A. N. Iyer, J. Y. Huang, R. Jammy, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Research Summary: Recent Advances in Bismuth-Based Superconductors", INVITED PAPER: Journal of Metals, 46, pp. 23-25 (1994)

187. N. Iyer, U. Balachandran, L. R. Motowidlo, J. G. Hoehn, Jr., and P. Haldar , “Fabrication and Characteristics of Tapes and Test Magnets Made from Ag-Clad Bi-2223 Superconductors”, INVITED PAPER: Journal of Electronic Materials, 23 (11), pp. 1087-1091 (1994)
188. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, L. R. Motowidlo, and G. Galinski, “Recent Issues in the Fabrication of High-Tc Magnets and Long Length Multifilamentary Conductors”, INVITED PAPER: Applied Superconductivity, Vol. 2, (3), pp. 251-259 (1994)
189. U. Balachandran, A. N. Iyer, J. Y. Huang, R. Jammy, P. Haldar, and J. G. Hoehn, Jr., “Recent Advances in Bismuth-Based Superconductors”, Journal of Metals, 46, (12), pp. 23-25 (1994)
190. P. Haldar, J. G. Hoehn, L. R. Motowidlo, U. Balachandran, and Y. Iwasa, “Fabrication and Characteristics of a Test Magnet from HTS Bi-2223 Silver-Clad Tapes”, Advances in Cryogenic Engineering, Vol. 40A, pp. 313-325 (1994)
191. U. Balachandran, A. N. Iyer, C. A. Youngdahl, L. R. Motowidlo, J. G. Hoehn, Jr. and P. Haldar , “Fabrication, Properties, and Microstructures of High-Tc Tapes and Coils Made from Ag-Clad Bi-2223 Superconductors”, Advances in Cryogenic Engineering, Vol. 40A, pp. 289-308 (1994)
192. K. Shibutani, Q. Li, R. Sabatini, M. Suenaga, L. Motowidlo, P. Haldar, “Limiting factors for critical current densities in BiSrCaCuO-Ag composite superconducting tapes at elevated temperatures”, Applied Physics Letters, 63 (25), pp. 3515-3517 (1993)
193. P. Haldar, J. Hoehn, L. Motowidlo, “Processing and Transport Properties of High-Jc Silver-clad Bi-2223 Tapes and Coils”, Journal of Electronic Materials, 22, (10), pp. 1295--1301 (1993)
194. Y.S. Hascicek, S. Gabor, P.V. Shoaff, H.W. Weijers, S.W. Van Sciver, P. Haldar, J. Hoehn, L. Motowidlo, “Characterization of BSCCO/Ag Tapes and Magnets”, IEEE Transactions on Applied Superconductivity, Vol. 3, (1), pp. 2229-2232 (1993)
195. L. Motowidlo, P. Haldar, J. Hoehn, J. Rice, M. Walker, “Fabrication and transport properties in Bi_{2-x}Pb_xSr₂Ca₂Cu₃O_y monocoire and multicore superconductors”, Applied Superconductivity, 1, (1), pp. 1503-1507 (1993)
196. L. Motowidlo, B. Zeitlin, M. Walker, P. Haldar, J. McCambridge, N. Rizzo, X. Ling, D. Prober, “Multifilamentary NbTi with artificial pinning centers: the effect of alloy, pin material, and geometry on the superconducting properties”, IEEE Transactions on Applied Superconductivity, Vol. 3, (1) pp. 1366-1369 (1993)
197. U. Balachandran, A. N. Iyer, P. Haldar, and L. R. Motowidlo, “The Powder-in-Tube Processing and Properties of Bi-2223”, INVITED PAPER: Journal of Metals, 45, pp. 54-57 (1993)
198. P. Haldar, J. G. Hoehn, Jr., U. Balachandran, and L. R. Motowidlo, “Processing and Transport Properties of High-Jc Silver Clad Bi-2223 Tapes and Coils”, INVITED PAPER: Journal of Electronic Materials, 22, pp. 1295-1301 (1993)
199. P. Haldar, J. G. Hoehn, J. A. Rice, L. R. Motowildlo, U. Balachandran, C. A. Youngdahl, J. E. Tkaczyk, and P. J. Bednarczyk, “Fabrication and Properties of High-Tc Tapes and Coils Made from Silver-Clad Bi-2223 Superconductors”, IEEE Transactions on Applied Superconductivity, Vol. 3, pp. 1127-1130 (1993)

200. C. Rosner, M. Walker, P. Haldar, L. Motowidlo, "Status of HTS superconductors: Progress in improving transport critical current densities in HTS Bi-2223 tapes and coils", *Cryogenics*, 32, (11), pp. 940-948 (1992)
201. P. Haldar, L. Motowidlo, "Processing High Critical Current Density Bi-2223 Wires and Tapes", *Journal of Metals*, 44, (10), pp. 54-58 (1992)
202. P. Haldar, J. Hoehn, J. Rice, M. Walker, L. Motowidlo, "Transport critical current densities of silver clad Bi-Pb-Sr-Ca-Cu-O tapes at liquid helium and hydrogen temperatures", *Applied Physics Letters*, 61, (5), pp. 604-606 (1992)
203. L. Motowidlo, B. Zeitlin, M. Walker, P. Haldar, "Multifilament NbTi with artificial pinning centers: The effect of alloy and pin material on the superconducting properties", *Applied Physics Letters*, 61, (8), pp. 991-993 (1992)
204. P. Haldar, J.G. Hoehn, J.A. Rice, L.R. Motowidlo, "Enhancement in critical current density of Bi-Pb-Sr-Ca-Cu-O tapes by thermomechanical processing: Cold rolling versus uniaxial pressing", *Applied Physics Letters*, 60, (4), pp. 495-497 (1992)
205. L. Motowidlo, E. Gregory, P. Haldar, J. Rice, R. Blaugher, "Critical currents and processing of wound coils of Ag-sheathed Bi-2223 high Tc tape - Microstructural and pinning effects", *Applied Physics Letters*, 59, pp. 736-738 (1991)
206. K. Chen, B. Maheswaran, P. Haldar, R.S. Markiewicz, B.C. Giessen, "Scaling of critical current density in field aligned grains of $(\text{Tl}_{0.75}\text{Bi}_{0.25})_{1.33}\text{Sr}_{1.33}\text{Ca}_{1.33}\text{Cu}_2\text{O}_{6.67}$ the 1212 phase", *Journal of Applied Physics*, 65, (9), pp. 3547-3578 (1989)
207. P. Haldar, K. Chen, B. Maheswaran, A. Roig-Janicki, N.K. Jaggi, R.S. Markiewicz, B.C. Giessen, "Bulk superconductivity at 122 K in $\text{Tl}(\text{Ba,Ca})_2\text{Ca}_3\text{Cu}_4\text{O}_{10.5}$ with four consecutive layers", *Science*, 241, pp. 1198-1200 (1988)
208. P. Haldar, A. Roig-Janicki, S. Sridhar, B.C. Giessen, "A new intermediate Tc oxide superconductor with a double perovskite structure: the 121 phase $(\text{Tl,Bi})_1(\text{Sr,Ca})_2\text{Cu}_1\text{O}_{4.5}$ ", *Materials Letters*, 7, (1,2), pp. 1-4 (1988)
209. M.X. Quan, P. Haldar, B.C. Giessen, "A close packed phase with a seven layer repeat unit prepared by RSP $m\text{-Nb}(\text{Rh}_{0.6}\text{Pd}_{0.4})_3$ ", *Materials Science and Engineering*, 98, pp. 157-160 (1988)
210. P. Haldar, S. Sridhar, A. Roig-Janicki, D.H. Wu, W.L. Kennedy, C. Zahopoulos and B.C. Giessen, "A new high Tc superconductor containing thallium and its crystal structure, the 1212 phase $(\text{Tl}_{1-x}\text{Bi}_x)_{1.33}\text{Sr}_{1.33}\text{Ca}_{1.33}\text{Cu}_2\text{O}_{6.67}$ ", *Journal of Superconductivity*, 1, pp. 211-218 (1988)
211. Y.Z. Lu, P. Haldar, R. Markiewicz, S. Sridhar and B.C. Giessen, "Glassy $\text{Yb}_{0.17}\text{Ba}_{0.33}\text{Cu}_{0.50}$ alloy as a precursor for the high Tc superconductor $\text{Yb}_1\text{Ba}_2\text{Cu}_3\text{O}_x$ ", *Materials Letters*, 5, (10), pp. 380-383 (1987)
212. P. Haldar, Y.Z. Lu, B.C. Giessen, " $\text{Eu}_1\text{Ba}_2\text{Cu}_3\text{O}_x$ produced by oxidation of a rapidly solidified precursor alloy: an alternative preparation method for high Tc ceramic superconductors", *Applied Physics Letters*, 51, (7), pp. 538-539 (1987)

VIII.5. CONFERENCE PRESENTATIONS

1. P. Haldar, “Innovation and Entrepreneurship”, NanoChallenge, PSG Institute of Advanced Studies, Coimbatore, India, January 2018.
2. P.Haldar, “Promoting India-US R&D and commercialization partnerships for Nanotechnology in Energy Applications”, Indo-US Science & Technology Workshop, Coimbatore, India 2018.
3. P.Haldar, “Innovation at Engineering Colleges”, College of Engineering, University of Toledo, Ohio, April 2017.
4. P. Haldar, “Evaluating the Business Opportunity to Win in the Distributed Generation Marketplace in New York State (and the U.S.)”, Stumpf Energy, New York City, June 2017.
5. P. Haldar, “The Model Project for Energy Efficient Building at SUNY Poly CNSE”, Shimizu-CNSE-NEDO Project, Albany, NY, Sept 2016.
6. P. Haldar, “A Case Study in Industry-University-Government NanoTechnology Partnerships: SUNY Poly in New York”, IEEE PELS-IES Delhi Chapter, Indian Institute of Technology, Delhi, India, August, 2016.
7. P. Haldar, “Challenges in Solar PV for Mass Deployment”, 4th PSG-CNSE Seminar on Solar Energy Systems, Innovations and Business Entrepreneurship, Coimbatore, India, August, 2016.
8. P. Haldar, “SPARC: SUNY Poly Advancing Research and Commercialization”, SPARC Entrepreneurship Forum, Albany, New York, May 2016.
9. P. Haldar, “ Opportunities and Challenges in Solar Development”, Solar Installations, Economics, Business Opportunities and New Trends in Solar Energy Systems, PSG Institute of Advanced Studies, Coimbatore, India, August, 2015.
10. P. Haldar, “ Research and Entrepreneurship at CNSE: Overview and Achievements”, PSG NanoChallenge – 2015, Coimbatore, India, August 2015.
11. P. Haldar, “Nanotechnology and the Clean Energy Industry”, Central Glass and Ceramic Research Institute, Kolkata, India, August 2015.
12. P. Haldar, “Nanotechnology and the Clean Energy Industry”, Renewable Energy and Sustainable Environment, Pollachi, India, August 2015.
13. P. Haldar, “Solar PV Manufacturing in New York”, UVANY, Buffalo, New York, May 2015.
14. P. Haldar, “Stationary, Portable, and Specialized Motive Applications”, Fuel Cells and Hydrogen: Regional Policy Planning Workshop, NEESC, Western New England University, Springfield, MA, October 2, 2014.
15. P. Haldar, “Tech Transfer and Innovation: Lab to market for Solar PV”, New Technologies, Business and Entrepreneurship in Solar Energy Systems, PSG Institute of Advanced Studies, Coimbatore, India, August 7, 2014.

16. P. Haldar, “Role of Industry-Academia partnerships in building an Entrepreneurial Solar Industry Ecosystem”, New Technologies, Business and Entrepreneurship in Solar Energy Systems, PSG Institute of Advanced Studies, Coimbatore, India, August 7, 2014.
17. P. Haldar, “Research to Business – sharing of experiences of researchers in nanotechnology” Nanotechnology: Small Science, Big Future, PSG Institute of Advanced Studies, Coimbatore, India, August 8, 2014.
18. P. Haldar, “Understanding the Context of Private School Education in the Capital Region, Benchmarking Enrollment Against Peers”, Academy of the Holy Names, Albany, New York April, 2014.
19. P. Haldar, “iCLEAN Overview & Accomplishments”, iCLEAN Annual Meeting, Albany, New York, November, 2013.
20. P. Haldar, “Innovation and Entrepreneurship in Nanotechnology”, 1st International Seminar Nanotechnology in Conventional and Alternate Energy A Global Status and Pathway, University of Petroleum and Energy Systems, Campus-Dehradun, India, August 12-13, 2013.
21. P. Haldar, “The Crucial Role of Public Private Partnerships (PPPs) for Solar PV Technologies”, Latest Developments in Solar Photovoltaic Technology PSG Institute of Advanced Studies, Coimbatore, India, August 6-7, 2013.
22. P. Haldar, “The Photovoltaic Manufacturing Consortium (PVMC) – Innovative Pathways toward Supply Chain Collaboration”, INAUGURAL KEYNOTE SPEAKER, SolarCon 2013, Bagaluru, India, August 1, 2013.
23. P. Haldar, Supporting PV Innovation and Deployment in the US, PLENARY SPEAKER, Area 11: PV Velocity Forum, 39th IEEE PVSC, Tampa, Florida, June 20, 2013.
24. P. Haldar, “Strategic Partnering with Larger Corporations: Building the Tech EcoSystem”, SmartStart UNYTECH, Albany, NY, May 2013.
25. P. Haldar, “Innovation & Entrepreneurship: Creating the Future”, New York State Business Plan Competition, Albany, New York, April 26, 2013.
26. P. Haldar, “Pioneering Innovation to Drive an Educational and Economic Renaissance in New York State”, National Academy of Sciences: The New York NanoTech Cluster, Albany, New York, April, 2013.
27. P. Haldar, “iCLEAN Overview and Accomplishments”, iCLEAN Annual Meeting, Albany, NY, November, 2012.
28. P. Haldar, “Nanotechnology and the Clean Energy Industry: Opportunities and Challenges”, PLENARY SPEAKER, National Clean Energy Workforce Education Conference, Albany Marriott, NY, November 2012
29. P. Haldar, “The Future of PV Technology and Energy Innovation – CNSE, E2TAC and the U.S. PVMC”, INVITED SPEAKER, Clean Energy States Alliance Workshop, Albany, NY, October 2012

30. P. Haldar, "NanoEnabled Clean Energy Technology Innovations – Solar and Energy Storage Applications", 4th International Conference on Advanced NanoMaterials (ANM 2012), Chennai, India, October, 2012
31. P. Haldar, "Outlook for 2012/2013 from the Nexus of the Supply Chain - Thin Film", SEMI North American PV Fab Managers Forum - Sustaining Business in a Changing Environment, San Francisco, CA, July 2012
32. P. Haldar, "DOE Distinguished Lecture: Solar PV Innovations for the 21st Century", SETP, DOE, Washington, D.C., April, 2012
33. P. Haldar, "Innovations Leading to 21st Century Jobs", Clean Energy and High Tech Career Forum NYSERDA's ST+EP PARK, Malta, New York, March 2012
34. P. Haldar, "Entrepreneurship and Innovation: Creating the Future", Marist College, New York, February 2012
35. P. Haldar, Solar Energy Innovations for the 21st Century: The PV Manufacturing Consortium, NANOVEMBER, CNSE, Albany, NY, November 2011
36. P. Haldar, "PV Manufacturing Consortium – Flexible PhotoVoltaic Manufacturing Challenges, Manufacturing Technology Forum - Nanotechnology and Electronic Materials, CNSE, Albany, NY, November, 2011
37. P. Haldar, "Big Cleantech Resources for Start up Cleantech Ventures", "MIT Enterprise Forum of NYC", New York, NY, November 2011
38. P. Haldar, "Nano-Enabled Energy Systems", Nanotechnology 2011 Conference and Workshops, Javits Convention Center, New York, NY, November 2011
39. P. Haldar, "Energy - Environmental Innovations Leading to 21st Century Jobs", "Industry – Environment Conference – 2011, Business Council of New York, Saratoga Springs, NY, October, 2011.
40. P. Haldar, "New York's Key Areas of Innovation: Impact of CNSE", "From Innovation to Implementation" ACE-NY Fall 2011 Conference, Albany NY, October, 2011
41. P. Haldar, "Innovations Leading to 21st Century Jobs: US Photovoltaic Manufacturing Consortium", SEMI Northeast Forum: Succeeding in Solar, Albany, NY, September 2011
42. P. Haldar, "Energy Innovations Leading to 21st Century Jobs", "The Role of Higher Education In Technology Based Economic Development" Orange County Community College, Newburgh Campus, Newburgh, NY, September 2011
43. P. Haldar, "PhotoVoltaic Manufacturing Consortium (PVMC) – Regaining U.S. Competitiveness in Solar" New York Solar Energy Society Annual Meeting, Saratoga Springs, NY, August 2011.
44. P. Haldar, "Department of Energy PV Manufacturing Initiative – A Path Towards Supply Chain Collaboration in the US" InterSolar, San Francisco, CA, July 2011.

45. P. Haldar, “Economic development opportunities: Working with local and state agencies to ensure successful citing of PV manufacturing – The NEW YORK perspective”, InterSolar, San Francisco, CA, July 2011
46. P. Haldar, “Energy Research at CNSE”, INC7, Albany, NY May 2011
47. P. Haldar, “Accelerating Innovation through Entrepreneurship and Private-Public Partnerships”, Technology Innovation Entrepreneurship in the Hudson Valley, Kingston, NY April 6th, 2011
48. P. Haldar, “CNSE: A New Paradigm for Industry-Government-University Collaboration”, U.S.-Japan Workshop on NanoTechnology, Tsukuba, Japan, February, 2011
49. P. Haldar, A. Nguyen, H. Efstathiadis, “Improving Metallization Lines for Solar Cells with Improved Efficiency and Lower Costs”, 2010 Electronics Packaging Symposium, GEGRC, Niskayuna, NY, (Sept, 2010)
50. P. Haldar, “Incubators for Collaborating & Leveraging Energy And Nanotechnology (iCLEAN)”, New York University, New York City, NY (June, 2010)
51. P. Haldar, “ New York Leadership in High Tech Cluster Development”, NYSE-K2E Leadership Roundtable, New York City, NY (May, 2010)
52. P. Haldar, “New York’s Nanotech Initiative at the National Nanotech Initiative review meeting for the President’s Council of Advisors for Science & Technology”, Washington D.C., (January, 2010).
53. P. Haldar, “Nanotech Applications in Clean Energy Technologies”, INVITED SPEAKER, International Conference on Advances in Mechanical and Building Sciences in the 3rd millennium”, Vellore Institute of Technology University, Vellore, India (December, 2009).
54. P. Haldar, “Nanengineering and E2TAC activities at CNSE”, INVITED SPEAKER, Joint US-Japan Workshop on Advanced Materials Research for NanoTechnology, Albany, NY (December, 2009).
55. P. Haldar, “Innovations in Ultra/Super Capacitors and Hybrid Batteries”, INVITED SPEAKER, Advanced Battery Value Chain Conference, Breakthroughs Technical Briefing, Washington D.C., (Dec 2009)
56. P. Haldar, “Applying Nanotech Innovations to Energy Applications”, KEYNOTE SPEAKER, 2009 Mid-Atlantic MEMS Alliance Symposium, Georgetown University, Washington, D.C.(November 2009)
57. P. Haldar, “Nanotech in Alternate Energy”, SPECIAL PRESENTATION, The Hudson Valley Center For Innovation, The Entrepreneurs' Breakfast Series, Kingston, NY (November, 2009)
58. P. Haldar, “Leveraging New York State’s Intellectual Resources for Producing Clean Energy Technology”, 22nd NREL Industry Growth Forum, Denver, CO (November, 2009)
59. P. Haldar, “Clean Energy Technology Initiatives in New York”, INVITED SPEAKER, New York Independent System Operator, Environmental Advisory Council Meeting, Latham, NY (October, 2009).

60. P. Haldar, “Applying NanoTech Innovations to Research and Education: CNSE”, KEYNOTE SPEAKER, American Society for Metals, Capital Region Annual Meeting, Albany, NY (October, 2009).
61. P. Haldar, “Solar/PV Market Considerations”, Panelist, SEMI New England Committee and PV Group’s Solar/PV Manufacturing Market Outlook, Albany, NY (September, 2009).
62. P. Haldar, “New York’s Energy Assets Creating Green Jobs, New Energy Symposium and Expo, New York Academy of Science, New York, NY (July 2009).
63. P. Haldar, “Powering the Future with Nanotechnology: Impact on Alternative Energy”, Capital Region Educators Program, CNSE, Albany, NY (June 2009)
64. P. Haldar, “ New York’s Nano Initiative”, INVITED SPEAKER, Growing Innovation Clusters for American Prosperity, National Academy of Sciences, Washington D.C., (June 2009)
65. P. Haldar, “Thin Films: The Catalyst for Commercialization and Investment in the Solar Industry”, American Solar Energy Society Conference, Buffalo, NY, (May 2009)
66. P. Haldar, “Applying Nanotechnology to Solar Cells”, 2009 ASM/TMS Annual Symposium Materials Challenges for Alternative Energy, Steinmetz Hall, GE Global Research Center, Niskayuna, NY (May 2009).
67. P. Haldar, “Nanotechnology: Applications to Energy and Storage” ASME workshop on measurement challenges, CNSE, Albany, NY (April 2009).
68. P. Haldar, “Addressing Clean Energy Challenges with Nano Technology”, KEYNOTE SPEAKER, Emerging Information Technology Conference (EITC) — Green Technology and Service 2009 Workshop, Taipei Economic and Cultural Office in New York, New York, NY (March, 2009)
69. P. Haldar, “Power, the future of Nanotechnology Energy”, KEYNOTE SPEAKER, IEEE Schenectady Section – February Luncheon and Meeting, Niskayuna, NY (Feb, 2009)
70. W. Li and P. Haldar, “One dimensional PdFe Nanorods as Electrocatalyst for Proton Exchange Membrane Fuel Cell (PEMFC)” 215th ElectroChemical Society Meeting, San Francisco, CA (May, 2009)
71. P. Haldar, “CNST Nanotechnology Seminar Series: Powering the Future with NanoTechnology”, National Institute of Standards and Technology, Gaithersburg, Maryland (Dec, 2008)
72. P. Haldar, “Leveraging Innovative Services for Commercializing Clean Energy Innovations” 21st NREL Industry Growth Forum, Denver, Colorado (Oct, 2008)
73. P. Haldar, “Forum Presenters Session – for business case presenters only” 21st NREL Industry Growth Forum, Denver, Colorado (Oct, 2008)
74. P. Haldar, “Panel on Large Company-Small Company Collaborations: Overcoming Commitment Issues” with Rich Honen, Mary Ann Capria and Kelly Mooney Lester, Licensing Executives Society, October, Orlando, FL (Oct, 2008)
75. P. Haldar and Edward Cupoli, “Panel on Technology Innovation and Partnerships”, Technology Transfer Society Conference, University at Albany, Albany NY (Oct, 2008)

76. P. Haldar, “Clean Energy Technologies”, Going Green Globally, School of Business, University at Albany, Albany, NY (May, 2008).
77. P. Haldar, “Energy Matters”, Driving Change Workshop at the New York State Department of Transportation, Albany, NY (May, 2008)
78. P. Haldar, “Educating the workforce for the nanotechnology industry at CNSE”, INVITED, American Physical Society March meeting, New Orleans, LA (April, 2008)
79. P. Haldar, “How I became a leader”, Omicron Delta Kappa National Leadership Honor Society Circle, Capital Region Leadership Conference, Albany, NY (Feb, 2008)
80. P. Haldar, “Capital Investment – Financing & Underwriting NanoTechnology”, Nanotechnology Law & Commerce, Business at One-Billionth of a Meter, Chadbourne & Parke LLP, New York, NY (Jan, 2008)
81. P. Haldar, “Energy and NanoTechnology”, INVITED PRESENTATION, International Conference, METALLO-2007, IIT Kanpur, India, (Dec, 2007)
82. P. Haldar, “The Power of NanoTechnology”, INVITED PRESENTATION, IEEE Syracuse Chapter, Onandaga Community College, Syracuse, NY, (Oct, 2007)
83. P. Haldar, “NanoEngineering of Fuel Cell Electrodes”, INVITED PRESENTATION, Nanomaterials Characterization Workshop, CACT Industrial open House, Alfred, NY, (Oct, 2007)
84. P. Haldar, “Energy Efficiency Approaches utilizing NanoTechnology”, The First Annual Eco Show organized by the Eco Radio Network, Albany, NY, (Oct, 2007)
85. P. Haldar, “Panel on Implementation and Commercialization of Energy Technologies”, New Energy Symposium, CNSE, Albany, NY, (Jul, 2007)
86. P. Haldar, “Powering the Future with Nanotechnology”, INVITED PRESENTATION, Albany Roundtable, Albany, NY, (April, 2007)
87. P. Haldar, “New York’s Solar Roadmap”, NYSEIA’s Solar Workshop, Albany, NY, (June, 2007)
88. P. Haldar, “College of Nanoscale Science & Engineering and E2TAC”, IEEE and ASME Schenectady Chapter Meeting, CNSE, Albany, NY, (Mar, 2007)
89. P. Haldar, “Hot Topics in Renewable Development and Finance – Panel Discussion”, INVITED PRESENTATION, Power-Gen Renewable Energy & Fuels, Las Vegas, NV, (Mar, 2007)
90. P. Haldar, “Fuel Cells and the Hydrogen Economy”, INVITED PRESENTATION IEEE Mid-Hudson Workshop on Alternate Energy, New Paltz, NY, (Nov, 2006)
91. P. Haldar, “The National Clean Energy Alliance”, INVITED PRESENTATION, 19th NREL Clean Energy Industry Growth Forum, Philadelphia, PA, (Oct, 2006)
92. P. Haldar, “Leveraging Incubator Resources – How they connect with Financiers”, INVITED PRESENTATION, Finance Issues Workshop and Training, U.S. Department of Energy, Washington D.C., (Sept, 2006)

93. P. Lee, S. Huang, Z. Zhao, H. Efstathiadis, P. Haldar, B. Landi and R. Raffaele, "Fabrication and Characterization of Ordered Nanorod-Organic Solar Cell", New Energy Symposium, CNSE, UAlbany (2006)
94. O. Paschos, M. Di, S. Knupp, B. K. Avasarala, W. Wang, P. Choi and P. Haldar, "Design Of Nanostructured Membrane Electrode Assemblies For Proton Exchange Membrane Fuel Cells", New Energy Symposium, CNSE, UAlbany (2006)
95. T. Yu, H. Efstathiadis, R. Matyi, P. Haldar, S. Ghamaty and N. Elsner, "Large Area Quantum Well Thermoelectric Generator", New Energy Symposium, CNSE, UAlbany (2006)
96. M. Black, N. Tandon, T. Devarajan, S. Higashiya, M. V. Rane-Fondacaro, J. Snyder, J. T. Welch and P. Haldar, "Development of High Efficiency Carbon Electrodes and Non-Aqueous Electrolytes for Ultracapacitor Applications", New Energy Symposium, CNSE, UAlbany (2006)
97. M. Sockin, E. Cupoli and P. Haldar, "Toward a sustainable future with alternative energy: an economic evaluation of nanotechnology's potential impact", Summer Internship Presentations, CNSE, UAlbany, (2006)
98. J. Wells, M. V. Rane-Fondacaro, H. Efstathiadis and P. Haldar, "Barrier Layers for Thin Film Solar Cells", Summer Internship Presentations, CNSE, UAlbany, (2006)
99. M. Black, M. V. Rane-Fondacaro, J. Snyder, and P. Haldar, EDLC electrode ESR minimization through Al anodization optimization, Summer Internship Presentations, CNSE, UAlbany, (2006)
100. P. Haldar, "Educating the workforce for the new nanotechnology industry – the College of Nanoscale Science and Engineering at the University at Albany", International Symposium on Frontiers in Nanoscale Science, Technology and Education, Cochin, India (2006)
101. P. Haldar, "The Business of NanoTechnology", CNSE-LeBoeuf Lamb Program on Nanotechnology, CNSE, Albany, NY (2006)
102. Chakrapani Varanasi, J. Burke, L. Brunke, P. N. Barnes, M. Sumption, I. Maartense, T. Haugan, H. Efstathiadis, P. Haldar, "Flux Pining Enhancement in $YBa_2Cu_3O_{7-x}$ Coated Conductors with $BaSnO_3$ and Y_2BaCuO_5 Nano Particle Additions Introduced Using a Dual Phase PLD Target Method", American Ceramics Society Meeting, Cincinnati, OH (2006)
103. P. Haldar, "Silicon Dynamics and an Insight in to Emerging Solar Technologies", INVITED PRESENTATION at the Solar Conference, First Albany Capital, New York City, NY February 15 (2006)
104. P. Haldar, "What's on Deck for Spinning out Clean Tech out of the Lab (Panel)", INVITED PRESENTATION at the 2nd Annual Clean-Tech Investor Summit, The Lodge at Rancho Mirage Palm Springs, CA February 1-2, (2006)
105. M. Rane, H. Bakhru, R. Moore, E. Stinzianni, K. Dunn, P. Haldar, R. Feenstra, Y. Zhang, and D. Christen, "Investigation of the Role of Intermediate Heat Treatment in Obtaining High J_c Films", Materials Research Society Spring Conference, San Francisco, CA (2006)

106. C. Varanasi, J. Burke, P.N. Barnes, H. Efstathiadis, P. Haldar, "Biaxially Textured Copper –Nickel alloy (Cu 55%, Ni 45%) Substrates for Coated Conductor Applications", Materials Research Society Spring Conference, San Francisco, CA (2006)
107. J.H. Ahn, B.J. Kim, J.G. Kim, H.J. Kim, G.W. Hong, H.G. Lee, J.M. Yoo, P. Haldar, "Effects of Oxidation Conditions on the Microstructure and Texture of NiO in a cube-textured Polycrystalline Nickel Substrate", Presented at the International Symposium on Superconductivity, Tsukuba, Japan (2005)
108. S.Y. Lee, S.A. Song, B.J. Kim, J.A. Park, H.J. Kim, G.W. Hong, H. G. Lee, J.H. Joo, J.M. Yoo, P. Haldar, "Effects of Precursor Composition on Jc Enhancement of YBCO film Prepared by TFA-MOD Method", Presented at the International Symposium on Superconductivity, Tsukuba, Japan (2005)
109. P. Lee, S. Huang, H. Efstathiadis, M. Rane, P. Haldar, B. Landi and R. Raffaele, H.G. Lee, , "Fabrication and Characterization of Ordered Nanorod-Organic Solar Cell", Materials Research Society Fall Conference, Boston, MA (2005)
110. P. Choi, O. Paschos, N. Merchant, R. Pollard, and P. Haldar, "Carbon nanotube-supported platinum electrodes for proton exchange membrane fuel cells", Materials Research Society Fall Conference, Boston, MA (2005)
111. T. Yu, H. Efstathiadis, F. Ramos, P. Haldar, S. Ghamaty and N. Elsner, "Large Area Quantum Well Thermoelectric Generator" Presented at the Fall Materials Research Society Conference, Boston, MA (2005)
112. M. Rane, H. Efstathidis, H. Bakhru, F. Ramos, P. Haldar and M. Paranthaman "Chemical and Microstructural Evaluation of Rare Earth Niobate Buffer Layers for Thick YBCO Films", Presented at the Spring Materials Research Society Conference, San Francisco, CA (2005)
113. H. Ye, H. Efstathiadis, P. Haldar, M. J. Hennessy, O. M. Mueller, and E. K. Mueller, "Packaging Development for Cryogenic Power Electronics", IMAPS Advanced Technology Workshop (ATW) on Reliability of Advanced Electronic Packages and Devices in Extreme Cold Environments, Pasadena, CA February 21- 23, (2005)
114. P. Haldar, "The Energy and Environmental Technology Application Center (E2TAC) a program of Albany NanoTech", INVITED PRESENTATION to the New York Capital Region Association of Energy Engineers, Albany, NY March (2005)
115. B. J. Landi, P. Denno, R. DiLeo, W. VanDerveer, R. Raffaele, H. Efstathiadis and P. Haldar, , "Carbon Nanotubes for Space Photovoltaic Applications", 18th Space Photovoltaics Research and Technology Conference, Cleveland, OH (2005)
116. O. Paschos, P. Choi, H. Efstathiadis and P. Haldar, "Development of Nanoengineered Platinum Array Electrodes for Proton Exchange Membrane Fuel Cells", 208th Meeting of the Electrochemical Society, Los Angeles, CA, October 16 - October 21, (2005)
117. P. Choi, O. Paschos, M. Rane, H. Efstathiadis, N. Merchant, R. Gaylord and P. Haldar , "Preparation, Characterization and Performance Evaluation of Carbon-supported Pt Nanoparticles", Presented at the Materials Research Society Fall Conference, Boston, MA (2004)

118. P. Haldar, H. Ye, H. Efstathiadis, J. Reynolds, M. Hennessy, O. Mueller, E. Mueller, “Improving Performance of Cryogenic Power Electronics”, INVITED PRESENTATION at Applied Superconductivity Conference, Jacksonville, FL, August, (2004)
119. S. Huang, H. Efstathiadis, P. Haldar, H. G. Lee, B. Landi, and R. Raffaele, “Characterization of nanostructured materials in a polymer matrix for organic solar cells”, 2nd International Energy Conversion Engineering Conference, Providence, RI Aug 16-19 (2004)
120. S. Huang, H. Efstathiadis, P. Haldar, H. G. Lee, B. Landi, and R. Raffaele, “Fabrication of Nanorod Arrays for Organic Solar Cell Applications”, Presented at the Materials Research Society Fall Conference, Boston, MA (2004)
121. Manisha V. Rane, M. Hatzistergos, O. Paschos, H. Efstathiadis and P. Haldar, “Microstructure-Property Relationships in Thick PLD YBCO Coated Conductors”, Presented at the Materials Research Society Conference, Boston, MA (2003)
122. M. Hatzistergos, P. Haldar, A. Kaloyeros, H. Efstathiadis, J. Reeves, V. Selvamanickam, L. Allen and R. MacCrimmon, “Effect of Gas Cluster Ion Beam Smoothing on Structure and Properties of Superconducting Films”, Presented at the Fall Materials Research Society Conference, Boston, MA (2003)
123. M. Lelovic, R. Koritala, B. Fisher, U. Balachandran; N. Vo, V. Selvamanickam, and P. Haldar , “High-Critical-Current Bi-2223 Superconducting Tapes”, Presented at Applied Superconductivity Conference, ASC 2000, Virginia Beach, Sept. 17-22, (2000)
124. V. Selvamanickam, G. Carota, N. Vo, C. Trautwein, P. Haldar, U. Balachandran, M. Chudzik; P. Arendt, J. Y. Coulter, and B. Newnam, “YBCO-Coated Conductor Fabrication Using IBAD and MOCVD”, Presented at Applied Superconductivity Conference, ASC 2000, Virginia Beach, Sept. 17-22, (2000)
125. V. Selvamanickam, G. Galinski, C. Trautwein, G. Carota, J. DeFrank, P. Haldar, U. Balachandran, M. Chudzik: Y. Coulter, P. Arendt, B. Newnam, and D. E. Peterson, “YBCO-Coated Conductor Development at IGC”, INVITED PRESENTATION at 6th International Conference, on Materials and Mechanisms of Superconductivity and High-Temperature Superconductors, Houston, Feb. 20-25, (2000)
126. U. Balachandran, M. P. Chudzik, R. A. Erck; C. R. Kannewurf, V. Selvamanicka and P. Haldar, “IBAD/MOCVD-Based YBCO-Coated Conductor Development”, INVITED PRESENTATION at 2000 TMS Annual Meeting, Nashville, March 12-16, (2000)
127. U. Balachandran, M. Lelovic, B. C. Prorok, V. Selvamianickam, and P. Haldar, “Fabrication and Characterization of Ag-Clad Bi-2223 Tapes”, INVITED PRESENTATION at the 101st Annual Meeting of the American Ceramic Society, Indianapolis, April 25-28, (1999)
128. U. Balachandran and M. Lelovic; V. Selvamanickam and P. Haldar, “Fabrication of Ag-Clad Bi-2223 Tapes from Coprecipitated Precursor Powder”, Presented at 1999 TMS Annual Meeting, San Diego, Feb. 28-March 4, (1999)
129. U. Balachandran, B. C. Prorok, M. Lelovic; N. G. Eror, V. Selvamanickam, P. Haldar, and L. M. Fisher, “Recent Advances in Fabrication of Bi-2223 Tapes”, Presented at 1998 Fall Meeting of the Materials Research Society, Boston, Nov. 30-Dec. 4, (1998)

130. U. Balachandran, B. C. Prorok, M. Lelovic, N. G. Eror, V. Selvamanickam, and P. Haldar, “Advances in Fabrication of Ag-Clad Bi-2223 Superconductors”, Presented at 1998 Applied Superconductivity Conference, Palm Desert, Sept. 13-18, (1998)
131. L. M. Fisher, A. V. Kalinov, S. E. Savelev, I. F. Voloshin, P. Haldar, and U. Balachandran, “AC Losses in Bi-2223 Tapes and in the 1-kA Transmission Line Model”, Presented at 1998 Applied Superconductivity Conference, Palm Desert, Sept. 13-18, (1998)
132. U. Balachandran, V. Selvamanickam, P. Haldar, M. Lelovic, and N. G. Eror, “Development of Ag-Clad Bi-2223 Superconductors for Electric Power Applications”, INVITED PRESENTATION at Symposium on Processing and Critical Current of HTS, Wagga Wagga, Australia, Feb. 2-4, (1998)
133. U. Balachandran, P. Haldar, and V. Selvamanickam, “Bi-2223 Conductor Development: ANL/IGC Collaborative R&D”, Presented at 1998 Annual Peer Review for Superconductivity, Washington, DC, July 20-21, (1998)
134. U. Balachandran, M. Lelovic, N. G. Eror, and P. Haldar, “Advances in Processing of Ag-Sheathed $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ ”, Presented at Third Pacific Rim International Conference on Advanced Materials and Processing, Honolulu, July 12-16, (1998)
135. V. Selvamanickam, M.S. Walker, D.W. Hazleton, and P. Haldar, “Progress in HTS Conductor Development for Electric Power Applications”, Presented at 1997 Fall Meeting of MRS, Boston, Dec. 1-5, (1997)
136. M. Sakharova, C. Kusko, D. Budil, L. Sakharov, R.S. Markiewicz, B.C. Giessen, V. Selvamanickam, P. Haldar, “Biaxially aligned rare earth (RE)-substituted Bi-2212 films as substrates for 123 superconductor films”, Presented at 1997 Fall Meeting of Materials Research Society, Boston, Dec. 1-5, (1997)
137. M. Lelovic, T. A. Deis, N. G. Eror, U. Balachandran; and P. Haldar, “AC Magnetic Field Losses of BSCCO-2223 Superconducting Mono and Multifilament Tapes”, Presented at 1997 Fall Meeting of Materials Research Society, Boston, Dec. 1-5, (1997)
138. U. Balachandran, A. N. Iyer, and P. Haldar, “Processing and Fabrication of High-Tc Superconductors for Electric Power Applications”, INVITED PRESENTATION: at the 4th International Union of Materials Research Societies International. Conference in Asia (IUMRS-ICA), Chiba, Japan, Sept. 16-18, (1997)
139. M. Lelovic, S. Mench, T. Deis, and N. G. Eror, U. Balachandran; and P. Haldar, “AC Magnetic Field Losses in BSCCO-2223 Superconducting Tapes”, Presented at Cryogenic Engineering Conference and International Cryogenic Materials Conference (CEC/ICMC), Portland, OR, July 28-Aug. 1, (1997)
140. P. Haldar, V. Selvamanickam, M. S. Walker, D. W. Hazelton, J. G. Hoehn, Jr., and F. Krahula, “Magnet and Applications Development Utilizing Long Lengths of Bi-2223 Superconducting Tapes”, Presented at Cryogenic Engineering Conference and International Cryogenic Materials Conference (CEC/ICMC), Portland, OR, July 28-Aug. 1, (1997)
141. U. Balachandran and A. N. Iyer; M. Lelovic, T. Deis, and N. G. Eror, and P. Haldar, “Recent Advances in Processing of Ag-Clad Bi-2223 Superconductors”, Presented at Cryogenic Engineering Conference and International Cryogenic Materials Conference (CEC/ICMC), Portland, OR, July 28-Aug. 1, (1997)

142. U. Balachandran, M. Lelovic, T. Deis, and N. G. Eror, and P. Haldar, "Effect of Cooling Rates on Transport Properties of Ag-Clad BSCCO Tapes", Presented 99th Annual Meeting of American Ceramic Society, Cincinnati, May 4-7, (1997)
143. U. Balachandran and A. N. Iyer; M. Lelovic, T. Deis, and N. G. Eror, and P. Haldar , "Recent Developments in the Fabrication of High- J_c Ag-Clad $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ Conductors", INVITED PRESENTATION at 1997 TMS Annual Meeting & Exhibition, Orlando, FL, Feb. 9-13, (1997)
144. M. Lelovic, T. A. Deis, B. Prorok, N. G. Eror, U. Balachandran, and P. Haldar , "High Transport J_c Bi-2223 Wire-in-Tube Superconducting Tapes", Presented at 1996 Applied Superconductivity Conference, Pittsburgh, Aug. 25-30, (1996)
145. U. Balachandran, R. Jammy, A. N. Iyer, and M. Chudzik, P. Haldar, "Processing and Characterization of Ag-Clad Bi-2223 Superconductors", Presented at 1996 Applied Superconductivity Conference, Pittsburgh, Aug. 25-30, (1996)
146. U. Balachandran, A. N. Iyer, R. Jammy, and P. Haldar , "Processing and Properties of Ag-Clad BSCCO Superconductors", INVITED PRESENTATION at the 10th Anniversary HTS Workshop on Physics, Materials, and Applications, Houston, Mar. 12-16, (1996)
147. U. Balachandran, A. N. Iyer, and P. Haldar , "Progress in the Development of Long Length High- T_c Superconductors", Presented at 1996 Annual Meeting and Exposition of American Ceramic Society, Indianapolis, April 14-17, (1996)
148. U. Balachandran, A. N. Iyer, R. Jammy, J. Y. Huang, and P. Haldar, "Recent Developments in Fabrication and Properties of Ag-Clad BSCCO Conductors", INVITED PRESENTATION at Annual Meeting of The Metallurgical Society (TMS), Anaheim, CA, Feb. 4-8, (1996)
149. P. Haldar, J. G. Hoehn, Jr., and U. Balachandran, "Development of HTS Conductor and Coils for Electric Power Applications", INVITED PRESENTATION at Annual Meeting of The Metallurgical Society (TMS), Anaheim, CA, Feb. 4-8, (1996)
150. U. Balachandran, A. N. Iyer, and P. Haldar , "Fabrication and Properties of Silver-Sheathed BSCCO Conductors", INVITED PRESENTATION at 8th International Symposium on Superconductivity, Hamamatsu, Japan, Oct. 30-Nov. 2, (1995)
151. R. Jammy, A. N. Iyer, U. Balachandran, and P. Haldar , "Strain Tolerance of Ag-clad BSCCO Monofilament, Multifilament, and Multilayer Composite Tapes", Presented at Fall Meeting of Materials Research Society, Boston, Nov. 27-Dec. 1, (1995)
152. U. Balachandran, A. N. Iyer, R. Jammy, P. Haldar, and M. Suenaga, "Advances in Fabrication and Properties of Ag-Clad BSCCO Superconductors", INVITED PRESENTATION at Japanese Institute of Metals, Fall Annual Meeting, Honolulu, Dec. 13-15, (1995)
153. A. N. Iyer, J. Y. Huang, R. Jammy, U. Balachandran, and P. Haldar, "Fabrication and Characteristics of Superconducting Joints Between Ag-Clad BSCCO Conductors", Abstract of paper presented at 1995 Taiwan International Conference on Superconductivity, Hualien, Taiwan, Aug. 8-11, (1995)
154. A. N. Iyer, R. Jammy, J. Y. Huang, U. Balachandran, P. Haldar, J. G. Hoehn, and M. Suenaga, "Fabrication and Properties of Mono- and Multifilament Ag-Clad BSCCO Conductors", Presented at 1995 Taiwan International Conference on Superconductivity, Hualien, Taiwan, Aug. 8-11, (1995)

155. P. Haldar, J. G. Hoehn, V. Selvamanickam, T. Finkle, U. Balachandran, A. N. Iyer, E. Peterson, and K. Salazaar, "Development of Prototype HTS Components for Electric Power Applications", INVITED PRESENTATION at Cryogenic Engineering Conference and International Cryogenic Materials Conference, Columbus, OH, July 17-21, (1995)
156. U. Balachandran, A. N. Iyer, R. Jammy, J. Y. Huang, P. Haldar, and M. Suenaga, "Advances in Fabrication and Development of Ag-Clad BSCCO Superconductors", Presented at International Workshop on Superconductivity, Maui, HI, June 18-21, (1995)
157. U. Balachandran, A. N. Iyer, R. Jammy, P. Haldar, J. G. Hoehn, Jr., and M. Suenaga, "Advances in the Fabrication of Mono- and Multifilament Ag-Clad BSCCO Superconductors", INVITED PRESENTATION at Cryogenic Engineering Conference and International Cryogenic Materials Conference, Columbus, OH, July 17-21, (1995)
158. A. N. Iyer, J. Y. Huang, R. Jammy, U. Balachandran, P. Haldar, and J. G. Hoehn, Jr. , "Superconducting Joints for Mono- and Multifilament Ag-Clad BSCCO Conductors", Presented at Cryogenic Engineering Conference and International Cryogenic Materials Conference, Columbus, OH, July 17-21, (1995)
159. R. Jammy, A. N. Iyer, J. Y. Huang, U. Balachandran, P. Haldar, and J. G. Hoehn , "Fabrication and Transport Properties of Superconducting Joints in Ag-Clad BSCCO Mono- and Multifilament Tapes", Presented at 97th Annual Meeting of American Ceramic Society, Cincinnati, April 30-May 4, (1995)
160. A. N. Iyer, R. Jammy, J. Y. Huang, U. Balachandran, P. Haldar, J. G. Hoehn, and M. Suenaga, "Strain Tolerance of Ag-Clad BSCCO Mono- and Multifilament Tapes", Presented at 97th Annual Meeting of American Ceramic Society, Cincinnati, April 30-May 4, (1995)
161. Jammy. R., A. N. Iyer, J. Y. Huang, U. Balachandran, P. Haldar, and J. G. Hoehn, "Fabrication of Superconducting Joints in Ag-Clad BSCCO Mono- and Multifilament Tapes", Presented at Spring Meeting of Materials Research Society, San Francisco, April 17-21, (1995)
162. R. Jammy, A. N. Iyer, J. Y. Huang, U. Balachandran, P. Haldar, J. G. Hoehn, Jr., and M. Suenaga, "Axial and Bending Strain Tolerance of Superconducting Ag/BSCCO Mono- and Multifilament Tapes", Presented at Spring Meeting of Materials Research Society, San Francisco, April 17-21, (1995)
163. P. Haldar, J. G. Hoehn, V. Selvamanickam, T. Finkle, U. Balachandran, A. N. Iyer, E. Peterson, and K. Salazaar, "Recent Advances in HTS Component Development for Electric Power Applications", Presented at Spring Meeting of Materials Research Society, San Francisco, April 17-21, (1995)
164. U. Balachandran, A. N. Iyer, J. Y. Huang, R. Jammy, P. Haldar, and J. G. Hoehn, "Advances in Processing and Properties of Ag-Clad BSCCO Superconductors", Presented at 97th Annual Meeting of American Ceramic Society, Cincinnati, April 30-May 4, (1995)
165. P. Haldar, J. G. Hoehn, Jr., V. Selvamanickam, U. Balachandran, A. N. Iyer, E. Peterson, and K. Salazar, "Development of HTS Components for Electric Power Applications", INVITED ABSTRACT presented at TMS Annual Meeting and Exhibition, Las Vegas, NV. Feb. 12-16, (1995)
166. A. N. Iyer, R. Jammy, U. Balachandran, M. Suenaga, and P. Haldar, "Recent Issues in the Fabrication of Ag-Clad BSCCO Superconductors", INVITED ABSTRACT presented at TMS Annual Meeting and Exhibition, Las Vegas, NV. Feb. 12-16, (1995)

167. A. N. Iyer, R. Jammy, U. Balachandran, M. Suenaga, P. Haldar, and L. R. Motowidlo, "Strain Tolerance and Transport Properties of Mono- and Multifilament Ag-Clad BSCCO Superconductors", Presented at 1994 Fall MRS Meeting, Boston, MA, Nov. 28-Dec. 2, (1994)
168. J. Y. Huang, A. N. Iyer, M. T. Lanagan, U. Balachandran, P. Haldar, and L. R. Motowidlo, "Fabricating Superconducting Joints Between Ag-Clad BSCCO", Presented at 1994 Fall MRS Meeting, Boston, MA, Nov. 28-Dec. 2, (1994)
169. U. Balachandran, A. N. Iyer, R. Jammy, P. Haldar, J. G. Hoehn, Jr., and M. Suenaga, "Processing and Properties of Long Lengths of Ag-Clad BSCCO Superconductors and High-Tc Magnets", Presented at 7th International Symposium on Superconductivity, ISS'94, Fukuoka, Japan, Nov. 8-11, (1994)
170. U. Balachandran, A. N. Iyer, P. Haldar, and J. G. Hoehn, Jr., "Processing and Fabrication of BSCCO Conductors and Magnets", INVITED PRESENTATION at the Pacific Coast Regional Meeting of the American Ceramic Society, Los Angeles, CA, Oct. 19-22, (1994)
171. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Progress in the Development of Tapes and Magnets Made from Bi-2223 Superconductors", INVITED PRESENTATION at the 4th World Congress on Superconductivity, Orlando, FL, June 27-July 1, (1994)
172. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Fabrication and Properties of Ag-Clad Bi-2223 Conductors and Magnets", INVITED PRESENTATION at the 1994 International Workshop on Superconductivity, Kyoto, Japan, June 6-9, (1994)
173. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, and L. R. Motowidlo, "Fabrication and Properties of Long-Length Mono- and Multifilament Ag-Clad Bi-2223 Superconductors", INVITED PRESENTATION at the 1994 Spring MRS Meeting, San Francisco, CA, April 4-8, (1994)
174. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Fabrication of Long-Length Bi-2223 Tapes, Coils, and Test Magnets", Presented at 1994 Annual Meeting and Exposition of the American Ceramic Society, Indianapolis, IN, April 24-28, (1994)
175. U. Balachandran, A. N. Iyer, C. A. Youngdahl, L. R. Motowidlo, J. G. Hoehn, Jr. and P. Haldar, "Fabrication and Characteristics of Tapes and Test Magnets Made from Ag-Clad Bi-2223 Superconductors", INVITED PRESENTATION at TMS Annual Meeting, San Francisco, CA, Feb. 27-Mar. 3, (1994)
176. U. Balachandran, A. N. Iyer, J. G. Hu, D. J. Miller, P. Haldar, and L. R. Motowidlo, "Processing and Properties of Ag-Clad Bi-2223 Tapes, Coils, and Test Magnets", INVITED PRESENTATION at the 6th Annual U.S.-Japan Joint HTS Workshop, Houston, TX, Dec. 6-7, (1993)
177. P. Haldar, J. G. Hoehn, Jr., L. R. Motowidlo, and U. Balachandran, "Recent Developments in Fabrication of Bi-2223 Conductors and Magnets", INVITED PRESENTATION at the 6th Annual U.S.-Japan Joint HTS Workshop, Houston, TX, Dec. 6-7, (1993)
178. A. N. Iyer, C. A. Youngdahl, U. Balachandran, L. R. Motowidlo, and P. Haldar, "Fabrication and Properties of Long-Length High-Tc Conductors Made from Ag-Clad Bi-2223 Superconductors", Presented at the Fall Materials Research Society Meeting Boston, MA, Nov. 29-Dec. 3, (1993)

179. P. Haldar, J. G. Hoehn, U. Balachandran, and L. R. Motowidlo, "Superconducting HTS Coils Using Silver Sheathed Bi-2223 Tapes", INVITED PRESENTATION at the TMS Fall Meeting, Pittsburgh, PA, Oct. 17-21, (1993)
180. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, M. Funk, and L. R. Motowidlo, "Powder Synthesis, Fabrication and Transport Properties of Long-Length Ag-Clad Bi-2223 Conductors", INVITED PRESENTATION at 1993 TMS Fall Meeting, Pittsburgh, PA, Oct. 17-21, (1993)
181. P. Haldar, J. G. Hoehn Jr., D. W. Hazelton, L. R. Motowidlo, and U. Balachandran, "Fabrication of Pancake Coils from HTS Bi-2223 Tapes", Presented at the International Cryogenic Materials Conference, Albuquerque, NM, July 12-16, (1993)
182. U. Balachandran, A. N. Iyer, C. A. Youngdahl, P. Haldar, J. G. Hoehn, and L. R. Motowidlo, "Fabrication and Characterization of High-Tc Tapes and Coils Made from Ag-Clad Bi-2223 Superconductors", INVITED PRESENTATION at 3rd IUMRS-International Conference on Advanced Materials, Tokyo, Japan, Aug. 31-Sept. 4, (1993)
183. U. Balachandran, A. N. Iyer, C. A. Youngdahl, L. R. Motowidlo, J. G. Hoehn, Jr., and P. Haldar, "Fabrication, Properties, and Microstructures of High-Tc Tapes and Coils from Ag-Clad Bi-2223 Superconductors", Presented at International Cryogenic Materials Conference, Albuquerque, NM, July 12-16, (1993)
184. U. Balachandran, A. N. Iyer, B. W. Veal, P. J. Kostic, R. B. Poeppel, L. R. Motowidlo, J. G. Hoehn and P. Haldar, "Evolution of High-Tc Phase during Fabrication of Long Lengths of Ag-Clad Pb-BSCCO Superconductors", Presented at Spring Materials Research Society, San Francisco, CA, April 12-16, (1993)
185. U. Balachandran, A. N. Iyer, C. A. Youngdahl, R. B. Poeppel, P. Haldar, J. G. Hoehn Jr., J. A. Rice, and L. R. Motowidlo, "Fabrication and Properties of Bi-2223 Tapes and Coils", Presented at Annual Meeting of American Ceramic Society, Cincinnati, OH, April 18-22, (1993)
186. P. Haldar, J. G. Hoehn, Jr., U. Balachandran, and L. R. Motowidlo, "High-Temperature Superconducting Coils from Silver-Sheathed Bi-2223 Tapes", INVITED PRESENTATION at TMS Fall Meeting, Pittsburgh, PA, Oct. 17-21, (1993)
187. T. L. Francavilla, C. S. Pande, H. A. Hoff, D. U. Gubser, P. Haldar, and U. Balachandran, "Characterization of Long Lengths BSCCO Superconductors Produced by Powder-In-Tube Technique", INVITED PRESENTATION at the 1993 TMS Fall Meeting, Pittsburgh, PA, Oct. 17-21, (1993)
188. U. Balachandran, H. N. Frase, T. Suratwala, R. B. Poeppel, and P. Haldar, "Phase Evolution in the Pb-Doped BSCCO System", INVITED PRESENTATION at 6th Annual Conference on Superconductivity and Applications, Buffalo, NY, Sept. 15-17, (1992)
189. U. Balachandran, T. Suratwala, R. B. Poeppel, L. R. Motowidlo, J. G. Hoehn, and P. Haldar, "Formation of Bi-2223 Phase and Interface Microstructure in Ag-Clad Superconductors", Presented at the Fall Meeting of the Materials Research Society, Boston, MA, Nov. 30-Dec. 4, (1992)
190. P. Haldar, J. G. Hoehn, M. S. Walker, L. R. Motowidlo, U. Balachandran, and C. A. Youngdahl, "Fabrication and Properties of High-Tc Tapes and Coils Made from Silver-Clad Bi-2223 Superconductors", Presented at 1992 Applied Superconductivity Conference, Chicago, IL, Aug. 23-28, (1992)

191. U. Balachandran, C. A. Youngdahl, R. B. Poeppel, P. Haldar, J. G. Hoehn, Jr., J. A. Rice, and L. R. Motowidlo, "Fabrication and Characterization of Long Lengths of Silver-Clad Bi-2223 Tapes", INVITED PRESENTATION at 1992 TMS Fall Meeting, Symposium on High Temperature Superconducting Compounds: Processing and Related Properties, Chicago, IL, Nov. 1-5, (1992)
192. U. Balachandran, S. L. Morissette, M. C. Hash, R. B. Poeppel, L. R. Motowidlo, J. G. Hoehn, and P. Haldar, "Interface Microstructure and Formation of Bi-2223 Phase in Powder-in-Tube Processed Conductors", Presented at 1992 Applied Superconductivity Conference, Chicago, IL, Aug. 23-28, (1992)
193. P. Haldar, J. G. Hoehn, J. A. Rice, L. R. Motowidlo, U. Balachandran, C. A. Youngdahl, and R. B. Poeppel, "Characteristics of Small Superconducting Coils Fabricated from Long Lengths of Silver Clad Bi-2223 Tapes", Presented at International Workshop on Superconductivity, Honolulu, HI, June 23-26, (1992)

VIII.6. CONFERENCE PUBLICATIONS

1. A. Nguyen, M.V. Rane-Fondacaro, H. Efstathiadis, P. Haldar, L. Michaelson, C. Wang, K. Munoz, T. Tyson, A. Gallegos, "Formation of a Low Ohmic Contact Nickel Silicide Layer on Textured Silicon Wafers Using Electroless Nickel Plating", Proceedings of the 25th European Photovoltaic Solar Energy Conference and Exhibition, held in Valencia, Spain (2010).
2. S. Knupp, M. Vukmirovic, P. Haldar and R. Adzic, "Platinum Monolayer Electrocatalysts for O₂ Reduction: Pt Monolayer on Carbon-Supported PdIr Nanoparticles", ECS Conference (2010)
3. A. Nguyen, L. Michaelson, D. Morrissey, M. Rane-Fondacaro, Z. Zhao, H. Efstathiadis, P. Haldar, "Front Metallization for Next Generation Crystalline Silicon Solar Cells", 2009 Fall Meeting of the AVS Hudson Mohawk Chapter, Albany, NY (2009)
4. B. Avasarala, P. Haldar, "Titanium Nitride Based Durable Electrocatalysts for Proton Exchange Membrane Fuel Cells", 2009 Fall Meeting of the AVS Hudson Mohawk Chapter, Albany, NY (2009)
5. S. Knupp, M. Vukmirovic, R. Adzic and P. Haldar, "Platinum Monolayer Electrocatalysts for O₂ Reduction: Pt Monolayer on Carbon-Supported PdIr Nanoparticles", 2009 Fall Meeting of the AVS Hudson Mohawk Chapter, Albany, NY (2009)
6. Z. Zhao, L. Rice, H. Efstathiadis and P. Haldar, "Thickness Dependent Effects of Thermal Annealing and Solvent Vapor Treatment of Poly(3-hexylthiophene) and Fullerene Bulk Heterojunction Photovoltaics", Mater. Res. Soc. Symp. Proc. Vol. 1123, Materials Research Society (2009).
7. B. J. Landi, P. Denno, R. DiLeo, W. VanDerveer, R. Raffaele, H. Efstathiadis and P. Haldar, "Carbon Nanotubes for Space Photovoltaic Applications", Proceedings of the 18th Space Photovoltaics Research and Technology Conference, Cleveland, OH (2005)
8. T. Yu, H. Efstathiadis, R. Matyi, P. Haldar, S. Ghamaty and N. Elsner, Large Area Deposition of Si/SiC Quantum Well Films for Thermoelectric Generator Applications" Proceedings of Fall Materials Research Society Conference, Boston, MA, Vol. 886, pp. F04-08 (2005)
9. S. Huang, H. Efstathiadis, P. Haldar, H.G. Lee, B. Landi, and R. Raffaele, "Fabrication of Nanorod Arrays for Organic Solar Cell Applications", Proceedings of Fall Materials Research Society Conference, Boston, MA, Vol. 836, pp. 2.5.1-5 (2004)
10. S. Huang, H. Efstathiadis, P. Haldar, H.G. Lee, B. Landis, R.P. Raffaele, "Investigation of Nanostructure-Polymer Blend Solar Cells", 2nd International Energy Conversion Engineering Conference, Providence, RI, Aug 16-19, pp. 1-5 (2004)
11. V. Selvamanickam, Y. Li, S. Sathiaraju, Y. Qiao, K. Zdun, L. Hope, J.L. Reeves, K. Lenseth, P. Haldar, "Coated conductor scale-up program at IGC-SuperPower", Space Technology and Applications International Forum (STAIF), Albuquerque, NM, Ed. by Mohamed S. El-Genk. Melville, NY: AIP, 2002. AIP Conference Proceedings, Vol 608, pp. 1163-1167 (2002)
12. V. Selvamanickam, Y. Li, J. Reeves, Y. Qiao, K. Lenseth, G. Carota, K. Zdun, M. Funk, N. Vo, L. Hope, M. Jones, P. Haldar, "YBCO Coated Conductor scale up", Proceedings of the International Symposium on Superconductivity (ISS), Japan (2001)
13. U. Balachandran, B. Ma, M. Li, B. L. Fisher, R. E. Koritala; V. Selvamanickam, G. Carota, M. Funk, N. Vo, and P. Haldar, "YBCO-Coated Conductors: Inclined Substrate Deposition and Metalorganic

Chemical Vapor Deposition”, INVITED PAPER: Proceedings of the 2001 International Workshop on Superconductivity, Honolulu, June 24-27, (2001)

14. U. Balachandran, M. Lelovic, B. C. Prorok, V. Selvaminickam, and P. Haldar, “Fabrication and Characterization of Ag-Clad Bi-2223 Tapes”, INVITED PAPER: Proceedings of the 101st Annual Meeting of the American Ceramic Society, Indianapolis, April 25-28, (1999)
15. U. Balachandran, M. Lelovic, V. Selvamanickam and P. Haldar, “Fabrication of Ag-Clad Bi-2223 Tapes from Coprecipitated precursor powder”, Proceedings of TMS Annual Meeting, San Diego, CA (1999)
16. U. Balachandran, B.C. Prorok, M. Lelovic, N.G. Eror, V. Selvamanickam, P. Haldar, L.M. Fisher, “Recent Advances in Fabrication of Bi-2223 Tapes”, Proceedings of the MRS Fall Meeting, Boston, MA (1998)
17. U. Balachandran and M. Lelovic; N. G. Eror, J. Talvacchio and R. Young, V. Selvamanickam and P. Haldar, “Enhancement of Critical Currents in $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ (Bi-2223) Superconducting Tapes”, Proceedings of the 11th International Symposium on Superconductivity (ISS '98), Fukuoka, Japan,; in Advances in Superconductivity XI, eds. N. Koshizuka and S. Tajima, pp. 947-950. Nov. 16-19, (1998)
18. U. Balachandran, M. Lelovic, N. G. Eror, and P. Haldar, “Advances in Processing of Ag-Sheathed $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_x$ Superconductors”, Proceedings of the Third Pacific Rim International Conference on Advanced Materials and Processing, Honolulu, HI, July 12-16, 1998, eds. M. A. Imam, R. DeNale, S. Hanada, Z. Zhong, and D. N. Lee, pp. 571-578 (1998)
19. P.E. Richens, H. Jones, R.M. Goodall, A.M. Campbell, D. Cardwell, D. Phillips, P. Haldar, “Progress in Iron cored High-Tc Magnet Development for Electromagnetic Actuator Applications” Proceedings of MT-15 Beijing, China (1997)
20. V. Selvamanickam, A. Ivanova, D.B. Fenner, T. Thurston, M.S. Walker, A. Kaloyeros, P. Haldar, “Fabrication of Biaxially-Textured thick film Y-Ba-Cu-O Superconductor by MOCVD on cube-textured metal substrates”, Proceedings of the Spring MRS Meeting, San Francisco, CA (1997)
21. R.C. Niemann, L.R. Turner, M.W. Morgan, P. Haldar, J.G. Hoehn, “High Temperature Superconductor Coil System for a Partial Detector Analyzing Magnet”, Proceedings of the CEC/ICMC '97 Conference, Portland, OR OSTI ID: 555243 (1997)
22. U. Balachandran, L.M. Fisher, A.V. Kalinov, S.E. Savel'ev, I.F. Volloshin, P. Haldar, “The study of losses in Bi-2223/Ag tapes and in the 1 kA AC transmission line model”, Proceedings of the CEC/ICMC '97 Conference, Portland, OR (1997)
23. V. Selvamanickam, A. Ivanova, D. B. Fenner, T. Thurston, M. S. Walker, A. E. Kaloyeros, and P. Haldar, “Fabrication of biaxially-textured thick film Y-Ba-Cu-O Superconductor by MOCVD on cube-textured metal substrates”, Proceedings of the Spring MRS Meeting, San Francisco, CA pp. 165-169 (1997)
24. U. Balachandran, A.N. Iyer, K.C. Goretta, P. Haldar, ”Processing and fabrication of high-Tc superconductors for electric power applications”, Proceedings of the 4th IUMRS ICA, Chiba, Japan, Sept (1997)

25. U. Balachandran, A. N. Iyer, M. Lelovic, T. Deis, N. G. Eror, and P. Haldar, "Recent Developments in the Fabrication of High- J_c Ag-Clad (Bi,Pb) $2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ Conductors", Proceedings of the TMS Annual Meeting, Orlando, FL, Feb. 9-13, 1997, in High-Temperature Superconductors: Synthesis, Processing, and Applications II, eds. U. Balachandran and P. J. McGinn, pp. 11-16 (1997)
26. P. Haldar, J. Hoehn, V. Selvaminickam, R. Farrell, U. Balachandran, A.N. Iyer, E. Peterson, K. Salazar, "Development of Prototype HTS Components for Magnetic Suspension Applications, Proceedings of the 3rd International Symposium on Magnetic Suspension Technology pp. 49-56 (1996)
27. R. Jammy, A. N. Iyer, J. Y. Huang, M. Chudzik, and U. Balachandran; P. Haldar, "Recent Developments in Fabrication and Properties of Ag-Clad BSCCO Conductors", Proceedings of the TMS Annual Meeting, Anaheim, CA, High-Temperature Superconductors: Synthesis, Processing, and Large-Scale Applications, eds. U. Balachandran, P. J. McGinn, and J. S. Abell, pp. 1-4 (1996)
28. R. Jammy, A. N. Iyer, M. Chudzik, and U. Balachandran; and P. Haldar, "Processing and Properties of Ag-Clad BSCCO Superconductors", INVITED PAPER: Proceedings of the 10th Anniversary HTS Workshop on Physics, Materials, and Applications, Houston, March 12-16, 1996, eds. B. Batlogg, C. W. Chu, W. K. Chu, D. U. Gubser, and K. A. Müller, pp. 189-195 (1996)
29. G. W. Crabtree, U. Welp, D. O. Gunter, W. Zhong, U. Balachandran, P. Haldar, R. S. Sokolowski, V. K. Vlasko-Vlasov, and V. I. Nikitenko, "Magneto-optical Imaging of Transport Current Densities in Superconductors", INVITED PAPER: Proceedings of the 8th International Symposium on Superconductivity (ISS '95), Hamamatsu, Japan, Advances in Superconductivity VIII, Vol. 2, pp. 445-452, eds. H. Hayakawa and Y. Enomoto Oct. 30-Nov. 2, (1995)
30. U. Balachandran, A. N. Iyer, R. Jammy, and P. Haldar, "Progress in Fabrication of Long-Length BSCCO Conductors", INVITED PAPER: Proceedings of the 7th U.S.-Japan Workshop on High- T_c Superconductors, Tsukuba, Japan, pp. 76-82, eds. K. Tachikawa, K. Kitazawa, K. Togano, and E. Muromachi, Oct. 24-25, (1995)
31. U. Balachandran, A. N. Iyer, R. Jammy, and P. Haldar, "Fabrication and Properties of Silver-Sheathed BSCCO Superconductors", INVITED PAPER: Proceedings of the 8th International Symposium on Superconductivity (ISS '95), Hamamatsu, Japan, Advances in Superconductivity VIII, Vol. 2, pp. 793-800, eds. H. Hayakawa and Y. Enomoto Oct. 30-Nov. 2, (1995)
32. U. Balachandran, A. N. Iyer, R. Jammy, P. Haldar, J. G. Hoehn, Jr., and M. Suenaga Processing and "Properties of Long-Lengths of Ag-clad BSCCO Superconductors and High- T_c Magnets", Advances in Superconductivity VII, Proceedings of the 7th International Symposium on Superconductivity (ISS '94), Kitakyushu, Japan, Nov. 8-11, (1994), pp. 781-790, eds. K. Yamafuji and T. Movishita (Springer-Verlag, Tokyo, 1995)
33. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Progress in Development of Tapes and Magnets Made from Bi-2223 Superconductors", INVITED PAPER: Proceedings of the 4th World Congress on Superconductivity, Orlando, FL, Vol. II, pp. 639-649, eds. K. Krishen and C. Burnham, June 27-July 1, (1994)
34. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Fabrication and Properties of Ag-Clad Bi-2223 Conductors and Magnets", INVITED PAPER: Proceedings of the 1994 International Workshop on Superconductivity, Kyoto, Japan, June 6-9, OSTI ID:10149661 (1994)

35. R. Sokolowski, P. Haldar, L. Motowidlo, "Progress in Development of High Temperature Superconducting Wire for Electric Power Applications", Proceedings of the 29th IECEC, Monterey, CA, August paper no. 94-4217 (1994)
36. J.W. Ekin, S.L. Bray, C.H. Joshi, A.J. Rodenbush, L. Motowidlo, P. Haldar, "Effect of strain on the critical current of high- T_c Bi superconductors and an epoxy-impregnated Bi superconducting coil", Proceedings of the 7th International Conference on Critical Currents, World Scientific (1994)
37. M. Suenaga, Q. Li, Y. Fukumoto, K. Shibusaki, Y.L Wang, H.J. Wiesmann, P. Haldar, L. Motowidlo, "Some aspects of critical currents in Ag sheathed $\text{Bi}_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_{10}$ composite tapes: A summary", Proceedings of the Topical Conference on the Critical State in Superconductors, Honolulu, HI, 24-26 Oct. (1994)
38. R. Hawsey, R. Sokolowski, P. Haldar, L. Motowidlo, "Development of practical high temperature superconducting wire for electric power applications", Proceedings of the 4th World Congress on Superconductivity, Orlando, FL, Vol. II, eds. K. Krishen and C. Burnham, June 27-July 1, OSTI ID: 10178258 (1994)
39. D. J. Miller, J. G. Hu, P. Kostic, U. Balachandran, and P. Haldar, "The Effect of Processing on the Microstructure of Ag-Sheathed Bi-2223 Wires" Proceedings of the TMS Fall Meeting Materials Week '93, Pittsburgh, PA, ed. by U. Balachandran, E.W. Collings and A. Goyal, October, pp. 299-268 (1993)
40. Y.S. Hascicek, S.W. Van Sciver, L. Motowidlo, D. Hazelton, P. Haldar, "Microstructure-Property Relationships in BSCCO/Ag Tapes for Application in High Field Magnets", Proceedings of the TMS Fall Meeting Materials Week '93, Pittsburgh, PA, ed. by U. Balachandran, E.W. Collings and A. Goyal, October (1993)
41. L.R. Motowidlo, D. W. Hazelton, G. Galinski, J.G. Hoehn, J.A. Rice, M. Staub, P. Haldar, "Recent developments for HTS conductors", Proceedings of the American Power Conference, Chicago, IL, April (1993)
42. L. Motowidlo, G. Galinski, J. Hoehn, P. Haldar, "Mechanical and Electrical Properties of BSSCO Multifilament Tape Conductors", Proceedings of the MRS Spring Meeting, San Francisco, CA, April (1993)
43. D. J. Miller, J. G. Hu, P. Kostic, U. Balachandran, and P. Haldar, "The Effect of Processing on the Microstructure of Ag-Sheathed Bi-2223 Wires", Proceedings of the TMS Materials Week '93, Pittsburgh, PA, ed. U. Balachandran, E.W. Collins and A. Goyal, pp. 299-309, Oct. 17-21 (1993)
44. U. Balachandran, A. N. Iyer, P. Haldar, and L. R. Motowidlo, "Processing and Properties of Ag-Clad Bi-2223 Tapes", INVITED PAPER: Proceedings of the 6th Annual U.S.-Japan Joint Workshop on Superconductivity, Houston, TX, Dec. 6-7, pp. 163-177 (1993)
45. U. Balachandran, A. N. Iyer, P. Haldar, J. G. Hoehn, Jr., and L. R. Motowidlo, "Recent Developments in Fabrication of Bi-2223 Conductors and Magnets", INVITED PAPER: Proceedings of the 6th Annual U.S.-Japan Joint Workshop on Superconductivity, Houston, TX, pp. 133-138, Dec. 6-7, (1993)
46. P. Haldar, J. G. Hoehn, Jr., L. R. Motowidlo, U. Balachandran, Y. Iwasa, and M. Yunus, "Recent Developments in Processing HTS Silver-Clad Bi-2223 Tapes, Coils, and Test Magnets", INVITED PAPER: Proceedings of the 6th International Symposium on Superconductivity (ISS '93), Hiroshima, Japan, Vol. 2, Advances in Superconductivity VI, pp. 605-612, eds. T. Fujita and Y. Shiohara, Oct. 25-29, (1993)

47. P. Haldar, J. G. Hoehn, Jr., L. R. Motowidlo, and U. Balachandran, "High-Temperature Superconducting Magnets and Coils from Silver Sheathed Bi-2223 Tapes", INVITED PAPER: Proceedings of the TMS Materials Week '93, Pittsburgh, PA, ed. U. Balachandran, E.W. Collins and A. Goyal, pp. 23-30, Oct. 17-21 (1993)
48. A. N. Iyer, U. Balachandran, P. Haldar, J. G. Hoehn, and L. R. Motowidlo, "Powder Synthesis, Fabrication, and Transport Properties of Long-Length Ag-Clad Bi-2223 Conductors", Proceedings of the TMS Materials Week '93, Pittsburgh, PA, ed. U. Balachandran, E.W. Collins and A. Goyal, pp. 13-32, Oct. 17-21 (1993)
49. U. Balachandran, C. A. Youngdahl, P. Haldar, and L. R. Motowidlo, "Development of Commercially Viable High-T_c Bi-2223 Superconductor Tapes", INVITED PAPER: Proceedings of SC GLOBAL 93-Intl. Superconductor Applications Convention, San Jose, CA, Feb. 1-3, pp. 10951-10953 (1993)
50. P. Haldar, J.G. Hoehn, U. Balachandran, L.R. Motowidlo, "Processing and transport properties of high J_c silver clad Bi-2223 tapes and coils", Proceedings of the Annual Meeting of The Metallurgical Society, Denver, CO, 21-25 Feb, OSTI ID: 10145835 (1993)
51. U. Balachandran, A. N. Iyer, C. A. Youngdahl, L. R. Motowidlo, J. G. Hoehn, Jr. and P. Haldar, "Fabrication and Characterization of High-T_c Tapes and Coils Made from Ag-Clad Bi-2223 Superconductors", INVITED PAPER: Proceedings Advanced Materials '93, Tokyo, Japan, VI/A: Superconductors, Surfaces and Superlattices, Transactions of the Materials Research Society Japan, Vol. 19A, pp. 385-391 (1993)
52. S.W. Van Sciver, Y.S. Hascicek, D.W. Markiewicz, L. Motowidlo, D. Hazelton, P. Haldar, "Strain dependence of Bi-2223 tape conductors for application in high field magnets", Proceedings of the 5th US-Japan Workshop on high-T_c superconductors, Tsukuba, Japan, p.115-118 ed. by K. Tachikawa, Nov (1992)
53. P. Haldar, L. Motowidlo, J. Hoehn, J. Rice, M. Walker, "Evolution, Growth and Transport Properties of the Bi-2223 Phase in Silver-clad tapes", Extended Abstracts of the International ISTE/MRS Workshop of Superconductivity, Honolulu, HI, June (1992)
54. D. B. Knorr, B. Chan, D. J. Wilkins, P. Haldar and J. C. Hoehn, Jr., L. R. Motowidlo, "Texture analysis of BSCCO tapes made by the powder-in-tube method", AIP Conference Proceedings, Vol. 251, (1), pp. 337-344 (1992)
55. R. D. Blaugher, D. W. Hazelton, P. Haldar, J. A. Rice, J. G. Hoehn, Jr, and M. S. Walker, "Platelet connection across domain boundaries and transport current in melt processed polycrystalline Y₁Ba₂Cu₃O_{7-x}", AIP Conference Proceedings, Vol. 251, (1), pp. 388-401 (1992)
56. P. Haldar, J.G. Hoehn, J.A. Rice, "Characteristics of small superconducting coils fabricated from long lengths of silver-clad Bi-2223 Tapes", Extended Abstracts of the International ISTE/MRS Workshop of Superconductivity, Honolulu, HI, June (1992)
57. F. Chen, R. Hidalgo, S. Q. Wang, X. Y. Zhang, R. S. Markiewicz, and B. C. Giessen, L. R. Motowidlo, J. A. Rice and P. Haldar, "Cold-worked, annealed alignment of Ag CLAD BI-2212 tapes", AIP Conference Proceedings, Vol. 219, (1), pp. 575-581 (1991)

58. M.X. Quan, P. Haldar, B.C. Giessen, "A metastable long period close-packed phase of the PuGa₃ type", Rapidly Solidified Alloys MRS Symposium Proceedings, Vol. 80 edited by M. Tenhover, L. Tanner and W. Johnson, MRS Pittsburgh, PA, pp. 293-297 (1987)
59. B.C. Giessen, M.X. Quan, P. Haldar, J. Werth, "Metastable extensions of intermediate phases in some aluminum-rare earth metal systems", Rapidly Solidified Alloys and their Mechanical and Magnetic Properties, MRS Symposium Proceedings, Vol. 58, edited by B.C. Giessen, D.E. Polk and A.I Taub, MRS Pittsburgh, PA, pp.299-304 (1986)