DR. RADENKA MARIC

President
Board of Trustees Distinguished Professor
University of Connecticut

president@uconn.edu
860-486-1450

Gulley Hall
352 Mansfield Road, Unit 1048
Storrs, CT 06269-1048

EDUCATION

1996 Doctor of Engineering in Metal Science, & Technology, Research Division of the Postgraduate School, Kyoto University, Japan

1993 Certificate, International Course for Graduate Research Students (M.S. equivalent), Materials Science and Energy, Graduate School of Engineering, Kyoto University, Japan

1989 B.S. Materials Science, University of Belgrade, Faculty of Technology & Metallurgy, Serbia

ACADEMIC LEADERSHIP APPOINTMENTS

9/22-present **17th President of the University of Connecticut**

02/22-09/22 Interim President, University of Connecticut

07/17-02/22 Vice President for Research, Innovation and Entrepreneurship, University of Connecticut Storrs, Regional, and UConn Health Campuses

05/15-09/17 Executive Director of the Technology Park and Innovation Partnership Building, University of Connecticut

GOVERNMENT AND INDUSTRY LEADERSHIP APPOINTMENTS

10/15-02/2019 Chief Technology Officer, Health eSense

12/04-08/10 Program Manager, National Research Council, Vancouver, Canada

12/05-12/06 Director of Science & Technology, National Research Council, Vancouver

02/01-02/05 Manager, nGimat, Atlanta, Georgia

05/96-02/01 Manager, Toyota Motors, Nagoya, Japan

FACULTY APPOINTMENTS

4/2021 - Present Board of Trustees Distinguished Professor, University of Connecticut

08/10-Present Chair Professor of Sustainable Energy, Departments of Materials Science & Engineering and Chemical & BiomolecuTelar Engineering, University of Connecticut

2016-2017 Fulbright Chair Professor, Politecnico di Milano, Italy

11/2012 Visiting Professor, Tokyo University of Science, Japan
(Japan Society for the Promotion of Science, JSPS, short-term Fellowship)

RESEARCH SCIENTIST APPOINTMENTS

04/95-08/96 Research Scientist, New Energy Development Organization, Tokyo, Japan

05/96-02/08 Research Scientist, Japan Fine Ceramics Center, Nagoya, Japan

12/89-10/91 Junior Scientist, Serbian Academy of Science and Art, Belgrade, Serbia

LEADERSHIP CERTIFICATIONS

2007-2009 Certification, Leadership, Leadership in Public Institutions, Canada & USA
2008 Certification, Executive Coach, North Carolina Center for Leadership Development, USA
2007 Certification, Executive Coach, Lean International-Lean Manufacturing, Japan & USA

AWARDS AND HONORS

Professional

- Fellow, Electrochemical Society, 2025
- Member, Oracle Research Strategy Council, 2020
- Fellow, International Association of Advanced Materials (FIAAM, Sweden), 2020
- Fellow, National Academy of Inventors (NAI), 2019
- Fellow, American Association for the Advancement of Science (AAAS) 2019
- Fulbright Chair Professor 2016-2017, Politecnico di Milano, Italy, 2017
- Honorary Member, National Academy of Inventors, 2017
- Elected Member, Connecticut Academy of Science and Engineering (CASE), 2012
- Fellow, Japan Organization for Promotion of Science, 2012
- Leadership Award, National Research Council of Canada, 2006, 2007 and 2008
- Selected to the National Academy of Engineering 9th Annual Frontiers of Engineering Symposium (September 2003 Irvine, CA) that brings together leading young engineers nominated by fellow engineers

Research and Innovation

- Board of Trustees Distinguished Professor, University of Connecticut, 2021
- Winner in Research Category, Women of Innovation, Connecticut Technology Council, 2015
- Finalist in Research Category, Women of Innovation, CT Technology Council, 2013, 2014
- Connecticut Quality Improvement Award, Platinum CQIA, Innovation Prize, 2014
- 2020 Women in Business Award, Hartford Business Journal
- Innovation Award, National Research Council of Canada, 2009
- Visiting Professor, Tokyo University of Science, Fall 2012
- The Best Young Woman Scientist Award, Japan 1996
- Outstanding Young Scientist, Sankai Shinbun Award, Japan1995
- Best Faculty Paper Award, Kyoto University, Japan, 1994

Professional and Community Service

- Immigrant Heritage Hall of Fame, 2022
- UConn Women and Philanthropy Leadership Council, 2021
- Appointed by CT Governor Lamont to be a member of the Board of Directors of Connecticut Innovations, 2020
- Appointed by CT Governor Lamont to the Eli Whitney Investment Committee, 2020

RESEARCH FIELDS

- Study of the chemical and physical processes underlying the synthesis of nanomaterials, alloys, oxide materials, and structures
- Study of the relationship of the physics and chemistry of growth to the attainment of novel materials and structures
- Developed novel processing for advancements in batteries, fuel cells, hydrogen storage and medical sensor manufacturing
- Study of alloys and oxide materials for catalysts and energy storage

SUMMARY OF PUBLISHED WORK AND PATENTS

Over 320 articles in refereed journals and conference proceedings (English and Japanese); two books published; 21 book chapters or invited review articles in major journals; 6 patents issued and 11 published patent disclosures.

EXPERIENCE AND ACHIEVEMENTS

PRESIDENT, UNIVERSITY OF CONNECTICUT
(09/22-present, 02/22-09/22 interim)

Lead all divisions of a public research university, including a health center with medical and dental schools, university-owned and operated hospital, law school, and multiple other schools and colleges. A Land, Sea, and Space Grant institution, UConn is Connecticut's flagship grant university and operates across four regional campuses in addition to its main campus in Storrs, UConn Health in Farmington, and the School of Law in Hartford. UConn's 14 schools and colleges collectively offer over 100 degree programs to more than 34,000 students, of whom over 9,000 are first generation college students and over 7,000 are graduate students. The University's operating budget is $4.2 billion, and UConn's research expenditures reached a record high of $480.6 million in FY 2025. The University of Connecticut is ranked #32 in the nation among public universities by *U.S. News and World Report*, 2026, and is ranked 8th in the world for sustainability by UI GreenMetric, an international scoring system that evaluates over 1,700 educational institutions worldwide.

Responsibilities:

- Engage all stakeholders to sharpen and refine a shared vision for the University of Connecticut and UConn Health, which will inspire the campus community, alumni, industry partners, healthcare systems, patients, and other key stakeholders to contribute sustainable intellectual and financial resources to ensure a successful future for the institution.
- Work collaboratively with business leaders, state agencies and municipalities, and other partners to advance economic development initiatives.
- Embrace the academic, research, and economic development missions of UConn while modeling the University's core values to internal and external stakeholders.
- Communicate the distinctiveness, uniqueness, and relevance of UConn's academic programs to a broad audience.
- Have overall financial, strategic, and operational responsibility for the University.

- Manage an effective senior leadership team.
- Sustain and enhance platforms and strategies to attract the best and brightest students, faculty, and staff while supporting their retention and graduation and developing effective programs for their life long success.
- Promote a culture of community, civility, and respect that supports all members of UConn Nation. Advance inclusion, social mobility, and sense of belonging; celebrate differences while proactively addressing potential conflicts.
- Engender the trust of all through collaboration, transparency, and shared values.
- Prioritize students first, define and advance student success holistically, encompassing academic success, mental health, physical wellbeing, personal resilience, and preparedness for careers and for life after college.
- Be the external face and champion of UConn to regional, national, and global communities.

***Key Achievements**:*

Impact on Connecticut

- Under my leadership, UConn was selected by the National Science Foundation for its NSF Regional Innovation Engines grant program in support of advancing quantum technologies after a three-year process and 700 letters of intent submitted to the NSF. This is a great milestone in UConn's history, as QuantumCT has the potential to receive $160 million from the NSF over the next decade, bringing industry, academia, and the state together to work on the effort. University-sponsored research can drive economic growth and deliver medical innovation and technologies for national security. Our research enterprise is oriented toward advancing the U.S. national interest and innovation. High academic standards, research opportunities, innovation, and community engagement are essential because rigor, learning, and hands-on experience go hand-in-hand, equipping students with the skills and knowledge they need to succeed in life and contribute to our country and community.
- Led the acquisition of Waterbury Hospital by UConn Health. By shifting ownership of the hospital from insolvent private ownership to the UConn Health system, the acquisition stabilizes an indispensible healthcare resource for the Waterbury region and expands healthcare access in the State. Importantly, the hospital adds additional beds and a Level II trauma center to the UConn Health Community Network, which strengthens community-based care by connecting it to the capabilities of UConn's academic medical center. The hospital acquisition advances the research and innovation mission of the University and supports the development of UConn's Waterbury campus as a center for career education and innovation in healthcare.
- Oversaw the transition of the Albert J. Solnit Children's Center – South Campus in Middletown, Connecticut, from the State of Connecticut Department of Childran and Families management to UConn Health. The facility provides services for severe mental illness, behavioral and emotional problems for children 13 to 17 years old. UConn Health's extensive clinical expertise, academic resources, and patient-centered approach will help ensure that adolescents needing in-patient psychiatric services are treated by high-caliber medical professionals.
- Oversaw $8.7 billion record impact of UConn on Connecticut's economy. UConn's operation contributes $5.53 billion to the State of Connecticut's Gross State Product and directly and indirectly supports over 49,000 jobs.
- 77% of UConn graduates take jobs in Connecticut, and 9 out of 10 graduates are employed full time, in graduate school, or in military service six months after graduation.

- Led the establishment of the UConn Honors College, securing additional resources for and elevating the status of UConn's nationally-recognized Honors Program, which was launched in 1964 to meet the needs of exceptional students. The change reflects UConn's ongoing commitment to academic excellence, student success, and life-changing student experiences. The college will offer expanded course offerings and enrichment programs and will support additional faculty involvement in honors education.
- Oversaw opening of new 650 bed residence hall and state-of-the art dining facility at Storrs campus.
- Secured $80 million commitment from a single donor and the state of Connecticut to build a new state-of-the-art nursing building as well as to expand nursing programs and enrollment.
- Balanced the FY23, FY24, and FY25 budget for both UConn and UConn Health and secured $625 million in capital funds to support a new science building and renovate and expand critical academic, research, residential, and athletic facilities.
- Achieved record high in annual research expenditures of $480.6 million. UConn is on track to exceed $550 million in expenditures in FY 2026.
- Achieved record high in annual philanthropic giving over $900 million of capital campaign of $1.5 billion.
- The number of first-generation college students has grown significantly, jumping from 7,000 in 2022 to nearly 9,000 in 2025.
- Achieved record high in annual clinical revenue at UConn Health at over $1 billion.
- Secured $625 million in new funding for campus infrastructure
- Balanced the university budget despite a $70 million cut from the state
- Secured $45 million for faculty hires in innovation and entrepreneurship in addition to $20 million secured for eminent faculty hires. These faculty will significantly advance our capabilities in areas of strategic importance and raise our national and international reputation.
- For the second consecutive year, UConn kept tuition rates steady, reflecting our commitment to making a university education accessible and affordable for all.
- S&P and Moody's have reaffirmed the University's strong credit ratings of A+/Aa3 on our Special Obligation - Student Fee Revenue Bonds, maintaining our stable outlook. While we did not receive an upgrade this cycle, this reaffirmation is a meaningful achievement given the challenges currently facing the national higher education sector overall. The agencies' continued confidence in our financial strength and strategic direction reflects stability, discipline, and strong leadership across the institution.
- Implemented a 10-year strategic plan—an initiative that was stalled for 4 years prior to my becoming president. Under my leadership and within the first year of my presidency, the University developed a comprehensive strategic plan shaped by broad-based community input, including input from more than 8,000 students.
- Implemented a strategic enrollment plan.
- Achieved record growth in applications for admission.
- Shepherded the university through a period of volatile research funding at the federal leve and continued to keep research programs supported despite funding cancellations.
- Despite not being in a Power 4 conference, UConn earned three national championships in basketball and two bowl appearances in football during my term as President. Achieved this without increasing the institutional subsidy to athletics.

Visibility

- Largest number of applications for the entering 2025 freshman class, ~64,000 for 6000 slots.
- Back-to-back men's NCAA basketball championships 2023, 2024. Women's NCAA basketball championship 2025.
- #9, Best Public University, Wall Street Journal, 2024.
- Worked with University Communications to strengthen UConn's brand identity as a world-class educational, research, and entrepreneurship institution by creating more videos, electronic books, and documentaries about innovations at UConn that have changed Connecticut and the world.
- With the office of global affairs, attended U21 in England, and at UConn, hosted Theresia Bauer, Baden-Württemberg Minister for Science, Research and Arts; hosted human rights summit, national energy conference and many other events emphasizing the UConn brand and priorities.
- As an ambassador for UConn and Connecticut, attended UConn athletics games and special events, including ringing the opening bell at the NY Stock exchange and visiting the White House with the UConn men's basketball team to meet with President Biden.

Executive Leadership and University Management

- At UConn Health, together with the CEO of UConn Health and team, achieved significant increase in net revenue by strategic hiring and expansion. The net patient revenue in FY22 was $743 million. Due to clinical growth through FY25, net patient revenue for FY26 is budgeted to be over $1.1 billion.
- Initiated and completed strategic planning, *Envisioning 2034, 2024-2034 Strategic Plan*. Over 8000 students and over 2000 faculty and staff participated. The strategic plan has five priorities: student success, as measured by a graduation rate of over 90% in 5 years; carbon neutral campus by 2030 and carbon zero by 2040; double research in five years; double fundraising in five years; and human rights education with global experience.
- Hired a new team of executives: • Provost (the first female provost in UConn history) • Chief Financial Officer for UConn and UConn Health, • Chief Executive Officer for UConn Health • Vice President for Student Life and Success • Vice President for Research, Innovation and Entrepreneurship • Chief Executive Officer and President of the UConn Foundation • Executive Director for Strategic Planning. Appointed a director and dean of the Stamford campus, appointed a director and dean of the Waterbury campus, appointed a head of the track and field program for men and women.
- Created greater organizational efficiency in leadership with one CFO for all campuses, one Vice President for Human Resources for all campuses, and combined University Facilities and Campus Planning and Development.
- Prioritized and strengthened a culture of belonging, social mobility, and diversity of people and perspectives through events and personal engagement with groups across campus and alumni.
- Refocused the Provost's Office mission to foster faculty excellence, holistic student success, and institutional innovation.
- Created the Vice Provost for Life Sciences position in order to better integrate and leverage work between the School of Medicine and School of Dental Medicine at UConn Health in Farmington and schools and colleges located at the main campus.

- Prioritized student well-being, safety, and freedom of expression in managing protests by members of the student body and campus community around conflicts in the Middle East.

Partnerships for Connecticut

- Appointed by Governor Lamont to serve on the Connecticut Innovations Board of Directors and Investment Committee.
- Worked with Governor Lamont and the leadership of Yale University to establish QuantumCT, a major economic development effort around quantum technologies supported by a National Science Foundation Regional Innovation Engine Development Award.
- Worked with the Governor to build international economic development partnerships.
    - Visited India with Governor Lamont and a Connecticut delegation to advance innovation partnerships, February 2025.
    - Attended Paris Air Show with Governor Lamont to facilitate partnerships with Connecticut industries in defense, advanced manufacturing, and research, June 2023.
    - Visited Israel with Governor Lamont to attract world-renowned companies in clean energy and food engineering to Connecticut, February 2022.
- Organized and attended events sponsored by leading healthcare, nonprofit, academic, and corporate organizations in the state and nationwide to promote investment in and collaboration with UConn and UConn Health.
- Worked with the State of Connecticut to realize transformative infrastructure investments at the UConn Storrs campus, including:
    - Oversaw completion and opening of Science 1 in 2023, one of the nation's most innovative facilities for interactive teaching, education, and materials science research.
    - To address demand for on-campus housing, oversaw construction of Connecticut Hall, a residential facility having 657 beds and a dining hall with 500 seats.
    - Secured $625 million in capital funding from the state to support expansion and renovation of science, research, residential, and athletics facilities.
- Worked with the State of Connecticut to expand capabilities at the regional campuses to expand community access to educational programs and stimulate economic development in high-need areas. Efforts include:
    - Improvement and expansion of housing and academic programs at the Stamford campus, including financial management and computer science,
    - Improvement and expansion of academic programs at the Waterbury campus, including allied health.
    - Planned development of housing infrastructure and support services at the Avery Point campus and expansion of academic programs, including psychology and engineering.
    - New residential dorm at Hartford campus to be opened in Fall 2026 and expansion of social work degree with a new fully online degree program.

Philanthropy

- Launched **Because of UConn** campaign in April 2025 with a goal of reaching $1.5 billion by 2030. Appointed new CEO of the UConn Foundation, who is directing the campaign.
- Secured an $80 million gift, the largest gift in the history of UConn: $50M donor, $30 million State of Connecticut. The gift is targeted to increase the number of nursing students, the accessibility of nursing education, and nursing research.

- Achieved consecutive record yearly highs in fundraising for the UConn Foundation: $120 million in FY 2022 and $158 million in FY2023. Increased endoment to a record $668 million in 2025.
- Attended and organized many engagement events with alumni and donors in conjunction with UConn athletic events, including the Big East and NCAA men's and women's basketball tournaments.
- Met with many donors to focus on understanding their priorities and how their priorities align with UConn and state priorities. Significantly increased touch points with existing donor base and expanded engagement with new and high impact donors.

Holistic Student Success and Wellness

- Increased university-supported need- and merit-based financial aid for students from $163.8 million in FY2022 to an estimated $210.7 million in FY2025.
- Increased funding for student mental health by 56% from $16 million in 2022 to $25 million in 2025. Increased availability of mental health services at all four regional campuses.
- Increased social and academic supports for first-generation students through a summer bridge program to socialize them to campus life and introduce them to support mechanisms.
- Attended organized student leadership development meetings and events.
- Expanded academic and student-support resources at regional campuses.
- Established a comprehensive food pantry system at all campuses.
- Established new alignment between the Dean of Students and Student Activities with academic enterprise.
- On behalf of the University, signed and adopted the Okanagan Charter, designating UConn a health-promoting university. The Charter affirms UConn's commitment to health, wellness, and sustainability and opens avenues for initiatives in Research and Policy, Culture and Environment, and Community and Belonging.
- With the Vice President for Enrollment and Student Success, the Provost, and the Deans, worked on concrete measures to promote safety and inclusion for all and the mental health and well-being of our students.
- Established the President’s Task Force for Combating Sexual Violence and Supporting Our Students.
- To build career- and life-readiness, increased the number of academic and career advisors and supported increased experiential learning opportunities for students.

Industry Engagement

- Hosted **UConn Forum: Economic Engine of a Thriving Connecticut** to connect the business community with UConn resources and expertise and promote UConn as an economic driver.
- Created mechanisms for companies (such as Moderna and Biohaven) to conduct clinical trials at UConn Health.
- Initiated customer discovery meetings with Connecticut’s leading CEOs to understand their workforce development needs and how to best to position UConn to address those needs. These conversations led to proposals being submitted to Pratt & Whitney and Eversource for $33 million and $40 million, respectively.
- Met with many CEOs of industry in Connecticut and across the country to promote opportunities for collaboration and investments in UConn.

- Worked with Werth Institute for Entrepreneurship and Innovation to produce the award-winning documentary, “Innovation in Connecticut,” which showcased the history of innovation and technological breakthroughs in Connecticut and UConn.

Engagement with State and Government Entities

- Strengthened relationships with legislators and the Governor and his team through multiple one-on-one meetings, visits to the capital, and hosted visits to UConn to demonstrate the economic development impact of UConn, our contribution to the health and wellbeing of Connecticut communities, and our service to students.
- With UConn’s governmental relations and finance officers, presented and lobbied for the value and economic impact of the university to the State of Connecticut. Worked to address a projected budget deficit of $146 million in 2024. Closed a budget deficit of $160 million in 2023.
- In a cost neutral agreement, succeeded in removing responsibility for state employee legacy costs from UConn to the State. This shift was intended to remove uncertainty from UConn's budget and to make UConn more competitive on externally-funded research proposals by reducing fringe benefit costs charged to external research grants.

Academics

- UConn recognized as a "Top Producing Institution" of Fulbright U.S. Students, 2023-2024, by U.S. Secretary of State Anthony Blinken.
- To elevate its impact and visibility, significantly increased financial support and advocated for expansion of the Human Rights Institute.
- Expanded UConn's global footprint in Italy, Egypt, and the Middle East through academic programs, scholarships, and entrepreneurship programs.
- Supported the growth of the School of Engineering and its transition to the College of Engineering.
- Working with the Provost, supported establishment of new programs, departments, and other additions to UConn's academic portfolio:
    - Elevated the Department of Public Policy to the School of Public Policy,
    - Established a master’s degree in applied data science and financial technologies
    - Established a master's degree in Social Responsibility and Impact on Business
    - Established the Department of Geography, Sustainability, Community and Urban Studies, leveraging existing programs and resources
- Made strategic investments and supported expansion of key programs, including:
    - Launched a number of new initiatives for study abroad
    - Made significant investment in the Institute for Environmental Sciences to speed the commercialization and impact of new discoveries.
- Worked with school and college deans to sunset under-enrolled programs and expand research space.
- Focus on faculty excellence through expanded communication, new faculty fellowships, and implementation of new system to manage PTR and faculty reporting.

Research

- Oversaw growth in research expenditures from $249 million in FY2020 to $342 million in FY2024.

- Invited and hosted the 15th Secretary of Energy of The United States, Secretary Jennifer M. Granholm, to talk about the importance of clean energy and to take note of UConn's major contributions to the field.
- Organized a visit of National Science Foundation Director Sethuraman Panchanathan to meet with scientists and entrepreneurs at UConn and to showcase UConn as an engine driving discovery and prosperity.
- Made regular visits to Washington D.C. to promote UConn's research enterprise with federal agencies and elected representatives.

Athletics

- UConn Huskies, NCAA Women's Division I Basketball National Champions, April 2025
- UConn Huskies, NCAA Men's Division I Basketball National Champions, April 2024.
- UConn Huskies, NCAA Men's Division I Basketball National Champions, April 2023.
- UConn athletics contributed $275 million in economic impact to the state of Connecticut in FY25.
- Advocated for and represented the University in NCAA and Big East meetings.
- Worked with the director of athletics and academic advisors to strengthen academic support for athletes and participated in Big East meetings and events.
- Regularly attends athletic events with donors and students.

Sustainability

- Through carbon mitigation projects being implemented on the Storrs campus, more thant 28,000 tons/ year in combined carbon emissions are expected through clean energy infrastructure, efficiency and conservation, and clean transit projects.
- Set a goal of achieving carbon neutrality by 2030 and carbon zero by 2040. Secured Board of Trustees support for these goals.
- Made significant investments in infrastructure, technology deployment with industry, education, research, and entrepreneurship.
- Ensured that clean energy capabilities are being added to new and existing infrastructure. For example, heating and cooling for Connecticut Hall, described below, will take advantage of 78 geo-thermal ground loop heat exchange wells which go 750 feet underground for heating and cooling, part of UConn's initiative to reduce fossil fuel use.

Operations and Infrastructure

- Collaboratively built the vision, strategy, and relationships needed to unlock and integrate university capabilities between regional campuses, the main campus, and UConn Health. Worked with the provost, CEO of UConn Health, and UConn CFO to brainstorm strategic priorities and financial resources.
- Established an emergency group to review policies, code of conduct, and any issues that require immediate action.
- Oversaw completion and opening of Science 1 in 2023, one of the nation's most innovative facilities for interactive teaching, education, and materials science research.

- To address demand for on-campus housing, oversaw construction of Connecticut Hall, a residential facility having 657 beds and a dining hall with 500 seats. The building is designed to meet LEED Gold requirements and reflects UConn's efforts to reduce both current and future carbon emissions by being completely powered by renewable energy through the use of a geothermal heating and cooling system and hydrogen fuel cells.
- Expanded student support services, dining services, and academic programs at regional campuses.
- Expanded student housing at Stamford campus and will open new student housing at Hartford campus.

VICE PRESIDENT FOR RESEARCH, INNOVATION AND ENTREPRENEURSHIP
UConn Storrs, Regional Campuses, and UConn Health, (07/17-02/22)

Led UConn's diverse research enterprise, with over 300 staff members reporting to her both at UConn and UConn Health. She also oversaw the Technology Transfer Office and the Technology Incubation Programs at three campuses. UConn TIP is the largest incubator in the state in both size (approximately 35,000 square feet of space) and number of wet labs (45). We had 51 companies participating in TIP in 2020, where they raised nearly $463 million in total funding. https://ovpr.uconn.edu/

Responsibilities

- Oversee management and implementation of a $300 million research budget and the research and investment portfolios of UConn's twelve colleges and schools, including the medical school, dental school, and five regional campuses, to facilitate, support, and assess experiential learning, research, and entrepreneurial initiatives.
- Manage the challenge of balancing the budget and ensuring the financial vitality of the institution and its research enterprise.
- Regularly interact with the Governor and Connecticut legislators to foster community involvement and build support for UConn.
- Expand career preparation programs and workforce development support in consultation with community business partners.
- Spearhead strategic planning and research and innovation initiatives for all schools and colleges.
- Oversee efforts to enhance UConn's economic development impact through initiatives that promote innovation and entrepreneurship, technology transfer, and commercialization.
- In collaboration with UConn's Office of Governmental Relations, pursue and promote federal and state support for strategic research and economic development initiatives.
- Oversee the following university-wide centers, institutes, and programs: the Center for Environmental Sciences and Engineering (CESE), the Institute for Collaboration on Health, Intervention, and Policy (InCHIP), the CT Sea Grant, the CT Institute for Resilience and Climate Adaptation (CIRCA), the Center for Open Research Resources and Equipment (COR2E), and the UConnTechnology Park, https://ovpr.uconn.edu/?s=centers
- Advise the President, Provost/Executive Vice President for Academic Affairs, Executive Vice President for Administration/CFO, Executive Vice President for Health Affairs/Chief Executive Officer, and other executive advisory bodies in decision making and oversight of general and research-related university matters.

Dr Radenka Maric
President
University of Connecticut

Key Achievements

- Increased sponsored program awards from $184.5 million in FY17 to $375.6 million in FY21, the highest in the history of the university.
- Increased UConn Health awards to $170 million in FY21, reaching an all-time high from $58 million in FY17.
- Working with Prof. Jeffrey Hoch of UConn Health, secured the largest award in UConn history, a $40 million NSF Major Instrumentation Award.
- Worked with local legislators to enhance the university's role in economic and workforce development and facilitated the addition of a $46 million to support innovation faculty hires
- Raised $10 million for the development of scholarships for students, fellowships for faculty, and new endowed Eminent Scholar Chairs.
- Development capacity and alumni outreach:
  - Closed UConn's $80 million gift for the Innovation Partnership Building research activities with industry, such as Raytheon, Synchrony Financial, Pratt & Whitney
  - Increased the size, diversity, philanthropy, and engagement of the Alumni Society Board and created Development Council for women in philanthropy.
- Developed new programs and interdisciplinary, multi-campus, multi-stakeholder collaborations, including: Innovation Grant in Science, Technology, Engineering, Arts, and Math (STEAM), Scholarship and Collaboration in Humanities and Arts Research Program Awards (SCHARP).
- Redesigned annual reporting for all direct reports in alignment with strategic plan and goals utilizing data-supported matrix in combination with goals developed.
- Supported undergraduate research for students with interest in health and the biomedical science through the Health Research Program, and undergraduate students in summer research or creative projects, full-time through the Summer Undergraduate Research program.
- Developed internal and external review of the technology transfer and venture development and revenue generation initiatives.
- Advanced mental health and wellness initiatives and climate on campus by leading an ad-hoc faculty, staff, and student committee charged with reviewing current efforts, understanding areas of diminished capacity, and identifying priorities for best practices and expansion of care for students. https://projectwellness.uconn.edu/final-report/
- Worked to create the vision, strategy, and relationships needed to unlock and integrate research capabilities between regional campuses, the main campus, and UConn Health.

Leadership in Research Administration

- Encouraged and supported centralizing the different campus functions by providing seed funding and incentives for collaboration.
- Developed shared governance service.
- Developed the Research Development Services unit to support faculty grant submissions through training and seed funding.
- Added positions to support large/complex awards at the post award stage to fully support large/complex awards from cradle to grave.
- Established the role, recruited, and hired the first Director of Sponsored Program Contracts to better serve investigators in the negotiation of industrial and other complex agreements.

- Established a substantial presence in the global higher education community and garnered considerable international recognition
- Provided funding to recruit and retain preeminent, research-active faculty.
- Awarded a $10 million grant from Connecticut Innovations to recruit academic entrepreneurs.
- Collaborated with The Jackson Laboratory for Genomic Medicine (JAX-GM) to increase joint grant funding to $42.5 million, recruit top researchers, and support undergraduate and graduate education.
- Actively promoted UConn to leaders and federal agencies in Washington, D.C., and each year secured between $33 million and $45 million for research through appropriation bills.
- International partnerships:
  - Increased collaboration and diversity of international students despite the pandemic and legal barriers
  - Established a new global alliance in climate change and sustainability.
- Served on DOE, ARPA-E, and NSF review panels to help to promote UConn.
- Helped secure $45 million in direct funding from federal sponsors; through appropriation language, obtained new dollars for federal agencies to start/continue programs where UConn is well-positioned to compete nationally.

Leadership in Innovation & Entrepreneurship

- Under my leadership of innovation and entrepreneurship programs, including the Technology Incubation Program (TIP) and the Technology Commercialization Services unit, UConn helped launch 67 UConn startups in the last three years and enabled 36 incubator companies to raise over $800 million.
- In 2021 the UConn Technology Incubation Program (TIP) received the Randall M. Whaley Award from the International Business Innovation Association (InBIA) recognizing outstanding achievement as an entrepreneurial technology center.
- Received 102 invention disclosures in FY20, the most in the university's history.
- Led efforts to develop Stamford data science initiatives, including the recent opening of a new location of UConn's Technology Incubation Program (TIP) in Stamford.
- Regularly engaged with venture capital companies, the Connecticut Department of Economic and Community Development (DECD), and Connecticut Innovations to seek investment in our faculty and student start-ups. Under my leadership, in FY20 the number of start-up companies in UConn's Technology Incubation Program reached a total of 67, the highest level in the history of the program.
- In FY 20, the UConn Technology Transfer Office secured $1.6 million in patent and licensing revenues. A total of 71 invention disclosures were received, 83 U.S. patent applications filed, 39 patents issued, and 26 licenses and options executed. The Technology Incubation Program, which includes 40,000 square feet of incubator space across three campuses, saw total funds rise to over $100 million reaching an all-time high.
- In FY20, secured 10 million from BioCT to recruit entrepreneurial faculty.

Service and Personal Research

- Serve on several boards and committees, such as Connecticut Innovations Board of Directors, CTNext Higher Ed Committee, CT Sea Grant Advisory Board, Oracle Research Industry Strategy Council, Eli Whitney Advisory Committee and Eli Whitney Investment Committee.
- Served on the President's Task Force on Mental Health, leading the Research & Training Working Group.
- Serve as Co-PI on the NSF sponsored grant "NSF RET Site Joule Fellows: Sustainable Energy for an Inclusive Society." https://ovpr.uconn.edu/news/quarterly-reports/.

New Initiatives Promoting Research, Innovation, and Scholarship

- Identified, developed, and nurtured innovative, collaborative and strategic research initiatives; promoted inter- and multi-disciplinary research, scholarship, and creative works; promoted research collaborations between UConn Storrs, UConn Health, Jackson Labs, and Yale.
- Developed Convergence Awards for Research in Interdisciplinary Centers (CARIC) seed funding program.
- Promoted UConn Human Rights Institute by supporting two postdoctoral fellowships and two research professor appointments in collaboration with the Schools of Engineering and Business.
- Established the Program in Accelerated Therapeutics for Healthcare (PATH): A partnership between the Schools of Pharmacy and Medicine, PATH aims to accelerate the translational pathway to convert discoveries into new medical therapeutics. The program seeks to quickly develop novel approaches focusing on well validated molecular targets for a specific disease area with a treatment need unmet by the current commercial marketplace.
- Established the Scholarship and Collaboration in Humanities and Arts Research Program (SCHARP): In partnership with the Humanities Institute, SCHARP supports innovative works in scholarship and creative activities in the arts and humanities that have the potential to transform a field of study, impact the common good, or chart a new direction in scholarly, creative, or artistic direction.
- Established the STEAM Innovation Grant: In partnership with the School of Fine Arts, STEAM encourages innovative collaborations between the arts and STEM disciplines. Projects funded by this grant may result in publications, exhibitions, performances, academic symposia, or other research or creative outcomes.
- Established Innovate Stamford, a new internship program that connects talented UConn students with opportunities in startups in one of the fastest growing regions of the state. Initiated and developed technology incubator in data science in Stamford.
- In collaboration with the Office of the Provost, the OVPR supported a student-led podcast called In Vivo. With regular interviews about science, the arts, current events, and other topics, In Vivo highlights the amazing faculty, students, and staff that give UConn life. The show is conducted out of UConn's WHUS studio and is run entirely by UConn students.
- Launched a new initiative, World Poetry Books, to support its mission of publishing and vigorously promoting a minimum of six books of exceptional poetry in translation each year. World Poetry Books offers our students the opportunity to gain hands-on, professional publishing skills, and establishes UConn as a preeminent publisher of exceptional world literature.
- Assisted in creating the Connecticut Convergence Institute for Translation in Regenerative Engineering as a Type 2 Center in the School of Medicine from the merger of the Institute for Regenerative Engineering (IRE) and the Connecticut Institute for Clinical and Translational Science

(CICATS) at UConn. The Institute integrates medicine, engineering, surgery, biology, physics, chemistry, and statistics/machine learning to enable a powerful platform for addressing scientific and medical problems in the regeneration and healing of complex tissues, organs, or organ systems.

- Increased global impact through focused support of international student recruiting, international research collaboration, study abroad programs/exchange partnership and academic and beyond-the-classroom international learning, and service opportunities.

Faculty/Student-Focused Initiatives

- Invested in start-up packages to recruit world-renowned faculty; sponsored 38 faculty hires.
- Reduced the F&A on small, pilot grants to 20% to stimulate exploratory projects and to create opportunities for larger extramural grants.
- Empowered and celebrated the successes of our faculty and students. Launched a monthly breakfast co-hosted by the Provost to celebrate the creative and research work of faculty and students, both at UConn and UConn Health.
- Initiated and supported a student-led podcast titled Podcast of UConn Research (PCR) to promote student and faculty accomplishments.

Interdisciplinary Initiatives

- Increased financial support for the School of Fine Arts and the Department of Political Science and increased the level of funding available for faculty and graduate students.
- Provided cross-disciplinary academic outreach in economic development with the Connecticut Department of Transportation and Travelers including, for example, the autonomous vehicle initiative, which draws on the faculty in geography, business, sociology, and engineering.
- BioScience Connecticut Innovation Fund (CBIF): received ~10 million from 2018 to 2020 from the CBIF to support research collaboration between Yale and UConn faculty. To leverage this investment of CBIF funds, UConn partners (OVPR, School of Pharmacy and School of Medicine) provided direct research support to two UConn cores (Medicinal Chemistry and Protein Expression) to help advance UConn projects.

State of Connecticut Initiatives

- Promoted BioScience Connecticut, a $200 million expansion of the UConn Health Center, by working closely with Jackson Laboratories and Yale University on cutting-edge research in genomic and precision medicine. Provided an interface with Jackson Laboratories in research, spin-offs, and university/industry partnerships.
- Worked with the Commissioner of the Connecticut DECD, Catherine Smith, on branding BioScience Connecticut.
- PI on grant to CT Innovations to recruit entrepreneurial faculty to UConn, $20 million grants from 2020-2025.
- Launched the expansion of innovation at the Stamford campus. Secured funding of $2 million in FY 18 of total 5 years $20 million to create and sustain the UConn Technology Incubation Program (TIP) in Stamford with emphasis on the digital technologies that are pivotal to most aspects of modern industry and commerce, https://today.uconn.edu/2019/01/uconn-innovate-stamford-collaboration-bolsters-innovation- ecosystem/ .

Federal Agency Initiatives

- Facilitated signature campus efforts related to defense. Organized networking events with Department of Defense, SBIR workshops, meet and greet events connecting industry and faculty, and Accelerate UConn entrepreneurship workshops.
- Helped to secure $12.38 million through the Air Force's Manufacturing Technology RDT&E Program for academic-industry partnerships to develop advanced materials and materials manufacturing processes.
- Worked to secure a set-aside for Academic Partnerships for Undersea Vehicle Research & Manufacturing through the Department of Defense (DoD) of $5 million in FY18 and $7.3 million in FY19 and $10 million in FY20. This funding supports research and technology critical to Connecticut's nuclear submarine industry and supply chain.

Industry and Community Engagement

- Led fundraising efforts with industry for research support. Main donors include: ELDOR (an Italian Company), Proton On-Site, Unilever, and Cabot.
- Advanced mission of the UConn Technology Park:
  - Engaged high-profile industry leaders (Eversource, Fraunhofer, UTC, GE, Comcast, CSI, CHEST, Synchrony, Thermo Fisher Scientific, Zeiss, DOD, DOE, etc.) to the Tech Park IPB centers generation .
  - Established in a team effort the Tech Park as UConn's hub for large-scale interdisciplinary research with a focus on the signature themes of cyber security, defense, and the energy/food/water/ environmental nexus. Strong capabilities at the Tech Park enhance the success rate of large-scale funded efforts, connect science with policy, and contribute to UConn's award-winning entrepreneurship ecosystem.
  - Successfully drew students and faculty from the humanities, social sciences, and art to multi-disciplinary research teams in interdisciplinary research at the Tech Park.
  - In team effort, secured gifts/funding to support industry- university partnerships that support the TechPark, research, and scholarships.
- Provided primary outreach and engagement with all businesses and communities: local, national, and international and serve in the role of the Board of Directors of Connecticut Technology Council.
- Developed effective communication, opportunities, and efficient contract negotiation with key industrial partners.

Achievements in Personal Research

- In addition to her duties as VPRIE, Dr. Maric has continued to serve as a role model to faculty and to advance her own research projects. She has secured six external grants generating over $4 million in research awards since taking office as VPR and works with students on a regular base.

EXECUTIVE DIRECTOR, TECHNOLOGY PARK AND INNOVATION PARTNERSHIP BUILDING
University of Connecticut (05/15-09/17)

The UConn Technology Park Innovation Partnership Building (IPB), the state-of-the-art $200-million initial building (115,000 square feet) with the latest facilities to enable cutting-edge research in advanced manufacturing, cyber security, system engineering and advanced characterization laboratories, is a real point of pride for the University. The mission of the Tech Park is to provide faculty expertise, state-of-the-art laboratories, and specialized equipment to enhance research and development projects with industry partners, leading to research breakthroughs, commercialization of new products, and high-paying jobs for the State of Connecticut. Our vision is to make the Tech Park the gateway for industry collaboration across the University.

Responsibilities

Dr. Maric managed the strategic development of the Tech Park and established relationships with leading figures in the industry, government and academia.

Key Achievements

Executive Management

- Wrote a business and operating plan for the Tech Park.
- Worked with the architectural firm in the final stages of construction in planning of facilities and laboratory development.
- Implemented a strict budget control policy with go/no-go decisions based on expenses.
- Brought the Physics Department's fast laser lab, bio lab, and the COR2E labs (in which UConn's very best students build cutting-edge websites that support UConn's world-class research infrastructure) as an integral part of the TechPark.
- Worked with directors of the centers on strategic planning and execution. Served on the governing body of the UTC Institute for Advanced Systems Engineering and the Fraunhofer USA Center for Energy Innovation.

Program Development and External Engagement

- Negotiated and re-launched the Fraunhofer USA Center for Energy Innovation (CEI). CEI researchers—comprising faculty from the University of Connecticut, Fraunhofer, and allied research organizations together with industry partners—focus on research, development, and commercialization efforts in energy and the environment.
- Led team efforts to secure gifts of more than $80 million; worked on establishment and contract development with ZEISS for the REFINE laboratory and with Synchrony Financial for the Center of Excellence in Cybersecurity.
- Hosted over 75 industry visits, 15 visits from national and international academic leaders, and 12 visits by government agency personnel and legislators.
- Organized workshops with Navy SBIR/STTR office to established innovative "dream teams" that qualify for DOD/ Navy SBIR funding.

CHAIR PROFESSOR IN SUSTAINABLE ENERGY

Departments of Chemical Biomolecular Engineering and of Materials Science and Engineering, University of Connecticut (08/10- present)

Dr Radenka Maric
President
University of Connecticut

In 2007, the University of Connecticut unveiled an ambitious new research campaign, the Eminent Faculty Initiative in Sustainable Energy, which resided in the School of Engineering. The Eminent Faculty Initiative represented a unique partnership between UConn, the Connecticut General Assembly, and the industrial partners who committed to propelling Connecticut onto the international stage in the development of sustainable "green" energy. As a part of that effort, UConn targeted world-renowned experts in energy and recruited Dr. Maric from Canada as an internationally recognized expert in energy.

Responsibilities

From day one, Dr. Maric took the initiative to bring people together and lead interdisciplinary teams to pursue large research development initiatives. She secured grants ranging from $1 million to $20 million, including two projects funded by ARPA-E and a $20 million Department of Energy, Energy Frontiers Research Center proposal that engaged 20 faculty members from many departments and schools, including national and international partners (the proposal had a high score but was not funded). Dr. Maric provided significant service to the University by serving on numerous search committees for Deans, Provost, Faculty, worked on academic plan development, and ABET evaluation and state initiatives. She served on the faculty promotion to tenure for four years.
Dr. Maric represented UConn nationally and internationally as a panelist, plenary speaker in numerous gatherings and in meetings of the Connecticut General Assembly. She mentors female faculty and minority students in STEM. She was instrumental in developing collaborations with Politecnico di Milano, Shanghai University, Tokyo University of Science and Fraunhofer Institute for ceramics, KITS.

Key Achievements

Research Funding and Program Development

- Conducted significant fundraising for research from industry, including $12.6 million funding from UTRC, FCE, Proton OnSite, NGK Spark Plugs, EDOR, ENI, Unilever, Cabot, and Advent, as well as federally-sponsored competitive grants from the National Science Foundation, ARPA-E, the US Department of Energy, and the Office of Naval Research.
- Secured a $1 million gift from the City of Stamford for a pilot gasifier.
- Increased global engagement through new study abroad opportunities, new international partnerships and focused international student recruiting with Politechnico di Milano, Italy, and Tokyo University of Science, Japan.
- Collaborated with the legislature on funding requests and capital projects.

Scholarly Achievements

- 120 peer-reviewed archival publications
- 162 peer-reviewed proceedings/conference presentations
- 48 invited talks and keynote presentations
- Teaching evaluations between 8.8 and 9.8/10 in 11 semesters at UConn
- 18 graduate students advised, 8 Ph.D. students and 6 master's students graduated
- 5 patents approved and 1 pending

Community and University Service

- Philanthropy leadership council

- Member of faculty development committee
- Member of graduate committee
- Member of committee women in STEM
- 33 community university and community outreach activities
- Participated in the working group for the academic plan development.
- Symposium organizer, Materials Research Society, December 2014 and November 2016
- Search Committee Member for the Dean of the School of Engineering
- Search Committee Chair for the Mechanical Engineering Department Head and for an eminent faculty position in the Materials Science and Engineering Department (MSE)
- ABET (Accreditation Board for Engineering and Technology) working group lead member for the MSE Department
- Chair, Chemical and Bimolecular Engineering Department PTR Committee, 2012-2016
- Committee for the Teachers for a New Era Project, 2013-2014
- Member, UCRF Research Advisory Council (RAC), 2014-2015.
- Chair, UCRF Research Advisory Council (RAC),2017-Present.

Professional Activities

- Panelist for NSF, DOE, ARPA-E, DOD, European Commission, and Horizon 2020
- International Advisory Board Member for 2nd Act, EU, and Canada Excellence programs
- Initiated and led MOU development with Tokyo University of Science, Indian Institute of Technology, and Shanghai University.

Technology Transfer and Commercialization

- Founded start-up company, Health eSense, in 2015.

Honors

- Elected Member of the Connecticut Academy of Science and Engineering, 2012
- Fulbright Chair for 2016/2017, Politecnico di Milano,Italy
- Women of Innovation Winner, Connecticut Technology Council, 2015

CHIEF TECHNOLOGY OFFICER
Health eSense (10/15-02/19)

Health eSense was founded to create a hand held, clinically accurate, non-invasive device to detect and monitor the status of chronic illnesses through analysis of exhaled breath. This product, a breathalyzer, will empower individuals to take control of their health, leading to improved outcomes and quality of their life.

Responsibilities

The technology is based on Dr. Maric's patents, and she has been responsible for technology development, grant preparation, and interactions with investors.

Key Achievements

- Directed research operations and managed engineers and technicians to develop processes and new materials used in sensors.
- Wrote a successful NSF grant for $225,000.
- Presented to investors.
- Interacted with medical community.
- Worked with CEO on strategic plan development.
- Worked on Market Assessment.

PROGRAM MANAGER AND GROUP LEADER
National Research Council, Canada (12/04-08/10)
Director of Science and Technology, National Research Council, Canada (12/05-12/06)

The National Research Council (NRC) is the Government of Canada's largest research organization supporting industrial innovation, the advancement of knowledge and technology development, and fulfilling government mandates. NRC provides Canadian firms and research organizations with opportunities to connect, collaborate, and grow beyond Canada's borders. NRC is engaging with innovators in more than 45 countries, leading to ongoing invitations to participate in international partnering opportunities and global events aimed at stimulating R&D and innovation in technology areas of mutual interest.

NRC- Institute for Fuel Cell Innovation (IFCI) is Canada's premier applied research organization dedicated to supporting Canada's clean energy, fuel cell, and hydrogen industry. NRC-IFCI works independently and in partnership with companies, research organizations, universities, and government agencies on projects focused on research, development, demonstration, and testing of clean energy technologies.

Responsibilities
As a Program Manager and Director of Science and Technology at NRC-IFCI, Dr. Maric led the strategic planning and business direction of the Institute, as well as its effective operation. Dr. Maric managed strategic relationships and linkages with industry, governments, and international organizations; led venture capital development, and secured gifts through fundraising of more than $20 million to support industry-university-national lab partnership consortia that supported research. Dr. Maric provided scientific vision, direction, and leadership to the Institute in developing a breakthrough thin-film deposition technology that enables next-generation semiconductor and advanced fuel cell materials production with significantly reduced cost and enhanced performance.

Key Achievements
Strategic Leadership

- Set strategies, priorities, targets, business tactics, and related action plans based on local, regional, national, and international trends and stakeholders' needs resulting in an excellent five-year evaluation of the overall fuel cell program.
- Led in all stages of project definition, from general planning to execution. Managed over 12 national and international projects with budgets over $50 million.
- Managed a staff of 160 scientists, students, engineers, and technicians developing processes and new materials for use in alternative energy.

Government Relations and Engagement

- Reviewer on the strategic directions for the Prime Minister of Canada and Government of Canada's three granting agencies, the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), and the Social Sciencesand Humanities Research Council (SSHRC), for Canada Excellence Research Chairs(CERC).
- Dr. Maric reported scientific progress to the Vice President for Research, the President, and the Parliament through the Minister of Innovation, Science and Economic Development of Canada.

International Partnerships

- Successfully bridged cross-cultural differences in the negotiation process with Japanese companies and government. Raised funds totaling over $5 million for consortia-sponsored research by Nissan, Toyota, and the New Energy and Development Organization (NEDO).
- Demonstrated leadership and developed team player skills in internationally recognized academic and industrial groups.

Research Leadership

- Led four international programs: an EU Frame 6 program related to intermediate temperature Solid Oxide Fuel Cells (SOFCs), a NEDO program related to high temperature proton conducting ceramics, a Helmholtz program on alternative energy (NRC-Germany), and a Toyota–NRC international consortium on fuel cell vehicle development.
- Served as principal Investigator in the National Fuel Cell Program related to the development of metal-supported SOFC's and as technical lead for the National Science Research Council's (NSERC) strategic project on Solid Oxide Fuel Cells.

Technology Commercialization

- Provided strategic vision and managed internal resources and customer interactions in order to identify and develop technologies and applications with significant potential and to funnel those ideas from inception to commercialization. Four patent applications and two licenses are under negotiation.
- Defined the appropriate technology and product strategy with specifications to match industry trends that enable long-term sustainable revenue.

Industry Engagement

- Raised funds for four industrial projects with a value of over $8 million from local companies for the research initiatives between industry-NRC-UBC and Simon Frazer University.
- Supported fundraising events for the start-up companies that were part of the National Research Council start-up initiative.
- Established and cultivated a network of long-term relationships with expert sources of industry information as well as current and potential customers.

Scholarly Achievements

- Investigated and assessed new applications in fuel cells, electrochemistry, electronics, and other areas from a materials and process development perspective.

- Organized three international conferences on Hydrogen and Fuel Cells.
- Served as member of the NSERC technical review committee.

MANAGER
nGimat, Atlanta, GA (03/01-12/04)

nGimat (formerly known as Micro Coating Technology, MCT) is a leading advanced materials company producing nanopowders and developing thin films that enable components for polymer-based applications, medical devices, electronics, and energy applications. As an intellectual property (over 40 issued patents) company, nGimat manufactures engineered nanomaterials and licenses these technologies to world leading companies.

Responsibilities
Recruited to lead fuel cell development team, manufacture new materials, and explore commercial applications and revenue generation through research grants, patent licensing, and venture capital investment.

Key Achievements
Business Development Leadership

- Directed research operations and managed a staff of 38 scientists, engineers, and technicians to develop processes and new materials used in fuel cells, sensors, energy, and other applications.
- Led nGimat in forming international business relationships with leading companies and provided strategic vision for technology licensing and transfer.
- Helped grow the company from 60 people to over 100 scientists, engineers, technicians, and supporting personnel.
- Supervised strategic planning and team efforts to bring Ballard Power System (BPS) as a strategic investor when BPS bought 3% of MCT for $7 million (U.S).

Technology Commercialization and Development

- Provided expertise in designing and troubleshooting equipment to build nanopowder collection systems.
- Coordinated product development efforts to incorporate nanomaterials that enabled size reduction in electronics, improved catalytic activity, and allowed cost reductions for SOFC and PEM applications.
- Participated in the development of a deposition process for production of PEM fuel cell materials and thin a film deposition process used for producing embedded resistors resulting in commercial licensing of the technology to industry leaders.

Research Program Leadership

- Administrated more than $12 million in funding for projects with the Department of Energy, Department of Defense (DARPA), and the National Science Foundation with successful funding of SBIR (Phase I and Phase II) contracts related to SOFC, PEM, and nanomaterial development.
- Developed joint projects and proposals with faculty at the Georgia Institute of Technology.

SENIOR SCIENTIST AND MANAGER
Japan Fine Ceramics Center (JFCC) Nagoya, Japan (04/96-02/01)

JFCC is Japan's leading applied research center focused on improving the product quality of ceramic materials through a technical basis by integrated testing, systems evaluation, and fundamental research and development. JFCC contributes to an increase in the utilization and expansion of ceramic applications, promotes fine ceramics industries, and enhances the Japanese economy. JFCC deals with five business activities: research and development, technological infrastructure development, projects for small and medium-sized enterprises, public relations/promotional activities and international cooperation. The technology development products deployment and demonstration were done in collaboration with Toyota Motors and Kansai Electrical Power.

Key Achievements
Strategic Research Leadership

- Led multi-disciplinary teams and forged strategic relationships to develop and commercialize spray-pyrolysis processes for producing ultra-fine particles (<500 nm) primarily for fuel cells, electronics, and biomaterials applications.
- Managed technology development and demonstration programs for fuel cells and brought over $5 million in funding. Customers included: Kansai Electrical Powder Inc. (design of the SOFC cell & building of a pilot plant with an ultimate capacity of 5 MW per year), Toyota (developed and characterized membranes for selective gas separation by pyrolysis of polysiloxanes).
- Led an international team on a NEDO project (NEDO #23985 Japan, France, Yugoslavia, and Germany) for nanocrystalline functional materials synthesis through aerosol routes, a 5- year $10 million projects.
- Managed 48 scientists to develop cutting-edge research at Toyota Motors related to catalyst development.

Research Accomplishments

- Developed materials for planar SOFC's that operate at low temperatures (materials and cell and stack fabrication and evaluation) for significant cost savings.
- Accumulated comprehensive knowledge for pursuing cutting-edge research and development of solid oxide fuel cells.
- Participated in technical and economic reviews of proposals for new research, development, and demonstration programs in the field of electrical generation, fuel cell processing, and nanostructure development.

MANAGER
Toyota Motors, Grampus Eight (04/96-02/01)

Nagoya Grampus, officially known as Nagoya Grampus Eight Nagoya Guranpasu Eito, is a Japanese association soccer club that plays in the J1 League. Based in Nagoya and founded as the company team of the Toyota Motor Corp. the club shares its home games between Mizuho Athletic Stadium (capacity 27,000) and the much larger Toyota Stadium (capacity 45,000). The team had its most successful season up to 1995 when it was managed by Arsène Wenger, well known for his exploits at Arsenal, and Dragan

Stojković as a most valuable player in five seasons (1995-2000). Later on Grampus won the Emperor's Cup and finished first in the J. League, with Dragan Stojković as a manager.

Responsibilities
In Toyota's leadership development program, Dr. Maric served as manager for Nagoya Grampus Eight soccer club. Her responsibilities for the club were to interact with media, public engagement, fundraising, and attending events with Dragan Stojković. Attended all domestic games and fundraising in Nagoya in four years.

Key Achievements
- Participated in over 20 fundraising events. The focus of each campaign was 1 million in donations.
- Studied the cost-effectiveness of running the team and assessed its marketing strategies.
- Participated in public and televised events.
- Built relationships with the local community.
- Built relationships with the media to obtain good coverage of players and to make the club more attractive to sponsors.
- Linked the athletic events with the promotion of the new hybrid cars.

RESEARCH SCIENTIST
New Energy Development Organization, Tokyo, Japan, 04/95-08/96
ASSOCIATE PROFESSOR
Kyoto University, Japan, 04/95-08/96

The New Energy and Industrial Technology Development Organization (NEDO) was established by the Japanese government in 1980 to develop new oil-alternative energy technologies. NEDO's activities were expanded to include industrial technology research and development and environmental technology research and development. NEDO is now also responsible for R&D project planning and formation, project management, and post-project technology evaluation functions.

Responsibilities
As Research Scientist, was responsible for writing grants, participating in NEDO workshops and solicitation development activities. Dr. Maric was also sponsored by NEDO to work as an Associate Professor at Kyoto University. where she taught two graduate courses.

Key Achievements
- Prepared and lectured "Non-Equilibrium Thermodynamics" for graduate students. This course included theories of irreversible processes, chemical reactions, and relaxation phenomena and analyses of complex systems.
- Taught "Heat Conduction" course for graduate students. This course included the theory of conduction, steady state and transient conductions, Laplace transform, Ritz and Kantorovich methods, Bessel functions, and differential formulations.
- Led project sponsored by NEDO and Toyota on synthesis of intermetallic compounds from nanolayer by self-propagating room temperature reaction.

PROFESSIONAL SERVICE AND OUTREACH

PROFESSIONAL ACTIVITIES AND SERVICE PROFESSIONAL SERVICE AND AFFILIATIONS

1. Member, Governor's Workforce Council, 2022-present
2. 2020 Women in Business Award, Hartford Business Journal, 2020.
3. Member of Board of Directors, Connecticut Innovations, 2020- present.
4. Board of Trustees, Solomon Schechter Day School, 2020-present.
5. Serving the Hartford community as an advisor to Governor Lamont on life science initiatives.
6. National Academy of Inventors, NIH, Fellow 2019, chapter activities organizer at UConn.
7. AAAS Fellow 2019, section group on sustainability and diversity.
8. Review Panel, Canada Excellence Research Chairs (2010 - 2017)
9. Review Panel, Department of Energy (2005 - 2020)
10. Review Panel, National Science Foundation (2007 - 2020)
11. Member of the Connecticut Technology Council (CTC) Board of Directors
12. Chair of the Higher Education Initiative Working Group, CTNext
13. Member of CT BIO Strategic Plan Working Group, advising the governor
14. Associate Editor for Electrochemical Energy Review (EER)
15. Associate Editor for The Journal of Nanotechnology and Smart Materials
16. Key Reader, Journal of Thermal Spray Technology
17. Key Reader, Journal of Power Sources
18. Board Committee Member, International Academy of Electrochemical Energy Science (IAOEES)
19. Chair and Member - Metal Science and Technology Society of Japan
20. Member - Electrochemical Society of Japan
21. Member - Kyoto Energy-Environmental Research Association
22. Co-Chair - Electrochemical Society (International)
23. Member - Material Research Society
24. Member - American Ceramic Society
25. Member - American Chemical Society
26. Member - American Association for the Advancement of Science
27. Fellow - International Institute for the Science of Sintering

SELECTED PROFESSIONAL ACTIVITIES 2000-PRESENT

1. Invited speaker at more than 165 conferences, university and industrial seminars
2. Member of the Advisory Group, European Horizon 2020 project, Investigations on degradation mechanisms and Definition of protocols for Fuel cell Accelerated Stress Testing (ID-FAST) 2018-2023.
3. Assessor/panelist of the research proposals for New Energy Development Organization (NEDO) Japan and Natural Sciences and Engineering Research Council of Canada (NSERC) FY 10,11,12,13,14,15 Department of Energy (DOE) FY 01, 04, 07,08, 09, 11, 12, 13,14,15, and U.S. Army Corps of Engineers Engineer Research and Development Center's (ERDC) FY 12, 13 and National Science Foundation (NSF) FY12, 13, 14, 15
4. Technical reviewer for more than 20 journals, including Science, Nature, Nature Materials, Nature Communications, Nature Energy, Advanced Materials, Advanced Energy Materials, Nano Today, Nano Letters, Nano Energy, ACS Nano, Journal of American Chemical Society, Advanced Functional Materials, Scientific Reports, Chemistry of Materials, Journal of Physical Chemistry, Solid State

Ionics, Electrochimica Acta, Journal of the Electrochemical Society, Int. J. Hydrogen Energy and so forth

5. Regular reviewer for Solid State Ionics, Journal of Thermal Spray Technology, Journal of Material Science, Solid State Ionics and Journal of Power Sources (reviewed over 200 papers)
6. Member of the organizing committee of Hydrogen and Fuel Cell conference (07, 09, 11, 12), MRS Fall Meeting & Exhibit FY13 and American Society of Mechanical Engineers (10, 11,12), Material Research Society conference organizer (14,15)
7. Served on numerous committees and panels for the above professional societies. Reviewed technical papers and proposals (from industry and universities). Organized meetings and symposiums in Japan, US, and Canada.
8. Editorial Board, Journal of Nanotechnology and Smart Materials (JNSM)
9. Key Reader, Journal of Thermal Spray Technology, since 2011
10. Key Reader, Journal of Power Sources, since 1996
11. Supervised ~5 postdoctoral fellows, ~16 PhD and ~6 joint PhD students, ~8 MS students and ~8 visiting professors/scholars; many of my former students/advisees are now conducting pioneering research in major industrial research centers and academia in the US and abroad.

SELECTED CONFERENCE ACTIVITIES SINCE 2010 TO PRESENT (SINCE JOINING UCONN)

1. Keynote Speaker, Inclusion, Diversity, Equity, and Awareness (IDEA), International Materials, Application & Technologies, St. Louis, September 2021
2. Conference organizer and Keynote Speaker: Materials Science and Materials Physics conference, Vienna, May 2019.
3. Keynote Speaker and Session Chair, American International Meeting in Electrochemistry and Solid State Science, Cancun, Mexico, October 2018.
4. Conference Organizer and Keynote Speaker 20th International Conference on Advanced Materials and Nanomaterials, Dubai, UAE, August 2018.
5. Keynote Speaker and Session Chair, 23rd International Conference on Nanomaterials and Nanotechnology, London, UK, March 2018.
6. Keynote Speaker and Session Chair, 7th International Conference on Fundamentals and Development of Fuel Cells (FDFC2017), Stuttgart, Germany, January 2017.
7. Session Organizer and Chair, Oxygen ion Conductor, 14th International Symposium on Solid Oxide Fuel Cells (SOFC), Daytona Beach, January 2017.
8. Organizer of the MRS Fall 2016 meeting, Symposium NM6: nanoscale Materials and devices by High-Temperature Gas-Phase Processes, November 2016.
9. Conference Organizer of the MRS Fall 2014 meeting, Symposium HH: High Temperature Synthesis of Functional Nanomaterials- Fundamental and Applications, Boston, December 2014.
10. Invited Plenary Speaker, Pt loading, Pt-Alloys and Core-Shell Catalysts Manufacturing by Scalable Flame Based Process, ASME 2014 International Mechanical Engineering Congress & Exposition, Montreal, Canada, November 2014.
11. Invited Plenary Speaker, Direct Deposition of low Pt loading catalyst for high temperature polymeric membranes operating at 2000C, International Conference on Electrochemical Energy and Technology, Shanghai, China, October 2014.
12. Vice-Chair of International Academy of Electrochemical Energy Science (IAOEES), organizer of International Conf. on Electrochemical Energy and Technology, Shanghai, China, October 2014.

13. Keynote Speaker, Core Shell Structure of Platinum Based Electrocatalyst for Fuel Cell Application, New Energy Forum, Qingdao, China, September 2014.
14. Organizer of the meeting and workshop between Tokyo University of Science and UConn's faculty, Kashiwa, Japan, May 2014.
15. Invited Plenary Speaker, Waste to Energy: Kinetic Improvement and Clean-Up of Gases for High Efficient Gasifier and Fuel Cell Integration, Eco Balance, Tsukuba, Japan, November 2012.
16. Invited Speaker, Yttria stabilized zirconia (YSZ) Nanomaterial for Solid Oxide Fuel Cell, World Congress of Nano S&T, Dalian, China, October 2011.
17. Invited Speaker, New Energy Forum, Flame Base Process for Batteries and Fuel Cells, Dalian, China, October 2011.
18. Track Co-Organizer, Materials for High Temperature Fuel Cells, ASME 2011 International Mechanical Engineering Congress & Exposition, Washington DC, August 2011.
19. Session Co-Organizer, Advances in Microstructure/Properties, ASME 2011 International Mechanical Engineering Congress & Exposition, Washington DC, August 2011.
20. Track Co-Organizer, Materials for High Temperature fuel Cells, ASME 2010, Materials for High Temperature Fuel Cells, ASME 2010 Eighth International Fuel Cell Science, Engineering and Technology Conference, Brooklyn, New York, June 2010.
21. Invited Plenary Speaker, Future Trends in Solid Oxide Fuel Cells, ASME 2010 Eighth International Fuel Cell Science, Engineering and Technology Conference, Brooklyn, New York June 2010.

UNIVERSITY SERVICE (PRINCIPAL)

- Interim President, leading strategic planning for the University.
- Vice President for Research, Innovation and Entrepreneurship, University of Connecticut and UConn Health. Lead the research mission at all UConn campuses, develop strategic plans and initiatives to increase extramural funding and support faculty success.
- Executive Director of the Innovation Partnership Building at the UConn Tech Park. Developed business plan, operation plan and established collaboration with industry.
- 2017 Search Committee Chair, Eminent Faculty Search, Material Science and Engineering Department
- 2016 Search Committee Chair, Head of Mechanical Engineering Department
- 2016 Leader, dual degree program development in engineering and Asian languages
- 2015 Search Committee Chair, Industry Liaison Manager for Tech Park.
- 2015 Presenter, Annual Advisory Board Meeting of School of Engineering
- 2015, 2016, and 2017 PTR Committee Member, MSE Department
- 2015 Led EGER program extension with the Politecnico di Milano.
- 2014 Strategic Area Advisory Team (SAAT) Member reporting to the University Academic Vision Committee (UAVC)
- 2014 Panel Participant, "Energy and Manufacturing," convened by State Representative Tim Bowles
- 2013 Presented to Connecticut Legislature, "Transformational $1.5 Billion Investment in UConn."
- 2013 Led MOU development with Tokyo University of Science.
- 2013 ABET team member
- 2013 Search Committee Member, Dean of Engineering
- 2013 Presented to 6 legislators and 12 executive and legislative branch staff members.

- 2013 Committee Member, University Honors Program
- 2012 Initiated and organized a visit of the CEO of NGK Spark Plug Power, Mr. Odo, to UConn and a meeting with State Legislators and the Governor.
- 2011-2014 Member, Graduate Committee
- 2011 Initiated and organized MOU development with the National Research Council of Canada.
- 2010-2018 Hosted numerous legislators and visitors at the Center for Clean Energy Engineering.

FUNDING

TOTAL FUNDING AT UCONN $17,327,750

1. Mott Corp., Porous Transport Layer for Stable Electrolyzer Performance, $534,310
2. Department of Energy through Alchemr, AEM Water Electrolyzer for Hydrogen Production from Offshore Wind, SBIR Phase II, Co-PI, $175,000.
3. UConn Research Office, NEUCORSE Initiative, Development of Advanced Materials and Advanced Manufacturing Technologies for Renewable and Sustainable Energy Systems, $100,000.
4. Koura Global, Advanced Fluorinated Materials for Next-Generation Low-temperature Fuel Cells and water Electrolyzers, Co-PI, $165,732.
5. Office of Naval Research, Comp-44: Triggering thermal runaway in lithium ion batteries, Co-PI, 2022-2024. $495,390.
6. Office of Naval research, Comp 26: Safe Energy and Power System for Unmanned Underwater Vehicles, Co-PI, 2022-2024, $550,499
7. Office of Naval Research, Safe, High Energy and Power Density Fuel Cells and Batteries with Underwater Wireless Recharging Capability: Supplement for Fuel Cell Hardware Development, Co-PI, 2020-2023, $100,000.
8. Koura Global, Advance Li-ion battery development, PI, 2022-2023, $100,000.
9. Mott Corp., Titanium plates development, PI, 2022-2023, $200,000.
10. DOD, UVT SEED: Internal Short Circuit and Thermal Runaway Triggers for Lithium Ion Batteries, Co-PI, 2021-2022, $250,000.
11. DOE, Reversible Fuel Cell Stacks With Integrated Water management, 1874-1681, Award Number: DE-EE0008901, Co-PI, 2019-2021, $1,500,000.
12. DOE, Catalyst layer design, manufacturing and In-line Quality Control, PI,2018-2021, $2,500,000.
13. ENI, Italy, Redox Flow Batteries with barrier, PI 2018-2019, $290,000.
14. ELDOR, Italy, Design, Characterization of Polymer Electrolyte Membrane Fuel Cell, PI, 2018- 2020, $205,854.
15. H2020 project, Investigations on degradation mechanisms and Definition of protocols for Fuel cell Accelerated Stress Testing (ID-FAST), Partner on European project 1018-2023, UConn is not getting money directly, total European budget $10,000,000
16. Cabot Corporation, Fundamental Study of Catholde Material in the Lithium-Ion Battery, PI, 2018-2019, $75,000.
17. DOE, Solid Oxide Electrolysis Cell Deposition on Metal Substrate by RSDT, PI, 2017-2019, $77,000.

18. Cadenza Innovation, The Fundamental Study, Characterization and Synthesis of Natural Graphite for Electrodes in Lithium Ion Batteries, PI, 2017-2020, $705,809.
19. Proton Onsite, Novell Electrode Development for Electrolizer, 2019-2019, $16,306.
20. NSF RET Site: Joule Fellows: Sustainable Energy for an Inclusive Society, Co-PI, 2017- 2020, $595,451.
21. NSF-SBIR Breathalyzer for non-invasive detection using a single ammonia sensor, NSF SBIRPI-2017-2018, PI, $225,000.
22. DOE, Innovative SOFC Technologies, PI, 2016-2018, $80,000.
23. DOE: Innovative SOFC Technologies with Fuel Cell Energy, PI, 2015-2019, $2,000.000.
24. NSF I-Corps: Novel Flame Base Precursors for Controlled Catalyst Structure, PI,2015, $50,000.
25. ARPA-E: Development of an Intermediate Temperature Metal Supported Proton Conducting Solid Oxide Fuel Cell Stack, DOE ARPA-E through UTRC, PI, 2014–2017, $991,473.
26. ARPA-E: Dual Mode Intermediate Temperature Fuel Cell: Liquid Fuels and Electricity, DOE ARPA-E through Fuel Cell Energy, PI, 2014–2017,$1,923,241.
27. DOE: Single Step Manufacturing of Low Catalyst Loading Electrolyzer MEAs – Phase II SBIR, Proton Onsite, PI, 2014 – 2015, $330,000.
28. NSF EEC-RET in Engineering and Computer Science Site: The Joule Fellows: Teachers in Sustainable Technologies Research Laboratories, Co-PI, 2014-2017, $496,129.
29. University MTAP Funds, Exploring Low-Cost method for Gas Diffusion Electrode (GDE) fabrication, PI, 2014–2015, $35,892.
30. NSF-GOALI: One-Step Direct Deposition of Durable Cathode for High Temperature Proton Exchange Membrane Fuel Cell, NSF, PI, 2013-2016, $423,204.
31. Advent, Inc.: One-Step Direct Deposition of High Temperature PEM, PI 2013-2014, $167,156.
32. NGK Spark Plug: Sensors for Highly Selective Detection of Acetone for Easy Diagnosis of Diabetes by Breath Analysis, PI, 2012-2015 $180,304.
33. Altinet Business Solutions: Biomass Gasification, PI, 2013-2014, $20,000.
34. Tokyo University of Science, Travel/Collaboration Grant: Biomass Gasification, PI, 2013- 2014, $100,000.
35. NGK Spark Plugs: Sensors for Acetone Detection, PI, 2013-2014, $110,000.
36. Ballard Power System: RSDT for nanofiber low Pt coating, PI, 2013, $50,000
37. ED/Office of Postsecondary Education: Graduate Assistance in Areas of National Needs: Nanostructure and Devices, Co-PI, 2012-2015, $350,000.
38. ED/Office of Postsecondary Education: Graduate Assistance in Areas of National Needs in Clean Energy, Co-PI, 2012-2015, $350,000.
39. Advent Inc.: One step direct deposition of durable cathodes for high temperature Proton Exchange Membrane Fuel Cells (PEMFC), PI, 2013-2014, $169,000.
40. DOE STTR Phase I: Single Step Manufacturing of Low Catalyst Loading Electrolyzer MEAs, PI, 2013, $60,000.
41. DOE CDP: Materials Genome Initiative, PI, 2012-2013, $200,000.
42. DOE: Development of Gasification Technology, PI, 2012-2013 $100,000.
43. BIC Inc.: Low Cost Electrode Development: Reactive Spray Deposition Technology (RSDT), PI, 2013, $25,000.

44. ONR: Reactive Spray Deposition Technology (RSDT) Process for High Temperature PEM, PI, 2012, $30,000.
45. NASA: Direct Dry Formation of Cathode Materials for Space Deployable Lithium-ion Batteries, PI, 2011-2012, $50,000.
46. DOE/Nanocell: Development of 10W Micro Direct Methanol Solid Oxide Fuel Cells, PI, 2012-2013, $100,000.
47. DOE: Rapidly Quenched YSZ as Enhanced Electrolyte for SOFC, PI, 2010-2012, $75,000.

TOTAL FUNDING BEFORE UCONN: $24,053,935

GOVERNMENT FUNDING: $12,498,935

1. Metal supported SOFC, NRC- Helmholtz International project, Co-PI, 2008-2011, $1,700,000.
2. Integrated Project on "SOFC Operation at 600□C, Eu, Fr-6 project, Bert Rietveld, Manager, PI for NRC-IFCI activities, Co-Pi, 2006-2010, $5,500,000.
3. Oxygen deficient nanocrystalline perovskite for low temperature Proton Exchange Membranes, NEDO, International project between IFCI-AIST, PI, 2004-2005, $699,000.
4. Cycled Hydrogen Production from Natural Gas Using Novel Oxides, DOE Grant No. DE- FG02-04ER86219 , PI, 2003-2005, $99,935.
5. Combustion Synthesis of Nanoparticles, NASA SBIR 00-1, SBIR I Amount: $100,000, SBIR II, PI, 2003-2005, $750,000.
6. Polycrystalline Laser-Host Material, OSD 04-L01 Awarded DoD, SBIR, PI, 2004, $100,000.
7. SBIR I Amount: $100,000, SBIR II, PI, 2002-2004, $750,000.
8. Novel Electrocatalysts and Electrode Layer Structures for PEMFCs, BAA, PI, 2004, $100,000.
9. CCVD-Produced, Oxygen-Deficient, Nanocrystalline Perovskite for Low-Temperature Proton Exchange Membranes-, DOE Grant No. DE-FG02-03ER83717, PI,2003, $100,000.
10. Cu-SDC Nanostructural Electrodes as Coking-Resistant Anodes for Intermediate- Temperature SOFCS, DOE Grant No. DE-FG02-02ER83499, PI, 2002, $100,000 .
11. Materials for intermediate temperature SOFC, New Energy and Development organization (NEDO) Japan, International collaboration between Japan, Germany, France, PI, 1996- 2001, $2,400,000.

INDUSTRY SPONSORED FUNDING: 11,555,000

1. Fuel Flexible Solid Oxide Fuel Cell Development, NRC Internal project with Industry, PI, 2008-2010, $1,500,000.
2. Catalyst evaluation for automotive application, Toyota Motors Corporation, PI, 2009, $800,000.
3. H2 Booster Technology Development for Co-production of H2, Quodrogen, member, 2009, $150,000.
4. Low Pt loading catalyst layer by thin film technologies, Nissan Motors, PI, 2004-2008. 5. $2,500,000.
6. Nanopowder Production by Plasma Spay process, Mettek-IRAP, 2004-2007, PI, $800,000.
7. Development of Cu and Au nanoparticles, Fukuda Metals, PI, 2004, $180,000.
8. Ba In based nanoparticles for chemical application, Sumitomo Chemicals, PI, 2003, $75,000.

9. Thin film SOFC, Hewlett-Packard, PI, 2002-2004, $500,000.
10. Carbon black and nanopowder composites for copy machines application, Canon, PI, 2003, $150,000.
11. Pt alloy catalyst, Toyota Motors, PI, 1997-2001, $2,000,000.
12. Intermediate temperature SOFC, Kansai Electrical Power, PI, $1,500,000. 1996-1998.
13. Low Pt loading catalyst, Ballard Power, PI, 2002-2004, $550,000.
14. Pigments and nanopowders by CCVD, Ferro, PI, 2003-2004, $850,000.
15. More than 20 Fee-For-Service projects.

TEACHING AND ADVISING

ADVISING AND MENTORSHIP

- 20 Ph.D. students 14 graduated, 6 current, Main Advisor
- 18 Ph.D. students co-supervised
- 6 Postdoctoral researchers mentored
- 6 Visiting scholars mentored
- 6 M.S. students supervised
- 52 Undergraduates mentored during service at UConn

Undergraduate and Graduate Student Initiatives

- Lead the mental health issue task for graduate and undergraduate students in research 2019-2020.
- Worked as an adviser to undergraduate students to assist them in curriculum planning, and finding the right mentors to address issues that they are challenging (2012-2016). For UConn, the 4 year and 5-year graduation rates for 2015 engineering aspirants are 68% and 86%. These rates are significantly higher than the national average.
- Provided internships to students with industry and government entities in CT.
- Worked as a supervisor on Industry-relevant capstone design programs 2010-2019.
- Guest lecturer in School of Business on technology transfer and innovation, 2020.
- Provided many lectures related to carrier planning and development, resume and cover letter preparation, and one on one preparation for the interview process.
- Supported Independent study for 12 undergraduate students and committed significant resources to develop student interest
- Worked with students on sustainability projects and climate change from 2010 to 2019.
- Worked on active recruitment through:
  - Open Houses and Campus Visits
  - NSF GK-12 Program (for Technical High School development)
  - Co –PI on NSF RET program (for K-12 teacher research training)
  - BRIDGE (for women and under-represented minority students)
  - Multiply Your Options (for middle-school girls)
  - Connecticut Invention Convention (for 14,000 K-12 student inventors)

Many of these activities were critical for improving our recruitment, retention, and graduation efforts.

- Provided scholarships from personal funds for 12 of the most vulnerable students at UConn across different schools in 2019.
- Made a 5-year pledge to The University of Connecticut Foundation, Inc. ("Foundation") for the benefit of graduate students of UConn to provide scholarships: "The Dr. Radenka Maric Scholarship for Graduate Students."

COURSES TAUGHT

Semester	Year	Course Number	Course Title	Solo or Team Taught	Enrollment	Student Evaluations Instructor/Dept Mean/Univ Mean
Spring	2016	CHEG 3127	Fluid Mechanics Laboratory	Solo	74	4.0/4.0/4.0
Spring	2016	MSE 4801	Materials for Alter, Renewable Energy	Solo	30	4.5/4.0/4.3
Fall	2015	MSE 4901W	Capstone Design Project I	Solo	9	4.5/4.1/4.6
Spring	2015	MSE 5309	Transport Phenomena	Solo	26	4.5/4.1/4.0
Fall	2015	CHEG 5395	Fuel Processing & Fuel Cells	Solo	12	4.0/4.0/4.2
Spring	2014	MSE 5309	Transport Phenomena	Solo	32	4.5/4.3/4.4
Fall	2013	MSE 4801	Materials for Alter,	Solo	17	9.7/9.1/8.6
Spring	2013	MSE 5309	Transport Phenomena	Solo	25	9.7/8.5/8.3
Fall	2012	MSE 4801	Mtls for Alter,	Solo	12	9.5/8.3/8.8
Spring	2012	MSE 5309	Transport Phenomena	Solo	14	9.1/9.0/9.0
Fall	2011	MSE 3055	Materials Science &	Solo	25	8.3/8.8/9.0
Fall	2010	MSE 4095	Materials for Energy	Solo	26	9.5/9.0/8.9

PUBLICATIONS

PUBLICATION SUMMARY

Over 300 articles in refereed journals and conference proceedings in English and Japanese; 2 books published; 21 book chapters or invited review articles in major journals; 6 patents issued and 11 published patent disclosures.

BOOKS

1. Solid Oxide Fuel Cell: From Fundamental Principles to Complete Systems, CRC Press, December, 2020.
2. Production, Properties and Applications of High Temperature Coatings, published by IGI Global, USA, 2018.

BOOK CHAPTERS

1. Maric, Radenka, Proton exchange membrane water electrolysis as a promising technology for hydrogen production and energy storage, Nanostructures, edited by Dr. Yanina Fedorenko "Nanostructures in Energy Generation, Transmission and Storage," 978-1-78985-740-5,
2. Maric, Radenka, Spray-based and CVD Processes for Synthesis of Fuel Cell Catalysts and Thin Catalyst Layers, PEM Fuel Cell Electrocatalysts and Catalyst Layers, Chapter 8, pp. 265-281, Springer, London (2008) DOI 10.1007/978-1-84800-936-3_20.

PATENTS

Title	Inventors	Status
Metal oxide based sensors for sensing low concentration of specific gases prepared by a flame based process	R. Maric, R. Jain	US10,488,397 B2 November 26th, 2019
Process for Making High-Temperature Polymeric Catalyst Coated Membranes for Use in Fuel Cells	R. Maric, J.M. Roller, N.Triantafyllopoulos	UCONNCG-14012 (2015)
Methods and Apparatus for Making Catalyst Films	R. Maric, J.M. Roller	US 9,861,978 B2 January 9th, 2018 Awarded in China August 2016
Cathode Materials for Low Temperature SOFC	S. Hui, R.Maric, Y.Sing, C. Deces-Petit	WO/2010/063105 PCT/CA2009/001742

Title	Inventors	Status
Reactive Spray Deposition Technology	R. Maric, T.P.K. Vanderhoek and J.M. Roller	WO2007045089 CA2626603, US2008280056, EP1940556, filed in China, Australia, India, Japan, South Korea, Russia
Controlled Atmosphere Reactive Spray Deposition (RSD) Apparatus and Method	J.M. Roller, R. Maric, R. Neagu and K. Fatih	Awarded March 2015
Layered Catalytic Materials for Fuel Cell Electrodes and Method for Their Production	J.M. Roller, R. Maric, R. Neagu and K. Fatih	The US application 61/193,240 filed Nov. 07, 2008, awarded May 2016.
A Ceramic Catalyst for Oxygen Reduction	S. Hui, R. Maric, S. Yick, C. Deces-Petit, X. Zhang and D. Ghosh	The US application 61/193,455 filed Dec. 1, 2008

REFEREED JOURNAL ARTICLES

1. Yu, X., He, Z., Chen, Z., Yildirim, S., Smith, K., Wu, J., Manthiram, A., Cao, S., Wang, Y., Xu, N., Alpay, P., Maric, R., Sun, S., Zhou, X-D., Solid-state lithium batteries with liquid additives: a critical review of progress and challenges, Electrochemical Energy Reviews 9 (1), 3.
2. Friedman, A., Bliznakov, S., Bonville, L.J., Maric, R., Complex Displacement Deposition: A Self-Templating Mechanism for Forming High-Surface-Area Catalysts, Small, e75654 (4 September 2026).
3. Friedman, A., Sifat, I., Bliznakov, S., Bonville, L.J., Pedram, S., Birnbach, M., Papandrew, A.B., Oliveira, A., Jankovic, J., Maric, R., Rapid impedance-based durability screening of porous transport layer coatings for PEM water electrolyzers, Journal of Power Sources 679, 240176.
4. He, A., Xu, N., Wang, Y., Chao, D., Maric, R., Virkar, A., Zhou, XD., Electrode-resolved mechanisms governing performance and durability in zinc-air batteries, Chemical Engineering Journal, 171444 (January 2026).
5. Zeng, Z., Li, L., Smith, K.S.,Wang, Y., He, Z., Capuano, C.B., Ayers, K.E., Maric, R., Bliznakov, S., Xu, N., Zhou, XD., Quantifying Individual Electrode Polarization and Understanding the Interactive Phenomenon in Proton Exchange Membrane Fuel Cells, Journal of The Electrochemical Society 172 (11), 114507.
6. Smith, K.S., Adjah-Tetteh, C., He, Z., Yang, G., Wang, Y., Bliznakov, S., Maric, R., Nengneng Xu, N., Zhou, XD., "Interface and Phase Synergy in Hierarchically Porous Co@(Co–Mn)3O4–x for High-Efficiency and Durable Rechargeable Zn–Air Batteries," The Journal of Physical Chemistry C 129 (37), 16507-16515.
7. Gado, A., Ouimet, R., Bonville, L., Maric, R., Bliznakov, S. Recombination Layers for Effective Hydrogen Crossover Mitigation in Proton Exchange Membrane Water Electrolyzers: Fabrication, Characterization, and Fundamental Principles of Operation. Electrochimica Acta 525, 146092 (June 2025).

8. Xing, J., Bliznakov, S., Bonville, L.J., Maric, R., Friedman, A., Boron-Modified NiFe-MOF-74 Catalyst for the Oxygen Evolution Reaction in Anion Exchange Membrane Water Electrolyzers, ChemCatChem 17 (11), e202402165.
9. Zeng, Z., Ouimet, R., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Yu, H., Maric, R., Bliznakov., S. Innovative Duo-Recombination Layer Design for Effective Hydrogen Crossover Mitigation in Advamced MEAs for PEM Water Electrolyzers, International Journal of Hydrogen Energy, 14, 534-544, (March 2025).
10. Xing, J., Bliznakov, S., Bonville, L., Maric, R., Friedman, A., Boron Modified NiFe-MOF-74 Catalyst for the Oxygen Evolution Reaction in Anion Exchange Membrane Water Electrolyzers, ChemCatChem (30 March 2025), https://doi.org/10.1002/cctc.202402165.
11. Khosravi, F., Stefanidis, E.K., Zeng Z., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "High-Resolution Differential Mobility Analysis (HR-DMA) of naturally charged Platinum Nanoparticles synthesized in two Reactive Spray Deposition Technology Flames", in preparation for submission to Fuel (March, 2025).
12. Stefanidis, E.K., Zeng Z., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "In-situ laser diagnostics of Iridium nanoparticles during their synthesis in a turbulent diffusion flame of the Reactive Spray Deposition Technology". Optics and Lasers in Engineering, 2025 **186** 108690.
13. Zeng, Z., Bonville, L., Maric, R., Bliznakov., S. High-Performance CCMs with Low PGM Loading for the Next Generation Proton Exchange Membrane Water Electrolyzers, submitted for publication, Electrochimica Acta (February, 2025).
14. Cecchetti, M., Ebaugh, T., Bonville, L., Maric, R., Caselegno, A., Zaggo, M. Development of a Vanadium Redox Flow Battery Operating with Thin Membrane Coupled with a Highly Selective and Stable Silica-Based Barrier Layer. Energy Technology, 2024 **12(8)** 2400410.
15. Bliznakov, S., Zeng, Z., Ouimet, R.,Niedzwiecki, A., Capuano, C., Ayers, K., Bonville, L., and Maric R., Innovative Membrane Electrode Assemblies for the Next Generation Proton Exchange Membrane Water Electrolyzers. Electrochemical Society Meeting Abstracts 243, 1992-1992.
16. Zeng, Z., Bliznakov, S., Bonville, L., Maric, R. Advanced Porous Transport Layers for PEM Water Electrolyzers: Impact of the Interfacial and Bulk Properties of the PTLs on the Electrolyzers Performance, presented at the 243rd ECS Meeting, Boston, MA, May 31, 2023
17. Gado, A., Ipekçi, D., Bliznakov, D., Bonville, L., McCutcheon, J., Maric R. Investigation of the Performance and Durability of Reactive Spray Deposition Fabricated Electrodes on a Bifunctional Membrane for Alkaline Water Electrolysis and CO2 Reduction Reaction, Electrochemical Society Meeting Abstracts 243, 2250-2250.
18. Xing, J., Bliznakov, S., Bonville, L., Maric, R. Enhancing Effect of Boron-Doping on the Activity of Nife-MOF-74 Towards Oxygen Evolution Reaction in Alkaline, Electrochemical Society Meeting Abstracts 243, 2089-2089.
19. Koni, A., Zeng, Z., Bonville, L.J., Bliznakov, S., Maric, R. Reactive Spray Deposition Technology for Deposition of Protective Metal Layers on Porous Transport Layers in PEM Water Electrolyzers, Electrochemical Society Meeting Abstracts 243, 2252-2252.
20. Zeng, Z., Xing, J., Bonville, L., Dekel, D., Maric, R., Bliznakov, S**.** (2024): Advanced Nickel-based Catalysts for the Hydrogen Oxidation Reaction in Alkaline Media, Synthesized by Reactive Spray Deposition Technology: Study of the Effect of Particle Size. *International Journal of Hydrogen Energy*, 2024, **52,** 1180-1191. **DOI:** 10.1016/j.ijhydene.2023.03.249.

21. Kasani, A., Maric, R., Bonville, L., Bliznakov, S. (2024): Catalysts for Direct Seawater Electrolysis: Current Status and Future Prospectives. *ChemElectroChem*, 2024, e202300743. doi.org/10.1002/celc.202300743.
22. Xing, J., Zeng, Z., Best, W., Liu, Z., Bonville, L., Maric, R., Bliznakov, S. Long-term durability test of highly efficient membrane electrode assemblies for anion exchange membrane seawater electrolyzers, Journal of Power Sources, 558 (2023) 232564.
23. Xing, J., Zeng, Z., Best, W., Liu, Z., Bonville, L., Maric, R., Bliznakov, S. Corrigendum to "Long-term durability test of highly efficient membrane electrode assemblies for anion exchange membrane seawater electrolyzers" [Journal of Power Sources, 558 (2023) 23256], Journal of Power Sources 630, 236105.
24. Zeng, Z., Ouimet, R., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Soleymani, A., Jankovic, J., Yu, H., Maric, R., Bliznakov, S. (2022): Degradation Mechanisms in Advanced MEAs for PEM Water Electrolyzers Fabricated by Reactive Spray Deposition Technology. *Journal of the Electrochemical Society –Focused Issue: Advanced Electrolysis for Renewable Energy Conversion and Storage,* 2022, 169 (5), 054536
25. Stefanidis, E., Ebaugh, T., Bliznakov, S., Bonville, L., Maric, R., Carbone, F. Laser diagnostics to characterize the in-flame growth of platinum nanoparticles manufactured by the reactive spray deposition technology, Combustion and Flame, 246 (2022) 112412.
26. Zang, Z., Jankovic, J., Bliznakov, S, Niedzwiecki, A., Capuano, C., Ayers,K., Soleymani, A., Bonville, L., Maric, R., Degradation Mechanisms in Advanced MEAs for PEM Water Electrolyzers Fabricated by Reactive Spray Deposition Technology, Journal of The Electrochemical Society 169 (5), (2022), 054536.
27. Xing, J., Bliznakov, S., Bonville, L., Oljaca, M., Maric, R., A review of nonaqueous electrolytes, binders, and separators for lithium-ion battery, Electrochemical Energy Reviews, 5 (14) (2022).
28. Bliznakov, S., Zeng, Z., Ouimet, R., Niedzwiecki, A., Capuano, C., Ayers, K., Bonville, J., Maric, R. Effective and Durable Recombination Layers for Hydrogen Crossover Mitigation in Proton Exchange Membrane Water Electrolyzers, Electrochemical Society Meeting Abstracts 242 (44) (2022) 1663.
29. Gado, A. , Bliznakov, S, , Bonville, L., Maric, R., Using Distribution of Relaxation Times Analysis to Explore Overpotentials in Proton Exchange Membrane Water Electrolyzers Utilizing Sintered Metal and Fibrous Titanium Porous Transport Layers, Electrochemical Society Meeting Abstracts 242 (39) (2022) 1442.
30. Xing, J., Zeng, Z., Koni, A., Mirshekari, G., Best, W., Kumar, V., Sammes, L., Bonville, L., Maric, R., Bliznakov, S., One-Step Synthesis of Selective Nife-Layered Double Hydroxide Anode Catalyst for Highly Efficient and Stable Anion Exchange Membrane Water Electrolyzers, Operating with Seawater, Electrochemical Society Meeting Abstracts 242 (39) (2022) 1389.
31. Koni, A., Bliznakov, S., Bonville, L., Maric, R., Reactive Spray Deposition Technology As an Alternative Method for Precious Metals Deposition on Sintered Titanium Porous Transport Layers for Application in Advanced Proton Exchange Membrane Water Electrolyzers, Electrochemical Society Meeting Abstracts 242 (44) (2022) 1660.
32. Zeng, Z., Bliznakov, S., Bonville, L., Ouimet, R., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R., Large–Scale, High-Performance, Durable and Low-Cost Membrane Electrode Assemblies for Proton Exchange Membrane Water Electrolyzers, Electrochemical Society Meeting Abstracts 242 (44) (2022) 1659.

33. Xing, J., Zeng, Z., Bliznakov, S., Bonville, L., Maric, R., (Digital Presentation) Boosting Hydrogen Oxidation Reaction Activity of Nickel Based Catalyst By Reactive Spray Deposition Technology: Effects of Particle Size, Electrochemical Society Meeting Abstracts 241 (38) (2022) 1784.
34. Cecchetti, M., Ebaugh, T., Toja, F., Bonville, L., Maric, R., Casalegno, A., Zago, M., Development of an Additional Selective Layer to Mitigate Crossover in Vanadium Redox Flow Batteries: Influence of Composition on Efficiency and Capacity Decay, Electrochemical Society Meeting Abstracts 241 (3) (2022) 467.
35. Koni, A., Gado, A., Bliznakov, S., Bonville, L., Maric, R., A Path to Significant Reduction of the Interfacial Contact Resistance of Sintered Titanium Porous Transport Layers in Advanced Proton Exchange Membrane Water Electrolyzers, Electrochemical Society Meeting Abstracts 241 (39) (2022) 1745.
36. Zeng, Z., Bliznakov, S., Bonville, L., Ouimet, R., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R., (Digital Presentation) Large–Scale High-Performance Low Catalyst Loaded Membrane Electrode Assemblies for Advanced Proton Exchange Membrane Water Electrolyzers, Electrochemical Society Meeting Abstracts 241 (35) (2022) 1520.
37. Gado, A., Ouimet, R., Bliznakov, S., Bonville, L., Maric, R., Understanding Proton Exchange Membrane Water Electrolyzer Hydrogen Crossover Mitigation in Reactive Spray Deposition Technology Fabricated Dual Recombination Layers through Distribution of Relaxation Times Analysis, Electrochemical Society Meeting Abstracts 241 (39) (2022) 1757.
38. Bliznakov, S., Marinkovic, N., Sasaki, K., Zeng, Z., Bonville, L., Maric, R., Advanced Catalysts for PEM Water Electrolyzers, Fabricated By Reactive Spray Deposition Technology: Study of the Degradation Mechanisms in the Catalysts' Layers By in-Situ and Ex-Situ Synchrotron X-Ray Absorption Spectroscopy, Electrochemical Society Meeting Abstracts 241 (39) (2022) 1756.
39. Ouimet, RJ, Gado, A. , Bliznakov, S., Bonville, L., Maric, R., Advanced Electrodes for Electrochemical Energy Storage and Conversion Devices Fabricated by Reactive Spray Deposition Technology, Electrochemistry Communications. , 133 (2021) 107162.
40. Mirshekari, G., Ouimet, R., Zeng, Z., Yu, H., Bliznakov, S., Bonville L., Maric, R., High-performance and cost-effective membrane electrode assemblies for advanced proton exchange membrane water electrolyzers: Long-term durability assessment, International Journal of Hydrogen Energy, 46 (2), (2021)1526-1539.
41. Quintero, C., Ercolino, G., Poozhikunnath, A., Maric, R., Speccia, S., Analysis of heat and mass transfer limitation for the combustion of methane emission in Pd/Ce3O4, coated on the ceramic foam, Chemical Engineering Journal, 405 (2021) 126970.
42. Sahoo, S., Dekel, D.R. Maric, R., Alpay, P., Atomistic Insights into the Hydrogen Oxidation Reaction of Palladium-Ceria Bifunctional Catalysts for Anion-Exchange Membrane Fuel Cells, ACS Catalysis, 11 (2021), 2561-2571.
43. Ouimet,R., Ebaugh, T., Mirshekari, G., Bliznakov,S., Bonville, L., Maric, R., Current Status on the Manufacturing of Nanomaterials for Proton Exchange Membrane Energy Systems by Vapor-Based Processes, Energy & Fuels, 35 (3), (2021) 1933-1956.
44. Gholamreza, M., Ouimet, R., Bonville L., Maric, R., High-Performance and Cost- Effective Membrane Electrode Assemblies for Advanced Proton Exchange Membrane Water Electrolyzers: Long-Term Durability Assessment, International Journal of Hydrogen Energy, 46 (2) (2021) 1526-1539.

45. Cecchetti, M., Ebaugh, T., Yu, H., Bonville L., Maric, R, Cassaleno, A Zago, M., Design and development of an innovative barrier layer to mitigate crossover in vanadium redox flow batteries, Journal of the Electrochemical Society, 167 (2020) 130535.
46. Daudt F.N. , Poozhikunnath, A., Yu, H., Bonville L., Maric, R., Nano-sized Pt–NbOx supported on TiN as cost-effective electrocatalyst for oxygen reduction reaction, Materials for Renewable and Sustainable Energy, https://doi.org/10.1007/s40243-020-00179-1 (2020).
47. Yu, H., Bonville, L., Jankovic, J., Maric, R., Microscopic insights on the degradation of a PEM water electrolyzer with ultra-low catalyst loading, Applied Catalysis B. Environmental, 260 (2020) 118194.
48. Zao, M., Baricci, A., Biselloa, A., Jahnke, T.,, Yu.H., Maric. R., Zeleney, P., Cassaleno, A., Experimental analysis of recoverable performance loss induced by platinum oxide formation at the polimer electrolyte fuel cell cathode, Journal of Power Sources, 455, (2020) 227990.
49. Poozhikunnath, A., Yu, H., Bonville, L.J., Myles, T., Maric, R., Characterization of PGM free Fe-N-C ORR catalysts synthesized by a direct flame spray pyrolysis process, Journal of Material Science, 55, 1673-1691(2020). (Journal Cover)
50. Poozhikunnath, A., Favata, J., Ahmadi, B., Xiong, J., Jankovic, J., Shahbazmohamadi, S., Bonville, L., Maric, R., "Correlative Microscopy-Based Approach for Analyzing Microscopic Impurities in Carbon Black for Lithium-Ion Battery Applications", Journal of the Electrochemical Society, 166 (2019), A3335-3341.
51. Kwak, D., Lei, Y., Maric, R., Ammonia gas sensors: a comprehensive review, Talanta, 204, 713-730 (2019).
52. Kwak, D., Men, W., Koski, K., Zhang, L., Sokol, H., Maric, R., amd Lei, Y., Molybdenum Trioxide (α-MoO3) Nanoribbons for Ultrasensitive Ammonia (NH3) Gas Detection: Integrated Experimental and Density Functional Thoery Simulation Studies, ACS Applied Materials Interfaces, (2019), DOI:10.1021/acsami.8b20302 (2019).
53. Kwak, D., Men, W., Koski, K., Zhang, L., Sokol, H., Maric, R., amd Lei, Y., Molybdenum Trioxide (α-MoO3) Nanoribbons for Ultrasensitive Ammonia (NH3) Gas Detection: Integrated Experimental and Density Functional Thoery Simulation Studies, ACS Applied Materials Interfaces, (2019), DOI:10.1021/acsami.8b20302.
54. Yu, H., Davydova, E. Ash, U., Miller, H., Bonville, L., Dekel, D. Maric, R., Palladium- ceria nanocatalyst for hydrogen oxidation in alkaline media: Optimization of the Pd-CeO2 interface, Nano Energy, 57, 820-826 (2019).
55. Wang, Y., Wu, Y., Amin, A.S., Kerns, P., Fee, J., He, J., Jin, L., Maric, R., Suib, S., Direct Construction of Mesoporous Metal Sulfides via Reactive Spray Deposition Technology, Advanced Energy Materials, DOI: 10.1021/acsaem.8b02110 (2019).
56. Yu, H., Bonville, L., Maric, R., Analysis of H2/Air polarization losses of low-platinum- loading cathodes with various I/C ratios and carbon supports, Journal of the Electrochemical Society, 165 (5), F272-F288 (2018).
57. Wang, Y., Roller, J., Maric, R., Novel flame synthesis of nanostructured □-Fe2O3 electrode as high-performance for lithium ion batteries, Journal of Power Sources, 378, 511-515 (2018).
58. Baricci, A., Bonanomi, M., Yu, H., Guetaz, L., Casalegno, A., Maric, R., Modelling analysis of low platinum polymer fuel cells degradation under voltage cycling: gradient catalyst layers with improved durability, Journal of Power Sources, 405, 89-100(2018).

59. Yu, H., Danilovic, N., Wang, Y., Maric, R., Nano-size IrOx catalyst of high activity and stability in PEM water electrolyzer with ultra-low iridium loading, Applied Catalysis B: Environmental, 239, 133-146 (2018).
60. Yu, H., Bonville, L., Maric R., Analysis of H2/air polarization curves: The influence of ionomer/carbon ratio and carbon supports on fuel cell catalyst synthesized in reactive spray deposition technology, Journal of the Electrochemical Society, 165, F272-F284 (2018).
61. Yu, H., Baricci, A., Casalegno, A., Guetaz, L., Bonville, L. and Maric, R, Strategies to mitigate Pt dissolution in low Pt loading proton exchange membrane fuel cell: II. Agradient Pt loading design, Electrochimica Acta, 247, 1169-1179 (2017).
62. Yu, H., Baricci, A., Bisello, A., Casalegno, A., Guetaz, L., Bonville, L. and Maric, R, Strategies to mitigate Pt dissolution in low Pt loading proton exchange membrane fuel cell: I. A gradient Pt particle size design, Electrochimica Acta, 247, 1155-1168 (2017).
63. Wang, Y., Roller, J., Maric, R., Direct Dry Synthesis of Thin Nanostructured LiNi0.8Co0.2O2 Film for Lithium Ion Micro-battery Cathodes, Electrochimica Acta, 241 (1), 510-516 (2017).
64. Wang, Y., Kumar, R., Roller, J., Maric. R., Synthesis and Characterization of Nano- crystalline La2Zr2O7 Film by Reactive Spray Deposition Technology for Application in Thermal Barrier Coatings, MRS Advances, 2 (28), 1519-1525 (2017) DOI:
65. Roller, J, Kim S., Kwak T., Yu, H., Maric, R., A study on the effect of selected process parameters in a jet-diffusion flame for Pt nanoparticle formation, Journal of Material Science, 52 (16), 9391-9409 (2017).
66. Wang, Y., Kumar, R. Roller. J. Maric, R., Synthesis and Characterization of Nano- crystalline La2Zr2O7 Film by Reactive Spray Deposition Technology for Application in Thermal Barrier Coatings, MRS Advances, doi.org/10.1557/adv.2017.154, February (2017).
67. Myles, T., Bonville, L., Maric, R., Free Electrolyte Challenges and Solution Pathways in High Temperature Polymer Electrolyte Membrane Fuel Cells, Catalysts, 7, 1-27(2017).
68. Yu, H., Baricci, A., Casalegno, A., Guetaz, L., Bonville, L, Maric, R., Strategies to mitigate Pt dissolution in low Pt loading proton exchange membrane fuel cell: a gradient Pt loading design supported by TEM and modeling analysis, Electrochimica Acta, in press(2017).
69. Yu, H., Baricci, A., Bisello, A., Casalegno, A., Guetaz, L., Bonville, L, Maric, R., Durability improvement of polymer electrolyte fuel cell from low-platinum loading catalyst layer with gradient platinum particle size, submitted to, Journal of The Electrochemical Society (2017).
70. Yu, H., Baricci, A., Casalegno, A., Guetaz, L., Maric, R., The influence of carbon support and platinum particle size on the degradation of cathode for low platinum-loading catalyst layer, ECS Transactions, 72, 41-55 (2016).
71. Yu, H., Baricci, A., Roller, J, Wang, Y., Casalegno, A., Mustain, W., Maric, R., Ultra-low Pt loading catalyst layers for PEMFC using reactive spray deposition technology. ECS Transactions, 69, 487-496 (2016).
72. Jain, R., Lei, Y., Maric, R., Ultra-low NO2 detection by gamma WO3 synthesized by Reactive Spray Deposition Technology, Sensors and Actuators B: Chemical, 236, 163-172 (2016).
73. Ayers., K.E., Renner, J.N., Danilovic, N., Wang, J.X., Zhang, Y., Maric, R., Yu, H., Pathways to ultra-low platinum group metal catalyst loading in proton exchangemembrane electrolyzers, Catalysis Today, 261, 121-132 (2016).

74. Torabi, A.,Barton, J., Willman, C., Ghezel-Ayagh, H., Li, N., Poozhikunnath, A., Maric, R., and Marina, O., "Development of low-intermediate temperature fuel cells for direct conversion of methane to methanol fuel", ECS Transactions 72, 193 (2016)
75. Poozhikunnath, A., Aindow, M., and Maric, R., Characterization of Gadolinium Doped Cerium (IV) Oxides Deposited by Reactive Spray Deposition Technology for Intermediate Temperature Fuel Cell Applications, Microscopy and Microanalysis 22, 1344 (2016).
76. Torabi, A., Barton, J., Willman, C., Ghezel-Ayagh,H., N. Li, Poozhikunnath, A., Maric, R., and Marina, O., Development of low-intermediate temperature fuel cells for direct conversion of methane to methanol fuel, ECS Transactions, 72, 193 (2016).
77. Yu, A., Chen, Z., Maric, R., Zhang, L., Zhang J. & Yan J., Supercapacitors, Applied Energy, 153, 1-112 (2015).
78. Roller, J. M., Maric, R., A Study on Reactive Spray Deposition Technology Processing Parameters in the Context of Pt Nanoparticle Formation, Journal of Thermal Spray Technology, 24(8), 1529-1541 (2015).
79. Yu, H., Baricci, A., Roller, J.M., Wang, Y., Casalegno A., Mustain, W., Maric, R., Ultra- Low Pt Loading Catalyst Layers for PEMFC Using Reactive Spray DepositionTechnology ECS Transactions 69(17), 487-496 (2015).
80. Myles, T. D., Kim, S., Mustain, W. & Maric, R., Application of a Coated Film Catalyst Layer Model to a High Temperature Polymer Electrolyte Membrane Fuel Cell with Low Catalyst Loading Produced by Reactive Spray Deposition Technology, Catalysts, 5, 1673- 1691(2015).
81. Kim, S., Myles, T. D., Kunz, H. R., Kwak, D., Wang, Y. & Maric, R., The Effect of Binder Content on the Performance of a High Temperature Polymer Electrolyte Fuel Cell Produced with Reactive Spray Deposition Technology, Electrochimica Acta, 177, 190-200 (2015).
82. Jain, R., Poyraz, A. S., Gamliel, D. P., Valla, J., Suib, S. L., Maric, R., Comparative study for low temperature water gas shift reaction on Pt/ceria catalysts: Role of different ceria supports, Applied Catalysis A: General, 507, 1-13 (2015).
83. Myles, T., Kim, S., Maric, R., Performance of a High Temperature Polymer Electrolyte Membrane Fuel Cell with Low Catalyst Loading Produced by Reactive Spray Deposition Technology, ECS Transactions, 66 (24), 11-17 (2015).
84. Zhao, S., Yu, H., Maric, R., Danilovic, N., Capuano, C.B., Ayers, K.E., Mustain, W.E., Calculating the electrochemically active surface area of Iridium oxide in operating proton exchange membrane electrolyzers, Journal of The Electrochemical Society, 162 (12), F1292-F1298 (2015).
85. Zhao, S., Yu, H., Maric, R., Danilovic, N., Capuano, C.B., Ayers, K.E., Mustain, W.E., Determining the electrochemically active area of IrOx powder catalysts in an operating proton exchange membrane electrolyzer, ECS Transactions, 69, 877-881 (2015).
86. Yu, H., Roller, J.M., Mustain, W.E., Maric, R., Influence of ionomer/carbon ratio for low- Pt loading catalyst layer prepared by flame-based reactive spray deposition technology, Journal of Power Sources, 283, 84-94 (2015).
87. Baricci, A., Zago, M., Yu, H., Maric, R., Casalegno, A., Mass transport issues in low platinum loading catalyst for polymer fuel cells, Proceedings of the 6th European Fuel Cell- Piero Lunghi Conference, European Fuel Cell, 85-86 (2015).

88. Roller, J. M., Yu, H., Vukmirovic, M., Bliznakov, S., Kotula, P. G., Carter, C. B., Adzic, R. & Maric, R., Flame-based synthesis of core-shell structures using Pd-Ru and Pd cores, Electrochimica Acta, 138, 341-352 (2014).
89. Roller, J. M., Renner, J., Yu, H., Capuano, C., Kwak, T., Wang, Y., Carter, C. B., Ayers, K., & Maric, R., Flame-based processing as a practical approach for manufacturing hydrogen evolution electrodes, Journal of Power Sources, 271, 366-376 (2014).
90. Roller, J. M., Yu, H., Zhang, L., Plachinda, P., Vukmirovic, M.B., Bliznakov, S., Li, M., Adzic, R. R., Maric, R., Evaluation of phase segregation in ternary Pt-Rh-SnO2 catalysts prepared from the vapor phase. Microscopy and Microanalysis, 20, 462-463 (2014).
91. Yu, H., Roller, J. M., Kim, S., Wang, Y., Kwak, D. & Maric, R., One-step deposition of catalyst layers for high temperature proton exchange membrane fuel cells (PEMFC), Journal of The Electrochemical Society, 161 (5), F622-F627 (2014).
92. Jain, R., Wang, Y. & Maric, R., Tuning of WO3 phase transformation and structural modification by reactive spray deposition technology, Journal of Nanotechnology and Smarth Materials, 1, 1-7 (2014).
93. Jain, R. & Maric, R., Synthesis of nano-Pt onto ceria support as catalyst for water-gasshift reaction by reactive spray deposition technology, Applied Catalysis A: General, 475, 461-468 (2014).
94. Dragan, M. A., Strutt, P. & Maric, R., Crystallization and microstructure of metastable water quenched nanostructured 8 mol% yttria-stabilized zirconia using the solution precursor plasma spray method, Journal of Materials Science, 49 (8), 3215-3224 (2014).
95. Garces, H. F., Roller, J. M., Kingondu, C. K., Dharmarathna, S., Ristau, R. A., Jain, R., Maric, R. & Suib, S. L., Formation of platinum (Pt) nanocluster coatings on K-OMS-2 manganese oxide membranes by Reactive Spray Deposition Technique (RSDT) for extended stability during CO oxidation, Advances in Chemical Engineering and Science, 4 (1), 23- 35 (2014).
96. Poozhikunnath, A., Maric, R., Microstructural design of piezoelectric ZnO thin films as high frequency resonators, Ceramic Transaction 249, 197-203 (2014).
97. Roller, J. M., Arellano-Jiméneza, J., Yu, H., Carter, C. B. & Maric R., Catalyst nanoscale assembly from the vapor phase on corrosion resistant supports, Electrochimica Acta, 107, 632- 655 (2013).
98. Roller, J.M., Arellano-Jiméneza, J., Jain, R., Yu, H., Carter, C.B. & Maric, R., Oxygen evolution during water electrolysis from thin films using bimetallic oxides of Ir-Pt and Ir- Ru, Journal of the Electrochemical Society, 160 (6), F716-F730 (2013).
99. Roller, J. M., Arellano-Jiméneza J., Jain R., Yu H., Maric R. & Carter C.B., Processing, activity and microstructure of oxygen evolution anodes prepared by a dry and direct deposition technique, ECS Transactions, 38 (1), 223-229 (2013).
100. Maric, R., Waste to Energy: Kinetic Improvement and Clean-Up of Gases for High Efficient Gasifier and Fuel Cell Integration, Eco Balance 2012, 65-71(2012).
101. Roller, J., Orfino, F., Neagu, R. & Maric, R., Supported and unsupported platinum catalysts prepared by the one-step Reactive Spray Deposition Technology (RSDT) method and their oxygen reduction reactivity in acidic media, Journal of Material Science, 47 (11), 4604- 4601, (2012).

102. Maric, R., Roller, J.M. & Neagu, R., Flame-based technologies and reactive spray deposition technology for low temperature solid oxide fuel cell, Journal of Thermal Spray Technology, 20 (4), 696-718 (2011).
103. Maric, R., Furusaki, K., Nishijima, D. & Neagu, R., Thin film low temperature solid oxide fuel cell (LTSOFC) by Reactive Spray Deposition Technology, RSDT, ECS Trans., 35 (1), 473-481 (2011).
104. Nédélec, R., Neagu, R., Uhlenbruck, S., Maric, R., Sebold, D., Buchkremer, H.-P. & Stöver, D., Gas phase deposition of diffusion barriers for metal substrates in solid oxide fuel cells, Surface and Coatings Technology, 205 (16), 3999-4004 (2011).
105. Maric, R., Neagu, R., Zhang-Steenwinkel, Y., Van Berkel, F.P.F. & Rietveld, B., Reactive spray deposition technology - An one-step deposition technique for solid oxide fuel cell barrier layers, Journal of Power Sources, 195 (24), 8198-8201(2010).
106. Hui, R., Sun, C., Yick, S., Decès-Petit, C., Zhang, X., Maric, R. & Ghosh, D., Ba1-xPrxCo1- yFeyO3-x as cathode materials for low temperature solid oxide fuel cells, Electrochimica Acta, 55 (16), 4772-4775 (2010).
107. Troczynski, T. & Maric, R., Characterization of porous stainless steel 430 for low temperature SOFC substrates, ECS Transactions, 26 (1), 357-362 (2010).
108. Xie, Y., Maric, R., Ghosh, D., Neagu, R., Hsu, C.-S., Zhang, X., Decès-Petit, C. & Robertson, M., Thin film solid oxide fuel cells deposited by spray pyrolysis, Journal of Fuel Cell Science and Technology, 7 (2), 0210071-0210076 (2010).
109. Neagu, R., Zhang, X., Maric, R. & Roller, J. M., Characterisation and performance of SOFC components made by reactive spray deposition technology, ECS Transactions, 25 (2), 2481- 2486 (2009).
110. Fatih, K., Neagu, R., Alzate, V., Neburchilov, V., Maric, R. & Haijiang, W., Activity of Pt- Sn catalyst prepared by reactive spray deposition technology for ethanol electro-oxidation, ECS Transactions, 25 (1), 1177-1183(2009).
111. Maric, R., Roller, J. M., Neagu, R., Fatih, K. & Tuck, A., Low Pt loading thin cathode catalyst layer by reactive spray deposition technology, ECS Transactions, 12 (1), 59-63 (2008).
112. Oberste Berghaus, J., Ghosh, D., Legoux, J.-G., Moreau, C., Hui, R., Decès-Petit, C., Qu, W. & Maric, R., Suspension HVOF spraying of reduced temperature solid oxide fuel cell electrolytes, Journal of Thermal Spray Technology, 17 (5-6), 700-707(2009).
113. Wang, Z., Berghaus, J.O., Yick, S., Decès-Petit, C., Qu, W., Hui, R., Maric, R., Ghosh, D. , Dynamic evaluation of low-temperature metal-supported solid oxide fuel cell oriented to auxiliary power units, Journal of Power Sources, 176 (1), 90-95 (2008).
114. Zhang, X., Robertson, M., Decès-Petit, C., Xie, Y., Hui, R., Qu, W., Kesler, O., Maric R. & Ghosh, D., Solid oxide fuel cells with bi-layered electrolyte structure, Journal of Power Sources, 175 (2), 800-805 (2008).
115. Xie, Y., Zhang, X., Robertson, M., Maric, R. & Ghosh, D., Mechanical strength and interface adhesion of a solid oxide fuel cell with doped ceria electrolyte, Materials Science Forum, 539-543 (2), 1421-1426 (2007).
116. Zhang, X., Kesler, O., Maric, R., Ghosh, D., Déces-Petit, C., Yick, S., Robertson & M., Roller, J.M., A study on Co and Cu oxides as sintering aids for Sm0.2Ce 0.8O1.9 electrolyte, Materials Science Forum, 539-543 (2), 1391-1396 (2007).

117. Hui, R., Yang, D., Wang, Z., Yick, S., Decès-Petit, C., Qu, W., Tuck, A., Maric, R. & Ghosh, D., Metal-supported solid oxide fuel cell operated at 400-600°C, ECS Transactions, 7 (1), 763-769 (2007).
118. Decès-Petit, C., Zhang, X. & Maric, R., Effect of sintering aids on the formation of zirconia-ceria solid solution, ECS Transactions, 7 (1), 2277-2282 (2007).
119. Hui, R., Wang, Z., Yick, S., Maric, R. & Ghosh, D., Fabrication of ceramic films forsolid oxide fuel cells via slurry spin coating technique, Journal of Power Sources, 172 (2), 840-844 (2007).
120. Hui, S.(R.), Roller, J., Yick, S., Zhang, X., Decès-Petit, C., Xie, Y., Maric, R. & Ghosh, D., A brief review of the ionic conductivity enhancement for selected oxide electrolytes, Journal of Power Sources, 172 (2), 493-502 (2007).
121. Hui, R., Wang, Z., Kesler, O., Rose, L., Jankovic, J., Yick, S., Maric, R. & Ghosh, D., Thermal plasma spraying for SOFCs: Applications, potential advantages and challenges, Journal of Power Sources, 170 (2), 308-323 (2007).
122. Wang, Z., Ghosh, D., Hui, R., Bogdanovic, N., Tang, Z., Yick, S., Xie, Y. & Maric, R., Plasma spray synthesis of ultra-fine YSZ powder, Journal of Power Sources, 170 (1), 145-149 (2007).
123. Hui, S.(R.), Yang, D., Wang, Z., Yick, S., Decès-Petit, C., Qu, W., Tuck, A., Maric, R. & Ghosh, D., Metal-supported solid oxide fuel cell operated at 400-600 °C, Journal of Power Sources, 167 (2), 336-339 (2007).
124. Zhang, X., Robertson, M., Deces-Petit, C., Qu, W., Kesler, O., Maric, R. & Ghosh, D., Internal shorting and fuel loss of a low temperature solid oxide fuel cell with SDC electrolyte, Journal of Power Sources, 164 (2), 668-677(2007).
125. Yang, D., Zhang, X., Nikumb, S., Decès-Petit, C., Hui, R., Maric, R. & Ghosh, D., Low temperature solid oxide fuel cells with pulsed laser deposited bi-layer electrolyte, Journal of Power Sources, 164 (1), 182-188 (2007).
126. Zhang, X., Decès-Petit, C., Yick, S., Robertson, M., Kesler, O., Maric, R., Ghosh, D., A study on sintering aids for Sm0.2Ce0.8O1.9 electrolyte, Journal of Power Sources, 162 (1), 480- 485 (2006).
127. Xie, Y., Zhang, X., Robertson, M., Maric, R. & Ghosh, D., Measurement of the interface adhesion of solid oxide fuel cells by indentation, Journal of Power Sources, 162 (1), 436-443 (2006).
128. Hui, R., Sakata, K., Kenji, M., Maric, R., Decès-Petit, C., Styles, E., Qu, W. & Ghosh, D., Proton conduction in ceria-doped Ba2In2O5 nanocrystalline ceramic at low temperature, Journal of Power Sources, 161 (1), 40-46 (2006).
129. Zhang, X., Maric, R., Ghosh, D., Robertson, M., Decès-Petit, C., Xie, Y., Hui, R. & Kesler, O., NiO-YSZ cermets supported low temperature solid oxide fuel cells, Journal of Power Sources, 161 (1), 301-307 (2006).
130. Zhang, X., Kesler, O., Maric, R., Ghosh, D., Robertson, M., Yick, S., Deces-Petit, C. & Roller, J. M., Sm0.5Sr0.5CoO3 + Sm0.2Ce0.8O1.9 composite cathode for cermet supported thin Sm0.2Ce0.8O1.9 electrolyte SOFC operating below 600 °C, Journal of Power Sources, 160 (2), 1211-1216 (2006).
131. Maric, R., Deces-Petit, C., Hui, R., Zhang, X., Ghosh, D., Sakata, K. & Kenji, M., Preparation and characterization of nanocrystalline Ba2In 2-xMxO5-x (M=Ce, Zr), Journal of the Electrochemical Society, 153 (8), A1505-A1510 (2006).

132. Hui, S. R., Roller, J. M., Zhang, X., Decès-Petit, C., Xie, Y., Maric, R. & Ghosh, D., Various approaches to enhance the ionic conductivity for selected oxide electrolytes, ECS Meeting Abstracts, 1078 (2005).
133. Zhang, X., Maric, R., Ghosh, D., Robertson, M., Decès-Petit, C., Xie, Y., Hui, R. & Roller, J., "Ni-YSZ cermet supported thin ceria-based electrolyte solid oxide fuel cell for reduced temperature operation," ESC Meeting Abstracts, 1072 (2005).
134. Decès-Petit, C., Zhang, X., Styles, E., Maric, R., Roller, J. & Ghosh, D., Characterization of low-temperature proton-conducting ceramics for hydrogen pumping applications, Proceedings - Electrochemical Society, PV 2005-07, 1165-1171 (2005).
135. Zhang, X. & Maric, R., Ghosh, D., Robertson, M., Decès-Petit, C., Xie, Y., Hui, R., Roller, J, Ni-YSZ cermet supported thin ceria-based electrolyte solid oxide fuel cell for reduced temperature (500-600°C) operation, (2005) Proceedings - Electrochemical Society, PV 2005- 07, 1102-1109 (2005).
136. Decès-Petit, C., Zhange, X., Styles, E., Maric, R., Roller, J. & Ghosh, D., Characterization of low temperature proton conducting ceramics for hydrogen pumping applications, ECS Meeting Abstracts, 1100-1102 (2005).
137. Zhang, X., Maric, R., Ohara, S. & Fukui, T., "Influence of interfacial reaction on electrode performance and ohmic losses," Proceedings - Electrochemical Society, PV 2005-07, 595- 602 (2005).
138. Zhang, X., Ohara, S., Maric, R. & Fukui, T., Influence of interfacial reaction on electrode performance and ohmic losses, ECS Meeting Abstracts, 1221-1229(2005).
139. Moon, K. S., Dong, H., Maric, R., Pothukuchi, S., Hunt, A.T., Li, Y. I. & Wong, C. P., Thermal behavior of silver nanoparticles for low-temperature interconnect applications, Journal of Electronic Materials, 34 (2), 168-175 (2005).
140. Maric, R., Oljaca, M., Vukasinovic, B. & Hunt, A.T., Synthesis of oxide nanopowders in nanoSpraySM diffusion flames, Materials and Manufacturing Processes, 19 (6), 1143-1156 (2004).
141. Milosevic, O., Mancic, L., Jordovic, B., Maric, R., Ohara, S. & Fukui, T., Processing of Gd2O3: Eu phosphor particles through aerosol route, Journal of Materials Processing Technology, 143-144 (1), 501-505 (2003).
142. Maric, R., Seward, S., Faguy, P. W. & Oljaca, M., Electrolyte materials for intermediate temperature fuel cells produced via combustion chemical vapor condensation, Electrochemical and Solid-State Letters, 6 (5), A91-A95 (2003).
143. Oljaca, M., Maric, R., Shanmugham, S. & Hunt, A. T., Nanomaterials for solid oxide fuel cells, American Ceramic Society Bulletin, 82 (1), 38-40 (2003).
144. Zhang, X., Ohara, S., Okawa, H., Maric, R. & Fukui, T., Interactions of a La0.9Sr0.1Ga0.8Mg0.2O3 electrolyte with Fe2O3, Co2O3 and NiO anode materials, Solid State Ionics, 139 (1-2), 145-152 (2001).
145. Zhang, X., Ohara, S., Maric, R., Okawa, H., Fukui, T., Yoshida, H., Inagaki, T. & Miura, K., Interface reactions in the NiO-SDC-LSGM system, Solid State Ionics, 133 (3), 153-160 (2000).
146. Inagaki, T., Miura, K., Yoshida, H., Maric, R., Ohara, S., Zhang, X., Mukai, K. & Fukui, T., High-performance electrodes for reduced temperature solid oxide fuel cells with doped lanthanum gallate electrolyte. II. La(Sr)CoO3 cathode, Journal of Power Sources, 86 (1), 347-351 (2000).

147. Ohara, S., Maric, R., Zhang, X., Mukai, K., Fukui, T., Yoshida, H., Inagaki, T. & Miura, K., High performance electrodes for reduced temperature solid oxide fuel cells with doped lanthanum gallate electrolyte. I. Ni-SDC cermet anode, Journal of Power Sources, 86 (1), 455- 458 (2000).
148. Maric, R., Fukui, T., Ohara, S., Yoshida, H., Nishimura, M., Inagaki, T. & Miura, K., Powder prepared by spray pyrolysis as an electrode material for solid oxide fuel cells, Journal of Materials Science, 35 (6), 1397-1404 (2000).
149. Zhang, X., Ohara, S., Maric, R., Mukai, K., Fukui, T., Yoshida, H., Nishimura, M. & Miura, K., Ni-SDC cermet anode for medium-temperature solid oxide fuel cell with lanthanum gallate electrolyte, Journal of Power Sources, 83 (1-2), 170-177(1999).
150. Maric, R., Ohara, S., Fukui, T., Yoshida, H., Nishimura, M., Inagaki, T. & Miura, K., Solid oxide fuel cells with doped lanthanum gallate electrolyte and LaSrCoO3 cathode and Ni- samaria-doped ceria cermet anode, Journal of the Electrochemical Society, 146 (6), 2006-2010 (1999).
151. Maric, R., Ohara, S., Fukui, T., Inagaki, T. & Fujita, J.-I., High-performance Ni-SDC cermet anode for solid oxide fuel cells at medium operating temperature, Electrochemical and Solid- State Letters, 1 (5), 201-203 (1998).
152. Maric, R., Ishihara, K.N. & Shingu, P.H., Structural changes during low energy ball milling in the Al-Ni system, Journal of Materials Science Letters, 15 (13), 1180-1183(1996).
153. Maric, R., Ishihara, K.N. & Shingu, P.H., Structure formation and deformation behaviour of multilayer composite prepared by ball milling and repeated pressing, Materials Science Forum, 179-181, 801-806 (1995).
154. Ishihara, K., Maric, R., Kondo, A. & Shingu, H., Formation of intermetallic compound by mechanical alloying, Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 41 (8), 949-952 (1994).

REFEREED CONFERENCE PAPERS

1. Bliznakov, S., Gado, A.M., Bonville, L.J., Maric, R., "Hydrogen Crossover Mitigation in PEM Water Electrolyzers: Recombination Layers Design, Fabrication, and Durability," Electrochemical Society Meeting Abstracts 248, 2121-2121.
2. Friedman, A., Sifat, I., Bliznakov, S., Bonville, L.J., Pedram, S., Jankovic, J., Maric, R., Oliveira, A. M., Papandrew., A.B.,"A Rapid, Model-Independent Method for Assessing the Corrosion Behavior of PTL Coatings in PEM Water Electrolyzers," Electrochemical Society Meeting Abstracts 249, 1762-1762.
3. Valchev, S., Sifat, I., Bonville, L.J., Maric, R., Bliznakov, S., "Advanced Anion Exchange Membrane Water Electrolyzers: Study of the Membrane Type and Thickness Impact on the Electrolyzer Performance," 249th ECS Meeting (May 24-28, 2026).
4. Friedman, A., Sifat, I., Bliznakov, S., Bonville, L.J., Pedram, S., Jankovic, J., Maric, R., Oliveira, A. M., Papandrew., A.B.,"A Rapid, Model-Independent Method for Assessing the Corrosion Behavior of PTL Coatings in PEM Water Electrolyzers," Electrochemical Society Meeting Abstracts 249, 1762-1762.
5. Bliznakov, S., Zeng, Z., Bonville, L.J., Maric, R., "(Invited) Comparative Study of Advanced Membrane Electrode Assemblies with Low PGM Loadings for Proton Exchange Membrane Water Electrolyzers: Porous Transport Electrodes vs Catalyst Coated Membranes," Electrochemical Society Meeting Abstracts 247, 1909-1909.

6. Perkins, E.M., Bliznakov, S., Bonville, L.J., Maric, R., "Advancing Pemwe Catalysis with Small Particle Size Titanium Oxide-Supported Iridium Via Reactive Spray Deposition Technology," ECS Meeting Abstracts, 1902.
7. Gado, A.M., Bonville, L.J., Bliznakov,S., Maric, R., "Tuning the Water Dissociation Catalyst Layer for Bipolar Membranes for Hydrogen Production," Electrochemical Society Meeting Abstracts 247, 1973-1973.
8. Friedman, A., Bliznakov, S., Bonville, L.J., Maric, R., Innovative Deposition Method for Mixed Metal Alloys and Hydroxides as High-Performance Catalysts for the Hydrogen and Oxygen Evolution Reaction., ECS Meeting Abstracts, 1965.
9. Perkins, E.M., Bliznakov, S., Bonville, L.J., Maric, R., "Electroconductive and Durable Ceramic Supports for Low-Loaded Iridium Oxide Anode Catalyst Layers in PEM Water Electrolyzers," 248th ECS Meeting (October 12-16, 2025).
10. Perkins, E. M., Bonville, L. J., Maric, R. and Bliznakov, S. Advanced Bipolar Plates for the Next Generation PEM Water Electrolyzers: Flow-Field Design, Fabrication, and Optimization, presented at the 246rd PRiME ECS Meeting, Honolulu, HI, October 6-11, 2024.
11. Gado, A. M., Bliznakov, S., Bonville, L. J., and Maric, R. Investigation of Water Dissociation Catalyst Layer Configurations for Bipolar Membrane Water Electrolzyers, presented at the 246rd PRiME ECS Meeting, Honolulu, HI, October 6-11, 2024.
12. Bliznakov, S., Bonville, L. J., and Maric, R. Development of Highly Active, Selective, and Durable Non-Precious Electrocatalysts for Advanced Membrane Electrode Assemblies for Direct Seawater Electrolyzers, presented at the 246rd PRiME ECS Meeting, Honolulu, HI, October 6-11, 2024.
13. Maric R. (2024), Hydrogen Production Technologies: novelties and advances, 37th Topical Meeting of the International Society of Electrochemistry, Stresa, Italy, 9 - 12 June 2024 (Keynote talk).
14. Bliznakov, S., Zeng, Z., Bonville, L., Maric, R. (2024): Novel Design of Low-Loaded MEAs for Advanced Low-Temperature Water Electrolyzers, *presented at the 245rd ECS Meeting,* San Francisco, CA on May 28th, 2024. (Invited talk)
15. Bashiri, S., Zeng, Z., Bonville, L. J., Bliznakov, S., and Maric, R. Comparative Study of Anion Exchange Membranes for Application in Advanced AEM Water Electrolysers, *presented at the 245rd ECS Meeting,* San Francisco, CA on May 27th, 2024.
16. *Gado, A. M., Bliznakov, S., Bonville, L. J., and Maric, R.* High Efficiency and High Durability Proton Exchange Membrane Water Electrolyzers for Hydrogen Production with Advanced Catalyst Coated Membranes, *presented at the 245rd ECS Meeting,* San Francisco, CA on May 28th, 2024.
17. Zeng, Z., Bliznakov, S., Bonville, L. J., and Maric, R. Advanced Porous Transport Electrode for High-Performance Proton Exchange Membrane Water Electrolyzers, *presented at the 245rd ECS Meeting,* San Francisco, CA on May 28th, 2024.
18. Xing, J., Bashiri, S., Bliznakov, S., Bonville, L. J., and Maric, R. Boron Modified Nife-MOF-74 Catalyst for Application in Advanced Anion Exchange Membrane Water Electrolyzers, *presented at the 245rd ECS Meeting,* San Francisco, CA on May 29th, 2024.
19. Bliznakov, S., Zeng, Z., Bonville, L., Maric, R. (2024): Novel MEAs with Low Ir loading for Advanced PEM Water Electrolyzers: Design, Fabrication, Performance, and Durability Assessment. *Presented at* the *Telluride Science Research Center Workshop on PGM and PGM-free catalysts for oxygen and hydrogen evolution reactions***,** March 18th 2024. (Invited talk)

20. Bliznakov, S., Advanced MEAs for PEM Water Electrolyzers Fabricated by the RSDT Methodology. *Presented at the seminar of the Chemistry Department at Binghamton University*, November 2023. (Invited talk)
21. Bliznakov, S., Zeng, Z., Ouimet, R., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R. (2023): Innovative Membrane Electrode Assemblies for the Next Generation Proton Exchange Membrane Water Electrolyzers, presented *at the 243rd ECS Meeting, with the 18th International Symposium on Solid Oxide Fuel Cells (SOFC-XVIII),* Boston, MA on May 29th, 2023. (Keynote talk)
22. Zeng, Z., Bliznakov, S., Bonville, L. J., Maric, R. Advanced Porous Transport Electrode for High-Performance Proton Exchange Membrane Water Electrolyzers. 245th ECS Meeting (May 26-30, 2024), 2024.
23. Xing, J., Bashiri, S., Bliznakov, S., Bonville, L. J., Maric, R. Boron Modified Nife-MOF-74 Catalyst for Application in Advanced Anion Exchange Membrane Water Electrolyzers. 245th ECS Meeting (May 26-30, 2024).
24. Gado, A.M., Bliznakov, S., Bonville, L. J., Maric, R. High Efficiency and High Durability Proton Exchange Membrane Water Electrolyzers for Hydrogen Production with Advanced Catalyst Coated Membranes. 245th ECS Meeting (May 26-30, 2024).
25. Bliznakov, S., Zeng, Z., Bonville, L. J., Maric, R. Novel Design of Low-Loaded Membrane Electrode Assemblies for Advanced Low-Temperature Water Electrolyzers, *Invited.* 245th ECS Meeting (May 26-30, 2024).
26. Bashiri, S., Zeng, Z., Bonville, L. J., Bliznakov, S., Maric, R. Comparative Study of Anion Exchange Membranes for Application in Advanced AEM Water Electrolysers. 245th ECS Meeting (May 26-30, 2024).
27. Khosravi, F., Stefanidis, E.K., Zeng Z., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "High-Resolution Differential Mobility Analysis (HR-DMA) of naturally charged Platinum Nanoparticles synthesized in two Reactive Spray Deposition Technology Flames", presented at the 13th U.S. National Combustion Meeting of The Combustion Institute, College Station, Texas, March 19-22, 2023.
28. Stefanidis, E.K., Zeng Z., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "In-situ laser measurements of a turbulent diffusion flame synthesizing Iridium nanoparticles for the Reactive Spray Deposition Technology" presented at the 13th U.S. National Combustion Meeting of The Combustion Institute, College Station, Texas, March 19-22, 2023.
29. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "Light Scattering and Laser-Induced Incandescence for the Characterization of Platinum Nanoparticles manufactured by the Reactive Spray Deposition Technology" presented at the 2022 Spring Technical Meeting of the Eastern States Section of The Combustion Institute, Orlando, Florida, March 6-9, 2022.
30. Bliznakov, S., Zeng, Z., Ouimet, R.,Niedzwiecki, A., Capuano, C., Ayers, K., Bonville, L., and Maric R., Innovative Membrane Electrode Assemblies for the Next Generation Proton Exchange Membrane Water Electrolyzers. Invited Plenary talk, presented at the 243rd ECS Meeting, Boston, MA, May 29, 2023

31. *Zeng, Z., Bliznakov, S., Bonville, L., Maric, R.* Advanced Porous Transport Layers for PEM Water Electrolyzers: Impact of the Interfacial and Bulk Properties of the PTLs on the Electrolyzers Performance, presented at the 243rd ECS Meeting, Boston, MA, May 31, 2023
32. Gado, A., Ipekçi, D., Bliznakov, D., Bonville, L., McCutcheon, J., Maric R. Investigation of the Performance and Durability of Reactive Spray Deposition Fabricated Electrodes on a Bifunctional Membrane for Alkaline Water Electrolysis and CO_2 Reduction Reaction, presented at the 243rd ECS Meeting, Boston, MA, May 30, 2023.
33. Xing, J., Bliznakov, S., Bonville, L., Maric, R. Enhancing Effect of Boron-Doping on the Activity of Nife-MOF-74 Towards Oxygen Evolution Reaction in Alkaline, presented at the 243rd ECS Meeting, Boston, MA, May 31, 2023.
34. Koni, A., Zeng, Z., Bonville, L.J., Bliznakov, S., Maric, R. Reactive Spray Deposition Technology for Deposition of Protective Metal Layers on Porous Transport Layers in PEM Water Electrolyzers, presented at the 243rd ECS Meeting, Boston, MA, May 31, 2023.
35. Bliznakov, S., Zeng, Z., Ouimet, R.,Niedzwiecki, A., Capuano, C., Ayers, K., Bonville, L., Yu, H., Maric R. Advanced MEAs for the Next-Generation Proton Exchange Membrane Water Electrolyzers, presented at the "Telluride Innovation Workshop -Platinum Group Metal and Platinum Group Metal-free Electrocatalysts: Catalyst/Ionomer Interactions March 7th, 2023, (invited talk).
36. Bliznakov, S., Xing, J., Zeng, Z., Best, B., Liu, Z., Bonville, L., Maric, R. Seawater Electrolysis Challenges and Perspectives, presented at the "Telluride Innovation Workshop – Decarbonization of Cement", March 8th, 2023, (invited talk).
37. Bliznakov, S., Zeng, Z., Ouimet, R., Niedzwiecki, A., Capuano, C., Ayers, K., Bonville, L., Yu, H., Maric R. Hydrogen Crossover Mitigation in Proton Exchange Membrane Water Electrolyzers, presented at the Global Energy Meet, GEM-2023, MARCH 6-10, 2023, BOSTON, MA
38. Bliznakov, S., Zeng, Z., Ouimet, R., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Yu, H., Maric, R. (2022): Novel Duo-Recombination Layer Design for Hydrogen Crossover Mitigation in Proton Exchange Membrane Water Electrolyzers, presented *at the 2022 World Fuel Cell Conference,* Irvine, CA (December 13, 2022)
39. Zeng, Z., Xing, J., Bonville, L., Dekel, D., Maric, R., Bliznakov, S. Advanced Nickel-based Catalysts for the Hydrogen Oxidation Reaction in Alkaline Media Synthesized by Reactive Spray Deposition Technology: Study of the Effect of Particle Size, presented *at the 2022 World Fuel Cell Conference,* Irvine, CA (December 13, 2022).
40. Bliznakov, S., Zeng, Z., Ouimet, R., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Yu, H., Maric, R. (2022): Effective and Durable Recombination Layers for Hydrogen Crossover Mitigation in Proton Exchange Membrane Water Electrolyzers, presented *at the 242nd ECS Meeting* in Atlanta, GA (October 12, 2022
41. Xing, J., Zeng, Z., Koni, A.,Mirshekari, G., Best, W., Kumar, V., Sammes, L., Bonville, L., Maric, R., Bliznakov, S. One-Step Synthesis of Selective Nife-Layered Double Hydroxide Anode Catalyst for Highly Efficient and Stable Anion Exchange Membrane Water Electrolyzers, Operating with Seawater, presented *at the 242nd ECS Meeting* in Atlanta, GA (October 13, 2022)
42. Zeng, Z., Bliznakov, S., Bonville, L., Ouimet, R., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R. Large–Scale, High-Performance, Durable and Low-Cost Membrane Electrode Assemblies for

Proton Exchange Membrane Water Electrolyzers, presented *at the 242nd ECS Meeting* in Atlanta, GA (October 9-13, 2022)

43. *Gado, A., Bliznakov, Bonville, L., and Maric, R.* Using Distribution of Relaxation Times Analysis to Explore Overpotentials in Proton Exchange Membrane Water Electrolyzers Utilizing Sintered Metal and Fibrous Titanium Porous Transport Layers, presented *at the 242nd ECS Meeting* in Atlanta, GA (October 9-13, 2022)
44. Koni, A., Bliznakov, S., Bonville, L., Maric, *R.* Reactive Spray Deposition Technology As an Alternative Method for Precious Metals Deposition on Sintered Titanium Porous Transport Layers for Application in Advanced Proton Exchange Membrane Water Electrolyzers, presented *at the 242nd ECS Meeting* in Atlanta, GA (October 9-13, 2022)
45. Stefanidis, Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F., "Laser spectroscopy diagnostics for tracking nanoparticle synthesis in flames", being submitted for presentation at The 2023 Gordon Research Seminar on Laser Diagnostics in Energy and Combustion Science (GRS), Newry, Maine, July 9-14, 2023.
46. Khosravi, F., Stefanidis, E.K., Zeng Z., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "High-Resolution Differential Mobility Analysis (HR-DMA) of sub-10nm Nanoparticles Synthesized by the Reactive Spray Deposition Technology", accepted for presentation at the 41st Conference of the American Association for Aerosol Research (AAAR), Portland, Oregon, October 2-6, 2023.
47. Stefanidis, E.K., Khosravi, F., Zeng Z., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "H Diagnostics for the in-situ characterization of catalyst nanoparticles synthesized by the Reactive Spray Deposition Technology (RSDT)", poster presentation at the Overall Research on Electrode Coating and Characterization Processes (OREO+C) Workshop, Storrs, CT, May 25-26, 2023. **Won prize as best poster presentation of the OREO+C workshop**
48. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "In-situ laser diagnostics of metal nanoparticles during their flame synthesis by in the reactive spray deposition technology" presented at the 40th Annual Conference of the American Association for Aerosol Research (AAAR), Raleigh, North Carolina, October 3-7, 2022.
49. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "Implementation of Laser Diagnostics in Reactive Spray Deposition Technology (RSDT) for the Characterization of Catalyst Nanoparticles" presented at the 11th International Aerosol Conference (IAC 2022), Athens, Greece, September 4-9, 2022.
50. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "In-situ Characterization of Catalyst Nanoparticles from Reactive Spray Deposition Technology (RSDT)" presented at the 25th ETH Conference on Combustion Generated Nanoparticles, on-line, June 21-23, 2022.
51. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "In-situ Laser Diagnostics to Monitor the Flame-Assisted Synthesis of Pt Nanoparticles in the Reactive Spray Deposition Technology (RSDT)" presented at the 44th Meeting of the Italian Section of The Combustion Institute, Naples, Italy, June 5-8, 2022.
52. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Maric, R., Carbone, F. "Pt Nanoparticles Characterization within the Reactive Spray Deposition Technology (RSDT)" presented at the C2E2 Clean Energy Symposium, Storrs, Connecticut, May 19-20, 2022.

53. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Carbone, F., Maric, R. "In-situ Laser Diagnostics for the Characterization of Nanoparticles Synthesized with the Reactive Spray Deposition Technology (RSDT)" presented at the 39th Annual Conference of the American Association for Aerosol Research (AAAR), Albuquerque, New Mexico, October 18-22, 2021.
54. Stefanidis, E.K., Ebaugh, T. A., Bliznakov, S., Bonville, L.J., Carbone, F., Maric, R. "Implementing on-line laser diagnostics to monitor the reactive spray deposition technology (RSDT) for catalyst manufacturing" presented at the 38th Annual Conference of the American Association for Aerosol Research (AAAR), Virtual, October 5-9, 2020.
55. Maric, R., Bliznakov, S., Ouimet,R., Zeng, Z., Wagner,A., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K.,. Catalyst Layer Design, Manufacturing and In-line Quality Control, U.S. Department of Energy Hydrogen and Fuel Cells Program 2022 Annual Merit Review and Peer Evaluation Meeting. June, 2022
56. Bliznakov, S., Marinkovic, N., Sasaki, K., Zeng, Z., Bonville, L., Maric, R., Advanced Catalysts for PEM Water Electrolyzers Fabricated by Reactive Spray Deposition Technology: Study of the Degradation Mechanisms in the Catalysts' Layers by In-situ and Ex-situ Synchrotron X-ray Absorption Spectroscopy. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
57. Koni A., Maric, R., A Path to Significant Reduction of the Interfacial Contact Resistance of Sintered Titanium Porous Transport Layers in Advanced Proton Exchange Membrane Water Electrolyzers. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
58. Zeng, Z., Bliznakov, S., Bonville, L., Ouimet, R., Niedzwiecki, A., Capuano,C., Ayers, K., Maric, R., Large–Scale High-Performance Low Catalyst Loaded Membrane Electrode Assemblies for Advanced Proton Exchange Membrane Water Electrolyzer. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
59. Xing ,J., Zeng, Z., Bliznakov, S., Bonville, L., and Maric, R., Boosting Hydrogen Oxidation Reaction Activity of Nickel Based Catalyst By Reactive Spray Deposition Technology: Effects of Particle Size. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
60. Gado, A., Ouimet, R., Bliznakov, S., Bonville, L., and Maric, R., Understanding Proton Exchange Membrane Water ç in Reactive Spray Deposition Technology Fabricated Dual Recombination Layers through Distribution of Relaxation Times Analysis. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
61. Zago, M.,Cecchetti, M., Ebaugh, T., Bonville, L., Maric, R., Casalegno, A., Development of an additional selective layer to mitigate crossover in vanadium redox flow batteries: influence of composition on efficiency and capacity decay. Presented at the 241th ECS Meeting, Vancouver, CA (May, 2022)
62. Maric, A., Bliznakov, S., Hydrogen Production by Water Electrolysis, ChemCat 2022, London, UK, May 25, 2022 (invited talk)
63. Bliznakov, S., Ouimet, R., Zeng, Z., Ebaugh, T., Bonville,L., Niedzwiecki, A., Capuano, C., Ayers, K., Maric,R., Advanced Proton Exchange Membrane Water Electrolyzers for Integration with Renewable Energy Sources, Presented at the Sixth International Conference on FOSSIL & RENEWABLE ENERGY, February 17, 2022.

64. Gado, A., Maric, R. Analysis of Electrochemical Impedance Spectroscopy using Distribution of Relaxation Times for Proton Exchange Membrane Fuel Cells and Electrolyzers, Abstracts, 1261, 240th Meeting of The Electrochemical Society, October 2021 (On line due to COVID-19).
65. Sahoo,S. Dekel, D., Maric,R. Alpay, P., Bifunctional Palladium-Ceria Catalysts for Hydrogen Oxidation Reaction, ECS Meeting Abstracts, 1878, Meeting of The Electrochemical Society, October 2021 (On line due to COVID-19).
66. Bliznakov, S., Ouimet, R., Zeng, Z., Ebaugh, T., Bonville, L., A Niedzwiecki, Maric., R., Highly Active and Durable Membrane Electrode Assemblies for Proton Exchange Membrane Water Electrolyzers Fabricated by Reactive Spray Deposition Technology, ECS Meeting Abstracts, 1271, 240th Meeting of The Electrochemical Society, October 2021 (On line due to COVID-19).
67. Bliznakov, S. Quimet, R., Maric, R., Advanced Catalysts for the Oxygen Evolution Reaction Fabricated By Reactive Spray Deposition Technology: Degradation Mechanisms Governing the Performance Loss during the Long-Term Steady State Operation, ECS Meeting Abstracts, 1271, 240th Meeting of The Electrochemical Society, October 2021 (On line due to COVID-19).
68. Maric, R, Inclusion, Diversity, Equity, and Awareness (IDEA), ASM International, September 13, St.Louis, (invited talk, Keynote Speaker).
69. Bliznakov, S., Maric R.,InnovativeMembrane Electrode Assemblies for PEM Water Electrolyzers Fabricated by Reactive Spray Deposition Technology: Study of the Degradation Mechanisms during the Long-Term Steady State Operation, 10th International Conference on Materials and Processes for Renewable Energies –Brazil/RS-10/14/2021
70. Maric, R. Catalyst layer design, manufacturing and in-line quality control for the PEM electrolysis MEAs, Second World Congress on Internal Combustion Engines, April 21-24, 2021 in Jianan, China, (invited talk, Keynote Speaker).
71. Maric, R., Catalyst Layer Design, Manufacturing and In-line Quality Control, Materials Info 2021, March 29, 2021, (invited talk, Keynote Speaker).
72. Maric, R., Advanced Membrane Electrode Assemblies for Proton Exchange Membrane Water Electrolyzers Fabricated by Reactive Spray Deposition Technology, Italian Virtual Workshop on Fuel Cells, March 17, 2021.
73. Ouimet, R., Mirshekari, G., Yu, H., Zeng, Z., Bonville, L., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R., Development of Recombination Layers to Reduce Gas Crossover for Proton Exchange Membrane Water Electrolyzers by Reactive Spray Deposition Technology PRiME 2020,238th Meeting of The Electrochemical Society, September 2020 (On line due to COVID-19).
74. Ebaugh, T., Bonville, L.J., Maric, R., An Investigation of the Ammonia-Sensing Behavior of α-MoO3-Based Chemi-Resistive Sensors PRiME 2020,238th Meeting of The Electrochemical Society, September 2020 (On line due to COVID-19).
75. Baricci, A., Yu, H., Croci, D., Palmieri, A, Maric, R., Picciotti, G., Casalegno, A., Experimental characterization of polymer electrolyte membrane fuel cells with low platinum loading operated under dry gas feed. 8th European Fuel Cell Technology & Applications Piero Lunghi Conference - EFC19, Abstract EFC19187, Naples, Italy, Dec. 2019 (Oral)
76. Ouimet, R., Mirshekari, G., Yu, H., Zeng, Z., Bonville, L., Mani, P., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R. Investigation of highly stable proton exchange membrane water electrolyzers with low catalyst loading and reduced hydrogen crossover, 2019 MRS Fall Meeting, Boston, MA, December, 2019. (Oral)

77. Ouimet, R., Yu, H., Bonville, L., Maric, R. Overpotential analysis of low loading Pt/C electrodes developed by reactive spray deposition technology, 2019 AIChE Annual Meeting, Orlando, FL, November, 2019.
78. Mirshekari, G., Ouimet, R., Yu, H., Zeng, Z., Bonville, L., Mani, P., Niedzwiecki, A., Capuano, C., Ayers, K., Maric, R. A pathway to significant reduction of hydrogen crossover with Pt recombination layer in proton exchange membrane water electrolyzers, ECS 236th meeting, Atlanta, GA, October, 2019.
79. Poozhikunnath, A., Xing, J., Yu, H., Bonville, L.J., Maric, R., Characterization of flame synthesized metal and nitrogen doped nanocarbons for oxygen reduction reaction. ECS 236th meeting, Atlanta, October. 2019.
80. Ebaugh, T.A., Poozhikunnath, A., Bonville, L.J., Maric, R., Ammonia-sensing properties of α-MoO3 fabricated by reactive spray deposition technology, ECS 236th meeting, Atlanta, GA, October, 2019.
81. Yu, H., Bonville, L.J., Maric, R., Catalyst development for renewable energy applications. Advanced Manufacturing and Characterization of Fuel Cells and Electrolyzes Workshop, Hartford, Sept. 2019.
82. Maric, R., Novelies in additive manufacturing and bio-printing, 2nd International Conference on Material Physics and Materials Science, Vienna, May, (invited talk, Keynote Speaker).
83. Yu, H., Davydova, E.S., Ash, U., Miller, H.A., Bonville, L., Dekel, D. R., Maric, R., Palladium-ceria nanocatalyst for hydrogen oxidation in alkaline media: optimization of the Pd- CeO2 interface. ECS 235th meeting, Dallas, TX, May 2019.
84. Daudt, N.F., Poozhikunnath, A., Yu, H., Bonville, L.J., Maric, R., Investigation of Pt-Nb- NbOx loaded on TiN as cost-effective electrocatalyst for polymer electrolyte membrane fuel cells. ECS 235th meeting, Dallas, TX, May 2019.
85. Ouimet, R.J., Yu, H., Bonville, L.J., Maric, R., Polarization analysis of durable low loading Pt/C electrodes produced by reactive spray deposition technology for low humidity conditions. 235th meeting of the Electrochemical Society, Dallas, May 2019.
86. Maric, R., Yu, H., Jankovic, J., Bonville, L., Degradation of PEM water electrolysis MEA after long-term operation, 18 AICeH, annual meeting , Pittsburg, October, 2018, (invited talk, Keynote Speaker).
87. Maric, R., Yu, H., Roller, J., Bonville, L., Study on the degradation of PEM water electrolysis MEA after long-term operation, ECS 234rd meeting, Cancun, Mexico, October, 2018, (invited talk, Keynote Speaker).
88. A. Poozhikunnath, H. Yu, L. Bonville and R. Maric, “Electrochemical and spectroscopic characterization of non- precious metal Fe-N-C ORR catalysts synthesized by direct flame spray pyrolysis”, ECS 243rd meeting, Seattle, WA, May 2018.
89. Maric, R., Yu, H., Roller, J., Bonville, L., Graphitize Carbon as a support in PEM FC, ECS 234rd meeting, Cancun, Mexico, October , 2018, (invited talk, Keynote Speaker).
90. Yu, H., Bonville, L.J., Maric, R., Study on the Degradation of PEM water electrolysis MEA after long-term operation, 234th meeting of the Electrochemical Society, Cancun, Mexico, October 2018.

91. Yu, H., Bonville, L.J., Maric, R., Platinum supported on graphitized carbon cathode for PEMFC fabricated with reactive spray deposition technology, 234th meeting of the Electrochemical Society, Cancun, Mexico, October 2018.
92. Maric, R., Yu, H., Roller, J., Bonville, L., Improved Low-Pt Loading Electrode Performance and Durability Through Catalyst Layer Design and Application, 20th International Conference on Advanced Materials Science and Nanotechnology Dubai, UAE, August, (invited talk, Keynote Speaker).
93. Wang, Y., Poozhikunnath, A., Myles, T., Maric, R., Synthesis of Nano-crystalline Thermal Barrier Coatings by Reactive Spray Deposition Technology, THERMEC 2018, Paris, France, July, 2018.
94. Yu, H., Roller, J., Bonville, L.J., Maric, R., IrOx/Nafion catalyst for oxygen evolution: Effect of surface oxide on activity and stability, 233rd meeting of the Electrochemical Society, Seattle, May, 2018, (invited talk, Keynote Speaker).
95. Yu, H., Poozhikunnath, A., Vukmirovic, M.B., Roller, J., Bonville, L.J., Adzic, R.R., Maric, R., Ternary Pt-Rh-SnO2 catalyst synthesized from vapor phase for ethanol oxidation, 233rd meeting of the Electrochemical Society, Seattle, May, 2018, (invited talk, Keynote Speaker).
96. Poozhikunnath, A., Yu, H., Bonville, L.J., Maric, R., Electrochemical and spectroscopic characterization of non-precious metal Fe-N-C ORR catalysts synthesized by direct flame spray pyrolysis, 233rd meeting of the Electrochemical Society, Seattle, May, 2018.
97. Poozhikunnath, A., and Maric, R., Developing an ITSOFC for Electrocatalytically Controlled Partial Oxidation of Methane to Methanol, TMS conference, Oregon, Portland, April, 2018.
98. Yu, H., Casalegno, A., Maric, R., Degradation in Low Platinum Polymer Electrolyte Fuel Cell and Electrolyzer, Catalysis and Chemical Engineering, Paris, France, February, 2018, (invited talk, Keynote Speaker).
99. Ouimet, R., Maric, R. Proton Conducting SOFC, 15th International Symposium on Solid Oxide Fuel Cells: Materials, Science and Technology, Daytona Beach, Florida, January, 2018.
100. Baricci, A., Yu, H., Guetaz, L., Casalegno, A., Maric, R., Marchesi, R., Modelling analysis of degradation in low platinum polymer electrolyte fuel cells, European Fuel Cell Conference, Naples, Italy, December, 2017.
101. Wang, Y., Roller, J.M. and Maric, R., One-Step Synthesis of Nanostructured Co3O4 Film on Nickel Foam as Electrode for Supercapacitor Application, 232nd meeting of the Electrochemical Society, Albuquerque, October 2017.
102. Wang, Y., Roller, J.M. and Maric, R., One-Step Fabrication of Nanostructured LiNi1/3Mn1/3Co1/3O2Cathode for Lithium Ion Batteries, 231st meeting of the Electrochemical Society, New Orleans, May 2017.
103. Yu, H., Bonville, L., Maric, R., Analysis of H2/Air polarization curves: The influence of ionomer/carbon ratio and carbon supports in low Pt loading catalyst on the cathode performance, 231st meeting of the Electrochemical Society, New Orleans, May 2017.
104. Yu, H., Capuano, C., Ayers, K., Maric, R., Iridium oxide/Nafion catalyst for oxygen evolution reaction and proton exchange membrane water electrolyzer, 231st meeting of The Electrochemical Society, New Orleans, May 2017.
105. Maric, R., Degradation of the low Pt loading cathode and possible mitigation strategy, 7th International Conference on Fundamentals and Development of Fuel Cells (FDFC2017), Stuttgart, Germany, January 2017 (invited talk, Keynote Speaker).

106. Maric, R., Degradation of the low Pt loading cathode and possible mitigation strategy, Second Act, EU Workshop on Durability Issues in PEMFC and DMFC, Stuttgart, Germany, January 2017 (invited talk, Keynote Speaker).
107. Maric, R, A. Poozhikunnath, A. Torabi, M. Aindow, Low Temperature Solid Oxide Fuel Cell (LT-SOFC) for direct conversion of methane to methanol and other liquids, 14th International Symposium on Solid Oxide Fuel Cells (SOFC), Daytona Beach, January 2017. (invited talk, Keynote Speaker)
108. Wang, Y., Kumar, R., Roller, J. and Maric, R., Synthesis and Characterization of Nano- crystalline La2Zr2O7 Film by Reactive Spray Deposition Technology for Application in Thermal Barrier Coatings. MRS Conference, Boston, December2016.
109. Yu, H., Baricci, A., Casalegno, A., Guetaz, L., Bonville, L., Maric, R., Gradient cathode catalyst in polymer electrolyte membrane fuel cell (PEMFC): mechanistic and microscopic analysis, 2016 fall meeting MRS Conference, Boston,, Boston, December, 2016.
110. Ouimet, R., Myles, T, Kwak, D., Bonville, L., Maric R., Production of Proton-Conducting Solid Oxide Fuel Cells by Reactive Spray Deposition Technology (RSDT), Materials Research Society (MRS), Fall meeting, Boston, November 2016.
111. Poozhikunnath A., Maric, R. and Aindow, M., Direct Gas to Liquid Conversion of Methane to Liquid Fuels Using Gadolinium Doped Ceria Electrolyte Based Intermediate Temperature Solid Oxide Fuel Cell, presented at the Materials Research Society (MRS) Fall conference, Boston, November 2016.
112. Yu, H. , Baricci, B., Casalegno, A. , Guetaz L., Maric, R., Gradient Cathode Catalyst Layer in Polymer Electrolyte Membrane Fuel Cell—Mechanistic and Microscopic Analysis, Materials Research Society (MRS), Fall meeting, Boston, November 2016 (invited talk, Keynote Speaker).
113. Wang, Y., Roller, J. and Maric, R., Synthesis of nanostructured La2Zr2O7 film by reactive spray deposition technology for application in thermal barrier coatings, Materials Research Society (MRS), Fall meeting, Boston, November 2016.
114. Casalegno, A., Maric, R., Baricci B., Haoran, Y., Guetaz, L., Low Pt-loading gradient catalyst layer with locally tailored particle size for improved lifetime, Materials Challenges for Fuel Cells and Hydrogen Technologies, Granoble, France, September 2017. (invited talk, Keynote Speaker).
115. Maric, R., Yu H., Baricci, A., Guetaz, L., Casalegno, A., Durability Improvement due to Catalyst Gradient Layer, 252nd American Chemical Society National Meeting & Exposition, Philadelphia, August 2016. (invited talk, Keynote Speaker).
116. Maric, R., Yu H., Baricci, A., Guetaz, L., Casalegno, A., Improved Low PGM Cathode performance and Durability through Catalyst Layer Design and Application, The International Conference on Electrochemical Energy Science and Technology, Kunming. China, August 2016. (invited talk, keynote speaker)
117. Maric, R., The next generation of fuel cell research, Discussion leader, GORDON, Fuel Cell Conference, August 2016. (invited talk, Keynote Speaker)
118. Maric, R., New Core- Shell nanostructres (CSNS) for critical energy conversion, International Conference on Electrical Interfaces, ICEI, Singapore, July 2016. (invited talk, Keynote Speaker)
119. Poozhikunnath, A., Aindow, M., Maric, R., Characterization of Gadolinium Doped Cerium (IV) Oxides Deposited by Reactive Spray Deposition Technology for Intermediate Temperature Fuel Cells, Microscopy and Microanalysis 2016 Meeting, Columbus, July 2016.

120. Maric, R., Yu H., Baricci, A., Guetaz, L., Casalegno, A., The Influence of the Carbon Support and Platinum Particles Size on Degradation of Cathode for Low Platinum Loading Catalyst Layer, 229th ECS meeting, San Diego, May 2016. (invited talk, KeynoteSpeaker)
121. Yu, H., Danilovic N., Wang Y., Palmieri A., Capuano C., Mustain W., Ayers K. and Maric R., Activity and microstructure of ultra-low Iridium loading catalyst for PEM electrolyzer, 229th ECS meeting, San Diego, May 2016.
122. Jain, R., Lei, Y., Maric, R., Ultra-Low NO2 detection by Gamma WO3 Synthesized by Reactive Spray Deposition Technology, 229th ECS meeting, San Diego, May 2016.
123. Myles, T., Ouimet, R., Kwak, D., Maric, R., Characterization and performance ofproton Conducting Solid oxide fuel Cell Manufactured Using Reactive Spray Deposition Technology, 229th ECS meeting, San Diego, May 2016. (invited talk, KeynoteSpeaker)
124. Ouimet, R., Myles, T. D., Kwak, D., Maric, R., Production of Proton Conducting Solid Oxide Fuel Cells by Reactive Spray Deposition Technology, 2016 Materials Research Society Spring Meeting, Phoenix, March 2016.
125. Poozhikunnath, A., Li, N., Aindow, M., Maric, R., Reactive Spray Deposition Optimization of Gd-Doped Ceria Functional Layers for Intermediate Temperature Molten Carbonate and Solid Oxide Fuel Cells, Materials Research Society fall meeting, Boston, December 2015.
126. Yu, H., Baricci, A., Casalegno, A., Mustain, W., Maric, R., Ultra-low Pt loading catalyst layers for PEMFC using reactive spray deposition technology, 228th meeting The Electrochemical Society, Phoenix, October 2015. (invited talk, Keynote Speaker)
127. Zhao, S., Yu. H., Maric. R., Danilovic. N., Capuano, C., Ayers. K., Mustain, W., Calculating the Electrochemically Active Surface Area of Iridium Oxide in Operating Proton Exchange Membrane Electrolyzers, 228th meeting The Electrochemical Society, Phoenix, October 2015.
128. Wang, Y., Roller, J. M., Maric, R., Direct dry synthesis of LiNi0.8Co0.2O2 thin film for lithium ion battery cathodes, 228th meeting of The Electrochemical Society, Phoenix, October 2015.
129. Roller, J. M., Wang, Y., Maric, R., A study in the formation of Li7La3Zr2O2 as a Garnet- Type Ionic Conductor Synthesized by Flame Combustion, Microscopy and Microanalysis 2015, Portland, August 2015.
130. Jain, R., Maric, R., 227th meeting The Electrochemical Society, Chicago, May2015.
131. Yu, H., Danilovic, N., Zhao, S., Wang, Y., Capuano, Mustain, W., Ayers, K., Maric, R., Manufacturing of low catalyst loading PEM electrolyzer MEAs using reactive spray deposition technology, 227th meeting The Electrochemical Society, Chicago, May 2015.
132. Li, N., Poozhikunnath, A., Aindow, M., Maric, R., Optimization of Support Materials for Intermediate Temperature Molten Carbonate Fuel Cells (IT-MCFC), 227th meeting The Electrochemical Society, Chicago, May 2015.
133. Wang, Y., Maric, R., Direct Dry Synthesis of LiNi0.8Co0.2O2 Thin Film for Lithium Ion Battery Cathodes, 227th meeting The Electrochemical Society, Chicago, May 2015.
134. Jain, R., Manthina, V., Maric, R., Antifogging Mirror by TiO2 and Si Doped TiO2 Thin Films Synthesized by Reactive Spray Deposition Technology, 2015 Materials Research Society (MRS) spring meeting and exhibit, San Francisco, CA. Symposium: UU: Titanium Oxides— From Fundamental Understanding to Applications, April 2015.

135. Yu, H., Wang, Y. & Maric, R., Flame synthesis of Pt catalyst supported on carbon: The particle size effect on oxygen reduction and PEMFC performance, 2014 fall meeting of Material Research Society, Boston, December 2014.
136. Jain, R., Roller. J.M, Maric, R., The Control of particle size, adhesiveness, phase and structure of WO3 film in the vapor phase by Reactive Spray Deposition Technology, Symposium: HH: Flame and High-Temperature Synthesis of Functional Nanomaterials – Fundamentals and Applications, 2014 fall meeting of Material Research Society, Boston, December 2014.
137. Wang, Y., Yu, H., Roller, J.M. & Maric, R., The effect of synthesis parameters on thesize of Pt nanoparticles formed by reactive spray deposition technology, 2014 fall meeting of Material Research Society, Boston, December 2014.
138. Kim, S., Kuntz, H.R. & Maric, R., The Effect of Carbon Support Materials on the Properties of Platinum Catalyst Prepared by Reactive Spray Deposition Technique for Use in HT-PEMFC, 2014 fall meeting of Material Research Society, Boston, December 2014.
139. Maric, R., Low Platinum Loading, Platinum Alloys and Core-Shell Catalysts Manufacturing by Scalable Flame-Base Process, ASME 2014 International MechanicalEngineering Congress & Exposition, November 2014, (Plenaries, Invited).
140. Yu, H., Kim, S., Kwak, D., Kunz, H. R., Roller, J. M., Maric, R., Choice of the Ionomer for Phosphoric Acid-Doped High Temperature Proton Exchange Membrane Fuel Cells, 225th meeting The Electrochemical Society, Orlando, May 2014.
141. Jain, R., Liu, Y.X., Wang, Y., Lei, Y., Maric, R., Synthesis of γ-WO3 By Reactive Spray Deposition Technology for NOx and H2 Sensing, The Electrochemical Society, Orlando, May 2014.
142. Roller, J. M., Yu, H., Vukmirovic, M. B., Bliznakov, S., Li, M. Adzic, R. & Maric, R., An Evaluation of the Ethanol Oxidation Activity of Ternary Pt-Rh-SnO2 Catalysts Prepared from the Vapor Phase, The Electrochemical Society, Orlando, May 2014.
143. Yu, H., Kim, S., Kwak, D., Roller, J. M., H., Kunz & R., Maric, R., An Evaluation of the Ethanol Oxidation Activity of Ternary Pt-Rh-SnO2 Catalysts Prepared from the Vapor Phase, The Electrochemical Society, Orlando, May 2014.
144. Roller, J. M., Arellano-Jimenez, M. J., Vukmirovic, M., Adzic, R., Kotula, P., Maric, R. & Carter, C. B., Investigation of Structural Features in Pd Nanoparticle Cores Comprising a Shell Layer of Pt, Materials Research Society, Boston, MA, Symposium AA: Catalytic Nanomaterials for Energy and Environment, December2013.
145. Jain, R., Poyraz, A., Wang,Y., Suib,S. L. & Maric, R., Processing–Structure–Property Relationship of Different Ceria Supports for Ceria/Pt Catalysts for Water Gas Shift Reaction, Materials Research Society, Boston, MA, December 2013.
146. Roller, J. M. , Maric, R., Yu, H., Vukmirovic, M., Carter, C. B. & Adzic, R., Flame Based Synthesis of Core-Shell Structures Using Pd-Ru and Pd Cores Prepared from the Vapor Phase With Reactive Spray Deposition Technology, 224th meeting of The Electrochemical Society, San Francisco, October 2013.
147. Yu, H., Roller, J. M., Mustain, W. & Maric, R., One step direct deposition of durable cathodes for high temperature Proton Exchange Membrane Fuel Cells (PEMFC), 224th meeting of The Electrochemical Society, San Francisco, October 2013.
148. Roller, J. M., Arellano-Jiménez, M. J., Yu, H., Kotula, P., Maric, R. & Carter, C. B., Structure and Phase Determination of a Bimetallic Pd-Ru Catalyst Prepared from the Vapor Phase with

Reactive Spray Deposition Technology, Microscopy and Microanalysis 2013, Indianapolis, August 2013.

149. Yu, H. , Roller, J. M., Jain, R., Carter, C. B. & Maric, R., Transmission Electron Microscopy Study on Platinum Nanoparticle Distribution in PEMFC Catalyst Layers under Different Ionomer/Carbon Ratios Fabricated by Direct Dry Deposition, Microscopy and Microanalysis 2013, Indianapolis, August 2013.
150. Yu, H., Roller, J., Kwak, D.,Wang, Y., Kotula, P. Carter, B.C., Maric R., Platinum Nanoparticle Distribution on Different Carbon Support Fabricated by a One-step Dry Process, Microscopy and Microanalysis 2013, Indianapolis, August2013.
151. Rastegar, V., Roller, J. M., Arellano-Jimenez, M.J., Janish, M., Jain, R., Maric, R., Carter, C. B., TEM Characterization on Oxygen-Deficient Titania Supported Pt Electrocatalysts for Energy Conversion, Microscopy and Microanalysis 2013, Indianapolis, August 2013.
152. Yu, H., Roller, J. M., Jain, R. & Maric, R., Influence of Ionomer/Carbon Ratios on Porosity Distribution, Surface Area and Roughness of PEMFC Catalyst Layers Fabricated by a Direct and Dry Deposition Method, 223rd meeting of The Electrochemical Society, Toronto, May 2013.
153. Roller, J. M., Ayers, K. E, Mustain, W. E. & Maric, R., Hydrogen Evolution on Combustion Catalyzed Electrodes with Low Loadings for PEM ElectrolyzersAdvances in Low Temperature Electrolyzer and Fuel Cell Technology: In Honor of Anthony B. (Tony) LaConti at the 223rd meeting of the Electrochemical Society, May 2013, Toronto, (invited talk).
154. Roller, J. M., Jain, R. & Maric, R., Direct Dry Formation of Cathode Electrodes for Lithium- Ion Batteries Using a One-Step Combustion Process, Next Generation Batteries 2012, Boston, July 2012, (invited talk).
155. Maric, R., Waste to Energy: Kinetic Improvement and Clean-Up of Gases for High Efficient Gasifier and Fuel Cell Integration, EcoBalance,Tokyo, Japan, October 2012, (invited talk).
156. Maric, R., Rolle J., Banas C., Pasaogullari U. & Halter A., The Performance of Low Pt Loaded Catalyst Coated Acid Doped PBI Membrane, Fuel Cell Seminar and Exhibition, Boston, November 2012.
157. Maric, R., Roller, J. M., Arellano-Jiménez, M. J., Mustain, W. E. & Carter C. B., Microstructure and durability of non-carbon supported cathode prepared by a direct dry deposition technique, The Electrochemical Society, San Francisco, May 2012.
158. Roller, J., Arellano-Jimenez, M.J., Bogart, J., Maric, R. & Carter; C.B. (Ultramicrotoming Pt Catalyzed Substrates and Dispersion Supports, Microscopy and Microanalysis 2013, Phoenix, August 2013.
159. Roller, J. M., Arellano-Jiménez, J. M, Jain, R., Maric, R & Carter C. B., Microstructure of Low Pt-L loaded Catalysts Dispersed via a Dry One-Step Process onto Corrosion Resistant Supports" 2012 MRS Spring Meeting, San Francisco, April 2012.
160. Maric, R., Waste to Energy: Kinetic Improvement and Clean-Up of Gases for High Efficient Gasifier and Fuel Cell Integration, Eco Balance, Tsukuba, Tokyo, Japan, November 2012. (invited talk).
161. Roller, J. M., Arellano-Jiménez, J. M., Jain, R., Maric, R. & CarterC.B., Activity and Microstructure of Oxygen Evolution Anodes Prepared by a Direct Dry Deposition Technique, The Electrochemical Society, San Francisco, October2012.

162. Maric, R., Yttria Stabilized Zirconia (YSZ) Nanomaterial for Solid Oxide Fuel Cell," Nano- S&T 2011, Boston, October 2011.
163. Maric, R., Flame Base Process for Batteries and Fuel Cell, Low Carbon Earth Summit LCES- 2011, Dalian, China, November 2011. (invited talk)
164. Maric, R., Nanomaterials for Energy Application," Nano S&T 2011, Dalian, China, November 2011. (invited talk)
165. Dragan, M., Roller, J. M., Strutt, P. & Maric, R., Study on the Performance of Rapidly Quenched YSZ Electrolytes in Solid Oxide Fuel Cells, HI TEMP 2011, Boston, September 2011.
166. Roller, J. M., Maric, R., Neagu, R. & Orfino, F., "Oxygen Reduction Reaction Evaluation of Platinum Catalysts Formed via the Reactive Spray Deposition Technique," ASME 2011 9th Fuel Cell Science, Engineering and Technology Conference, Washington DC, August 2011.
167. Maric, R., Furusaki, K., Nishijima, D. & Neagu, R., Thin Film Low Temperature Solid Oxide Fuel Cell (LTSOFC) by Reactive Spray Deposition Technology (RSDT), SOFC-XI, Electrochemical Society Conference (ESC), Montreal, May 2011.
168. Dragan, M., Roller, J. M., Strutt, P., Maric, R., "Study on the Performance of Rapidly Quenched YSZ Electrolytes in Solid Oxide Fuel Cells," 2011 MRS Fall Meeting, Boston, November 2011.
169. Troczynski, T. & Maric, R., Characterization of Porous Stainless Steel 430 for Low Temperature SOFC Substrates, Hydrogen and Fuel Cells 2009 Conference and Exhibition, Vancouver, Canada, September 2009.
170. Maric, R, Neagu, R., Zhang-Steenwinkler,Y., P.F. van Berkel, F. & Rietveld, B., Flame Deposition of the Electrolyte and Cathode for High and Stable Performance of Low- Temperature SOFCs, ASME 8th International Fuel Cell Science, Engineering and Technology Conference, FuelCell 2010, Brookline, June 2010.
171. Maric, R., Schalchi, B., Mitlin, D., Roller, J. M. & Neagu, R., Microstructure of Low- Platinum Loaded Catalysts Prepared Using a Novel High Temperature Route via the Reactive Spray Deposition Technology (RSDT) process, The Electrochemical Society, Vancouver, April 2010.
172. Roller, J. M., Neagu, R., Xie, Z. & Maric, R., Multi-layered and gradient electrodes for Proton Exchange Membrane Fuel Cells by Reactive Spray Deposition Technology (RSDT), The Electrochemical Society, Vancouver, April 2010.
173. Xie, Z., Haldane, M., Roller, J. M., Neagu, R., Maric, R., Navessin, T. & Holdcroft, S., Equivalent Weight (EW) Influence on Fuel Cell Performance of the Catalyst Layers Prepared by Reactive Spraying Deposition Technology (RSDT), The Electrochemical Society, Vancouver, April 2010.
174. Rose, L., Kesler, O. & Maric, R., The oxidation characteristics of spherical stainless steel powder particles, The Electrochemical Society, Vancouver, April 2010.
175. Rose, L., Kesler, O., Zhang,X., Sobolyeva, T., Troczynsky,T. & Maric, R., Characterization of Porous Stainless Steel 430 for Low Temperature Solid Oxide Fuel Cell," H2FC 2009, Vancouver, May 2009.
176. Maric, R., Zhang, X. & Negue, R., Characterization and Performance of SOFC Components Made by Reactive Spray Deposition Technology, The Electrochemical Society, Vienna, Austria, October 2009.
177. Roller, J. M., Fatih, K., Negue, R. & Maric, R., Low Platinum Electrodes for Proton Exchange Fuel Cells Manufactured by Reactive Spray Deposition Technology," The Electrochemical Society, Vienna, Austria, October 2009.

178. Roller, J., Neagu, R., Fatih, K., Tuck, A. & Maric, R., Investigation of Heterogeneous PEM Cathode Architectures Uing Ultra-Low Platinum Loading Manufactured by Reactive Spray Deposition Technology (RSDT), H2FC 2009, Vancouver, May 2009.
179. Neagu, R., Maric, R., Deces-Petit, C., Thin Layers of YSZ and GDC Electrolyte Deposited by RSDT, H2FC 2009, Vancouver, May 2009.
180. M. A. van Tuel, M., P. F. van Berke, F., Rietveld, B., Maric, R., Uhlenbruck, S. &Tietz F., Modification of Cell Microstructure and Compositions for High and Stable Performance of Low Temperature SOFC's, European Fuel Cell Forum, Luzern, July 2009.
181. Hui, R., Yang, D., Yick, S., Decès-Petit C., Qu W. & Maric, R., Ghosh D. ,Fabrication and Characterization of Metal-Supported SOFCs for 500oC, 2007 International Conference on Metallurgical Coatings and Thin Films, San Francisco, December 2007.
182. Maric, R., Roller, J. M., Neagu, R. & Fatih, K., Low Pt Thin Cathode Layer Catalyst Layer by Reactive Spray Deposition Technology, 2007 Fuel Cell Seminar & Exposition, San Antonio, October 2007.
183. Wang, Z., Hui, S., Xie, Y., Yick, S., Tang, Z., Bogdanovic, Z., Burgess, A., Maric, R., Ghosh, D., Fabrication of YSZ Powder by Plasma Spray, H2FC 2007, Vancouver, December 2007.
184. Zhang, X., Robertson, M., Deces-Petit, C., Qu, W., Min, K.B., Tuck, A., Xie, Y., Hui, R., Kesler, O., Maric, R., Ghosh, D., Fabrication and Characterization of Cermet Supported Cell with SDC Electrolyte, 10th International Symposium on Solid Oxide Fuel Cells (SOFC-X), Nara, Japan, March 2007.
185. Tuck, A., Zhang, X., Hui, R., Qu, W., Deces-Petit, C., Xie, Y., Roller, J. M., Min, K.B., Robertson, M., Yick, S., Maric, R., Ghosh, D., Development Status of SOFC Cell and Stack Technology at NRC-IFCI, ECS Transactions, Vol. 7 (1), 10th International Symposium on Solid Oxide Fuel Cells (SOFC-X), Nara, Japan, March 2007.
186. Deces-Petit, C., Zhang, X., Maric, R., Effect of Sintering Aids on the Formation of Zirconia-Ceria Solid Solution, ECS 10th International Symposium on Solid Oxide Fuel Cells (SOFC-X), Nara, Japan, March 2007.
187. Hui, R., Yang, D., Wang, Z., Yick, S., Decès-Petit, C., Qu, W., Tuck, A., Maric, R., Ghosh, D. Metal-Supported Solid Oxide Fuel Cell Operated at 400~600oC, ECS 10th International Symposium on Solid Oxide Fuel Cells (SOFC-X), Nara, Japan, March 2007.
188. Zhang, X., Robertson, M., Yick, S., Deces-Petit, C., Styles, E., Qu, W., Xie, Y., Hui, R., Roller, J., Kesler, O., Maric, R., Ghosh,D., SSC+SDC Composite Cathode For Cermet Supported Thin SDC Electrolyte SOFC Operating Below 600°C, Thermec-2006, Vancouver, July 2006.
189. Xie, Y., Zhang, X., Robertson, M., Maric, R., Ghosh, D., Mechanical Strength and Interface Adhesion of a Solid Oxide Fuel Cell with doped Ceria Electrolyte Thermec-2006, (2006).
190. Zhang, X., Robertson, M., Yick, S., Deces-Petit, C., Styles, E., Xie, Y., Kesler, O., Maric, R., Ghosh,D., A Study on Co and Cu Oxides as Sintering Aids for Sm0.2Ce0.8O1.9 Electrolyte, Thermec-2006, Vancouver, July 2006.
191. Maric, R., Qu, W., Ghosh, D., Zhang, X., Characterization of Commercial Borosilicate Based Glasses for Solid Oxide Fuel Cell Sealing, 30th International Conference & Exposition on Advanced Ceramic & Composites, Symposium 3 - the 3rd International Symposium on Solid Oxide Fuel Cells, Honolulu, November 2006.

192. Perednis, D., Xie, Y., Zhang, X., Ghosh, D., Maric, R., Roller, J., Solid Oxide Fuel Cells with Samaria-Doped Ceria Electrolytes Prepared via Spray Pyrolysis, 1st International Symposium on Fuel Cell and Hydrogen Technologies, COM2005, p.273, Vancouver, October 2005.
193. Zhang, X., Robertson, M., Decès-Petit, C., Xie, Y., Hui, R., Yick, S., Staite, M., Styles, E., Roller, J., Maric, R., Ghosh, D., Ni-YSZ Cermet Substrate Supported Thin SDC and YSZ+SDC Bi-Layer SOFCs, 1st International Symposium on Fuel Cell and Hydrogen Technologies, COM2005, p.319, Vancouver, October 2005.
194. Deces-Petit, C., Zhang, X., Styles,E., Maric, R., Roller, J., Ghosh, D., Characterization of Low Temperature Proton Conducting Ceramics for Hydrogen Pumping Applications, SOFC –IX, Pennington, June 2005.
195. Perednis, D., Xie, Y., Zhang,X., Ghosh, D., Maric, R., Roller, J., Deposition of Samaria- Doped Ceria Electrolyte Using Spray Pyrolysis, SOFC –IX, Pennington, June 2005.
196. Hui, R., Roller, J., Zhang, X., Deces-Petit, C., Xie, Y., Maric, R., Ghosh, D., Various Approaches to Enhance the Ionic Conductivity for Selected Oxide Electrolytes, SOFC –IX, Pennington, June 2005.
197. Zhang, X., Robertson, M., Yick, S., Deces-Petit, C., Styles, E., Xie, Y., Hui, R., Maric, R., Ghosh, D., Various Approaches to Enhance the Ionic Conductivity for Selected Oxide Electrolytes, SOFC –IX, Pennington, June 2005.
198. Zhang, X., Robertson, M., Yick, S., Deces-Petit, C., Styles, E., Xie, Y., Hui, R., Maric, R., Ghosh, D., Ni-YSZ Cermet Supported Thin Ceria-Based Electrolyte Solid Oxide Fuel Cell for Reduced Temperature Operation, SOFC–IX, Pennington, June2005.
199. Zhang, X., Ohara, S., Maric, R., Fukui, T., Influence of Interfacial Reaction on Electrode Performance and Ohmic Losses, SOFC –IX, Pennington, June2005.
200. Maric, R., Coube, O., Low Temperature Sintering of Dense Nanocrystalline Cerium and Cerium Doped Oxide Ceramics, 2003 International Conference on Nanotechnology & PM2, Providence, September 2003.
201. Maric, R., Oljaca, M., Materials for Low Temperature Solid Oxide Fuel Cells Fabricated Using Combustion Chemical Vapor Deposition, 2003 Fuel Cell Seminar, Palm Springs, November 2003.
202. Coube, O., Maric, R., "A Comparative Study Between Micron- and Nano-Doped Ceria Powder for the Fabrication of Solid Oxide Fuel Cell Electrolyte," 2003 International Conference on Nanotechnology & PM2, Providence, September2003.
203. Maric, R., Sundell, S., Oljaca, M., Hunt, A., Nanoparticle Synthesis via Nanomiser Atmosphere Flame Technology, World Congress on Powder Metallurgy & Particulate Materials, Las Vegas, August 2002.
204. Maric, R., Faguy, R., Oljaca, M., Fabrication of Metal & Metal Oxide Nanopowder for SOFC Applications using Combustion Chemical Vapor Deposition, 2002 Fuel Cell Seminar and Exhibition, Palm Springs, November 2002.
205. Maric, R., Wang, J.X., Oljaca, M., Adzic, R.R., Faguy, P.W., Characterization of Unsupported Platinum Nanoparticles Produced via Combustion Chemical Vapor Deposition, The Electrochemical Society 2002.
206. Yoshida, H., Inagaki. T., Miura, K., Ohara, S., Maric, R., Fukui, T., Microstructure and Electrical Properties of Anode and Cathode for Reduced Temperature SOFC with Lantanum Gallate

Electrolyte, 2000 Fuel Cell Seminar and Exhibition, Abstract, pp. 558-561, Honolulu, November 2000.

207. Ohara, S., Maric, R., EMAX Analysis of Multicomponent System Synthesized by Ultrasonic Spray Pyrolysis, Advance Nanostructure Materials, pp.235-150, Boston, June 1999.
208. Maric, R., Fuku, T., Ohara, S., Inagaki, T., Yoshida, H., Miura, K., Performance of a Ni- SDC-LaSrGaMgO3/LaSrCoO3 Single Fuel Cell, Solid Oxide Fuel Cells VI, Honolulu, October 1999.
209. Ohara, S., Maric, R., Fukui, T., Yoshida, H., Inagaki, T., Miura K., High performance Electrodes for Reduced Temperature SOFC with Doped Lanthanum Gallate Electrolyte: Ni-SDC Anode, Sixth Grove Fuel Cell Symposium, pp.125-132, London, UK, September 1999.
210. Maric, R., Ohara, S., Fukui, T., Yoshida, H., Inagaki, T., Miura K., Solid Oxide Fuel Cells with LaSrGaMgO3 Electrolyte, Ni-SDC anode and LaSrCoO3 cathode, The 3rd International Fuel Cell Conference, Nagoya, Japan, November 1999.
211. Maric, R., Ohara, S., Fukui, T., Yoshida, H., Inagaki, T., Miura K., Preparation of Fine, Spherical, Composite Powder by Spray Pyrolysis, International Sintering Conference, pp. 234- 245, Belgrade, Serbia, May 1998.
212. Maric, R., Ohara, S., Fukui, T., Yoshida, H., Inagaki, T., Miura K., La, SrMnO3-YSZ Prepared by Spray Pyrolysis as Cathode Material for Solid Oxide Fuel Cells, International Symposium on Design, Processing and Properties of Advanced Engineering, pp. 319-326, Kobe, Japan, September 1997.
213. Maric, R., Ishihra, K., Shingu, P.H., Structure Formation and Deformation Behavior of Multilayers Prepared by Ball Milling and Repeated Pressing, International Conference on Metastable, Mechanically Alloyed and Nanocrystaline, pp. 36-42, Materials Park, March 1994.
214. Maric, R., Ishihra, K., Shingu, P.H., “Thermodynamics and Kinetic of Intermetallic Compound Formation,” 3rd International Conference on Materials, pp. 199-205, Honolulu, November 1993.
215. Maric, R., Ishihra, K., Shingu, P.H., “SHS Reactions in Intermetallic Systems Promoted by Ball Milling,” Proceedings of Powder Metallurgy, pp. 30-36, Kyoto, October 1993.