Chunlei (Peggy) Wang

1. Name and academic rank:
Chunlei Wang, Professor, Department of Mechanical and Materials Engineering, FIU

2. Education – degree, discipline, institution, year
Ph.D. Condensed Matter Physics, Jilin University, 1997
M.S. Solid State Physics, Jilin University, 1993
B.S. Solid State Physics, Jilin University, 1990

3. Academic experience – institution, rank, title
26 Years
- Professor, Department of Mechanical and Materials Engineering, FIU, 2016-present
  Affiliated faculty member, Center for Study of Matter at Extreme Conditions, Biomolecular Sciences Institute, Center for Women and Gender studies, FIU
- Visiting Professor (sabbatical leave), Naval Surface Warfare Center - Carderock Division (NSWCCD), Jan 2020-Aug 2020
- JSPS fellow (sabbatical leave), Kochi University of Technology, Japan, Nov 2019-Jan 2020
- Visiting Professor (sabbatical leave), Alabama Transportation Institute, University of Alabama, Fall 2019
- Visiting professor, Jilin University (summer, 2016-2018)
- Interim Director, Advanced Materials Engineering Research Institute (AMERI), FIU, 2014
- Guest Scientist (sabbatical leave), Max Planck Institute for Solid State Research, 2012-2013
- Associate Professor (Tenured), Mechanical and Materials Engineering, FIU, 2010-2016
- Assistant Professor (Tenure-track), Mechanical and Materials Engineering, FIU, 2006-2010
- Postdoctoral Researcher, Assistant Specialist, Assistant Researcher, Mechanical and Aerospace Engineering, UC Irvine, 2003-2006
- Postdoctoral Researcher, Electrical and Computer Engineering, UC Irvine, 2001-2003
- Research Associate (Non-tenure track), Electrical Engineering, Osaka University, 1998-2001
- Research Assistant, Department of Electrical Engineering, Osaka University, 1995-1997
- Lecturer, National Key Laboratory of Superhard Materials, Jilin University, 1995-2001

4. Non-Academic experience:
Consultant (sabbatical leave), Intel Corporation, Santa Clara, CA, 2012**;** Co-founder and consultant, Carbon Microbattery Company (name changed to: Enevate Corp), Irvine, CA, 2005

5. Current membership in professional organizations
Materials Research Society (MRS); Electrochemical Society (ECS); Society of Photo-Optical Instrumentation Engineers (SPIE); Institute of Electrical and Electronics Engineers (IEEE)

6. Honors and awards
JSPS fellowship, 2019-2020; Max Plank Institute Guest Scientist Fellowship, 2012-2013; FIU faculty award: Excellence in Research and Creative Activities, 2013; FIU Kauffman Professor Award, 2009; DARPA Young Faculty Award, 2008; Japanese Government (MONBUSHO) Scholarship, 1995-1997

7. Service activities (within and outside of the institution)
NSF NERC program, ASSIST center, FIU education/outreach director, 2013-2014; "Encyclopedia of Nanotechnology", 2nd edition (2016) and 1st edition (2012), section editor for "Fabrication Process"; Reviewer Editorial Board of Frontiers in Energy Storage, which is a

section of Frontiers in Energy Research, 2013-present; Associate Editor for the topic nanodivices, Nanomaterials and Nanotechnology, SAGE; Proposal reviewer: NSF, DOE, NASA, ACS, AAAS, etc; Conference Organizer or program committee member: MRS, ECS, SPIE, C-MEMS, etc; Various committees at FIU: College level Award Committee, MME Search and Screen Committee, Tenure Promotion committee, Diversity Committee, etc

8. Briefly list the most important publications and presentations from the past five years

Anis Allagui, Amin Rabiei Baboukani, Ahmed S Elwakil, Chunlei Wang, Electrochemical stability analysis of red phosphorus-based anode for lithium-ion batteries, Electrochimica Acta, (2021) 139149

Yuqing Wen, Mingming Ma, Amin Rabiei Baboukani, Jie Yang, Digby D.Macdonald, Wei Shang, Chunlei Wang, Microporous micro-arc oxidation/bis-[3-triethoxysilylpropyl]tetrasulfide/graphene composite film with improved corrosion protection properties on aluminum alloy, Journal of Alloys and Compounds, 871 (5) (2021) 159526

Shahrzad Forouzanfar, Nezih Pala, Marc Madou, Chunlie Wang, Perspectives on C-MEMS and C-NEMS Biotech Applications, Biosensors and Bioelectronics, 180 (2021) 113119

Amin Rabiei Baboukani, Iman Khakpour, Vadym Drozd, and Chunlei Wang, Liquid-Based Exfoliation of Black Phosphorus into Phosphorene and its Application for Energy Storage Devices, Small Structures, Small Struct. 2021, 306, 2000148 (1-28)

Shahrzad Forouzanfar, Fahmida Alam, NezihPala, and ChunleiWang, Highly Sensitive Label-Free Electrochemical Aptasensors Based on Photoresist Derived Carbon for Cancer Biomarker Detection, Biosensors and Bioelectronics, 170 (2020) 112598

Amin Rabiei Baboukani, Iman Khakpour, Ebenezer Adelowo, Vadym Drozd, Wei Shang, and Chunlei Wang, High-Performance Red Phosphorus-Sulfurized Polyacrylonitrile Composite by Electrostatic Spray Deposition for Lithium-Ion Batteries, Electrochimica Acta, 345 (2020) 136227

Ebenezer Adelowo, Amin Rabiei Baboukani, Omena Okpowe, Iman Khakpour, Meer Safa, Chunhui Chen and Chunlei Wang, A High-Energy Aqueous On-Chip Lithium-Ion Capacitor Based on Interdigital 3D Carbon Microelectrode Arrays, J Power Source, 455 (2020) 22798

Yong Hao; Chunlei Wang, Free-standing reduced graphene oxide/carbon nanotube paper for flexible sodium-ion battery application, Molecules, 25 (2020) 1014

Anis Allagui, Halima Alnaqbi, Ahmed S. Elwakil, Zafar Said, Ahmed A. Hachicha, Chunlei Wang, and Mohammad A. Abdelkareem, Fractional-order electric double-layer capacitors with tunable low-frequency impedance phase angle and energy storage capabilities, Appl. Phys. Lett. 116, 013902 (2020)

Amin Rabiei Baboukani, Iman Khakpour, Vadym Drozd, Anis Allagui, and Chunlei Wang, Single-Step Exfoliation of Black Phosphorous and Deposition of Phosphorene via Bipolar Electrochemistry for Supercapacitor Application, Journal of Materials Chemistry A, 7 (2019) 25548–25556

Iman Khakpour, Amin Rabiei Baboukani, Anis Allagui, Chunlei Wang, Bipolar Exfoliation and In-situ Deposition of High-Quality Graphene for Supercapacitor Application, ACS Applied Energy Materials, 2 (2019) 4813-4820

Yin Song, Chunlei Wang, High-Power Biofuel Cells Based on Three-Dimensional Reduced Graphene Oxide/Carbon Nanotubes Micro Arrays, Microsystems & Nanoengineering , (2019) 5:46, pp1-11