# BOARD OF TRUSTEES UNIVERSITY OF THE DISTRICT OF COLUMBIA UDC RESOLUTION NO. 2023 - 13

SUBJECT: TENURE APPROVAL FOR HONGMEI DANG, PH.D., SCHOOL OF ENGINEERING AND APPLIED SCIENCES (SEAS)

**WHEREAS**, pursuant to D.C. Code §38-1202.06(3), the Board of Trustees is authorized to establish or approve policies and procedures governing admissions, curricula, programs, graduation, the awarding of degrees, and general policy making for the components of the University; and

WHEREAS, Dr. Hongmei Dang is a continuing and recently promoted Associate Professor in the Department of Electrical and Computer Engineering, of the School of Engineering & Applied Sciences (SEAS), who has petitioned the University of the District of Columbia to be granted tenure in the department in which she is qualified; and

**WHEREAS,** Dr. Devas Shetty, Dean of SEAS, in conjunction with the SEAS faculty, have conducted a thorough review of Dr. Dang's background and record of achievements in teaching, scholarship and university and community service; and

**WHEREAS,** Dr. Dang is judged to be an outstanding professor with distinguished skills and expertise who meets the criteria by which University of the District of Columbia faculty are evaluated, based on the 8<sup>th</sup> Master Agreement; and

**WHEREAS**, the Chief Academic Officer and the President have affirmed the recommendation of tenure for Dr. Dang, which is also supported by the Dean and Faculty of SEAS, and the President has forwarded the recommendation for tenure to the Board of Trustees.

**NOW THEREFORE BE IT RESOLVED**, that the Board of Trustees of the University of the District of Columbia approves the award of tenure to Dr. Hongmei Dang at the rank of Associate Professor in the School of Engineering and Applied Sciences (SEAS).

Submitted by the Academic & Student Affairs Committee: May 31, 2023

Approved by the Board of Trustees:

Wristopher D. Bell

June 8, 2023

Christopher D. Bell

Chairperson of the Board



LAWRENCE T. POTTER, JR., Ph.D. CHIEF ACADEMIC OFFICER

#### **CONFIDENTIAL MEMORANDUM**

TO: Ronald Mason, Jr., J.D.

President

FROM:

Chief Academic Officer

DATE: April 30, 2023

RE: Recommendation: Professor Hongmei Dang for tenure and promotion to the rank of

**Associate Professor** 

#### President Mason:

Guided by the *Eight Master Agreement* and criteria established by the School of Engineering & Applied Sciences (SEAS) for promotion and tenure, I have reviewed the portfolio and supporting documentation submitted by **Dr. Hongmei Dang for tenure and promotion to the rank of Associate Professor**.

As Chief Academic Officer, my review aims to evaluate evidence of significant and relevant achievements in scholarship/creative work, teaching, and service. In addition, I review the self-narrative to ensure alignment between established standards and evidence provided within the portfolio. I conduct my review of each applicant after the files have been reviewed by the Chair, DEPC, CPC, Dean, and URC (in cases where an appeal is filed). Based on a holistic review of recommendations and the file, I make an independent recommendation to you for consideration.

Professor Dang received an initial appointment at UDC as a tenure-track Assistant Professor in August 2016. She is now applying for the rank of Associate Professor with tenure. For the past three years, her annual evaluation scores have been 4, 3, and 3. Professor Dang is, therefore, eligible by time in rank and annual ratings.

Chair: Strongly Recommended (1 of 1)

**DEPC:** Strongly Recommended

CPC: Strongly Recommended (1 of 2)

Dean: Recommended (1 of 2)

**TEACHING**: Since arriving at UDC, Professor Dang has developed and taught a variety of fundamental to advanced courses (10 total) at the undergraduate and graduate levels. The **Dean** states that Professor Dang's "academic background and experience provided her a strong foundation to teach microelectronics at UDC. Dr. Dang found an opportunity to set up a multi-level microelectronics/integrated circuit design course sequence that is primarily essential from an industry point of view. This kind of practical approach was needed to deal with emerging microelectronics and to expose UDC students to emerging microelectronic technologies." Two courses of note are the ELEC 474 Advanced Topics in Electrical Engineering Nanotechnology Fabrication Process and ELEC 678 Advanced Digital Integrated Circuit Design courses. These courses are of

national importance to the US Administration's effort to onshore microelectronics manufacturing and design through the CHIPS Act, which provides \$53B in funding to support this initiative. Professor Dang published her curricular development efforts at the 2021 ASME International Mechanical Engineering Congress Exposition. The **Dean** further praises Professor Dang for participating in teaching-focused workshops, seminars, and other training to pursue continuous improvement as a teacher: "Dr. Dang received a Kern Entrepreneurial Engineering Network (KEEN) grant to participate in teaching workshops and understand state-of-the-art teaching methods, and techniques. As a result, she introduced the Entrepreneurially Minded Learning (EML) e-module to her electronics courses to effectively engage students and motivate students to gain an entrepreneurial mindset in building, sustaining, and leading effective teams." The results of these efforts have been impressive in terms of the impact on students (and the potential that impact shows for the future). **Dean Shetty** continues, "There are several examples of her students developing a keen interest in microelectronics and using that hardware expertise to market themselves and get jobs in top industries (Examples- Arnold Feutmba was sought after by Texas Instruments Company and Leatham Keenan was immediately recruited as RF engineer at Raytheon Technologies)."

Professor Dang's student evaluations have accumulated a mean score of 4 out of 4 since 2016, which is impressive. Some comments from her students are representative:

"The instructor is very good, and you can tell that she knows the material. She knows how to break down the material or course to make it more understandable. She will even go above and beyond to make the course easy for students."

"I absolutely enjoyed Dr. Dang's class. She is a fantastic professor and very skilled in her field."

"Dr. Dang is one of the best professors in the electrical engineering department. She knows her material and really cares about her students."

"Dr. Dang went above and beyond my expectations for a professor this semester. [...] Her willingness to accommodate students' varying needs was remarkable."

RESEARCH: The DEPC states that "Dr. Dang has made significant efforts to bring cutting edge research in the renewable energy and semiconductor field to UDC and advance the impact of UDC research in the national and international microelectronics/renewable energy engineering community." Successful publication activity and extramural (mainly federal) funding show evidence of success in this domain. Professor Dang's area of expertise includes implementing nanotechnology to improve the performance of solar cells. She has published several articles and has obtained funding to support her research in this area. She has recently obtained a \$400K grant from the Department of Energy (as PI) to develop efficient and stable solar cells, for example. Professor Dang is also funded through an award from NSF Centers of Research Excellence in Science and Technology (CREST) (\$4,848,327), on which she is a Co-PI. Her research projects funded by the CREST grant focus on nanoscale earth-abundant photovoltaics, and she is using this funding to train her students for internship and employment opportunities. She is also a Co-PI of a National Institute of Standards and Technology Grant: the UDC NIST-PREP grant (\$6,761,811), which funded a research project on nano-scale defect analysis and device modeling of Solar Cells. Professor Dang has also been awarded two NSF Major Research Instruments (MRI) grants as a Co-PI that funded the purchase of an advanced scanning electron microscope coupled with a focused ion beam instrument (FIB/SEM) (\$511,707) and a Versalab physical property measurement system (\$199,210). All told, this represents some \$12.7M in grant support for Professor Dang as a PI or Co-PI.

One aspect of Professor Dang's portfolio that stands out was the detail regarding publications (as listed in the P-1 Form). Professor Dang's includes the impact factors of the journals and the rankings of the articles within a subset of articles on the topic. The statistics demonstrate, almost uniformly, that her scholarly publications appear in high-impact journals and that the articles are highly ranked/rated. She is also regularly the first author. Professor Dang has a total of 22 peer-reviewed publications (a combination of conference proceedings and journal articles). Half of those (11) have appeared during her time at UDC. One example of the superior quality of her scholarship is a first-author article published in *Scientific Reports* (2015), which has an Impact Factor of 5.516. The article was the top-ranked journal article out of 30,891 journals over a

**period of 3 years**, which put it in in the **top 0.003**% among all subject categories. Although the article was published in 2015, one year before her arrival, it has allowed her to continue to pursue related research, building upon that reputation and growing it at UDC.

**SERVICE:** In the area of service, Professor Dang is making valuable contributions at UDC and to the broader academic community. One important contribution has been to the American Semiconductor Academy, an initiative to create a nationwide network of educational institutions and industries to produce the workforce needed for onshore microelectronics fabrication and design. The ASA brings together 94 universities, 25 community colleges in partnership with a microelectronics industry association (SEMI) to provide internships and jobs for students. Professor Dang participated in ASA workshops to create a vision paper for workforce development that resulted in \$200M in federal funding for workforce development. Here at UDC, Professor Dang has organized monthly research seminars by inviting speakers from diverse universities and national labs. She also was active in providing technical reviews of grant proposals and scholarly manuscripts for federal funding agencies and top journals. The **CPC** applauds Professor Dang's work as a peer reviewer in her field. She serves as a reviewer for six (6) high-impact international journals and conference proceedings, including *IEEE Transactions on Neural Networks and Learning Systems, American Institute of Physics (AIP) Advances*, and the American Society for Engineering Education. She has done a total of **30 reviews** for these various publications/publishers.

The **DEPC** praises Professor Dang's service in terms of student advising/mentoring: "Dr. Dang has served as a research mentor and has been advising 13 undergraduate students where three of whom are female students. These students' research has been supported by various resources, including her research grant-NSF CREST grant (\$4,848,327), UDC STEM Center grants, Lockheed Martin fellowship and Xerox Fellowship."

In terms of service to SEAS, Professor Dang served as a DEPC Committee member (Department of Electrical and Computer Engineering) in 2019-2020 and 2021-2022. She has also been on the Curriculum Committee of the Department of Electrical and Computer Engineering since 2016, supporting innovation and updates to the curriculum. **Dean Shetty\_similarly praises** the extensive reach of Professor Dang's service: "Major service provided by Dr. Dang involves organizing monthly Research Seminars to support Center for Nanotechnology Research and Education (CNRE) at UDC funded by NSF CREST grant. She has invited 20 guest speakers from prestigious universities and national labs such as National Institute of Standards and Technology, Oak Ridge National Laboratory, Consolidated Nuclear Security, Department of Energy's Kansas City National Security Campus, Y-12 National Security Complex, Johns Hopkins University, Georgetown University, University of Virginia, University of Maryland, Florida International University, and the US Naval Research Laboratory."

## **Summary Evaluation**

Professor Dang's portfolio provides **four** external review letters: **Dr. David Zubia**, Professor and Texas Instruments Foundation Professor in Electrical Engineering, Department of Electrical and Computer Engineering, University of Texas at El Paso; **Dr. Indranil Bhattacharya**, Associate Professor, Department of Electrical and Computer Engineering, Tennessee Tech University; **Dr. Susanna Thon**, Associate Professor Department of Electrical and Computer Engineering Johns Hopkins University; and **Dr. Yucheng Lan**, Professor, Department of Physics and Engineering Physics, Morgan State University.

**Dr. Thon** writes that she "strongly supports Dr. Dang's application for promotion to the rank of Associate Professor" and offers praise for her research record, stating, "Dr. Dang's research has greatly advanced the field of defect science in novel semiconductors, and continues to influence the development of next-generation photovoltaic technology [and that her work at UDC will allow her] to **achieve and sustain national competitiveness** in a research area of critical importance to [the nation]." **Dr. Lan** likewise "strongly recommends" Dr. Dang for promotion and offers a similar conclusion: "I firmly believe that Dr. Dang is an outstanding faculty and scientific researcher in photovoltaics. Dr. Dang's research has a direct link and **major practical significance to the national interest** of the United States, especially semiconductor manufacturing and the national utilization of solar electricity." **Dr. Zubia**, who writes a commendatory letter of support but concludes, unusually, without a recommendation: "I believe that Dr. Hongmei Dang's development as an education and research scholar is meritorious compared to peers in a similarly ranked universities. [...] In summary, I feel the Dr. Dang has produced significant contributions to her field and institution and has a bright future as an academic scholar." Professor Dang presents an excellent portfolio of achievements in all domains. Dean Shetty concludes, "Dr. Dang enhances the visibility of UDC [and] will continue to

reviewers in supporting <u>Professor Dang to be tenured and pro</u> and thorough.	•
The electronic dossier is available for review. Send an ema	nil request to the Office of the Chief Academic Officer at
I, Ronald Mason, Jr., President of the University of the District of	of Columbia, APPROVEX DENY
the recommendation to promote Professor Hongmei Dang to the	he rank of Associate Professor with tenure, and
recommend her for approval to the Board of Trustees.	
Smald Harvy	5/11/23
Signature	Date

cc: Professor Hongmei Dang

Albert Pearsall, President, UDCFA Lorinnsa Bridges-Kee, Vice President of Human Resources

# Hongmei Dang, Ph.D University of the District of Columbia, Washington, DC 20008

hongmei.dang@udc.edu

EDUCATION—		
Doctor of Philosophy in Electrical and Computer Engineering University of Kentucky Dissertation Title: Nanostructured Semiconductor Device Design in Solar Cells	May 2015	
Master in Physics Tsinghua University, Beijing, China	July 2004	
Bachelor of Science in Engineering, Materials Science and Engineering University of Science & Technology Beijing, China	July 1999	
Assistant Professor	August 2016-Present	

Assistant Professor

August 2016-Present

Department of Electrical and Computer Engineering, University of the District of Columbia, Washington,

DC.

- → Developed curricula of Physical Electronics, Electronics(Lecture & Lab), Advanced Digital Integrated Circuit Design, Nanotechnology Process
- → Designed and managed Electronics I and II lab, Advanced Digital Integrated Circuit Design lab projects, and Nanotechnology Process lab projects.
- ♣ Conducted research projects of nanoscale solar cells funded by NSF and DOE grants.
- Maintained active research program involving underrepresented undergraduates and graduates.
- ♣ Faculty Advisor for the Undergraduate and Graduate Student Research
- ♣ Solo- Principal Investigator of Department of Energy Grant award, Co-Principal Investigator of three NSF Grant awards and Co-Principal Investigator of a United States Department of Commerce Grant.
- ♣ Published and presented peer-reviewed articles in journal and at international conferences.

Research Associate,

September 2015-August 2016

Department of Electrical and Computer Engineering, University of Kentucky.

- ♣ Established new methods for simulation of nanoscale solar cells.
- ♣ Responsible for design of experiments, training and supervising undergraduate and graduate students, developing standard experimental procedures and managing laboratory equipment.
- ♣ Published research at international conferences and participated in writing grant proposals.

Research Assistant, Department of Electrical and Computer Engineering, University of Kentucky, January 2009-May 2015

→ Conducted fundamental research, as part of an interdisciplinary team, toward the essential efficiency improvement of nanoscale solar cells.

- ♣ Developed nanofabrication technique of nanowire solar cells including optimization of nanowires, absorber layer and contact fabrication to address photocurrent loss and low efficiency in solar cells.
- ♣ Performed advanced characterization of nanowire solar cells, including materials, optical and electrical characterization at nanoscale.

# – AWARDED AND PENDING GRANT PROPOSALS & FUNDING \_\_\_\_\_\_

#### **Grants**

- **♣ Solo-PI: Hongmei Dang**, **DOE MSRDC** grant, titled "Development of Efficient and Stable Perovskite Solar Cells with SnO₂ as Electron Transport Layer", 2022-2024, \$399,886, Awarded.
- ♣ PI-Lei Wang, Co-PIs: Hongmei Dang, Jiajun Xu, Kate Klein and Hossain Azam, NSF Major Research Instrumentation grant, titled: "NSF-MRI Acquisition of Dual Beam FIB/SEM to Enable New Capability for Research. Education and Training at UDC", 2020-2021, \$511,707, Awarded.
- ♣ PI-Pawan Tyagi, Co-PIs: Hongmei Dang, Jiajun Xu, Kate Klein and Shetty, Devdas, NSF CREST grant proposal, titled: "Center for Nanotechnology Research and Education at UDC". 2019-2024, \$4,848,327, Awarded.
- → PI-Pawan Tyagi, Co-PIs: **Hongmei Dang**, Jiajun Xu, Kate Klein, NSF Major Research Instrumentation grant proposal, titled: "Acquisition of a VersaLab Physical Property Measurement System at University of the District of Columbia", 2019-2020, **\$199,210**, **Awarded**.
- ♣ PI- Hongmei Dang(PI), Co-PIs: Nian Zhang, Esther T. Ososanya, Wagdy H. Mahmoud, Briana Wellman, Apple Grant, titled "Apple HBCU New Silicon Initiative Grant proposal", 2021-2024, \$10,000, Donated.
- → PI-Kate Klein, Co-PIs: **Hongmei Dang**, Pawan Tyagi, Jiajun Xu, Esther Ososanya, Wagdy Mahmoud, Shetty, Devdas etc, a grant proposal of Professional Research Experience Program, GAITHERSBURG, National Institute of Standards and Technology (NIST), United States Department of Commerce (DoC), titled: "Professional Research Experience Program at the University of the District of Columbia (PREP-UDC) Proposal for PREP Gaithersburg", 2018-2023, **\$6,761,811**, **Awarded**.
- **Hongmei Dang, National Science Foundation (NSF) HBCU-UP Grant Awarded to the UDC STEM Center for Research and Development**, project titled: "Density Functional Theory Computing and TCAD Simulation of Earth-abundant Benign Sb₂Se₃ Solar cells", 2019-2020, **\$7,000, Awarded**.
- ♣ Hongmei Dang, National Science Foundation (NSF) HBCU-UP Grant Awarded to the UDC STEM Center for Research and Development, project titled: "Development of high-efficiency and low-cost core-shell single crystal nanowire FeS2 homojunction solar cells", 2017-2018, \$5,000, Awarded.
- **Hongmei Dang**, The Kern Entrepreneurial Engineering Network(KEEN), titled: "Integration of an E-Learning Module-Building, Sustaining and Leading Effective Teams and Establishing Performance Goal into Electronics I Lab" 08/16/2017-12/31/2017, \$2,000, Awarded.

♣ University of District of Columbine (Drs. Esther Ososanya, Hongmei Dang and Max Denis) is collaborating with University of California, Riverside (Drs. Albert Wang, Elaheh Sadredini, Sheldon Tan, Jianlin Liu, Ramdas Pai), University of California, Los Angeles (Drs. Yuan Tian, Subramanian Iyer, Frank Chang, Ken Yang, Kang Wang), University of California Irvine (Drs. Fadi Kurdahi, Lee Swindlehurst, Keyue Smedley), and North Carolina Agricultural and Technical State University (Drs. Corey Graves, Tyrette Carter, Christopher Doss) to develop NSF Engineering Research Center for Innovative Co-Design & Workforce for Emerging Hetero-Integrated Microsystems, 10 years from 2023-2032, \$50 million, pending.

## SUBMITTED GRANT PROPOSALS -

- ♣ PI- Hongmei Dang, Co-PIs: Pawan Tyagi, Jiajun Xu, UCHE UDEOCHU, Ozlem Dilek, NSF Major Research Instrumentation grant, titled: "Acquisition of Time Resolved Photoluminescence Microscope to Enable Multidisciplinary Research, Education and Training at UDC", 2022, \$347,719.
- → PI-Pawan Tyagi, Co-PI: **Hongmei Dang,** NSF Excellence in Research grant, titled: "Magnetic Tunnel Junction-Based Molecular Spintronics Devices and New Materials", 2018, \$499,630.
- ♣ PI- Hongmei Dang, NSF EPMD-Electrn Photon & Magn Devices grant, titled: "Nano-scale Design, Fabrication and Modeling for Record Breaking, Core-Shell Single Crystal Nanowire FeS2 Homojunction Solar Cell Arrays", 2017, \$299,993.

# PUBLICATIONS —

- Bailey Garfield, Daniel Orebiyi, Hongmei Dang, "Development of Earth-Abundant Benign TiO2
  /Sb2Se3 Solar Cells for Renewable Energy Application" 2023 Emerging Researchers National
  (ERN) Conference in STEM, Submitted
- 2. **Hongmei Dang**, Esther Ososanaya, Nian Zhang, "Improving reliability of window-absorber solar cells through CdS nanowires", Optical Materials, 132, 112721, 2022
- 3. Hongmei Dang, Esther Ososanya, Nian Zhang, "Comparison of electrical characteristics of Schottky junctions based on CdS nanowires and thin film", Nanotechnology, 33, 215707, 2022
- 4. **Hongmei Dang**, Esther Ososanya, Kate Klein, Pawan Tyagi, "Project Based Course Enabled Nanotechnology Education for Senior Level Undergraduate and Graduate Students". 2021 ASME International Mechanical Engineering Congress & Exposition. 85659, V009T09A008, 2021
- 5. **Hongmei Dang**, Jonathan Valdivia, Jinfessa Robera, Oluchi Onwuvuche, Travis Lodge, Esther Ososanya, and Lei Wang, "Modeling Efficiency Loss in Sb<sub>2</sub>Se<sub>3</sub> Solar Cells". 2020 47th IEEE Photovoltaic Specialists Conference (PVSC 47), 2771-2776, 2020.
- 6. Nian Zhang, Welezane Karimoune, Lara Thompson, **Hongmei Dang**, "A between-class overlapping coherence-based algorithm in KNN classification". 2017 IEEE International Conference on Systems, Man, and Cybernetics (SMC), 572-577, 2017.
- 7. **Hongmei Dang**, Esther Ososanya, Nian Zhang, Xiaohui Wang, Hojjatollah Sarvari and Vijay P. Singh, "Modeling Effect of Defects on Efficiency of Nanowire CdS-CdTe Solar Cells". 2017 IEEE PVSC-44 JUNE 25-30, 2017 WASHINGTON, D.C, 2432-2437, 2017
- 8. Hongmei Dang, Esther Ososanya, Nian Zhang and Vijay Singh, "Numerical Modeling and Simulation

- of Stable Nanowire CdS-CdTe Solar Cells". 2017 IEEE 17th International Conference on Nanotechnology (IEEE-NANO), 171-176, 2017
- 9. Xiaohui Wang, Hojjatollah Sarvari, **Hongmei Dang**, Zhi Chen, Vijay Singh, "Evolution characteristics of perovskite solar cells in air and vacuum environments". Optik, 111-116, 2017
- Dang, Hongmei, Singh, V. Guduru, S. & JT Hastings. Embedded nanowire window layers for enhanced quantum efficiency in window-absorber type solar cells like CdS/CdTe. Solar Energy Materials and Solar Cells, 144:641-651, 2016. DOI:10.1016/j.solmat.2015.09.044
- 11. Xiaohui Wang, Hojjatollah Sarvari, **Hongmei Dang**, Vijay Singh, Zhi Chen. "Preparation and evaluation of perovskite solar cells in the absolute atmospheric environment". Optoelectronics Devices and Integration VI, 100190B, 2016.
- 12. Hojjatollah Sarvari, Xiaohui Wang, Yafei Wang, Peng Zhang, Shibin Li, **Hongmei Dang,** Vijay P Singh, Zhi Chen. "Comprehensive study of the two-step solution processes in ambient air for lead iodide perovskite solar cells". 43th IEEE Photovoltaic Specialists Conference (PVSC), 0823-0827, 2016.
- 13. **Dang, Hongmei.** & Singh, V. Nanowire CdS-CdTe solar cells with Molybdenum oxide as contact. *Scientific Reports* 5, 14859, 2015. DOI: 10.1038/srep14859
- 14. **Dang, Hongmei**, Singh, V. Guduru, S. etal. Nanotube photovoltaic configuration for enhancement of carrier generation and collection. *NanoResearch* 8, 3186–3196 (2015). DOI 10.1007/s12274-015-0818-7.
- 15. **Dang, Hongmei**. & Singh, V. Effect of anodic aluminum oxide membrane on performance of nanostructured solar cells. *Materials Research Express* 2, 055001, 2015.
- 16. **Dang, Hongmei**, Singh, V. P., etal. Wide spectral response and ambient air-stable nanowire window-absorber type solar cells, 42th.IEEE Photovoltaic Specialist Conference (PVSC), 1-6, 2015.
- 17. **Dang, Hongmei**, Singh, V. P., etal. Molybdenum Oxide Contacts for Nanowire CdS-CdTe Solar Cells, *42th*.IEEE *Photovoltaic Specialist Conference (PVSC)*, *1-6*, 2015.
- 18. **Dang, Hongmei**, Singh, V, Rajaputra, S. etal. Cadmium sulfide nanowire arrays for window layer applications in solar cells. *Solar Energy Materials and Solar Cells* 126, 184-191, 2014.
- 19. **Dang, Hongmei**, Singh, V. P., etal. Electro-optical characterization of n-CdS nanowires/p-CdTe heterojunction solar cell devices, *40th*.IEEE *Photovoltaic Specialist Conference (PVSC)*, Denver, Colorado, 2014.
- 20. **Dang, Hongmei**, S.Rajaputra, Singh, V. P., et al. CdS nanowire layers of enhanced transmittance for window layer applications in thin film solar cells, 38th.IEEE Photovoltaic Specialist Conference (PVSC), Seattle, 2012.
- 21. W H Jiang, F Jiang, F X Liu, Y D Wang, F Q Yang, **Hongmei Dang**, H Choo, P K Liaw. Mechanical behaviours of workhardening and worksoftening bulk metallic glasses, Materials Science and Technology, 28, 2012
- 22. Fuqian Yang, **Hongmei Dang**, Effect of electric field on the nanoindentation of zinc sulfide. Journal of Applied Physics, 5, 056110, 2009.

23. FuaianYang, Hongmei Dang, Gongyao Wang, Yoshihiko Yokoyama, Peter K Liaw, Indentation behavior of a ZCAP-3 bulk metallic glass: Effects of the fatigue deformation. Journal of Materials Research, 7, 2346-2352, 2009.

# ABSTRACTS (Selected)

Luis F. Hernandez Camas, **Hongmei Dang**, "Simulation and Modeling of perovskite solar cells", 64th Electronic Materials Conference, 2022.

**Hongmei Dang**, Esther Ososanya , Nian Zhang and Lei Wang, "Modeling Efficiency Loss Mechanism of Earth-Abundant FeS<sub>2</sub> Solar Cells", Nanotech 2018 TechConnect World Innovation Conference, 2018

# HONORS, AWARDS and SERVICE -

- Department of Energy (DOE), Grant Panel Reviewer, 2022
- Member of American Semiconductor Academy and Collaborating with 94 universities, 25 community colleges and 40 industry semiconductor companies to make contributions to the ASA initiative planning.
- Endorsed and supported CHIPS for America Act to pass House and Senate leadership.
- ♣ DEPC member of the Department of Electrical and Computer Engineering in 2019-2020 and 2021-2022
- ▲ Member of the Department Curriculum Committee, 2016-present
- Organized monthly Research Seminars for Center for Nanotechnology Research and Education (CNRE) on NSF CREST Grant Projects. Invited >20 guest speakers from prestigious universities and national labs to give us research seminars.
- ♣ Member of NSF CREST Grant coordinator search committee
- Member of NSF CREST Grant post-doctoral fellow search committee
- \* Member of UDC STEM Center Steering Committee
- ♣ Lockheed Martin Fellowship 2016-2022
- **⊥** IEEE Membership 2020
- Judges Appreciation Award, undergraduate research committee for twelfth annual undergraduate research, 2019
- Judges Service Award, the 75<sup>th</sup> National Institute Science (NIS) and Beta Kappa Chi(BKX) Joint Annual Meeting, 2018
- Technical Program Committee Member, American Society for Engineering Education(ASEE), 2018
- Committee member of Undergraduate study and Graduate Research, 2016-Present.
- Nominator of the Best Poster Award, 2015 IEEE International Photovoltaic Specialists Conference, 2015.
- Reviewer of International Journal of Computational Intelligence Systems, Transactions on Neural Networks and Learning Systems, Small, Solar Energy Materials and Solar Cells, AIP Advances, American Society for Engineering Education (ASEE) Mid-Atlantic Conference Proceedings.



## FISCAL IMPACT STATEMENT

TO: The Board of Trustees

FROM: Managing Director of Finance David A. Franklin

DATE: June 8, 2023

SUBJECT: Tenure Approval for Hongmei Dang, Ph.D., School of Science Engineering and Applied

Sciences (SEAS)

#### Conclusion

It is concluded that there is no fiscal impact associated with the granting of tenure to Dr. Hongmei Dang, Assistant Professor in the Department of Electrical & Computer Engineering, in the School of Engineering & Applied Sciences (SEAS) of the University of the District of Columbia (UDC). The proposed resolution is for the approval of tenure for Professor Dang at the rank of Associate Professor.

The Chair, DEPC, and CPC of SEAS have conducted thorough, independent reviews and prepared independent reports to the dean regarding tenure for Professor Dang. It was then considered at the Dean's, CAO's and President's levels It has been recommended in the Board Resolution that Professor Dang be approved for tenure.

## **Background**

Dr. Dang joined the SEAS in August of 2016. Vetting of all dossier content was completed at the levels of the program, Department, and School. The CAO reviewed all recommendations and Dr. Dang's portfolio (which includes external reviews of her qualifications). All reviews validate the strengths of Professor Dang's tenure and promotion dossier and conclude that she is an excellent teacher, emerging researcher and scholar who has begun to receive recognition for her work, making her a highly competitive tenure candidate. Additionally, she has demonstrated a strong record of service to the University community.

The recommendation of tenure for Professor Dang has been affirmed by the Dean, Chief Academic Officer, and President. The President has forwarded the recommendation and background information along with a resolution for the award of tenure to the Board of Trustees.

## **Financial Impact**

This request has been approved based upon the information provided. There are no anticipated risks at this time.