

WEI-NING WANG

Virginia Commonwealth University (VCU)
Department of Mechanical and Nuclear Engineering,
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EDUCATION

Ph.D. in <i>Chemistry and Chemical Engineering</i> , Hiroshima University, Japan	2003–2006
M.E. in <i>Materials Science and Engineering</i> , Nanjing University of Technology, China	1999–2002
B.E. in <i>Polymer Science & Engineering</i> , Nanjing Univ. of Chemical Technology, China	1995–1999

RESEARCH STATEMENT

My research covers a wide range of topics in nanoscience and nanotechnology, with a major focus on *nanomanufacturing* (process development & materials synthesis) and *heterogeneous catalysis*, aiming to solve *fundamental issues* in both areas, such as nucleation, crystal growth, and self-assembly in materials synthesis, and transport phenomena (charge, heat, and mass transfers) in catalysis, towards addressing *critical challenges* in the sectors of energy, environment and human health.

PROFESSIONAL EXPERIENCE

Assistant Professor	August 2014–present
Department of Mechanical and Nuclear Engineering, Virginia Commonwealth University	
Research Assistant Professor & Nano Research Facility Lab Manager	2013–2014
Department of Energy, Environmental & Chemical Engineering, Washington University in St. Louis	
Postdoctoral Research Associate	May 2009–December 2012
Aerosol and Air Quality Research Lab, Washington University in St. Louis (<i>with Prof. Pratim Biswas</i>)	
Research Associate (Assistant Professor)	October 2007–May 2009
Department of Chemical Engineering, Hiroshima University, Japan	
JSPS Postdoctoral Fellow	April 2006–September 2007
Japan Society for the Promotion of Science—Hiroshima University (<i>with Prof. Kikuo Okuyama</i>)	
Graduate Research Assistant	
Dept. of Chemical Engineering, Hiroshima University, Japan	March 2003–March 2006
Dept. Polymer Science and Engineering, Nanjing University of Technology	Sept. 1999–June 2002

AWARDS AND HONORS (INCLUDING STUDENTS' AWARD)

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|--|------------|
| • Outstanding Graduate Research Award , College of Engineering, VCU
(for graduate student, Xiang He) | 2018 |
| • Outstanding Reviewer Awards for <i>Nanotechnology</i> and <i>Journal of Physics D</i> | 2017, 2018 |
| • ACS-PRF Doctoral New Investigator Award | 2016 |
| • VCU Presidential Research Quest Fund Award | 2016 |
| • Ralph E. Powe Junior Faculty Enhancement Award , VCU nominee (1/2) | 2016 |
| • Jeffress Trust Award , VCU nominee (1/4) | 2016, 2018 |
| • Highly Cited Papers (2) , Top 1% in Chemistry, Essential Science Indicators SM | 2015-2018 |
| • Certificate of Excellence in Reviewing for <i>Advanced Powder Technology</i> | 2014, 2017 |

- **Outstanding Paper Award of 2012**, *Journal of Chemical Engineering of Japan* 2013
- **TOP 25 Most Cited Paper** in *Appl. Catal. B.* in 2010 and 2011 2012
- **JSPS Postdoctoral Fellowship** (Competitive fellowship awarded to highly qualified young foreign researchers; Japan Society for the Promotion of Science) 2006–2007
- **The National Science & Technology Award Nominated by the Ministry of Education of China (Second Prize)** (ID: 2004-050) 2005
- **Thermal Fluid and Materials Fellowship**, Hiroshima University 2003–2006
- **A Graduate Student Exempted from Entrance Examination** 1999
(The **ONLY** student in the Dept. Polymer Science & Engineering, Nanjing Tech)
- **Graduation with Honors (TOP 3%)**, Nanjing Univ. of Chemical Technology 1999

TEACHING

- Lecturer** 2014–present
- Heat Transfer (EGMN302); Heating, Ventilating, and Air Conditioning (EGMN491), Advanced Characterization of Materials (EGMN609), Vertically Integrated Projects (VIP, ENGR497), VCU
- Guest Lecturer** 2009–2014
- Aerosol Science and Engineering (EECE/ChE/ME 518, graduate level), Washington University

PH.D. STUDENTS/VISITING SCHOLARS

Xiang He	Ph.D. candidate	2015–present
Zan Zhu	Ph.D. candidate	2017–present
Dawei Wang	Postdoctoral Researcher	2016–present
Asep Bayu Dani Nandiyanto	Fulbright Scholar	2018–present

PH.D. DISSERTATION COMMITTEES

Students	Department/University	Advisor(s)	Graduation year
Yi Jiang	Washington University	Pratim Biswas/John Fortner	2016
Yao Nie	Washington University	Pratim Biswas/John Fortner	2018
Qiang Wang	MNE, VCU	Daren Chen	2016
Naveen Palapati	MNE, VCU	Arunkumar Subramanian	2016
Yomna Abdelmoaty	MNE, VCU	Hani El-Kaderi	2017
Di Liu	MNE, VCU	Daren Chen	2018
Corell H. Moore	MNE, VCU	Puru Jena/Jim McLeskey	TBD
Caleb Massey	MNE, VCU	Gokul Vasudevamurthy	TBD
Mahjabin Maksud	MNE, VCU	Arunkumar Subramanian	TBD
Ahmed Abdelkader	Chemistry, VCU	Hani El-Kaderi	TBD

UNDERGRADUATES AND K-12 STUDENTS

VIP Program	Johnny Bui, Kayla Logan, Jethrine Mugumya, John Riley, Xinbei Yi, Ryan Compton, Imani Bynum, Omar Alam, Sofia Duarte, Harini Mody, Nicholas Hatstrup
VCU-VMI Program	Grayson Larus (2016), Al-Jhon Barrogo (2017)
DURI Program	Kayla Logan, VCU Chemical Engineering, 2017
DERI Program	Mason Oakes (Glen Allen High, 2016), Stephanie Gernentz (Trinity Episcopal, 2017), Grant Hutchins (Maggie Walker, 2017), Zoe Manring (Tucker High, 2018) and Saran Rathore (Godwdin High, 2018)
RMEP Program	Oluwatomi Olusina (Homeschool, 2016), Rachel Silver (Manchester High, 2016), Christopher Woodley (Manchester High, 2017), London Hopkins (Henrico High, 2018), Lauren Elam (Homeschool, 2018)
Volunteers/Summer interns	Cheng Hsuan Wu (2016), Charles Yang (2016-2017), Arnaud Debraine, Ahmed Alqhtani, Vu Nguyen, Congyi Tang (2017)

PROFESSIONAL SERVICES, DEVELOPMENT & OUTREACH ACTIVITIES

Services to Department, School, and University

- Member, Newport News Shipbuilding Scholarship Committee 2015–present
- Member, Ph.D. Qualifying Exam Committee 2016–2017

Editor and Reviewer

- Advisory Panel member, *Nanotechnology* (IF = 3.404) 2017–present
- Advisory Panel member, *Journal of Physics D: Applied Physics* (IF = 2.373) 2018–present
- Editorial Board member, *Nanomaterials and Nanotechnology* (IF = 1.730) 2015–present
- Panelist for the US Environmental Protection Agency (EPA) 2018
- Panelist for the National Science Foundation (NSF) 2017
- Reviewer for American Chemical Society Petroleum Research Fund (ACS-PRF) 2017, 2018
- Reviewer for the Virginia Tobacco Indemnification Commission 2015
- Reviewer for the Kentucky Science and Engineering Foundation 2015, 2017
- Reviewer of **70+** leading journals for **300+** papers. 2004–present

Conference Session Chair/Working Group Chair

- Organizing committee member (Secretary), 2019 International Symposium on Clusters and Nanostructures, Richmond, Virginia October 2019
- Session Chair, Nano-Micro Conference 2017, Shanghai, China June 2017
- Technical program committee member and Special symposium organizer, 35th Annual Conference, American Association for Aerosol Research (AAAR) Oct. 2016
- Chair and vice-chair, Combustion & Material Synthesis Working Group, AAAR 2014–2016
- Session Chair, AAAR Annual Conferences/2014 International Aerosol Conference 2012–2016

Professional Society Memberships

- Member, American Association for Aerosol Research (AAAR) 2008–present
- Senior Member, American Institute of Chemical Engineers (AIChE) 2010–present
- Member, American Chemical Society (ACS) 2013–present
- Member, Association of Environmental Engineering & Science Professors 2016–present

Outreach Activities

- Judge, AIChE Global Undergraduate Student Video Competition 2017
- Judge, Metro Richmond STEM Fair, Richmond, Virginia 2016–present
- Faculty Advisor, Richmond Minorities in Engineering Partnership (RMEP) 2016–present
- Faculty Advisor, Dean's Early Research Initiative (DERI), VCU 2016–present
- Faculty Advisor, Dean's Undergraduate Research Initiative (DURI), VCU 2017–present
- Faculty Instructor, Discovery Program, Mary and Frances Youth Center 2017–present

GRANTS RECEIVED

- PI, National Science Foundation (NSF), CMMI 2017-2020
- PI, ACS Petroleum Research Fund (PRF), Doctoral New Investigator (DNI) 2016-2018
- PI, Commonwealth Center for Advanced Manufacturing (CCAM) 2017
- PI, VCU Presidential Research Quest (PeRQ) Fund 2016-2017
- PI, Altria Endowment for VIP projects 2016-present
- Co-PI, Center for Filtration Research, U. Minnesota 2018-2020

Instrument proposals approved (3)

- PI, Argonne National Laboratory, access to SAXS/WAXS and TAS 2017-2019
- PI, Oak Ridge National Laboratory, rapid access to HRTEM/SAED/EELS 2017

PUBLICATIONS

PEER-REVIEWED JOURNAL ARTICLES (87 in total, in descending chronological order)

Article Citation Summary as of June 27, 2018 based on the three major databases:

Web of Science (WoS) = 2741, H-Index = 29; Research ID: [B-3005-2008](#)
Scopus = 2939, H-index = 30; Scopus Author ID: [35320776800](#)
Google Scholar = 3790, H-index = 35

*Corresponding author; Ph.D. students and postdoc fellow under Dr. Wang's supervision are underlined.

1. X. He and **W.-N. Wang***, "Rational Design of Efficient Semiconductor-based Photocatalysts via Microdroplets: A Review", *KONA Powder and Particle Journal*, under review
2. D. Wang, B. Zhu, X. He, Z. Zhu, G. Hutchins[#], P. Xu, and **W.-N. Wang***, "Iron Oxide Nanowire-Based Filter for Inactivation of Airborne Bacteria", *Environmental Science: Nano*, **5**(5): 1096-1106 (2018) (IF = 6.087; [#]High school student; Highlighted on Inside Front Cover)
3. X. He, V. Nguyen[†], Z. Jiang, D. Wang, Z. Zhu, and **W.-N. Wang***, "Highly-Oriented One-Dimensional MOF-Semiconductor Nanoarrays for Efficient Photodegradation of Antibiotics", *Catalysis Science & Technology*, **8**: 2117-2123 (2018) (IF = 5.365; [†]Undergraduate student)
4. D. Wang, S. E. Gilliland III, X. Yi[†], K. Logan[†], D. R. Heitger, H. R. Lucas, and **W.-N. Wang***, "Iron Mesh-Based Metal Organic Framework Filter for Efficient Arsenic Removal", *Environmental Science & Technology*, **52**(7): 4275-4284 (2018) (IF = 6.653; [†]Undergraduate students)
5. X. He and **W.-N. Wang***, "MOF-based Ternary Nanocomposites for Better CO₂ Photoreduction: Roles of Heterojunction and Coordinatively Unsaturated Metal Sites", *Journal of Materials Chemistry A*, **6**(3): 932-940 (2018) (IF = 9.931)
6. D. Wang, Z. Li, J. Zhou, H. Fang, X. He, P. Jena, J.-B. Zeng*, and **W.-N. Wang***, "Simultaneous Detection and Removal of Formaldehyde at Room Temperature: Janus Au@ZnO@ZIF-8 Nanoparticles", *Nano-Micro Letters*, **10**(1): 4 (2018) (IF = 7.381)
7. X. He, Z. Gan, S. Fisenko, D. Wang, H.M. El-Kaderi, and **W.-N. Wang***, "Rapid Formation of Metal-Organic Frameworks (MOFs)-based Nanocomposites in Microdroplets and Their Applications for CO₂ Photoreduction", *ACS Applied Materials & Interfaces*, **9**(11): 9688-9698 (2017) (IF = 8.097; Total WoS cites = **8**)
8. X. He, C. Yang[#], D. Wang, S. E. Gilliland III, D. R. Chen, and **W.-N. Wang***, "Facile Synthesis of ZnO@ZIF Core-shell Nanofibers: Crystal Growth and Gas Adsorption", *CrystEngComm*, **19**: 2445-2450 (2017) (Highlighted on Back Cover; [#]High school student)
9. X. Wang, H. Wang, H. Jing, **W.-N. Wang**, W. Cui, B. J. Williams, and P. Biswas, "Formation of Nitrogen-Containing Organic Aerosol during Combustion of High Sulfur Content Coal", *Energy & Fuels*, **31**(12): 14161-14168 (2017)
10. X. Wang, S. Li, **W.-N. Wang**, and P. Biswas, "Mercury Oxidation during Coal Combustion by Injection of Vanadium Pentoxide (V₂O₅)", *International Journal of Coal Geology*, **170**: 54-59 (2017)
11. **W.-N. Wang*** and X. He, "Aerosol Processing of Crumpled Graphene Oxide-based Nanocomposites for Drug Delivery", *Current Pharmaceutical Design*, **22** (17): 2491-2500 (2016)
12. Y. Nie, **W.-N. Wang**, Y. Jiang, J. Fortner, and P. Biswas, "Crumpled Reduced Graphene Oxide-Amine-Titanium Dioxide Nanocomposites for Simultaneous Carbon Dioxide Adsorption and Photoreduction", *Catalysis Science & Technology*, **6**: 6187-6196 (2016) (Featured on Back Cover)
13. B. B. Karakocak, R. Raliya, J. T. Davis, S. Chavalmale, **W.-N. Wang**, N. Ravi, and P. Biswas, "Biocompatibility of Gold Nanoparticles in Retinal Pigment Epithelial Cell Line", *Toxicology In Vitro*, **37**: 61-69 (2016)
14. X. Wang, H. Jing, B. Dhungel, **W.-N. Wang**, B. M. Kumfer, R. L. Axelbaum, and P. Biswas, "Characterization of Organic and Black Carbon Aerosol Formation during Coal Combustion: An Experimental Study in a 1 MW Pilot Scale Coal Combustor", *Fuel*, **180**: 653-658 (2016)

15. **W.-N. Wang**, F. Wu, Y. Myung, D. M. Niedzwiedzki, H. S. Im, J. Park, P. Banerjee, and P. Biswas, "Surface Engineered CuO Nanowires with ZnO Islands for CO₂ Photoreduction", *ACS Applied Materials & Interfaces*, **7**(10): 5685-5692 (2015) (IF = 8.097; Total WoS cites = **31**)
❖ Featured in WU Newsroom: "[Researchers find less expensive way to convert carbon dioxide](#)"
❖ Highlighted in the ACS Select Virtual Issue: [Recent Advances in Atomic Layer Deposition](#).
16. R. Raliya, R. Nair, S. Chavalmame, **W.-N. Wang**, and P. Biswas, "Mechanistic Evaluation of Translocation and Physiological Impact of Titanium Dioxide and Zinc Oxide Nanoparticles on the Tomato (*Solanum lycopersicum* L.) Plant", *Metallomics*, **7**(12): 1584-1594 (2015) (WoS cites = **46**)
❖ Featured in Washington University SEAS Newsroom: "[Tomatoes get boost in growth, antioxidants from nano-sized nutrients](#)", and by [National Science Foundation](#) as well, November 5, 2015
17. Y. Jiang, **W.-N. Wang**, D. Liu, Y. Nie, W. Li, J. Wu, F. Zhang, P. Biswas, and J. D. Fortner, "Engineered Crumpled Graphene Oxide Nanocomposite Membrane Assemblies for Advanced Water Treatment Processes", *Environmental Science & Technology*, **49**(11): 6846-6854 (2015) (IF = 6.653; Total WoS cites = **40**)
18. Y. Wang, P. Liu, J. Fang, **W.-N. Wang**, and P. Biswas, "Kinetics of Sub 2 nm TiO₂ Particle Formation in an Aerosol Reactor during Thermal Decomposition of Titanium Tetraisopropoxide", *Journal of Nanoparticle Research*, **17**: 147 (2015)
19. H. Jing, X. Wang, **W.-N. Wang**, and P. Biswas, "Elemental Mercury Oxidation in an Electrostatic Precipitator Enhanced with *In Situ* Soft X-ray Irradiation", *Journal of the Air & Waste Management Association*, **65**(4): 455-465 (2015)
20. A. Leavey, Y. Fu, M. Sha, A. Kutta, C. Lu, **W.-N. Wang**, B. Brake, Y. Chen, and P. Biswas, "Air Quality Metrics and Wireless Technology to Maximize the Energy Efficiency of HVAC in a Working Auditorium", *Building and Environment*, **85**: 287-297 (2015)
21. **W.-N. Wang*** and P. Biswas, "Aerosol Processing of Advanced Functional Materials for Energy and Environmental Applications", *Eurozoru Kenkyu (Journal of Aerosol Research)*, **29** (2): 77-87 (2014) (Invited Feature Article; Highlighted on Front Cover)
22. T. Ogi, H. Iwasaki, K. Aishima, F. Iskandar, **W.-N. Wang**, K. Takimiya, and K. Okuyama, "Transient Nature of Graphene Quantum Dots Formation via a Hydrothermal Reaction", *RSC Advances*, **4**(99): 55709-55715 (2014)
23. R. Balgis, T. Ogi, **W.-N. Wang**, G. Anikumar, S. Sago, and K. Okuyama, "Aerosol Synthesis of Self-Organized Nanostructured Hollow and Porous Carbon Particles using a Dual Polymer System", *Langmuir*, **30** (38): 11257-11262 (2014)
24. T. Ogi, H. Iwasaki, A. B. D. Nandiyanto, F. Iskandar, **W.-N. Wang**, and K. Okuyama, "Direct White Light Emission from a Rare-Earth-Free Aluminum-Boron-Carbon-Oxynitride Phosphor", *Journal of Materials Chemistry C*, **2**(21): 4297-4303 (2014) (IF = 5.976)

Publications Prior to VCU

25. **W.-N. Wang**, J. Soulis, Y. J. Yang, and P. Biswas, "Comparison of CO₂ Photoreduction Systems: A Review", *Aerosol and Air Quality Research*, **14**(2): 533-549 (2014) (Invited Review Article; Total WoS cites = **40**)
26. **W.-N. Wang**, Y. Jiang, J. D. Fortner, and P. Biswas, "Nanostructured Graphene-Titanium Dioxide Composites Synthesized by a Single Aerosol Process for Photoreduction of Carbon Dioxide", *Environmental Engineering Science*, **31**(7): 428-434 (2014)
27. Y. Jiang, **W.-N. Wang**, P. Biswas, and J. D. Fortner, "Facile Synthesis and Characterization of Ternary Crumpled Graphene-TiO₂-Magnetite Nanocomposites for Advanced Water Treatment", *ACS Applied Materials & Interfaces*, **6**: 11766-11774 (2014) (IF = 8.097; Total WoS cites = **46**)
28. J. Fang, Y. Wang, M. Attoui, T. S. Chadha, J. R. Ray, **W.-N. Wang**, Y.-S. Jun, and P. Biswas, "Measurement of Sub 2 nm Clusters of Pristine and Composite Metal Oxides During Nanomaterials Synthesis in Flame Aerosol Reactors", *Analytical Chemistry*, **86**: 7523-7529 (2014)
29. Y. Wang, J. Fang, M. Attoui, T. S. Chadha, **W.-N. Wang**, and P. Biswas, "Application of Half Mini

- DMA for sub 2 nm Particle Size Distribution Measurement in an Electrospray and a Flame Aerosol Reactor", *Journal of Aerosol Science*, **71**: 52-64 (2014)
30. **W.-N. Wang**, J. C. Tarafdar, and P. Biswas, "Nanoparticle Synthesis and Delivery by an Aerosol Route for Watermelon Plant Foliar Uptake", *Journal of Nanoparticle Research*, **15**(1): 1417 (2013)
 31. P. Namkhang, W.-J. An, **W.-N. Wang**, K. S. Rane, P. Kongkachuichay, and P. Biswas, "Low Temperature Synthesis of N-doped TiO₂ Nanocatalysts for Photodegradation of Methyl Orange", *Journal of Nanoscience and Nanotechnology*, **13**(3): 2376-2381 (2013)
 32. T. Ogi, A. B. D. Nandiyantio, K. Okino, F. Iskandar, **W.-N. Wang**, E. Tanabe, and K. Okuyama, "Towards Better Phosphor Design: Effect of SiO₂ Nanoparticles on Photoluminescence Enhancement of YAG:Ce", *ECS Journal of Solid State Science & Technology*, **2**(5): R91-95 (2013)
 33. A. Tarafdar, R. Raliya, **W.-N. Wang**, P. Biswas, and J. C. Tarafdar, "Green Synthesis of TiO₂ Nanoparticle Using *Aspergillus Tubingensis*", *Advanced Science, Engineering and Medicine*, **5**(9): 943-949 (2013)
 34. X. Wang, S. M. Daukoru, S. Torkamani, **W.-N. Wang**, and P. Biswas, "Role of Exhaust Gas Recycle on Submicrometer Particle Formation during Oxy-Coal Combustion", *Proceedings of the Combustion Institute*, **34**(2): 3479-3487 (2013)
 35. **W.-N. Wang**, Y. Jiang, and P. Biswas, "Evaporation-Induced Crumpling of Graphene Oxide Nanosheets in Aerosolized Droplets: Confinement Force Relationship", *Journal of Physical Chemistry Letters*, **3**(21): 3228-3233 (2012) (IF = 8.709; Total WoS cites = **56**)
 36. **W.-N. Wang**, W.-J. An, B. Ramalingam, S. Mukherjee, D. M. Niedzwiedzki, S. Gangopadhyay, and P. Biswas, "Size and Structure Matter: Enhanced CO₂ Photoreduction Efficiency by Size-resolved Ultrafine Pt Nanoarticles on TiO₂ Single Crystals", *Journal of the American Chemical Society*, **134**(27): 11276-11281 (2012) (IF = 14.357; Total WoS cites = **326**)
 - ❖ Featured in JACS Spotlights: "[Making Something Useful from Emitted Greenhouse Gases](#)"
 - ❖ Highly Cited Paper, Top 1% in Chemistry (Essential Science IndicatorsSM, Thomson Reuters)
 37. W.-J. An[†], **W.-N. Wang**[†], B. Ramalingam, S. Mukherjee, B. Daubayev, S. Gangopadhyay, and P. Biswas, "Enhanced Water Photolysis with Pt Metal Nanoparticles on Single Crystal TiO₂ Surfaces", *Langmuir*, **28**(19): 7528-7534 (2012) ([†]*Equal contribution*; Total WoS cites = **35**)
 38. T. Ogi, A. B. D. Nandiyanto, **W.-N. Wang**, F. Iskandar, and K. Okuyama, "Direct Synthesis of Spherical YAG:Ce Phosphor from Precursor Solution Containing Polymer and Urea", *Chemical Engineering Journal*, **210**: 461-466 (2012) (IF = 6.735)
 39. T. Ogi, F. Iskandar, A. B. D. Nandiyanto, **W.-N. Wang**, and K. Okuyama, "Influence of Polymer Decomposition Temperature on the Formation of Rare-earth Free Boron Carbon Oxynitride Phosphors", *Journal of Chemical Engineering of Japan*, **45**(12): 995-1000 (2012)
 - ❖ This paper was selected to be awarded the JCEJ "[Outstanding Paper Award of 2012](#)"!
 40. C. Grigoriu, **W.-N. Wang**, D. Martin, and P. Biswas, "Capture of Particles from an Iron and Steel Smelter with a Pulse-Energized Electrostatic Precipitator", *Aerosol & Air Quality Research*, **12**(5): 673-682 (2012)
 41. T. Ogi, Y. Kaihatsu, Y. Kusakibaru, **W.-N. Wang**, M. Munir, and K. Okuyama, "Preparation and Characterization of Boron Oxide-based Red-emitting Phosphors using Eu, Al and Ca Additives", *Materials Chemistry and Physics*, **133**(1): 392-397 (2012)
 42. Y. Morimoto, M. Hirohashi, A. Ogami, T. Oyabu, T. Myojo, M. Todoroki, M. Yamamoto, M. Hashiba, Y. Mizuguchi, B.-W. Lee, E. Kuroda, M. Shimada, **W.-N. Wang**, K. Yamamoto, K. Fujita, S. Endoh, K. Uchida, N. Kobayashi, K. Mizuno, M. Inada, H. Tao, T. Nakazato, J. Nakanishi and I. Tanaka, "Pulmonary Toxicity of Well-dispersed Multi-wall Carbon Nanotubes Following Inhalation and Intratracheal Instillation", *Nanotoxicology*, **6**(6): 587-599 (2012) (IF = 5.811; Total WoS cites = **36**)
 43. Y. Morimoto, M. Hirohashi, A. Ogami, T. Oyabu, T. Myojo, M. Hashiba, Y. Mizuguchi, T. Kambara, B.-W. Lee, E. Kuroda, M. Shimada, **W.-N. Wang**, K. Mizuno, K. Yamamoto, K. Fujita, N. Kobayashi, J. Nakanishi, and I. Tanaka, "Pulmonary Toxicity of Well-dispersed Single-wall Carbon Nanotubes after Inhalation", *Nanotoxicology*, **6**(7): 766-775 (2012) (IF = 5.811)

44. **W.-N. Wang**, J. Park, and P. Biswas, "Rapid Synthesis of Nanostructured Cu-TiO₂-SiO₂ Composites for CO₂ Photoreduction by Evaporation Driven Self-assembly", *Catalysis Science & Technology*, **1**(4): 593-600 (2011) (IF = 5.365)
❖ Highly cited article (Total WoS cites = **68**; Top 10% among 198 articles in 2011)
❖ Hot Article, featured on Inside Front Cover: [Splitting carbon dioxide with light](#).
45. **W.-N. Wang**, T. Ogi, Y. Kaihatsu, F. Iskandar, and K. Okuyama, "Novel Rare-Earth-Free Tunable-Color-Emitting BCNO Phosphors", *Journal of Materials Chemistry*, **21**(14): 5183-5189 (2011) (Invited Highlight Article) (IF = 6.626; Total WoS cites = **72**)
46. P. Biswas, **W.-N. Wang**, and W.-J. An, "The Energy-Environment Nexus: Aerosol Science and Technology Enabling Solutions", *Frontiers of Environmental Science & Engineering in China*, **5** (3): 299-312 (2011) (Invited Feature Article)
47. M. Sahu, B. Wu, L. Zhu, C. Jacobson, **W.-N. Wang**, K. Jones, Y. Goyal, Y. Tang, and P. Biswas, "Role of Dopant Concentration, Crystal Phase and Particle Size on Microbial Inactivation of Cu-doped TiO₂ Nanoparticles", *Nanotechnology*, **22**(41): 415704 (2011)
48. T. Oyabu, T. Myojo, Y. Morimoto, A. Ogami, M. Hirohashi, M. Yamamoto, M. Todoroki, Y. Mizuguchi, M. Hashiba, B. W. Lee, M. Shimada, **W.-N. Wang**, K. Uchida, S. Endoh, N. Kobayashi, K. Yamamoto, K. Fujita, K. Mizuno, M. Inada, H. Tao, T. Nakazato, J. Nakanishi, and I. Tanaka, "Biopersistence of Inhaled MWCNT in Rat Lungs in a 4-week Well-characterized Exposure", *Inhalation Toxicology*, **23**(13): 784-791 (2011)
49. A. Ogami, K. Yamamoto, Y. Morimoto, K. Fujita, M. Hirohashi, T. Oyabu, T. Myojo, K. Nishi, C. Kadoya, M. Todoroki, M. Yamamoto, M. Murakami, M. Shimada, **W.-N. Wang**, N. Shinohara, S. Endoh, K. Uchida, J. Nakanishi, and I. Tanaka, "Pathological Features of Rat Lung Following Inhalation and Intratracheal Instillation of C₆₀ Fullerene", *Inhalation Toxicology*, **23**: 407-416 (2011)
50. Y. Li, **W.-N. Wang**, Z. Zhan, M.-H. Woo, C.-Y. Wu, and P. Biswas, "Photocatalytic Reduction of CO₂ with H₂O on Mesoporous Silica Supported Cu/TiO₂ Catalysts", *Applied Catalysis B: Environmental*, **100**(1-2): 386-392 (2010) (IF = 11.369; Total WoS cites = **236**)
❖ Highly Cited Paper, Top 1% in Chemistry field (Essential Science IndicatorsSM, Thomson Reuters)
❖ TOP 25 Most Cited Paper and Science Direct TOP 25 Hottest Article in *Appl. Catal. B* in 2010, 2011
51. Z. Zhan, **W.-N. Wang**, L. Zhu, W.-J. An, and P. Biswas, "Flame Aerosol Reactor Synthesis of Nanostructured SnO₂ Thin Films: High Gas-sensing Properties by Control of Morphology", *Sensors and Actuators B: Chemical*, **150**(2): 609-615 (2010)
52. Y. Kaihatsu, **W.-N. Wang**, F. Iskandar, T. Ogi, and K. Okuyama, "Effect of the Carbon Source on the Luminescence Properties of Boron Carbon Oxynitride (BCNO) Phosphor Particles", *Journal of the Electrochemical Society*, **157**(10): J329-J333 (2010)
53. M. Shimada, **W.-N. Wang**, and K. Okuyama, "Synthesis of Gallium Nitride Nanoparticles by Microwave Plasma-Enhanced CVD", *Chemical Vapor Deposition*, **16**(4-6): 151-156 (2010)
54. Y. Morimoto, M. Hirohashi, A. Ogami, T. Oyabu, T. Myojo, K. Nishi, C. Kadoya, M. Todoroki, M. Yamamoto, M. Murakami, M. Shimada, **W.-N. Wang**, K. Yamamoto, K. Fujita, S. Endoh, K. Uchida, N. Shinohara, J. Nakanishi, and I. Tanaka, "Inflammogenic Effect of Well-characterized Fullerenes in Inhalation and Intratracheal Instillation Studies", *Particle and Fibre Toxicology*, **7**: 4 (2010) (IF = 6.105; Total WoS cites = **40**)
55. Y. Kaihatsu, **W.-N. Wang**, F. Iskandar, and K. Okuyama, "Controlled Synthesis of Carbon based Alumina Nanophosphors with Tunable Blue to Green Luminescence", *Materials Letters*, **64**(7): 836-839 (2010)
56. D. Hidayat, A. Purwanto, **W.-N. Wang**, and K. Okuyama, "Preparation of Size-controlled Tungsten Oxide Nanoparticles and Evaluation of Their Adsorption Performance", *Materials Research Bulletin*, **45**(2): 165-173 (2010)
57. **W.-N. Wang**, Y. Kaihatsu, F. Iskandar, and K. Okuyama, "Highly Luminous Hollow Chloroapatite Phosphors Formed by a Template-free Aerosol Route for Solid State Lighting", *Chemistry of Materials*, **21**(19): 4685-4691 (2009) (IF = 9.890; Total WoS cites = **21**)

58. **W.-N. Wang**, Y. Kaihatsu, F. Iskandar, and K. Okuyama, "Chemical and Photoluminescence Analyses of New Carbon-based Boron Oxynitride Phosphors", *Materials Research Bulletin*, **44**(11): 2099-2102 (2009) (ScienceDirect TOP25 Hottest Article, *MRB*, October-December 2009)
59. M. Shimada, **W.-N. Wang**, K. Okuyama, T. Myojo, T. Oyabu, Y. Morimoto, I. Tanaka, S. Endo, K. Uchida, K. Yamamoto, and J. Nakanishi, "Development and Evaluation of an Aerosol Generation and Supplying System for Inhalation Experiments of Manufactured Nanoparticles", *Environmental Science & Technology*, **43**(14): 5529-5534 (2009) (IF = 6.653; Total WoS cites = **41**)
60. K. Fujita, Y. Morimoto, A. Ogami, T. Myojo, I. Tanaka, M. Shimada, **W.-N. Wang**, S. Endoh, K. Uchida, T. Nakazato, K. Yamamoto, H. Fukui, M. Horie, Y. Yoshida, H. Iwahashi, and J. Nakanishi, "Gene Expression Profiles in Rat Lung after Inhalation Exposure to C₆₀ Fullerene Particles", *Toxicology*, **258**(1): 47-55 (2009) (Total WoS cites = **60**)
61. H. Yokoyama, T. Ono, Y. Morimoto, T. Myojo, I. Tanaka, M. Shimada, **W.-N. Wang**, S. Endo, K. Uchida, "Noninvasive In Vivo Electron Paramagnetic Resonance Study to Estimate Pulmonary Reducing Ability in Mice Exposed to NiO or C₆₀ Nanoparticles", *Journal of Magnetic Resonance Imaging*, **29**(6): 1432-1437 (2009)
62. W. Widiyastuti, T. Minami, **W.-N. Wang**, F. Iskandar, and K. Okuyama, "Photoluminescence Characteristics of Macroporous Eu-doped Yttrium Oxide Particles Prepared by Spray Pyrolysis", *Japanese Journal of Applied Physics*, **48**(3): 032001 (2009)
63. W. Widiyastuti, A. Purwanto, **W.-N. Wang**, F. Iskandar, H. Setyawan, and K. Okuyama, "Nanoparticle Formation through Solid-fed Flame Synthesis: Experiment and Modeling", *AIChE Journal*, **55**(4): 885-895 (2009)
64. Y. Kaihatsu, F. Iskandar, H. Widiyandari, **W.-N. Wang**, and K. Okuyama, "Fabrication and Characterization of a Yellow-Emitting BCNO Phosphor for White Light-Emitting Diodes", *Electrochemical and Solid-State Letters*, **12**(3): J33-J36 (2009)
65. **W.-N. Wang**, F. Iskandar, K. Okuyama, and Y. Shinomiya, "Rapid Synthesis of Non-aggregated Fine Chlorapatite Blue Phosphor Powders with High Quantum Efficiency", *Advanced Materials*, **20**(18): 3422-3426 (2008) (IF = 21.850; Total WoS cites = **38**)
66. **W.-N. Wang**, A. Purwanto, I.W. Lenggoro, K. Okuyama, H. Chang, and H.-D. Jang, "Investigation on the Correlations between Droplet and Particle Size Distribution in Ultrasonic Spray Pyrolysis", *Industrial & Engineering Chemistry Research*, **47**(5): 1650-1659 (2008) (Total WoS cites = **71**)
67. T. Minami, **W.-N. Wang**, F. Iskandar, and K. Okuyama, "Photoluminescence Properties of Submicrometer Phosphors with Different Crystallite/Particle Sizes", *Japanese Journal of Applied Physics*, **47**(9): 7220-7223 (2008)
68. T. Ogi, Y. Kaihatsu, F. Iskandar, **W.-N. Wang**, and K. Okuyama, "Facile Synthesis of New Full-Color-Emitting BCNO Phosphors with High Quantum Efficiency", *Advanced Materials*, **20**(17): 3235-3238 (2008) (IF = 21.950; Total WoS cites = **100**)
69. Y. Terashi, A. Purwanto, **W.-N. Wang**, F. Iskandar, and K. Okuyama, "Role of Urea Addition in the Preparation of Tetragonal BaTiO₃ Nanoparticles using Flame-Assisted Spray Pyrolysis", *Journal of the European Ceramic Society*, **28**(13): 2573-2580 (2008)
70. A. Purwanto, **W.-N. Wang**, T. Ogi, I. W. Lenggoro, E. Tanabe, and K. Okuyama, "High Luminance YAG:Ce Nanoparticles Fabricated from Urea Added Aqueous Precursor by Flame Process", *Journal of Alloys and Compounds*, **463**(1-2): 350-357 (2008) (Total WoS cites = **66**)
71. **W.-N. Wang**, W. Widiyastuti, T. Ogi, I.W. Lenggoro, and K. Okuyama, "Correlations between Crystallite/Particle Size and Photoluminescence Properties of Submicrometer Phosphors", *Chemistry of Materials*, **19**(7): 1723-1730 (2007) (IF = 9.890)
❖ Highly cited article (Total WoS cites = **206**; Top 3% among 968 articles (28/968) in 2007)
72. **W.-N. Wang**, W. Widiyastuti, I.W. Lenggoro, T.-O. Kim, and K. Okuyama, "Photoluminescence Optimization of Luminescent Nanocomposites Fabricated by Spray Pyrolysis of a Colloid-Solution Precursor", *Journal of the Electrochemical Society*, **154**(4): J121-J128 (2007)
73. A. Purwanto, **W.-N. Wang**, I.W. Lenggoro, and K. Okuyama, "Formation and Luminescence

- Enhancement of Agglomerate-Free YAG:Ce³⁺ Submicrometer Particles by Flame-assisted Spray Pyrolysis”, *Journal of the Electrochemical Society*, **154**(3): J91-J96 (2007)
74. **W.-N. Wang**, S.G. Kim, I.W. Lenggoro, and K. Okuyama, “Polymer-assisted Annealing of Spray-pyrolyzed Powders for Formation of Luminescent Particles with Submicrometer and Nanometer Sizes”, *Journal of the American Ceramic Society*, **90**(2): 425- 432 (2007)
 75. W. Widiyastuti, **W.-N. Wang**, A. Purwanto, I. W. Lenggoro, K. Okuyama, “A Pulse Combustion-spray Pyrolysis Process for the Preparation of Nano- and Submicrometer-sized Oxide Particles”, *Journal of the American Ceramic Society*, **90**(12): 3779-3785 (2007)
 76. A. Purwanto, **W.-N. Wang**, I.W. Lenggoro, and K. Okuyama, “Formation of BaTiO₃ Nanoparticles from an Aqueous Precursor by Flame-assisted Spray Pyrolysis”, *Journal of the European Ceramic Society*, **27**(16): 4489-4497 (2007)
 77. S.-G. Kim, **W.-N. Wang**, T. Iwaki, A. Yabuki, and K. Okuyama, “Low-Temperature Crystallization of Barium Ferrite Nanoparticles by a Sodium Citrate-Aided Synthetic Process”, *Journal of Physical Chemistry C*, **111**(28): 10175-10180 (2007) (Total WoS cites = **42**)
 78. W. Widiyastuti, **W.-N. Wang**, I. W. Lenggoro, F. Iskandar, and K. Okuyama, “Simulation and Experimental Study of Spray Pyrolysis of Polydispersed Droplets”, *Journal of Materials Research*, **22**(7): 1888-1898 (2007)
 79. S.P. Fisenko, **W.-N. Wang**, M. Shimada, and K. Okuyama, “Vapor Condensation on Nanoparticles in the Mixer of a Particle Size Magnifier”, *International Journal of Heat and Mass Transfer*, **50**(11-12): 2333-2338 (2007)
 80. S.P. Fisenko, **W.-N. Wang**, I. W. Lenggoro, and K. Okuyama, “Evaporative Cooling of Micron-sized Droplets in a Low-pressure Aerosol Reactor”, *Chemical Engineering Science*, **61**(18): 6029-6034 (2006) (Total WoS cites = **31**)
 81. **W.-N. Wang**, I.W. Lenggoro, K. Okuyama, Y. Terashi, and Y.-C. Wang, “Effects of Ethanol Addition and Ba/Ti Ratios on Preparation of Barium Titanate Nanocrystals via a Spray Pyrolysis Method”, *Journal of the American Ceramic Society*, **89**(3): 888-893 (2006)
 82. **W.-N. Wang**, I.W. Lenggoro, Y. Terashi, T.-O. Kim, and K. Okuyama, “One-step Synthesis of Titanium Oxide Nanoparticles by Spray Pyrolysis of Organic Precursors”, *Materials Science and Engineering: B*, **123**(3): 194-202 (2005) (Total WoS cites = **42**)
 83. **W.-N. Wang**, I.W. Lenggoro, Y. Terashi, Y.-C. Wang, and K. Okuyama, “Direct Synthesis of Barium Titanate Nanoparticles via a Low Pressure Spray Pyrolysis Method”, *Journal of Materials Research*, **20**(10): 2873-2882 (2005)
 84. **W.-N. Wang**, I.W. Lenggoro, and K. Okuyama, “Dispersion and Aggregation of Nanoparticles Derived from Colloidal Droplets under Low-Pressure Conditions”, *Journal of Colloid & Interface Science*, **288**(2): 423-431 (2005) (ScienceDirect TOP25 Hottest Article, *JCIS*, April-June 2005)
 85. **W.-N. Wang**, Y. Itoh, I.W. Lenggoro, and K. Okuyama, “Nickel and Nickel Oxide Nanoparticles Prepared from Nickel Nitrate Hexahydrate by a Low Pressure Spray Pyrolysis”, *Materials Science and Engineering B—Advanced Functional Solid-State Materials*, **111**(1): 69-76 (2004)
 - ❖ Highly cited article (Total WoS cites = **83**; Top 3% among 470 articles (16/470) in 2004)
 - ❖ ScienceDirect TOP25 Hottest Article, *Mater. Sci. Eng. B* (July – September 2004)
 86. X.-L. Wang, **W.-N. Wang**, and D.-X. Wang, “Experimental Investigation on Separation Performance of Nanofiltration Membranes for Inorganic Electrolyte Solutions”, *Desalination*, **145**(1-3): 115-122 (2002) (Total WoS cites = **55**)
 87. X.-L. Wang, A.-L. Ying, and **W.-N. Wang**, “Nanofiltration of L-Phenylalanine and L-Aspartic Acid Aqueous Solutions”, *Journal of Membrane Science*, **196**(1): 59-67 (2002) (Total WoS cites = **52**)

REVIEWS & NON-ENGLISH PAPERS

1. W. Lenggoro, A. Purwanto, Widiyastuti, **W.-N. Wang**, and K. Okuyama, "Functionalization of Nanoparticles by Particle Processing Using Spray Methods", *The Micromeritics*, **52**: 43-47 (2009) (In Japanese)
2. K. Fujita, Y. Morimoto, A. Ogami, T. Myojyo, I. Tanaka, M. Shimada, **W.-N. Wang**, S. Endoh, K. Uchida, S. Kinugasa, H. Kato, K. Takahashi, H. Tao, M. Inada, T. Nakazato, K. Yamamoto, H. Fukui, M. Horie, Y. Yoshida, H. Iwahashi, and J. Nakanishi, "Gene Expression Profiling to Assess the Biological Effects of Manufactured Nanomaterials", *Japanese Journal of Environmental Toxicology*, **11**(2): 69-73 (2008) (in Japanese with English abstract)
3. K. Okuyama, **W.-N. Wang**, and F. Iskandar, "Technology Innovation in the Nanoparticle Project—Synthesis of Nanoparticles and Nanocomposites", *KONA Powder & Particle Journal*, **25**: 237-243 (2007)
4. K. Okuyama, **W.-N. Wang**, and F. Iskandar, "Novel Synthetic Method for Crystalline Nanoparticles from Liquid Droplets", *Farumashia*, **43**(4): 315-319 (2007) (In Japanese)
5. **W.-N. Wang**, "Synthesis of Nanoparticles via Spray Route under Low Pressure Conditions", *Journal of the Society of Powder Technology, Japan*, **43**(6): 462 (2006) (In Japanese)
6. K. Okuyama, T. Ogi, and **W.-N. Wang**, "Synthesis and Evaluation for Nano-particles", *Journal of the Japan Society of Polymer Processing*, **18**(9): 612-619 (2006) (In Japanese)
7. **W.-N. Wang**, D.-X. Wang, X.-L. Wang, and H. Zhao, "Experimental Investigation on Separation of Inorganic Electrolyte Solutions by Nanofiltration Membranes", *Journal of Chemical Engineering of Chinese Universities*, **16**(3): 257-262 (2002) (in Chinese, with English abstract)
8. X.-L. Wang, **W.-N. Wang**, D.-X. Wang, and H. Zhao, "Progress on the Separation of Aqueous Solutions of Neutral Solutes and Electrolytes with Low Molecular Weights by using Nanofiltration Membranes", *Progress in Nature Science*, **12**(12): 1233-1239 (2002) (In Chinese)

BOOK CHAPTERS (5 IN TOTAL)

1. P. Biswas, W.-J. An, and **W.-N. Wang**, "Engineered Nanoparticles and the Environment: Inadvertently and Intentionally Produced", in *Nature's Nanostructures*, Ed. by Amanda Barnard and Haibo Guo, Pan Stanford Publishing, Singapore, pp. 443-476 (2012) (**Keynote Chapter**)
2. **W.-N. Wang**, A. Purwanto, and K. Okuyama, "Chapter 38: Low-pressure Spray Pyrolysis", in *Handbook of Atomization and Sprays: Theory and Applications*, Ed. by Nasser Ashgriz, Springer, New York, pp. 861-868 (2011)
3. A. Purwanto, **W.-N. Wang**, and K. Okuyama, "Chapter 39: Flame Spray Pyrolysis", in *Handbook of Atomization and Sprays: Theory and Applications*, Ed. by Nasser Ashgriz, Springer, New York, pp. 869-879 (2011)
4. **W.-N. Wang**, I.W. Lenggoro, and K. Okuyama, "Preparation of Nanoparticles by Spray Routes", in *Encyclopedia of Nanoscience and Nanotechnology (ENN)*, 2nd Edition, Ed. by H. S. Nalwa, American Scientific Publishers, Stevenson Ranch, California, Vol. 21, pp. 435-458 (2011)
5. K. Okuyama, **W.-N. Wang**, and A. Purwanto, "Spray Pyrolysis Method", in *Development and Applications of Nanophosphors*, Ed. by Tetsuhiko Isobe, CMC Publishing Co., Ltd., Tokyo, Japan (Aug. 2007) pp. 65-74 (In Japanese)

PATENTS & INVENTION DISCLOSURES

- **W.-N. Wang**, D. Wang, P. Xu, and B. Zhu, Iron Oxide Nanowires Based Filter for Inactivation of Bacteria, Invention Disclosure, VCU WAN-18-056.
- J. D. Fortner, P. Biswas, Y. Jiang, **W.-N. Wang**, Composite Nanostructures Having a Crumpled Graphene Oxide Shell. US20170087519A1/WO2015142938A1.
- K. Okuyama, H. Yabuki, F. Iskandar, **W.-N. Wang**, K. Yun, Polymer Fine Particles, No. JP2008-239897A.

INVITED TALKS (*PRESENTER, 8 IN TOTAL)

1. **W.-N. Wang***, "Strategies to Design and Synthesize MOFs-based Nanocomposites for Efficient Gas Detection and Conversion", The Center for Nanophase Materials Sciences (CNMS) at Oak Ridge National Laboratory (ORNL), Oak Ridge, TN, December 8, 2017
2. **W.-N. Wang***, "Facile Development of Nanostructured Photocatalysts for CO₂ Capture and Conversion", *The Nano-Micro Conference 2017*, Shanghai, China, June 19-23, 2017
3. **W.-N. Wang***, "Indoor Air Quality: What You Don't Know May Harm You", *2017 VJAS (Virginia Junior Academy of Science) Annual Research Symposium and 76th Annual Meeting*, Richmond, VA, May 16, 2017
4. **W.-N. Wang***, "Development Strategies for Efficient Photocatalysts for CO₂ Photoreduction: Aerosol Science & Technology Enabling Solutions", *Physics Colloquia*, Department of Physics, Virginia Commonwealth University, Richmond, November 21, 2014
5. **W.-N. Wang***, "Particle Synthesis via Aerosol Processes – Concepts, Strategies, and Visions", *Minisymposium on Particle Synthesis*, Friedrich-Alexander University of Erlangen-Nuremberg, Erlangen, Germany, July 8-9, 2008
6. **W.-N. Wang***, F. Iskandar, and K. Okuyama, Nanophosphor Formation from Disintegration of Spray Pyrolyzed Submicron Phosphors via Polymer-assisted Annealing, *BASF Conference on Nanomaterials*, Singapore, Oct 21-23, 2007
7. **W.-N. Wang***, I.W. Lenggoro, F. Iskandar, and K. Okuyama, Nanoparticle and Nanostructured Powders Synthesis via Spray Route, *BASF's 2nd Asia Workshop on Nanostructural Surfaces*, Shanghai, China, May 9-11, 2006
8. **W.-N. Wang***, Synthesis of Nanoparticles via Spray Route Under Low Pressure Conditions, Tsinghua University, Beijing, China, May 8, 2006

CONFERENCE PRESENTATIONS (87 IN TOTAL)

1. X. He* and **W.-N. Wang***, "Development of Semiconductor-MOF Ternary Photocatalyst Toward Intensified Charge Carrier Density and Molecule Activation in Heterogeneous Photocatalysis", *2018 MRS Fall Meeting & Exhibit*, Boston, MA, November 25-30, 2018
2. X. He and **W.-N. Wang***, "MOFs-based Hybrid Nanocomposites for Efficient Gas Capture and Conversion: A Charge Transfer Study," *10th International Aerosol Conference (IAC2018)*, St. Louis, MO, September 2-7, 2018
3. Y. Khodyko, S. P. Fisenko, and **W.-N. Wang***, "Femtoliter Droplet Cloud Evaporation in an Aerosol Reactor," *10th International Aerosol Conference (IAC2018)*, St. Louis, MO, September 2-7, 2018
4. H. Tu*, **W.-N. Wang**, and D.-R. Chen, "Aerosol-assisted Synthesis of Sodium Tungsten Bronze Oxide for UV and IR Shielding," *10th International Aerosol Conference (IAC2018)*, St. Louis, MO, September 2-7, 2018
5. K. Logan*†, D. Wang, and **W.-N. Wang**, "An Iron Mesh-based Metal Organic Framework Filter for Efficient Arsenic Removal," *2017 Undergraduate Research Symposium*, VCU School of Engineering, Richmond, November 21, 2017. (†Undergraduate student)
6. Y. Nie*, L.-Y. Lin, **W.-N. Wang**, and P. Biswas, "Role of Nitrogen Addition to Reduced Graphene Oxide-TiO₂ Nanocomposites in Enhancing CO₂ Photoreduction," *2017 AIChE Annual Meeting*, Minneapolis, MN, October 29-November 3, 2017
7. X. He*, D. Wang, and **W.-N. Wang***, "Facile Development of MOFs-based Nanocomposites for Enhanced CO₂ Photoreduction," *254th ACS National Meeting*, Washington DC, Aug. 20-24, 2017
8. **W.-N. Wang***, X. He, and Z. Gan, "Aerosol Processing of MOF-Based Nanocomposites for Carbon Dioxide Photoreduction," *2016 AIChE Annual Meeting*, San Francisco, CA, November 16, 2016
9. Z. Gan, X. He, and **W.-N. Wang***, "Rapid Synthesis of Highly Porous Polymer Nanocrystals by Aerosol Routes", *AAAR 35th Annual Conference*, Portland, OR, October 17-21, 2016
10. **W.-N. Wang***, "Aerosol Processing of Advanced Materials for Energy and Environmental

- Applications”, *Center for Rational Catalyst Synthesis (CERCAS) Fall Meeting*, Columbia, SC, December 14-15, 2015
11. **W.-N. Wang***, F. Wu, Y. Myung, D. Niedzwiedzki, H. S. Im, J. Park, P. Banerjee, and P. Biswas, “Facile Development of ZnO-CuO Nanowires for CO₂ Photoreduction into Hydrocarbon Fuels”, *2015 AIChE Annual Meeting*, Salt Lake City, UT, November 8-13, 2015
 12. N. Zhou*, D.-R. Chen, and **W.-N. Wang***, “Formaldehyde Photodegradation by Graphene Oxide-based Nanocomposites”, *International Symposium on Clusters and Nanomaterials (ISCAN)*, Richmond, VA, October 26-29, 2015
 13. H. Jing*, X. Wang, **W.-N. Wang**, and P. Biswas, “Elemental Mercury Oxidation in an Electrostatic Precipitator with in-situ Soft X-rays”, *2014 AIChE Annual Meeting*, Atlanta, November 16-21, 2014
 14. Y. Jiang*, **W.-N. Wang**, D. Liu, Y. Nie, W. Li, J. Wu, F. Zhang, P. Biswas, and J.D. Fortner, “Engineered Crumpled Graphene Oxide Nanocomposite Membrane Assemblies for Advanced Water Treatment Processes”, *2014 Mid-America Environmental Engineering Conference*, Missouri University of Science and Technology, Rolla, MO, November 15, 2014
 15. Y. Nie*, **W.-N. Wang**, Y. Jiang, J. Fortner, and P. Biswas, “Aminated Reduced Graphene Oxide-Titanium Dioxide Nanocomposites (AGOTi) for Carbon Dioxide Capture and Photoreduction”, *AAAR 33rd Annual Conference*, Orlando, FL, October 21-24, 2014
 16. A. Leavey*, Y. Fu, M. Sha, A. Kutta, C. Lu, **W.-N. Wang**, B. Brake, Y. Chen, and P. Biswas, “How Air Quality Metrics and Wireless Technology Can Maximize the Energy Efficiency of HVAC in a Working Auditorium”, *AAAR 33rd Annual Conference*, Orlando, FL, October 21-24, 2014
 17. **W.-N. Wang***, F. Wu, Y. Myung, H. S. Im, J. Park, P. Banerjee, and P. Biswas, “Facile Development of Highly Efficient ZnO-CuO Nanowire Arrays for Solar Conversion of Carbon Dioxide”, *International Aerosol Conference (IAC 2014)*, Busan, Korea, August 28-September 2, 2014
 18. Y. Jiang*, **W.-N. Wang**, Y. Nie, S. An, P. Biswas, and J. D. Fortner, “Engineered Crumpled Graphene Nanocomposites for Photocatalytic Environmental Reduction Applications”, *248th ACS National Meeting and Exposition*, San Francisco, CA, August 10-14, 2014
 19. Y. Jiang*, D. Liu, **W.-N. Wang**, Y. Nie, W. Li, J. Wu, F. Zhang, P. Biswas, and J. D. Fortner, “Crumpled Graphene Oxide Nanocomposites for Multifunctional Water Treatment Membrane Structures”, *248th ACS National Meeting and Exposition*, San Francisco, CA, August 10-14, 2014
 20. H. Jing*, X. Wang, **W.-N. Wang**, and P. Biswas, “Capture of Submicrometer Particles from Air-fired and Oxy-coal Combustions by a Soft X-ray Enhanced Electrostatic Precipitator”, *A&WMA’s 107th Annual Conference & Exhibition*, Long Beach, CA, June 24-27, 2014
 21. H. Jing*, X. Wang, **W.-N. Wang**, and P. Biswas, “Elemental Mercury Oxidation in an Electrostatic Precipitator with In-situ Soft X-rays”, *A&WMA’s 107th Annual Conference & Exhibition*, Long Beach, CA, June 24-27, 2014
 22. **W.-N. Wang**, Y. Jiang, J. Fortner, and P. Biswas*, “Development of Crumpled Graphene-TiO₂ Nanocomposites for CO₂ Photoconversion into Hydrocarbon Fuels”, *Conference on Aerosol Technology 2014*, Karlsruhe, Germany, June 16-18, 2014
 23. F. Wu, **W.-N. Wang**, Y. Myung, H. S. Im, J. Park, P. Biswas, and P. Banerjee*, “At the Edge of Thickness: Few Å ZnO on CuO Nanowires for Highly Efficient Photoreduction of CO₂”, *The AVS Topical Conference on Atomic Layer Deposition 2014*, Kyoto, Japan, June 15-18, 2014
 24. Y. Jiang*, **W.-N. Wang**, P. Biswas, and J. D. Fortner, “High Performance Crumpled Graphene-TiO₂ Photocatalysts for Water Treatment Technologies”, *247th ACS National Meeting and Exposition*, Dallas, TX, March 16-20, 2014
 25. N. Katta, D. Saha, K. Leong, J. Wu, N. Gandra, **W.-N. Wang**, P. Banerjee, S. Singamaneni, P. Biswas, and B. Raman, “Analysis of Biological and Artificial Chemical Sensor Responses to Odor Mixtures”, *IEEE Sensors 2013*, Baltimore, Maryland, November 3-6, 2013
 26. **W.-N. Wang***, W.-J. An, B. Ramalingam, S. Mukherjee, D. M. Niedzwiedzki, S. Gangopadhyay, and P. Biswas, “Enhanced Carbon Dioxide Photoconversion Efficiency by 1D Structured Platinized TiO₂ Films”, *224th ECS Meeting*, San Francisco, CA, Oct 27-Nov 1, 2013 (Peer-reviewed)

27. **W.-N. Wang***, Y. Jiang, J. Fortner, and P. Biswas, "Development of Crumpled Graphene-based Nanocomposites via Aerosol Route for Environmental Applications", *32nd AAAR Annual Conference*, Portland, Oregon, Sept 30-Oct 4, 2013
28. Y. Wang, J. Fang, T. Chadha, **W.-N. Wang**, and P. Biswas, "Evaluation of High Resolution Half Mini DMA and Nano DMA for Measurement of Size Distributions in Electrospray and a Flame Aerosol Reactor", *32nd AAAR Annual Conference*, Portland, Oregon, Sept 30-Oct 4, 2013 (O)
29. Y. Jiang*, **W.-N. Wang**, J. Fortner, and P. Biswas, "Engineered Crumpled Graphene Oxide-based Nanocomposites as Platform Materials for Advanced Water Treatment Technologies", *Gordon Research Conference on Environmental Nanotechnology*, Stowe/Flake Resort and Conference Center, Stowe, VT, June 2-7, 2013
30. **W.-N. Wang***, W.-J. An, B. Ramalingam, S. Mukherjee, D. M. Niedzwiedzki, S. Gangopadhyay, and P. Biswas, "Highly Efficient Pt-TiO₂ Nanostructured Films for CO₂ Conversion to Hydrocarbon Fuels", *31th AAAR Annual Conference*, Minneapolis, Minnesota, October 8-12, 2012
31. W.-J. An*, **W.-N. Wang**, B. Ramalingam, S. Mukherjee, S. Gangopadhyay, and Pratim Biswas, "Role of Pt Nanoparticles in Photoreactions on TiO₂ Photoelectrodes", *Proceedings of 2012 MRS Spring Meeting*, San Francisco, California, April 9-13, 2012 (Peer-reviewed)
32. W.-J. An*, J. Co-Reyes, V. B. Shah, **W.-N. Wang**, R. E. Blankenship, and P. Biswas, "Nano-Biohybrid Light-Harvesting Systems for Solar Energy Applications", *Proceedings of 2012 MRS Spring Meeting*, San Francisco, California, April 9-13, 2012 (Peer-reviewed)
33. **W.-N. Wang** and P. Biswas*, "Aerosol Delivery of Nanomaterials to Plants", Nanotech Seminar at Central Arid Zone Research Institute, Jodhpur, India, March 1st, 2012 (Invited Lecture)
34. **W.-N. Wang***, "Aerosol Processing of Advanced Functional Materials for Energy and Environmental Applications", *2011 AIChE Annual Meeting*, Minneapolis, October 16-21, 2011
35. **W.-N. Wang***, P. Namkhang, K. S. Rane, and P. Biswas, "Low Temperature Synthesis of N-TiO₂ Particles by Hydrazine-assisted Aerosol Pyrolysis of Titanium Tetraisopropoxide Nitric Solution", *2011 AIChE Annual Meeting*, Minneapolis, MN, October 16-21, 2011
36. **W.-N. Wang***, K. S. Rane, and P. Biswas, "Direct Synthesis of Cu-N-TiO₂/SiO₂ Mesoporous Catalysts by Hydrazine-assisted Aerosol Pyrolysis and Their Application to CO₂ Photoreduction", *30th AAAR Annual Conference*, Orlando, FL, October 3-7, 2011
37. **W.-N. Wang***, J. C. Tarafdar, and P. Biswas, "Nanoparticle Nutrient Synthesis and Delivery Using Aerosol Routes for Plants", *30th AAAR Annual Conference*, Orlando, FL, October 3-7, 2011
38. V. Shah*, J. Springer, **W.-N. Wang**, D. Holten, and P. Biswas, "Self-assembly of Chlorins in Aerosol Droplets for Use in Solar Energy Applications", *30th AAAR Annual Conference*, Orlando, FL, October 3-7, 2011
39. X. Wang*, M. Daukoru, S. Torkamani, **W.-N. Wang**, L. Zhang, J. Hao, and P. Biswas, "Role of Flue Gas Recycle on Submicrometer Particle Formation during Oxy-Coal Combustion", *30th AAAR Annual Conference*, Orlando, FL, October 3-7, 2011
40. V. Shah*, J. Springer, **W.-N. Wang**, D. Holten, and P. Biswas, "Self-assembly of Bacteria Chlorophyll Analogues by Aerosol Route", Annual PARC (Photosynthetic Antenna Research Center) All Hands Meeting, Washington University in St. Louis, MO, June 20-21, 2011
41. **W.-N. Wang***, J. Park, and P. Biswas, "CO₂ Photoreduction by Nanostructured Composite Photocatalytic Materials Synthesized by a Furnace Aerosol Reactor System", *2010 AIChE Annual Meeting*, Salt Lake City, UT, November 7-12, 2010
42. Z. Zhan, **W.-N. Wang***, L. Zhu, W.-J. An, and P. Biswas, "Correlation between Sensitivity and Morphology of Flame-made SnO₂ Thin Film Gas Sensors", *2010 AIChE Annual Meeting*, Salt Lake City, UT, November 7-12, 2010
43. M. Daukoru, L. Zhang, S. Torkamani, **W.-N. Wang**, S. Wang, J. Hao, and P. Biswas*, "Laboratory-scale Study of Fine Particle Formation and Mercury Speciation during Oxy-coal Combustion", *2010 AIChE Annual Meeting*, Salt Lake City, UT, Nov 7-12, 2010

44. **W.-N. Wang***, J. Park, and P. Biswas, "Mesoporous Cu-TiO₂-SiO₂ Photocatalyst Particles for CO₂ Reduction via a Template-free Aerosol Process", *29th AAAR Annual Conference*, Portland, OR, October 25-29, 2010
45. **W.-N. Wang***, Z. Wang, and P. Biswas, "Aerosol Processing of Visible Light Induced Photocatalysts for CO₂ Reduction under LED Illumination", *29th AAAR Annual Conference*, Portland, OR, October 25-29, 2010
46. M. Sahu*, B. Wu, L. Zhu, **W.-N. Wang**, Y. Tang, and P. Biswas, "Role of Nanoparticle Chemical Composition and Particle Size on Toxicity of Cu-doped TiO₂ Nanomaterials in Environmental Microorganism", *29th AAAR Annual Conference*, Portland, OR, October 25-29, 2010
47. **W.-N. Wang***, M. Daukoru, J. Park, X. Wang, S. Torkamani, and P. Biswas, Bench-scale Study of Fine Particle Formation, Mercury Speciation, and CO₂ Photoreduction in Oxy-coal Combustion, *15th Annual Mid-American Environmental Engineering Conference*, Missouri University of Science & Technology, Rolla, MO, Oct 16, 2010
48. S. Torkamani, **W.-N. Wang**, P. Biswas*, X. Wang, M. Daukoru, and D. Zernickow, "Carbon Dioxide Capture and Conversion in Different Modalities of Coal Combustion Systems (Conventional, Oxy-coal, Gasification)", McDonnell International Scholars Academy Symposium: Global Energy Future, Washington University in St. Louis, MO, October 1-5, 2010
49. **W.-N. Wang**, J. Park, and P. Biswas*, "Synthesis of Cu-TiO₂/SiO₂ mesoporous particles for CO₂ photoreduction in a furnace aerosol reactor (FuAR) system", *2010 International Aerosol Conference (IAC)*, Helsinki, Finland, August 29-September 3, 2010
50. Z. Zhan, **W.-N. Wang**, L. Zhu, W. An, and P. Biswas*, "Morphology Control of SnO₂ Thin Film Gas Sensors by a Flame Aerosol Reactor", *2010 International Aerosol Conference (IAC)*, Helsinki, Finland, August 29-September 3, 2010
51. M. Shimada*, A. Tao, H. Yamamoto, and **W.-N. Wang**, "Plasma Synthesis of Composite Films using Gaseous and Aerosol Precursors", *2010 IAC*, Helsinki, Finland, Aug 29-Sep 3, 2010
52. **W.-N. Wang***, J. Park, and P. Biswas, "Rapid Synthesis of Silica-supported Cu-TiO₂ Fine Catalysts for CO₂ Photoreduction", *Proceedings of the A&WMA's 103rd Annual Conference & Exhibition*, Calgary, Alberta, Canada, June 22-25, 2010, pp. 3583-3593. (Peer-reviewed)
53. D. Hidayat, A. Purwanto, **W.-N. Wang**, and K. Okuyama*, "Tungsten Oxide Nanoparticles and Their Adsorption Performance", *World Congress on Particle Technology 6 (WCPT6) 2010*, Nuremberg, Germany, Apr 26-29, 2010
54. M. Daukoru*, **W.-N. Wang***, and P. Biswas, "Carbon Dioxide Capture from Coal Combustion Exhausts", *14th Annual Mid-American Environmental Engineering Conference*, Washington University in St. Louis, St. Louis, MO, October 24, 2009
55. K. Fujita*, Y. Morimoto, A. Ogami, T. Myojyo, I. Tanaka, M. Shimada, **W.-N. Wang**, S. Endoh, K. Uchida, T. Nakazato, H. Tao, K. Yamamoto, H. Fukui, M. Horie, Y. Yoshida, H. Iwahashi, and J. Nakanishi, "Comprehensive Gene Expression in Rat Lung after Inhalation Exposure to C₆₀ Fullerene Particles", *The 46th Congress of the European Societies of Toxicology (EUROTOX2009)*, Dresden, Germany, Sep 13-16, 2009
56. A. Tao*, **W.-N. Wang**, and M. Shimada, "Synthesis of Composite Films using Aerosol Particles in Plasma", *The 26th Symposium of Japan Association of Aerosol Science and Technology (JAASST)*, Okayama, August 19-21, 2009
57. M. Shimada, K. Nakashima*, **W.-N. Wang**, K. Okuyama, T. Myojo, T. Oyabu, Y. Morimoto, and I. Tanaka, "Generation of MWCNT Aerosols for Inhalation Exposure Experiment", *The 26th Symposium of JAASST*, Okayama, Aug 19-21, 2009
58. K. Fujita*, Y. Morimoto, A. Ogami, T. Myojyo, I. Tanaka, M. Shimada, **W.-N. Wang**, S. Endoh, K. Uchida, H. Tao, S. Inada, T. Nakamoto, M. Tamura, K. Yamamoto, H. Fukui, M. Hayakawa, M. Horie, Y. Yoshida, H. Iwahashi, and J. Nakanishi, "Gene Expression Profiling for Toxicological Assessment of Manufactured Nanoparticles in Rat Lung", *Korean Environmental Toxicology Meeting 2008*, Ewha Womans University, Seoul, Korea, Oct 31, 2008

59. T. Oyabu*, Y. Morimoto, T. Myojo, A. Ogami, M. Murakami, C. Kadoya, K. Nichi, M. Yamamoto, M. Todoroki, M. Hirohashi, M. Shimada, **W.-N. Wang**, K. Uchida, S. Endo, J. Nakanishi, and I. Tanaka, "Biopersistence of Inhaled and Intratracheal Instilled Nanoparticles in Rat Lungs", *Nanotoxicology - 2nd International Conference*, Zurich, Switzerland, Sep 7-10, 2008
60. K. Fujita*, S. Endoh, K. Uchida, S. Kinugasa, H. Katoh, K. Takahashi, H. Tao, S. Inada, T. Nakazato, K. Yamamoto, H. Fukui, M. Horie, K. Yoshida, H. Iwahashi, S. Futatsugi, J. Nakanishi, Y. Morimoto, A. Ogami, T. Myojo, I. Tanaka, M. Shimada, and **W.-N. Wang**, "Possibility of Gene Expression Profiling for Toxicological Assessment of Manufactured Nanoparticles", *The 14th Joint Symposium of Japan Bioassay Research Center and Japanese Society of Environmental Toxicology*, Tsukuba, Aug 28-29, 2008
61. M. Shimada, Y. Kunimoto*, **W.-N. Wang**, K. Okuyama, T. Myojo, T. Oyabu, Y. Motimoto, and I. Takaka, "Dispersion and Supplying System of Manufactured Nanoparticles for Inhalation Exposure Experiment", *The 25th JAAST Symposium*, Kanazawa, Aug 20, 2008
62. M. Shimada*, **W.-N. Wang**, and K. Okuyama, "Particle Dispersion Method for Inhalation Experiment", *(NEDO-AIST-OECD) International Symposium on the Nanorisk Assessment on Manufactured Nanomaterials*, Tokyo, April 23, 2008
63. I. W. Lenggoro*, A. Purwanto, W. Widiyastuti, **W.-N. Wang**, and K. Okuyama, "Morphology and Size Control in Multi-component Particle Formation by Spray Methods", *16th Nisshin Engineering Particle Technology International Symposium*, Sendai, Japan, December 10-11, 2007
64. S. Kinouchi*, **W.-N. Wang**, W. Widiyastuti, T. Ogi, and K. Okuyama, "Relationship between Crystallite/Particle Sizes and Photoluminescence Properties of Spray Pyrolyzed Particles", *The Symposium of the Society of Chemical Engineers, Japan (SCEJ)*, Yamaguchi, Nov 22, 2007
65. M. Hazata*, W. Widiyastuti, **W.-N. Wang**, A. Purwanto, and K. Okuyama, "Nano- and Submicron Oxide Particles Synthesized by Pulse Combustion Spray Pyrolysis Method", *The SCEJ Symposium*, Yamaguchi, Nov 22, 2007
66. T. Ogi*, F. Iskandar, K. Okuyama, and **W.-N. Wang**, Preparation and Characterization of Fine Particles via Spray Pyrolysis Method, POWTEX Osaka 2007, *The Association of Powder Process Industry and Engineering, Japan (APPIE)*, Osaka, Oct 16-19, 2007
67. **W.-N. Wang***, W. Widiyastuti, T. Ogi, A. Purwanto, I.W. Lenggoro, and K. Okuyama, "Effects of Crystallite/Particle Sizes on Luminescent Properties of Submicron Spray Pyrolyzed Phosphor Powders", *The 3rd Asian Particle Technology (APT) Symposium*, Beijing, September 3-5, 2007
68. W. Widiyastuti*, **W.-N. Wang**, A. Purwanto, I.W. Lenggoro, and K. Okuyama, "Comprehensive Analysis of Particle Formation from Polydispersed Droplets by Spray Pyrolysis Method: Experiment and Simulation", *The 3rd APT Symposium*, Beijing, China, Sep 3-5, 2007
69. A. Purwanto*, **W.-N. Wang**, I.W. Lenggoro, and K. Okuyama, "Direct Preparation and Characterization of BaTiO₃ Nanoparticles from Flame Assisted Spray Pyrolysis", *The 3rd APT Symposium*, Beijing, China, Sep 3-5, 2007
70. M. Shimada*, Y. Hayashi, **W.-N. Wang**, W. Lenggoro, and K. Okuyama, "Development of an Aerosol Particle Dispersing and Supplying System for Nanoparticle Inhalation Experiments", *The 3rd International Symposium on Nanotechnology, Occupational and Environmental Health*, Taipei, Taiwan, Aug 29-Sep 1, 2007
71. **W.-N. Wang***, S.-G. Kim, I.W. Lenggoro, and K. Okuyama, "Novel Route to Phosphor Nanoparticle Synthesis via Spray Pyrolysis with Polymer Assisted Heat Treatment", *The 5th Asian Aerosol Conference*, Kaoshiung, Taiwan, August 26-29, 2007
72. I.W. Lenggoro*, **W.-N. Wang**, and K. Okuyama, "Preparation of Fine- and Nano-particles by Spray-based Methods", *Hosokawa Powder Technology Research Institute*, Osaka, Jul 9, 2007
73. S.-G. Kim*, **W.-N. Wang**, T. Iwaki, A. Yabuki, and K. Okuyama, "Low Temperature Crystallization of Barium Ferrite Nanoparticles by a Sodium Citrate-Aided Synthetic Process", *The 42nd Symposium of the Society of Powder Technology of Japan*, Tokyo, Jun 19-20, 2007
74. **W.-N. Wang***, "Luminescence Dependence of Submicron Phosphors on Particle and Crystal

Sizes", *Joint Seminar of Hiroshima University and Korean Advanced Institute of Science and Technology (KAIST)*, Higashi Hiroshima, March 1st, 2007

75. I.W. Lenggoro*, **W.-N. Wang**, S.-G. Kim, and K. Okuyama, "Change in the Crystallinity and Size of Fine Phosphor Particles with Post-Annealing", *The 72nd SCEJ Annual Meeting*, Kyoto, Mar 19-21, 2007
76. **W.-N. Wang***, I.W. Lenggoro, and K. Okuyama, "One-step Preparation of Barium Titanate Nanoparticles via an Aerosol Route", *The 7th International Aerosol Conference*, St. Paul, Minnesota, September 10-15, 2006
77. S.P. Fisenko, **W.-N. Wang***, I.W. Lenggoro, and K. Okuyama, "Evaporative Cooling of Aerosol Droplets and Nanoparticles Growth in a Low Pressure Aerosol Reactor", *The 7th International Aerosol Conference*, St. Paul, Minnesota, September 10-15, 2006
78. M. Shimada*, I.W. Lenggoro, K. Okuyama, Y. Hayashi, **W.-N. Wang**, and T. Ogi, "Development of Particle Dispersion and Supplying System for in vivo Inhalation Experiment of Nanoparticles", *The 23rd JAAST Symposium*, Fukuoka, August 8-10, 2006
79. **W.-N. Wang**, J. Nakamura*, I.W. Lenggoro, and K. Okuyama, "Formation of Multi-component Oxide Nanoparticles by a Low Pressure Spray Pyrolysis Method", *The 23rd JAAST Symposium*, Fukuoka, August 8-10, 2006
80. **W.-N. Wang***, I.W. Lenggoro, and K. Okuyama, "Experimental Investigation on Dispersion and Aggregation of Colloidal Nanoparticles via an Aerosol Route", *The 4th Asian Aerosol Conference (AAC-2005)*, Mumbai, India, December 13-16, 2005
81. I.W. Lenggoro*, **W.-N. Wang**, and K. Okuyama, "Dispersion and Aggregation of Nanoparticles from Low-Pressure Spray of Colloidal Solution", *Autumn Annual Meeting and Symposium of the Society of Powder Technology of Japan*, Osaka, October 18-21, 2005
82. I.W. Lenggoro, **W.-N. Wang***, and K. Okuyama, "Formation of Dispersed Nanoparticles and Aggregates from Colloidal Solution via a Spray Drying Method", *The 37th SCEJ Autumn Annual Meeting*, Okayama, September 15-17, 2005
83. **W.-N. Wang***, I.W. Lenggoro, and K. Okuyama, "Dispersion and Aggregation of Nanoparticles Derived from Colloidal Droplets under Low Pressure Conditions", *The 22nd JAAST Symposium*, Osaka, July 28-30, 2005
84. **W.-N. Wang***, I.W. Lenggoro, Y. Itoh, and K. Okuyama, "One-step Production of Metal and Metal Oxide Nanoparticles via Spray Method", *The 10th Asian Pacific Confederation of Chemical Engineering Congress*, Kitakyushu, Japan, October 17-21, 2004 (Peer-reviewed)
85. I.W. Lenggoro, K. Sasakawa*, Y. Itoh, **W.-N. Wang**, and K. Okuyama, "Direct Synthesis of Nanoparticles by using a Low Pressure Spray Pyrolysis", *The 69th SCEJ Annual Meeting*, Osaka, April 2-4, 2004
86. X.-L. Wang*, and **W.-N. Wang**, "Latest Progress on Nanofiltration Process", *The 4th National Conference on Membrane and Membrane Process*, Nanjing, China, October 20-23, 2002
87. X.-L. Wang*, **W.-N. Wang**, and D.-X. Wang, "Experimental Investigation on Separation of Inorganic Electrolyte Solutions by Nanofiltration Membranes", *The 2002 International Congress on Membranes and Membrane Processes (ICOM 2002)*, Toulouse, France, July 7-12, 2002