

Chongyin Yang, Ph.D.

Assistant Professor, Tesla Canada Chair
Department of Physics & Atmospheric Science, Dalhousie University
Room 224, 6310 Coburg Rd., Halifax, NS B3H 4R2, Canada
Phone: 902-494-3915
E-mail: c.yang@dal.ca

I. EDUCATION

2011 – 2014 **Ph.D.** in *Materials Physics and Chemistry*
Shanghai Institute of Ceramics, Chinese Academy of Sciences

2008 – 2011 **Master** in *Materials Physics and Chemistry*
Institute of Semiconductors, Chinese Academy of Sciences

2004 – 2008 **B.S.** in *Materials Science and Engineering*
Nanjing University

II. PROFESSIONAL EXPERIENCE

A. Appointments

01/2021 – Present **Assistant Professor, Tesla Canada Chair**
Department of Physics & Atmospheric Science
Dalhousie University, Canada

08/2015 – 12/2020 **Assistant Research Scientist**
Department of Chemical and Biomolecular Engineering
University of Maryland at College Park, U.S.

07/2014 – 08/2015 **Research Associate**
Shanghai Institute of Ceramics
Chinese Academy of Sciences, China

B. Research Experience

01/2021 – Present **Assistant Professor, Tesla Canada Chair, Dalhousie University**

- Principal Investigator in project “Structure and Properties of Halogen-Graphite Intercalation Electrodes for Low-Cost and High-energy Li-ion Batteries” (funding supported by NSERC - Discovery Grants, 2021 - 2026)
- Co-Principal-Investigator in project “Advanced Batteries for Electric Vehicle and Grid Energy Storage Applications” (funding supported by NSERC - Alliance Grants and Tesla, Inc. 2021 - 2026)

08/2015 – 12/2020 **Assistant Research Scientist, University of Maryland at College Park**
(Supervisor: Dr. Chunsheng Wang)

- Leading Researcher in project “High energy aqueous Li-ion battery” (funding supported by DoE ARPA-E, 2015 - present)

- Principal Investigator in project “Robust, Flexible, Aqueous Polymer Electrolyte Based Li-ion Batteries” (funding supported by Johns Hopkins Applied Physics Lab, 2018 - 2019)
 - Leading Researcher in project “Improve the maturity of the 4.0 V aqueous flexible Li-ion battery technology” (funding supported by US Army Research Laboratory, 2018 - present)

07/2014 - 08/2015 Research Associate, Shanghai Institute of Ceramics, Chinese Academy of Sciences (Supervisor: Dr. Fuqiang Huang)

- Principal Investigator in project “Black Titania as Excellent Photocatalyst” (funding supported by Young Scientists Fund of Chinese National Natural Science Fund, 2014 - 2015)

09/2008 - 07/2014 Graduate Research Assistant, Shanghai Institute of Ceramics, Chinese Academy of Sciences (Supervisor: Dr. Fuqiang Huang)

- Design and preparation of wide-spectrum absorption materials for photocatalyst, photoelectrochemical cell, and solar cell.
- Manufacturing high efficiency CIGS thin films for solar cell applications.
- Development of high-capacity energy storage materials and devices.
- Fundamental research on solid crystal structure and electron structure manipulation.
- Chemical vapor deposition (CVD) of large-scale graphene film.

C. Proposal & Funding

- **NSERC - Discovery Grants** “Structure and Properties of Halogen-Graphite Intercalation Electrodes for Low-Cost and High-energy Li-ion Batteries” (2021 - 2026)
- **NSERC - Alliance Grants (co-applicant)** “Advanced Batteries for Electric Vehicle and Grid Energy Storage Applications” (2021 - 2026)
- “Robust, Flexible, Aqueous Polymer Electrolyte Based Li-ion Batteries” (2018 - 2019)
Sponsor: Johns Hopkins Applied Physics Lab

III. Awards & Honors

- University of Maryland’s 2021 Invention of the Year Award
- Chinese Academy of Sciences President Award
- “Dongsheng Yan” Academic Special Scholarship in SICCAS
- National Scholarship for Excellent Graduate students
- Excellent Student of Chinese Academy of Sciences
- Outstanding master thesis in Jiangsu province (2012)
- People’s Scholarship and Excellent Student of Nanjing University

IV. Publications

A. Publication Statistics (as of 09/15/2021, Source: [Google Scholar](#))

Total citation: 9109

h-index: 40

B. Refereed Journal Articles

1. L. Cao, D. Li, T. Pollard, T. Deng, B. Zhang, **C. Yang**, L. Chen, J. Vatamanu, E. Hu, M. J Hourwitz, L. Ma, M. Ding, Q. Li, S. Hou, K. Gaskell, J. T Fourkas, X.-Q. Yang, K. Xu, O. Borodin, C. Wang, Fluorinated interphase enables reversible aqueous zinc battery chemistries, *Nature Nanotechnology* (2021).
2. **C. Yang**, X. Wang, W. Dong, I-W. Chen, Z. Wang, J. Xu, T. Lin, H. Gu, F. Huang, Nitrogen-doped black titania for high performance supercapacitors, *Science China Materials* (2020) 63, 1227-1234.
3. J. Zhang, C. Cui, P.-F. Wang, Q. Li, L. Chen, F. Han, T. Jin, S. Liu, H. Choudhary, S. R Raghavan, N. Eidson, A. von Cresce, L. Ma, J. Uddin, D. Addison, **C. Yang***, C. Wang, "Water-in-salt" polymer electrolyte for Li-ion batteries, *Energy & Environmental Science* (2020) 13, 2878-2887.
4. A. Cresce, N. Eidson, M. Schroeder, L. Ma, Y. Howarth, **C. Yang**, J. Ho, R. Dillon, M. Ding, A. Bassett, J. Stanzione, R. Tom, T. Soundappan, C. Wang, K. Xu, Gel electrolyte for a 4V flexible aqueous lithium-ion battery, *Journal of Power Sources* (2020) 469, 228378.
5. L. Chen, L. Cao, X. Ji, S. Hou, Q. Li, J. Chen, **C. Yang**, N. Eidson, C. Wang, Enabling safe aqueous lithium ion open batteries by suppressing oxygen reduction reaction, *Nature communications* (2020) 11, 1-8.
6. J. Chen, X. Fan, Q. Li, H. Yang, M R. Khoshi, Y. Xu, S. Hwang, L. Chen, X. Ji, **C. Yang**, H. He, C. Wang, E. Garfunkel, D. Su, O. Borodin, C. Wang, Electrolyte design for LiF-rich solid–electrolyte interfaces to enable high-performance micro-sized alloy anodes for batteries, *Nature Energy* (2020) 5, 386-397.
7. C. Cui, X. Fan, X. Zhou, J. Chen, Q. Wang, L. Ma, **C. Yang**, E. Hu, X. Yang, C. Wang, Structure and Interface Design Enable Stable Li-Rich Cathode, *Journal of the American Chemical Society* (2020) 142, 8918-8927.
8. C. Cui, **C. Yang***, N. Eidson, J. Chen, F. Han, L. Chen, C. Luo, P. Wang, X. Fan, C. Wang, A Highly Reversible, Dendrite-Free Lithium Metal Anode Enabled by a Lithium-Fluoride-Enriched Interphase, *Advanced Materials* (2020) 32, 1906427.
9. L. Chen, J. Zhang, Q. Li, J. Vatamanu, X. Ji, T. P Pollard, C. Cui, S. Hou, J. Chen, **C. Yang**, L. Ma, M. S Ding, M. Garaga, S. Greenbaum, H. Lee, O. Borodin, K. Xu, C. Wang, A 63 m Superconcentrated Aqueous Electrolyte for High-Energy Li-Ion Batteries, *ACS Energy Letters* (2020) 5, 968-974.
10. **C. Yang**, J. Chen, X. Ji, T. P. Pollard, X. Lü, C. Sun, S. Hou, Q. Liu, C. Liu, T. Qing, Y. Wang, O. Borodin, Y. Ren, K. Xu, C. Wang, Aqueous Li-ion Battery Enabled by Halogen Conversion-Intercalation Chemistry in Graphite, *Nature* (2019) 69, 245-250.
11. C. Cui, X. Ji, P. Wang, G. Xu, L. Chen, J. Chen, H. Kim, Y. Ren, F. Chen, **C. Yang**, X. Fan, C. Luo, K. Amine, C. Wang, Integrating Multiredox Centers into One Framework for High-Performance Organic Li-Ion Battery Cathodes, *ACS Energy Letters* (2019) 5, 224-231.
12. T. Gao, X. Ji, S. Hou, X. Fan, X. Li, **C. Yang**, F. Han, F. Wang, J. Jiang, K. Xu, C. Wang, Thermodynamics and Kinetics of Sulfur Cathode during Discharge in MgTFSI₂–DME Electrolyte, *Advanced Materials*, (2018) 30, 1704313.
13. L. Suo, O. Borodin, Y. Wang, X. Rong, W. Sun, X. Fan, S. Xu, M. A. Schroeder, A. V. Cresce, F. Wang, **C. Yang**, Y. Hu, K. Xu, C. Wang, "Water-in-Salt" Electrolyte Makes Aqueous Sodium-Ion Battery Safe, Green, and Long-Lasting, *Advanced Energy Materials* (2017) 7, 1701189.

14. **C. Yang**, X. Ji, X. Fan, T. Gao, L. Suo, F. Wang, W. Sun, J. Chen, L. Chen, F. Han, L. Miao, K. Xu, K. Gerasopoulos, C. Wang, Flexible Aqueous Li-ion Battery with High Energy and Power Densities, *Advanced Materials* (2017) 29, 1701972.
15. **C. Yang**, J. Chen, T. Qing, J. Chen, X. Fan, W. Sun, A. v. Cresce, M. S. Ding, M. A. Schroeder, N. Eidson, C. Wang, K. Xu, 4.0 V Aqueous Li-ion Batteries, *Joule* (2017) 1, 122–132.
16. **C. Yang**, L. Suo, O. Borodin, F. Wang, W. Sun, T. Gao, X. Fan, S. Hou, Z. Ma, K. Amine, K. Xu, C. Wang, Unique aqueous Li-ion/sulfur chemistry with high energy density and reversibility, *Proceedings of the National Academy of Sciences* (2017) 114, 6197-6202.
17. F. Wang, X. Fan, T. Gao, W. Sun, Z. Ma, **C. Yang**, F. Han, K. Xu, C. Wang, High-Voltage Aqueous Magnesium Ion Batteries, *ACS Central Science* (2017) 3, 1121-1128.
18. W. Sun, F. Wang, S. Hou, **C. Yang**, X. Fan, Z. Ma, T. Gao, F. Han, R. Hu, M. Zhu, C. Wang, Zn/MnO₂ Battery Chemistry with H⁺ and Zn²⁺ Coinsertion, *Journal of the American Chemical Society* (2017) 139, 9775-9778.
19. H. Tian, T. Gao, X. Li, X. Wang, C. Luo, X. Fan, **C. Yang**, L. Suo, Z. Ma, W. Han, C. Wang, High power rechargeable magnesium/iodine battery chemistry, *Nature Communications* (2017) 8, 14083.
20. F. Wang, L. Suo, Y. Liang, **C. Yang**, F. Han, T. Gao, W. Sun, C. Wang, Spinel LiNi_{0.5}Mn_{1.5}O₄ Cathode for High-Energy Aqueous Lithium-Ion Batteries, *Advanced Energy Materials* (2017) 7, 1600922.
21. L. Suo, O. Borodin, W. Sun, X. Fan, **C. Yang**, F. Wang, T. Gao, Z. Ma, M. Schroeder, A. v. Cresce, S. M. Russell, M. Armand, A. Angell, K. Xu, C. Wang, Advanced High-Voltage Aqueous Lithium-Ion Battery Enabled by “Water-in-Bisalt” Electrolyte, *Angewandte Chemie International Edition* (2016) 128, 7252-7257.
22. F. Wang, Y. Lin, L. Suo, X. Fan, T. Gao, **C. Yang**, F. Han, Y. Qi, K. Xu, C. Wang, Stabilizing high voltage LiCoO₂ cathode in aqueous electrolyte with interphase-forming additive, *Energy & Environmental Science* (2016) 9, 3666-3673.
23. Xuyuan Zhang, **Chongyin Yang**, Jianping Zhou, Meirong Huo, Somatostatin Receptor-Mediated Tumor-Targeting Nanocarriers Based on Octreotide-PEG Conjugated Nanographene Oxide for Combined Chemo and Photothermal Therapy, *Small* (2016) 12, 3578–3590.
24. Jian Zhi, **Chongyin Yang**, Tianquan Lin, Houlei Cui, Zhou Wang, Hui Zhang, Fuqiang Huang, Flexible all solid state supercapacitor with high energy density employing black titania nanoparticles as a conductive agent, *Nanoscale* (2016) 8, 4054-4062.
25. Tianquan Lin, I-Wei Chen, Fenxin Liu, **Chongyin Yang**, Hui Bi, Fangfang Xu, Fuqiang Huang, Nitrogen-doped mesoporous carbon of extraordinary capacitance for electrochemical energy storage, *Science* (2015) 350, 1508-1513.
26. Houlei Cui, Guilian Zhu, Xiangye Liu, Fengxin Liu, Yian Xie, **Chongyin Yang**, Tianquan Lin, Hui Gu, Fuqiang Huang, Niobium Nitride Nb₄N₅ as a New High-Performance Electrode Material for Supercapacitors, *Advanced Science* (2015) 2, 1500126.
27. Houlei Cui, Guilian Zhu, Yian Xie, Wei Zhao, **Chongyin Yang**, Tianquan Lin, Hui Gu, Fuqiang Huang, Black nanostructured Nb₂O₅ with improved solar absorption and enhanced photoelectrochemical water splitting, *Journal of Materials Chemistry A* (2015) 3, 11830-11837.
28. Guilian Zhu, Hao Yin, **Chongyin Yang**, Houlei Cui, Zhou Wang, Jijian Xu, Tianquan Lin, Fuqiang Huang, Black titania for superior photocatalytic hydrogen production and photoelectrochemical water splitting, *ChemCatChem* (2015) 7, 2614-2619.

29. T. Lin, C. Yang (equal contribution), Z. Wang, H. Yin, X. Lv, F. Huang, J. Lin, X. Xie, M. Jiang, Effective Nonmetal Incorporation in Black Titania with Enhanced Solar Energy Utilization, *Energy & Environmental Science* (2014) 7, 967-972.
30. Houlei Cui, Wei Zhao, Chongyin Yang, Hao Yin, Tianquan Lin, Yufeng Shan, Yian Xie, Hui Gu, Fuqiang Huang, Black TiO₂ nanotube arrays for high-efficiency photoelectrochemical water-splitting, *Journal of Materials Chemistry A* (2014) 2, 8612-8616.
31. Yian Xie, Yufeng Liu, Houlei Cui, Wei Zhao, Chongyin Yang, Fuqiang Huang, Facile solution-based fabrication of ZnIn₂S₄ nanocrystalline thin films and their photoelectrochemical properties, *Journal of Power Sources* (2014) 265, 62-66.
32. C. Yang, Z. Wang, T. Lin, H. Yin, X. Lv, D. Wan, T. Xu, C. Zheng, J. Lin, F. Huang, X. Xie, M. Jiang, Core-Shell Nanostructured "Black" Rutile Titania as Excellent Catalyst for Hydrogen Production Enhanced by Sulfur Doping, *Journal of the American Chemical Society* (2013) 135, 17831-17838.
33. Z. Wang, C. Yang (equal contribution), T. Lin, H. Yin, P. Chen, D. Wan, F. Xu, F. Huang, J. Lin, X. Xie, M. Jiang, Visible-light Photocatalytic, Solar Thermal and Photoelectrochemical Properties of Aluminium-Reduced Black Titania, *Energy & Environmental Science* (2013) 6, 3007-3014.
34. Z. Wang, C. Yang (equal contribution), T. Lin, H. Yin, P. Chen, D. Wan, F. Xu, F. Huang, J. Lin, X. Xie, M. Jiang, H-doped Black Titania with Very High Solar Absorption and Excellent Photocatalysis Enhanced by Localized Surface Plasmon Resonance, *Advanced Functional Materials* (2013) 23, 5444-5450.
35. C. Yang, M. Qin, Y. Wang, D. Wan, F. Huang, J. Lin, Observation of an Intermediate Band in Sn-doped Chalcopyrites with Wide-spectrum Solar Response, *Scientific Reports* (2013) 3, 1286.
36. C. Yang, H. Bi, D. Wan, F. Huang, X. Xie, M. Jiang, Direct PECVD growth of vertically erected graphene walls on dielectric substrates as excellent multifunctional electrodes, *Journal of Materials Chemistry A* (2013) 1, 770-775.
37. Haijie Chen, Chongyin Yang, Huili Liu, Ganghua Zhang, Dongyun Wan, and Fuqiang Huang, Thermoelectric properties of CuInTe₂/graphene composites, *CrystEngComm* (2013) 15, 6648-6651.
38. Hao Yin, Tianquan Lin, Chongyin Yang, Zhou Wang, Guilian Zhu, Tao Xu, Xiaoming Xie, Fuqiang Huang, and Mianheng Jiang, Gray TiO₂ Nanowires Synthesized by Aluminum-Mediated Reduction and Their Excellent Photocatalytic Activity for Water Cleaning, *Chemistry-A European Journal* (2013) 19, 13313-13316.
39. Ping Chen, Haijie Chen, Mingsheng Qin, Chongyin Yang, Wei Zhao, Yufeng Liu, Wenqing Zhang, and Fuqiang Huang, Fe-substituted indium thiospinels: New intermediate band semiconductors with better absorption of solar energy, *Journal of Applied Physics* (2013) 113, 213509.
40. Ping Chen, Mingsheng Qin, Haijie Chen, Chongyin Yang, Yaoming Wang, Fuqiang Huang, Cr incorporation in CuGaS₂ chalcopyrite: A new intermediate-band photovoltaic material with wide-spectrum solar absorption, *Physica Status Solidi (a)* (2013) 210, 1098-1102.
41. Yufeng Liu, Yian Xie, Houlei Cui, Wei Zhao, Chongyin Yang, Fuqiang Huang, and Ning Dai, Controllable Synthesis of Cu₂In₂ZnS₅ Nano/Microcrystals and Hierarchical Films and Applications in Dye-sensitized Solar Cells, *The Journal of Physical Chemistry C* (2013) 117, 10296-10301.
42. Ganghua Zhang, Hui Wu, Guobao Li, Qingzhen Huang, Chongyin Yang, Fuqiang Huang, Fuhui Liao, and Jianhua Lin, New high T_c multiferroics KBiFe₂O₅ with narrow band gap and promising photovoltaic effect, *Scientific Reports* (2013) 3, 1265.
43. Guilian Zhu, Tianquan Lin, Xujie Lü, Wei Zhao, Chongyin Yang, Zhou Wang, Hao Yin, Zhanqiang Liu, Fuqiang Huang, and Jianhua Lin, Black brookite titania with high solar absorption and excellent photocatalytic performance, *Journal of Materials Chemistry A* (2013) 34, 9650-9653.

44. Yufeng Liu, Yian Xie, HouLei Cui, Wei Zhao, **Chongyin Yang**, Yaoming Wang, Fuqiang Huang, and Ning Dai, Preparation of Monodispersed CuInS₂ Nanopompons and Nanoflake Films and Applications in Dye-sensitized Solar Cells, *Physical Chemistry Chemical Physics* (2013) 15, 4496.
45. **C. Yang**, Y. Wang, S. Li, D. Wan, F. Huang, CuSbSe₂-assisted sintering of CuInSe₂ at low temperature, *Journal of Materials Science* (2012) 47, 7085-7089.
46. **D. Wan, C. Yang (equal contribution)**, T. Lin, Y. Tang, M. Zhou, Y. Zhong, F. Huang, J. Lin, Low-Temperature Aluminum Reduction of Graphene Oxide, Electrical Properties, Surface Wettability, and Energy Storage Applications, *ACS Nano* (2012) 6, 9068–9078.
47. Yaoming Wang, Jianjun Wu, Yufeng Tang, Xujie Lü, **Chongyin Yang**, Mingsheng Qin, Fuqiang Huang, Xin Li, and Xia Zhang, Phase-Controlled Synthesis of Cobalt Sulfides for Lithium Ion Batteries, *ACS Applied Materials & Interfaces* (2012) 4, 4246-4250.
48. Mingsheng Qin, **Chongyin Yang**, Yaoming Wang, Lidong Chen, and Fuqiang Huang, Temperature dependence of microstructure and physical properties of CuInSe₂ prepared by rapid synthesis reaction, *Materials Research Bulletin* (2012) 47, 3908–3911.
49. Mingsheng Qin, **Chongyin Yang**, Yaoming Wang, Zhongtian Yang, Ping Chen, and Fuqiang Huang, Synthesis, physical properties and electronic structure of Sr_{1-x}La_xCu₂Pn₂ (Pn=P, As, Sb), *Journal of Solid State Chemistry* (2012) 187, 323–327.
50. **C. Yang**, F. Huang, L. Wu, K. Xu, New stannite-like p-type thermoelectric material Cu₃SbSe₄, *Journal of Physics D: Applied Physics* (2011) 44, 295404.
51. **C. Yang**, D. Wan, Z. Wang, F. Huang, Intrinsic ZnO films fabricated by DC sputtering from oxygen-deficient targets for Cu(In, Ga)Se₂ solar cell application, *Chinese Optics Letters* (2011) 9, 103102.
52. Fuqiang Huang, Minling Liu, **Chongyin Yang**, Highly enhanced p-type electrical conduction in wide band gap Cu_{1+x}Al_{1-x}S₂ polycrystals, *Solar Energy Materials and Solar Cells* (2011) 95, 2924–2927.
53. Fuqiang Huang, **Chongyin Yang**, and Dongyun Wan, Advanced solar materials for thin-film photovoltaic cells, *Frontiers of Physics* (2011) 6, 177-196.
54. **C. Yang**, W. Wang, Z. Shan, F. Huang, Preparation and photocatalytic activity of high-efficiency visible-light-responsive photocatalyst SnS_x/TiO₂, *Journal of Solid State Chemistry* (2009) 182, 807-812.

Filed patents/disclosures:

1. US20160240328A1 "Titanium oxide-based supercapacitor electrode material and method of manufacturing same"
2. CN102583340B "High-conductivity graphene material with low-temperature gas-phase reduction and preparation method thereof"
3. CN103191707B "Method for preparing black titanium dioxide by using dual-temperature area reducing method"
4. CN102250616B "Double-perovskite structured red fluorescent powder as well as preparation method and application thereof"
5. CN103633165B "Chalcopyrite structure with an intermediate layer of the solar cell absorbing material and method"
6. CN103606573B "An intermediate chalcopyrite structure with absorbent material and method"
7. WO2015043538A1 "Titanium oxide-based supercapacitor electrode material and method of manufacturing same"
8. US20190379040A1 "Electrodes Including a Passivation Layer"
9. WO2018165585A3 "Aqueous hydrogel electrolyte systems with wide electrochemical stability window"
10. WO2019040906A1 "High Voltage Aqueous Electrolyte System for Lithium Metal or Graphite Anode"
11. US "Aqueous Electrochemical Capacitors with Wide Electrochemical Stability Window"
12. US "High Voltage Electrolyte System for 4.0 V Aqueous Lithium Ion Batteries"

13. US "A Flexible, Wearable Aqueous Li-Ion Battery with High Energy and Power Densities"
14. US "A High-energy Aqueous Battery System with An exceptionally wide Operation Temperature from – 100° to +100°C"
15. US "High Energy Aqueous Li-ion Battery Enabled by Halogen Conversion-Intercalation Chemistry in Graphite"
16. US "High Voltage Aqueous Li-ion Battery Enabled by Phosphate Additive and Alkaline Passivation"

V. CONFERENCE PRESENTATIONS

- **2018 MRS Fall Meeting:** Presentations on Application of Nanoscale Phenomena and Materials to Practical Electrochemical Energy Storage and Conversion, Nov 28, 2018, Boston, Massachusetts. "Nonflammable Fluorinated Electrolytes for Li-ion Batteries".
- **232nd ECS MEETING:** Presentations on Batteries and Energy Storage, October 3, 2017, National Harbor, Maryland. "Beyond Li-Ion Chemistry for High Energy Aqueous Battery".
- **2014 ECS and SMEQ Joint International Meeting:** Invited Presentations on Solar Energy Materials and Photocatalysts, October 5-9, 2014, Cancun, Mexico. "Nano Black Titania and Solar Applications".
- **IUMRS International Conference on Advanced Materials (IUMRS-ICAM 2013),** 22-28 Sep. 2013, Qingdao, China. "Nano Black Titania and Solar Applications".
- **3rd USTC-PolyU-SICCAS Joint Workshop on Advanced Materials for Energy Conversion,** 1 Nov 2013, Shanghai, China, "Nano Black Titania: Synthesis and New Energy Applications".
- **International Conference on Sintering 2011,** 30 Aug 2011, Shilla Jeju, Korea. "Low-temperature Rapid Sintering of Non-oxide Energy Materials".

VI. TEACHING & MENTORSHIP

- **PHYC 3540 Optics and Photonics**
Department of Physics & Atmospheric Science, Dalhousie University
- **ENCH 808/ENPM 808 Advanced Fuel Cells and Batteries** (Guest Lecturer, March 2019)
Department of Chemical and Biomolecular Engineering, University of Maryland
- **Mentored 8 Ph.D/MS students on research:**
Jiaxun Zhang (PhD student at University of Maryland)
Tingting Qin (MS student at University of Maryland)
Chunyu Cui (visiting PhD student at University of Maryland)
Wei Sun (visiting PhD student at University of Maryland)
Nan Piao (visiting PhD student at University of Maryland)
Chenguang Guo (PhD student at Chinese Science)
Haijie Chen (PhD student at Chinese Science)
Xiangye Liu (PhD student at Chinese Science)