

# **CURRICULUM VITAE**

## **Guohua Chen**

Department of Mechanical Engineering

The Hong Kong Polytechnic University, Hong Hom, Kowloon, Hong Kong

Tel: (852) (852) 2766-7821 Fax: (852) 2364-7183 Email: kechengh@ust.hk

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### **Education:**

- Ph.D. in Chemical Engineering, McGill University, Canada, 1994
- M.Eng. in Chemical Engineering, McGill University, Canada, 1989
- B. Eng. in Chemical Engineering (Honor), Dalian University of Technology, Dalian, China 1984

### **Awards and honors:**

- Elected Fellow, American Institute of Chemical Engineers 2016
- Best Poster, The 65<sup>th</sup> Annual Meeting, ISE, Lausanne, Switzerland 2014
- Certificate of Exemplary Service to DRT Journal and Excellent in Drying Research, Drying Technology Journal, Taylor & Francis Group, 2011
- Winner, Research Excellence Award, School of Engineering, HKUST 2011
- Elected Fellow, Hong Kong Institution of Engineers 2009
- NASA EPSCoR Speaker, University of Wyoming 2009
- Certificate of Excellence, by WFCFD 2007
- Most Cited Paper 2003-2006 Award – *Chemical Engineering Science* 2007
- Certificate of Merit, Drying Technology – An International Journal 2007
- K.C. Wong Education Foundation Award for Oversea Scholars 2005
- Excellent Paper Award (Guo and Chen), The 3<sup>rd</sup> National Ph.D. Forum 2005
- Certificate of Merit, Drying Technology – An International Journal 2004
- Pulp and Paper Research Institute of Canada Scholarship, 1988 – 1990
- Differential fees waiver award, McGill University, 1987 – 1989
- China Education Commission Scholarship for Studying Abroad, 1986 – 1987
- Outstanding Graduate Award, Dalian University of Technology, 1984
- On Dean's Honor list, Dalian University of Technology, 1980 – 1983

### **Working experience:**

#### **The Hong Kong Polytechnic University**

2017 – Present, Chair Professor, Department of Mechanical Engineering

#### **The Hong Kong University of Science and Technology**

2012 – 2016, Head of Department, Chemical and Biomolecular Engineering.

2009 – 2016, Co-Director, HK-Beijing UST Joint Research Centre, FYTGS

2009 – 2012, Associate Director, Environmental Engineering Program, SENG

2007 – 2016, Director, Center for Green Products and Processing Technologies, FYTGS

2008 – 2016, Professor – Department of Chemical and Biomolecular Engineering

2002 – 2008, Associate Professor — Department of Chemical Engineering

1996 – 2002, Assistant Professor — Department of Chemical Engineering





## **Refereed Journal Publications**

### **2015-2016**

1. Zhang, L., **Chen, G.**, Berg, E. J. and Tarascon, J-M, Triggering the In Situ Electrochemical Formation of High Energy Density Cathode Material from MnO, in Press, Advanced Energy Materials (2016) DOI: 10.1002/aenm.201602200.
2. Hassanzadeh, N., Sadrnezhaad, S. K. and **Chen, G.**, In-situ hydrothermal synthesis of Na<sub>3</sub>MnCO<sub>3</sub>PO<sub>4</sub>/rGO hybrid as a cathode for Na-ion battery , Electrochimica Acta, 208 (2016) 188-194.
3. Su, J., Zhu, L., Geng, P. and **Chen, G.**, Self-assembly graphitic carbon nitride quantum dots anchored on TiO<sub>2</sub> nanotube arrays: an efficient heterojunction for pollutants degradation under solar light, Journal of Hazardous Material, 316(2016) 159-168.
4. Su, J., Bai, Z., Huang, B., Quan, X. and **Chen, G.**, Unique three dimensional architecture using a metal-free semiconductor cross-linked bismuth vanadate for efficient photoelectrochemical water oxidation, Nano Energy, 24(2016)148-157.
5. Su, J., Geng, P. Li, X.Y., and **Chen, G.**. Graphene linked graphitic carbon nitride/TiO<sub>2</sub> nanowire arrays heterojunction for efficient solar-driven water splitting, Journal of Applied Electrochemistry, 186 (2016) 127-135.
6. Wang, W., Hu, D.P., Pan, Y.Q. and **Chen, G.**. Numerical investigation on freeze-drying of aqueous material frozen with pre-built pores, Chinese Journal of Chemical Engineering, 24(1) (2016)116-125.
7. Su, J., Zhu, L. and **Chen, G.**, Ultrasmall graphitic carbon nitride quantum dots decorated self-organized TiO<sub>2</sub> nanotube arrays with highly efficient photoelectrochemical activity, Applied Catalysis B: Environmental, 186 (2016) 127–135.
8. Geng, P. and **Chen, G.**, Magnéli Ti<sub>4</sub>O<sub>7</sub> modified ceramic membrane for electrically-assisted filtration with antifouling property, Journal of Membrane Science, 498(2016)302-314.
9. Deng, Y., Fang, C. and **Chen, G.**, The developments of SnO<sub>2</sub>/graphene nanocomposites as anode materials for high performance lithium ion batteries: A review, Journal of Power Sources, 304 (2016) 81-101.
10. Zhang, Z., Li, X. Liu, B., Zhao, Q. and **Chen, G.**, Hexagonal microspindle of NH<sub>2</sub>-MIL-101 (Fe) metal–organic frameworks with visible-light-induced photocatalytic activity for the degradation of toluene, RSC Advances 6 (2016) 4289-4295.

### **2014-2015      17 papers**

11. Deng, Y., Xu, H., Bai, Z., Huang, B., Su, J. and **Chen, G.**, Durable polydopamine-coated porous sulfur core–shell cathode for high performance lithium–sulfur batteries. Journal of Power Sources, 300 (2015) 386-394.

12. Yang, B., Geng, P. and **Chen, G.**, One-dimensional structured IrO<sub>2</sub> nanorods modified membrane for electrochemical anti-fouling in filtration of oily wastewater, Separation and Purification Technology, 156(2015)931-941.
13. Su, J., Geng, P., Li, X.Y., Zhao, Q.D., Quan, X. and **Chen, G.**, Novel phosphorus doped carbon nitride modified TiO<sub>2</sub> nanotube arrays with improved photoelectrochemical performance, Nanoscale, 7(2015)16282-16289.
14. Sun, Z., Xiao, M., Wang, S., Han, D., Song, S., **Chen, G.** and Meng, Y., Specially designed carbon black nanoparticle-sulfur composite cathode materials with a novel structure for lithium-sulfur battery application, Journal of Power Sources, 285 (2015) 478-484
15. Zhang, B., Wang, S., Xiao, M., Han, D., Song, S., **Chen, G.** and Meng, Y., A novel lithium-sulfur battery cathode from butadiene rubber-caged sulfur-rich polymeric composites, RSC Advances, 5 (2015) 38792-38800.
16. Wan, L., Deng, Y., Yang, C., Xu, H., Qin, X. and **Chen, G.**, Ni/Mn ratio and morphology-dependent crystallographic facet structure and electrochemical properties of the high-voltage spinel LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> cathode material, RSC ADVANCES , 5 (2015) 25988-25997
17. Zhang, L.T., Tarascon, J-M, Sougrati, M.T., Rousse, G. and **Chen, G.**, Influence of relative humidity on structure and electrochemical performance of sustainable LiFeSO<sub>4</sub>F electrode for Li-ion batteries, Journal of Materials Chemistry A, 3 (2015) 16988-16997.
18. Wang, S., Zhao, Z., Xu, H., Deng, Y.F., Li, Z. and **Chen, G.**, Sulfur impregnated in tunable porous N-doped carbon as sulfur cathode: effect of pore size distribution, Electrochimica Acta, 173 (2015) 282–289.
19. Liu, Z.T., Qin, X.S., Xu, H., **Chen, G.**, One-pot synthesis of carbon-coated nanosized LiTi<sub>2</sub>(PO<sub>4</sub>)<sub>3</sub> as anode materials for aqueous lithium ion batteries, Journal of Power Sources, 293 (2015) 562-569 .
20. Fang, C., Deng, Y., Xie, Y., Su, J. and **Chen, G.**, Improving the Electrochemical Performance of Si Nanoparticle Anode Material by Synergistic Strategies of Polydopamine and Graphene Oxide Coatings, Journal of Physical Chemistry C, 119 (2015) 1720-1728.
21. Wang, W., Hu, D.P., Pan, Y.Q., Zhao, Y.Q. and **Chen, G.**, Freeze-Drying of Initially Unsaturated Material Frozen with Pre-Built Pores, AIChE J, 61 (2015)2048-2057.
22. Zhang, Y., Yu, L., Wu, D., Huang, L.P., Zhou, P., Quan, X. and **Chen, G.**, Dependency of simultaneous Cr(VI), Cu(II) and Cd(II) reduction on the cathodes of microbial electrolysis cells self-driven by microbial fuel cells, Journal of Power Sources, 273 (2015)1103-1113 .
23. Huang, L., Liu, Y., Yu, L., Quan, X., **Chen, G.**, A new clean approach for production of cobalt dihydroxide from aqueous Co(II) using oxygen-reducing biocathode microbial fuel cells, Journal of Cleaner Production, 86 (2015) 441-446.
24. Xie, F.X., Deng, Y., Xie, Y., Xu, H., and **Chen, G.**, Ultra-small nanoparticles of MgTi<sub>2</sub>O<sub>5</sub> embedded in carbon rods with superior rate performance for sodium ion batteries, Chemical Communications, 51 (2015) 3545-3548.
25. Zhou, X., Xie, Y., Deng, Y., Qin, X.S., **Chen, G.**, The enhanced rate performance of LiFe<sub>0.5</sub>Mn<sub>0.5</sub>PO<sub>4</sub>/C cathode material via synergistic strategies of surfactant-assisted solid state method and carbon coating, Journal of Materials Chemistry A, 3 (2015) 996-1004.

26. Gao, X-W., Deng, Y., Wexler, D., **Chen, G.**, Chou, S-L, Liu, H-K, Shi, Z-C, Wang, J-Z, Improving the electrochemical performance of the LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> spinel by polypyrrole coating as a cathode material for the lithium-ion battery, *Journal of Materials Chemistry A*, 3(2015) 404-411.
27. Geng, P., Su, J., Miles, C. Comninellis, Ch., **Chen, G.**, Highly-Ordered Magnéli Ti<sub>4</sub>O<sub>7</sub> Nanotube Arrays as Effective Anodic Material for Electro-oxidation, *Electrochimica ACTA*, 153(2015) 316–324.

### **2013-2014      19 papers**

28. Zhou, X , Deng, YF , Wan, LN , Qin, XS and **Chen, G.**, A surfactant-assisted synthesis route for scalable preparation of high performance of LiFe<sub>0.15</sub>Mn<sub>0.85</sub>PO<sub>4</sub>/C cathode using bimetallic precursor, *Journal of Power Sources*, 265(2014) 223-230
29. Xu, HJ, Deng, SN and **Chen, G.**, Improved electrochemical performance of Li<sub>1.2</sub>Mn<sub>0.54</sub>Ni<sub>0.13</sub>Co<sub>0.13</sub>O<sub>2</sub> by Mg doping for lithium ion battery cathode material, *Journal of Materials Chemistry A*, 2(2014)15015-15021
30. Han, DM, Zhang, B , Xiao, M , Shen, PK , Wang, SJ , **Chen, G.**, Meng, YZ , Polysulfide rubber-based sulfur-rich composites as cathode material for high energy lithium/sulfur batteries, *International Journal of Hydrogen Energy*, 39 (2014)16067-16072
31. Zhao, ZX , Wang, S , Liang, R , Li, Z , Shi, ZC and **Chen, G.**, Graphene-wrapped chromium-MOF(MIL-101)/sulfur composite for performance improvement of high-rate rechargeable Li-S batteries, *Journal of Materials Chemistry A*, 2(2014)13509-13512
32. Gao, XW , Luo, WB , Zhong, C, Wexler, D , Chou, SL, Liu, HK, Shi, ZC , **Chen, G.**, Ozawa, K , Wang, JZ , Novel Germanium/Polyppyrrole Composite for High Power Lithium-ion Batteries, *Scientific Reports* , 4, Article Number: 6095, DOI: 10.1038/srep06095, 2014.
33. Gu, Y., Xiong, Z.G., Abdulla, W. A., **Chen, G.** and Zhao, X. S., A new approach to preparing porous carbons with controllable pore structure and morphology, *Chemical Communications*, 50(2014) 14824-14827
34. Qian, YX , Deng, YF , Wan, LN , Xu, HJ , Qin, XS and **Chen, G.**, Investigation of the Effect of Extra Lithium Addition and Postannealing on the Electrochemical Performance of High-Voltage Spinel LiNi<sub>0.5</sub>Mn<sub>1.5</sub>O<sub>4</sub> Cathode Material, *Journal of Physical Chemistry C*, 118 (2014) 15581-15589
35. Zhang, B , Xiao, M , Wang, SJ , Han, DM, Song, SQ, **Chen, G.**, Meng, YZ, Novel Hierarchically Porous Carbon Materials Obtained from Natural Biopolymer as Host Matrixes for Lithium-Sulfur Battery Applications, *ACS Applied Materials & Interfaces*, 6(2014) 13174-13182
36. Sun, C , Deng, YF, Wan, LN, Qin, XS and **Chen, G.**, Graphene Oxide-Immobilized NH<sub>2</sub>-Terminated Silicon Nanoparticles by Cross-Linked Interactions for Highly Stable Silicon Negative Electrodes, *ACS Applied Materials & Interfaces*, 6(2014) 11277-11285
37. Xu, M, Hadi, P , **Chen, G.**, Mckay, G., Removal of cadmium ions from wastewater using innovative electronic waste-derived material, *Journal of Hazardous Materials*, 273 (2014)118-123

38. Liu, XW, Tang, J, Qin, XS, Deng, YF, **Chen, G.**, Supercritical-hydrothermal accelerated solid state reaction route for synthesis of LiMn<sub>2</sub>O<sub>4</sub> cathode material for high-power Li-ion batteries, *Transactions o Nonferrous Metals Society of China*, 24(2014) 1414-1424
39. Zhao, ZX, Qin, D, Wang, S, **Chen, G**, Li, Z, Fabrication of High Conductive S/C Cathode by Sulfur Infiltration into Hierarchical Porous Carbon/Carbon Fiber Weave-Structured Materials via Vapor-Melting Method, *Electrochimica ACTA*, 127(2014) 123-131
40. Sun, ZJ, Xiao, M, Wang, SJ, Han, DM, Song, SQ, **Chen, G**, Meng, YZ, Electrostatic shield effect: an effective way to suppress dissolution of polysulfide anions in lithium-sulfur battery, *Journal of Materials Chemistry A*, 2(2014)15938-15944
41. Xu, H., Deng, YF, Zhao, ZX, Xu, HJ, Qin, XS, **Chen, G**, The superior cycle and rate performance of a novel sulfur cathode by immobilizing sulfur into porous N-doped carbon microspheres, *Chemical Communications*, 50(2014)10468-10470
42. Deng, YF, Wan, LN, Xie, Y, Qin, XS, **Chen, G**, Recent advances in Mn-based oxides as anode materials for lithium ion batteries, *RSC Advances*, 4(2014) 23914-23935
43. Sun, ZJ, Xiao, M , Wang, SJ , Han, DM , Song, SQ, **Chen, G**, Meng, YZ, Sulfur-rich polymeric materials with semi-interpenetrating network structure as a novel lithium-sulfur cathode, *Journal of Materials Chemistry A*, 2(2014)9280-9286
44. Xiong, MY, **Chen, G.**, Barford, J, Genetic engineering of yeasts to improve ethanol production from xylose, *Journal of The Taiwan Institute of Chemical Engineers*, 45(2014) 32-39
45. Ke, J, Li, XY, Zhao, QD, Shi, Y, **Chen, G**, A novel approach to synthesize ultrasmall Cu doped Zn-In-Se nanocrystal emitters in a colloidal system, *Nanoscale*, 6(2014) 3403-3409
46. Kwok, K. C. M., Koong, L. F., **Chen, G.**, McKay, G., Mechanism of arsenic removal using chitosan and nanochitosan, *Journal of Colloid and Interface Science*, 416, 1-10 (2014).

### 2012-2013 12 Papers

47. Huang, L. P., Wang, Q., Quan, X., Liu, Y.X., **Chen, G.**, Bioanodes/biocathodes formed at optimal potentials enhance subsequent pentachlorophenol degradation and power generation from microbial fuel cells, *Bioelectrochemistry*, 94, 13-22(2013).
48. Hou, Y., Li, X.Y., Zhao, Q.D., **Chen, G.**, ZnFe<sub>2</sub>O<sub>4</sub> multi-porous microbricks/ graphene hybrid photocatalyst: Facile synthesis, improved activity and photocatalytic mechanism, *Applied Catalysis B-Environmental*, 142, 80-88(2013).
49. Liu, Y.M., Chen, S., Quan, X., Yu, H.T., Zhao, H.M., Zhang, Y.B., **Chen, G.**, Boron and Nitrogen Codoped Nanodiamond as an Efficient Metal-Free Catalyst for Oxygen Reduction Reaction, *Journal of Physical Chemistry C*, 117, 14992-14998 (2013).
50. Xu, H., Deng, Y.F., Shi, Z.C., Qian, Y.X., Meng, Y.Z., **Chen, G.**, Graphene-encapsulated sulfur (GES) composites with a core-shell structure as superior cathode materials for lithium-sulfur batteries, *Journal of Materials Chemistry A*, 1(47)15142-15149(2013).
51. Wang, Q., Huang, L.P., Yu, H.T., Quan, X., **Chen, G.**, Recent Developments of Graphene Electrodes in Bioelectrochemical Systems, *ACTA Physico-Chimica Sinica*, 29, 889-896 (2013).

52. Huang, L.P., Guo, R., Jiang, L.J., Quan, X., Sun, Y.L., **Chen, G.**, Cobalt leaching from lithium cobalt oxide in microbial electrolysis cells, *Chemical Engineering Journal*, 220, 72-80 (2013).
53. Teng, W., Li, X.Y., Zhao, Q.D., **Chen, G.**, Fabrication of Ag/Ag<sub>3</sub>PO<sub>4</sub>/TiO<sub>2</sub> heterostructure photoelectrodes for efficient decomposition of 2-chlorophenol under visible light irradiation, *Journal of Materials Chemistry A*, 1, 9060-9068 (2013).
54. Huang, L.P., Li, T.C., Liu, C., Quan, X., Chen, L.J., Wang, A.J., Chen, G., Synergetic interactions improve cobalt leaching from lithium cobalt oxide in microbial fuel cells, *Bioresource Technology*, 128, 539-546 (2013).
55. Deng, Y.F., Zhou, Y.B., Shi, Z.C., Zhou, X., Quan, X. and **Chen, G.**, Porous LiMn<sub>2</sub>O<sub>4</sub> microspheres as durable high power cathode materials for lithium ion batteries, *Journal of Materials Chemistry A*, 1, 8170–8177 (2013).
56. Qin, X.S., Yang, B., Gao, F.R. and **Chen, G.**, Treatment of Restaurant Wastewater by Pilot-Scale Electrocoagulation-Electroflotation: Optimization of the Operating Conditions, *Journal of Environmental Engineering*, 139, 1004-1016 (2013).
57. Qian, Y., Deng, Y.F., Shi, Z.C., Zhou, Y., Zhuang, Q. and **Chen G.**, Sub-micrometer-sized LiMn<sub>1.5</sub>Ni<sub>0.5</sub>O<sub>4</sub> spheres as high rate cathode materials for long-life lithium ion batteries, *Electrochemistry Communications*, 27, 92–95 (2013) .
58. Zheng, J., Deng, S., Shi, Z.C., Xu, H., Xu, H., Deng, Y.F., Zhang, Z. and **Chen, G.**, The effects of persulfate treatment on the electrochemical properties of Li[Li<sub>0.2</sub>Mn<sub>0.54</sub>Ni<sub>0.13</sub>Co<sub>0.13</sub>]O<sub>2</sub> cathode material, *Journal of Power Sources*, 221, 108-113(2013).

### **2011-2012 16 Papers**

59. Wang, S.S., Huang, L.P., Gan, L.L., Quan, X., Li, N., **Chen, G.**, Lu, L., Xing, D.F., Yang, F.L., Combined effects of enrichment procedure and non-fermentable or fermentable co-substrate on performance and bacterial community for pentachlorophenol degradation in microbial fuel cells, *Bioresource Technology*, 120, 120-126 (2012).
60. Deng, Y.F., Zhang, Q.M., Shi, Z.C., Han, L.J., Peng, F. and **Chen, G.**, Synergies of the crystallinity and conductive agents on the electrochemical properties of the hollow Fe<sub>3</sub>O<sub>4</sub> spheres, *Electrochimica ACTA* , 76, 495-503 (2012).
61. Li, H., Zhao, Q.D., Li, X.Y., Shi, Y. and **Chen, G.**, Fabrication and surface photovoltage study of hematite microparticles with hollow spindle-shaped structure, *Applied Surface Science*, 258 (18) 7099-7104 (2012).
62. Shen, Y., Zhao, Q.D., Li, X.Y., Hou, Y. and **Chen, G.**, Surface photovoltage property of magnesium ferrite/hematite heterostructured hollow nanospheres prepared with one-pot strategy, *Colloids and Surfaces A-Physicochemical and Engineering Aspects*, 403, 35-40 (2012).
63. Wang W., Chen M. and **Chen G.**, Issues in Freeze Drying of Aqueous Solutions, *Chinese Journal of Chemical Engineering*, 20 (3) 551-559 (2012).
64. Zoo X.J., Li X.Y., Zhao Q.D. and **Chen G.**, Preparation and Characterization of LaVO<sub>4</sub>/TiO<sub>2</sub> Nanotubes and Their Application in Photocatalytic Degradation of Gaseous

Toluene under Visible Light, Chemical Journal of Chinese Universities-Chinese, 33 (5) 1046-1049 (2012).

65. Hou, Y., Li, X.Y., Zhao, Q.D., **Chen, G.** and Rastor, C.L., Role of Hydroxyl Radicals and Mechanism of Escherichia coli Inactivation on Ag/AgBr/TiO<sub>2</sub> Nanotube Array Electrode under Visible Light Irradiation, Environmental Science & Technology, 46 (7) 4042-4050 (2012).
66. Yan, Q.Y., Li, X.Y., Zhao, Q.D. and **Chen, G.**, Shape-controlled fabrication of the porous Co<sub>3</sub>O<sub>4</sub> nanoflower clusters for efficient catalytic oxidation of gaseous toluene, Journal of Hazardous Materials, 209, 385-391 (2012).
67. Deng, Y.F., Li, Z.E., Shi, Z.C., Xu, H., Peng, F. and **Chen, G.**, Porous Mn<sub>2</sub>O<sub>3</sub> microsphere as a superior anode material for lithium ion batteries, RSC Advances, 2 (11) 4645-4647 (2012).
68. Huang, L.P., Gan, L.L., Wang, N., Quan, X., Logan, B.E., **Chen, G.**, Mineralization of pentachlorophenol with enhanced degradation and power generation from air cathode microbial fuel cells, Biotechnology And Bioengineering, 109 (9) 2211-2221 (2012).
69. Tuutijarvi, T., Repo, E., Vahala, R., Sillanpaa, M. and **Chen, G.**, Effect of Competing Anions on Arsenate Adsorption onto Maghemite Nanoparticles, Chinese Journal of Chemical Engineering, 20 (3) 505-514 (2012).
70. Huang, L.P., Chai, X.L., Quan, X., Logan, B.E., **Chen, G.**, Reductive dechlorination and mineralization of pentachlorophenol in biocathode microbial fuel cells, Bioresource Technology, 111, 167-174 (2012).
71. Qin, X., Gao, F. and **Chen, G.**, Wastewater Quality Monitoring System Using Sensor Fusion And Machine Learning Techniques, Water Research, 46 (4) 1133-1144 (2012).
72. Yang, B., Chen, G. and **Chen, G.**, Experimental investigation on biological and filtration process performances of submerged membrane bioreactor in restaurant wastewater treatment, Separation and Purification Technology, 88, 184-190 (2012).
73. He, J., Zhang, T.Y. and **Chen, G.**, Ammonia Gas Sensing Characteristics of Fluorescence-Based Poly(2-(Acetoacetoxy)Ethyl Methacrylate) Thin Films, Journal of Colloid and Interface Science, 373, 94-101 (2012).
74. Zhang Q., Shi, Z., Deng, Y., Zheng, J., Liu, G. and **Chen, G.**, Hollow Fe<sub>3</sub>O<sub>4</sub>/C spheres as superior lithium storage materials, Journal of Power Sources, 197, 305– 309 (2012).

### 2010-2011 17 papers

75. Yang, C., Lin, W., Li, ZY, Zhang, R.W., Wen, H.R., Gao, B., **Chen, G.**, Gao, P., Yuen, M. M. F., Wong, C.P., Water Based Isotropically Conductive Adhesives: Towards Green and Low-Cost Flexible Electronics, Advanced Functional Materials, 21(23) 4582-4588 (2011).

76. Huang, LP, Chai, XL, **Chen, G.** and Logan, BE., Effect of Set Potential on Hexavalent Chromium Reduction and Electricity Generation from Biocathode Microbial Fuel Cells, Environmental Science & Technology, 45(11) 5025-5031 (2011).
77. Zhang, W., Li, XY, Zhao, QD, Hou, Y, and **Chen, G.**, Uniform alpha-Fe<sub>2</sub>O<sub>3</sub> nanotubes fabricated for adsorption and photocatalytic oxidation of naphthalene, Materials Chemistry and Physics, 129(3) 683-687 (2011).
78. Zhang, G., Wang, S., Zhao, S., Fu, L., **Chen, G.** and Yang, FL., Oxidative degradation of azo dye by hydrogen peroxide electrogenerated in situ on anthraquinonemonosulphonate/polypyrrole composite cathode with heterogeneous CuO/gamma-Al<sub>2</sub>O<sub>3</sub> catalyst, Applied Catalysis B-Environmental, 106(3-4) 370-378 (2011).
79. Wang, W., Ma H. and **Chen, G.**, A Model for Drying of Porous Materials: From Generality to Specific Applications, Drying Technology- An International Journal, 29(13) 1542-1555(2011).
80. Huang, LP, Gan, LL, Zhao, QL, Logan, BE, Lu, H and **Chen, G.**, Degradation of pentachlorophenol with the presence of fermentable and non-fermentable co-substrates in a microbial fuel cell, Bioresource Technology, 102(19) 8762-8768 (2011).
81. Xiong, M.Y., **Chen, G.** and Barford, J.P., Alteration of xylose reductase coenzyme preference to improve ethanol production by *S.Cerevisiae* from high xylose concentrations, Bioresource Technology, 102(19) 9206-9215 (2011).
82. Deng, Y.F., Tang, S.D., Zhang, Q.M., Shi, Z.C., Zhang, L.T., Zhan, S.Z. and **Chen, G.**, Controllable synthesis of spinel nano-ZnMn<sub>2</sub>O<sub>4</sub> as an anode material with high capacity retention for lithium ion batteries via a single-source precursor route, Journal of Material Chemistry, 21(32) 11987-11995 (2011).
83. Zhu, Z., Li, X.Y., Zhao, Q., Shi, Y., Li, H. and **Chen, G.**, Surface photovoltage properties and photocatalytic activities of nanocrystalline CoFe<sub>2</sub>O<sub>4</sub> particles with porous superstructure fabricated by a modified chemical coprecipitation method, Journal of Nanoparticle Research, 13(5) 2147-2155 (2011).
84. Lu, G., Li, X.Y., Qu, Z., Zhao, Q., Zhao, L. and **Chen, G.**, Copper-ion exchanged Ti-pillared clays for selective catalytic reduction of NO by propylene, Chemical Engineering Journal, 168(3) 1128-1133 (2011).
85. Zhao, L., Li, X.Y., Quan, X. and **Chen, G.**, Effects of Surface Features on Sulfur Dioxide Adsorption on Calcined NiAl Hydrotalcite-like Compounds, Environmental Science & Technology, 45 (12) 5373-5379 (2011).
86. Deng,Y.F., Zhang, Q., Tang, S., Zhang, L., Deng, S., Shi, Z. and **Chen, G.**, One-pot synthesis of ZnFe<sub>2</sub>O<sub>4</sub>/C hollow spheres as superior materials for lithium ion batteries, Chemical Communications, 47, 6828-6830 (2011).
87. Huang, L.P., Cheng, S.A., **Chen, G.**, Bioelectrochemical systems for efficient recalcitrant wastes treatment, Journal of Chemical Technology and Biotechnology, 86(4)481-491(2011).

88. Li, X.Y., Hou, Y., Zhao, Q.D., **Chen, G.**, Synthesis and Photoinduced Charge-Transfer Properties of a ZnFe<sub>2</sub>O<sub>4</sub>-Sensitized TiO<sub>2</sub> Nanotube Array Electrode, *Langmuir*, 27(6) 3113-3120 (2011).
89. Zhu, Z.R., Li, X.Y., Zhao, Q.D., Liu, S.M., Hu, X.J., **Chen, G.**, Facile solution synthesis and characterization of porous cubic-shaped superstructure of ZnAl<sub>2</sub>O<sub>4</sub>, *Materials Letters*, 65(2)194-197(2011).
90. Huang, L.P., Chai, X.L., Cheng, S.A., **Chen, G.**, Evaluation of carbon-based materials in tubular biocathode microbial fuel cells in terms of hexavalent chromium reduction and electricity generation, *Chemical Engineering Journal*, 166(2) 652-661(2011).
91. Li, X.Y., Hou, Y., Zhao, Q.D., Teng, W., Hu, X.J., **Chen, G.**, Capability of novel ZnFe<sub>2</sub>O<sub>4</sub> nanotube arrays for visible-light induced degradation of 4-chlorophenol, *Chemosphere*, 82(4)581-586(2011).

### 2009-2010 13 papers

92. Zhu, Z.R., Li, X.Y., Zhao, Q.D., Qu, Z.P., Hou, Y., Zhao, L., Liu, S.M., **Chen, G.**, FTIR study of the photocatalytic degradation of gaseous benzene over UV-irradiated TiO<sub>2</sub> nanoballs synthesized by hydrothermal treatment in alkaline solution, *Materials Research Bulletin*, 45(12)1889-1893(2010).
93. Zhu, Z.R., Li, X.Y., Zhao, Q., Li, H., Shen, Y., and **Chen, G.**, Porous "brick-like" NiFe<sub>2</sub>O<sub>4</sub> nanocrystals loaded with Ag species towards effective degradation of toluene, *Chemical Engineering Journal*, 165(1) 64-70 (2010).
94. Zhao, L., Li, X.Y., Zhao, Q., Qu, Z., Yuan, D., Liu, S., Hu, X. and **Chen, G.**, Synthesis, characterization and adsorptive performance of MgFe<sub>2</sub>O<sub>4</sub> nanospheres for SO<sub>2</sub> removal, *Journal of Hazardous Materials*, 184(1-3) 704-709 (2010).
95. Wan, L., Li, X.Y., Qu, Z., Shi, Y., Li, H., Zhao, Q., and **Chen, G.**, Facile synthesis of ZnO/Zn<sub>2</sub>TiO<sub>4</sub> core/shell nanowires for photocatalytic oxidation of acetone, *Journal of Hazardous Materials*, 184(1-3), 864-868 (2010).
96. Ran, J., Li, X.Y., Zhao, Q., Qu, Z., Li, H., Shi, Y., and **Chen, G.**, Synthesis, structures and photocatalytic properties of a mononuclear copper complex with pyridine-carboxylato ligands, *Inorganic Chemistry Communications*, 13(4) 526-528 (2010) .
97. Lu, G., Li, X.Y., Qu, Z., Zhao, Q., Li, H., Shen, Y. and **Chen, G.**, Correlations of WO<sub>3</sub> species and structure with the catalytic performance of the selective oxidation of cyclopentene to glutaraldehyde on WO<sub>3</sub>/TiO<sub>2</sub> catalysts, *Chemical Engineering Journal*, 159(1-3) 242-246 (2010).
98. Hou, Y., Li, X.Y., Zhao, Q., Quan, X. and **Chen, G.**, Electrochemically Assisted Photocatalytic Degradation of 4-Chlorophenol by ZnFe<sub>2</sub>O<sub>4</sub>-Modified TiO<sub>2</sub> Nanotube Array Electrode under Visible Light Irradiation, *Environmental Science and Technology*, 44(13) 5098-5103 (2010).
99. Jia, J., Li, X.Y. and **Chen, G.**, Stable spinel type cobalt and copper oxide electrodes for O<sub>2</sub> and H<sub>2</sub> evolution in alkaline solution, *Electrochimica Acta*, 55, 8197–8206 (2010) .

100. Qin, X., Gao, F. and **Chen, G.**, Effects of the geometry and operating temperature on the stability of Ti/IrO<sub>2</sub>-SnO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub> electrodes for O<sub>2</sub> evolution, *Journal of Applied Electrochemistry*, 40, 1797–1805 (2010).
101. Tuutijärvi, T., Lu, J., Sillanpää, M., and **Chen G.**, Adsorption mechanism of arsenate on crystal γ-Fe<sub>2</sub>O<sub>3</sub> nanoparticles, *Journal of Environmental Engineering*, 136 (9) 897-905 (2010).
102. Hou, Y., Li, X.Y., Zhao, Q.D., Quan, X. and **Chen, G.**, Electrochemical Method for Synthesis of a ZnFe<sub>2</sub>O<sub>4</sub>/TiO<sub>2</sub> Composite Nanotube Array Modified Electrode with Enhanced Photoelectrochemical Activity, *Advanced Functional Materials*, 20, 2165–2174 (2010).
103. Shang, F.M., Liu, D.Y., Xian, H.Z., Liu, J.H. and **Chen, G.**, Experiments on Enhanced Heat Transfer of Self-Exciting Mode Oscillating-Flow Heat Pipe with Non-Uniform Structure, *International J of Food Engineering*, 6(2), 1-10(2010).
104. Zhang, W., Li, X.Y., Qu, Z., Zhao, Q. and **Chen, G.**, Facile solution synthesis and characterization of CaCO<sub>3</sub> microspheres with urchin-shaped structure, *Materials Letters*, 64(1) 71-73(2010).

### **2008-2009      15 papers**

105. Zhao, Q., Li, X.Y., Wang, N., Hou, Y., Quan, X. and **Chen, G.**, Facile fabrication, characterization, and enhanced photoelectrocatalytic degradation performance of highly oriented TiO<sub>2</sub> nanotube arrays, *Journal of Nanoparticle Research*, 11(8) 2153-2162 (2009).
106. Zhang, H., Li, X.Y. and **Chen, G.**, Ionic liquid-facilitated synthesis and catalytic activity of highly dispersed Ag nanoclusters supported on TiO<sub>2</sub>, *Journal of Material Chemistry*, 19(43) 8223-8231 ( 2009).
107. Hou, Y., Li, X.Y., Liu, P., Zou, X., **Chen, G.** and Yue, P.L., Fabrication and photoelectrocatalytic properties of highly oriented titania nanotube arrays with {101} crystal face, *Separation and Purification Technology*, 67(2) 135–140 (2009).
108. Liu, L., Zhang, Y., Yang, F.L., **Chen, G.** and Yu, J.C., Simultaneous photocatalytic removal of ammonium and nitrite in water using Ce<sup>3+</sup>-Ag<sup>+</sup> modified TiO<sub>2</sub>, *Separation and Purification Technology*, 67(2) 244-248 (2009).
109. Zhang, H. and **Chen, G.**, Potent antibacterial activity of Ag/TiO<sub>2</sub> nanocomposite powders synthesized by a one-pot sol-gel method, *Environmental Science & Technology*, 43 (8) 2905–2910 (2009).
110. Zhang, H., **Chen, G.** and Bahnemann, D., Photoelectrocatalytic Materials for Environmental Applications, *Journal of Materials Chemistry*, 19(29) 5089–5121 (2009).
111. Wang, S.S., **Chen, G.**, Yang, F.L., HFCVD of diamond and its application as electrode in aluminum electrolysis, *Thin Solid Films*, 517 (12) 3559-3561 (2009).
112. **Chen, G.**, Lau, K. K. S. and Gleason, K. K., iCVD growth of poly(N-vinylimidazole) and poly(N-vinylimidazole-co-N-vinylpyrrolidone), *Thin Solid Films*, 517 (12) 3539-3542 (2009).
113. Tuutijärvi, T., Lu, J., Sillanpää, M., and **Chen G.**, As(V) adsorption on maghemite nanoparticles, *Journal of Hazardous Materials*, 166(2-3) 1415-1420 (2009).

114. Liu F.F., Li X.Y., Hou Y., Quan X., and **Chen, G.**, Sol-Gel Template Synthesis and Structural Properties of a Highly Ordered ZnFe<sub>2</sub>O<sub>4</sub> Nanotube Arrays, *Acta Materilia*, 57, 2684–2690 (2009).
115. Cui, Y., Li, X.Y. and **Chen, G.**, Electrochemical degradation of bisphenol A on different anodes, *Water Research*, 43, 1968 – 1976 ( 2009).
116. He, J., Wang, W., Yuan, C., Zhang, T.Y., and **Chen, G.**, Mechanical Properties Improvement of Waterborne Polyurethane Coating Films After Rewetting and Drying, *Drying Technology- An International Journal*, 27(4), 534–537 (2009).
117. Xian, H., Liu, D., Shang, F., Yang, Y., **Chen, G.**, Experimental Study on the Heat Transfer Enhancement of Oscillating-Flow Heat Pipe by Acoustic Cavitation, *Drying Technology-An International Journal*, 27(4), 542–547 (2009).
118. Hou, Y., Li, X.Y., Zou, X., Quan, X. and **Chen, G.** Photoelectrocatalytic activity of a Cu<sub>2</sub>O-loaded self-organized highly oriented TiO<sub>2</sub> nanotube array electrode for 4-chlorophenol degradation, *Environmental Science & Technology*, 43(3) 858-863 (2009).
119. Wang, N., Li, X.Y., Wang, Y., Quan, X., **Chen, G.**, Evaluation of bias potential enhanced photocatalytic degradation of 4-chlorophenol with TiO<sub>2</sub> nanotube fabricated by anodic oxidation method, *Chemical Engineering Journal*, 146(1)30-35 (2009).

#### **2007-2008      10 papers**

120. Lu, G., Li, X.Y., Qu, Z., Wang, Y. and **Chen, G.**, Selective oxidation of cyclopentene to glutaraldehyde over the WO<sub>3</sub>/SiO<sub>2</sub> catalyst, *Applied Surface Science*, 255(5) 3117-3120 (2008).
121. Zuo, Q., Chen, X., Li, W., **Chen, G.**, Combined electrocoagulation and electroflotation for removal of fluoride from drinking water, *Journal of Hazardous Materials*, 159(2-3) 452-457 (2008).
122. Sui, C., Lu, G., Li, X.Y., Qu, Z., Zou, X.J. and **Chen, G.**, Selective oxidation of cyclopentene catalyzed by Pd(CH<sub>3</sub>COO)<sub>2</sub>-NPMoV tinder oxygen atmosphere, *Reaction Kinetics and Catalysis Letters*, 94(2) 191-198 (2008).
123. Wang N., Li X.Y., Wang Y., Hou Y., Zou X. and **Chen G.**, Synthesis of ZnO/TiO<sub>2</sub> nanotube composite film by a two-step route, *Materials Letters*, 62(21-22)3691-3693 (2008).
124. Fang YM, Hu HQ and **Chen, G.**, Zeolite with tunable intracrystal mesoporosity synthesized with carbon aerogel as a secondary template, *Microporous and Mesoporous Materials*, 113(1-3) 481-489 (2008).
125. Wang YX, Li XY, Lu G., **Chen G.** and Chen Y., Synthesis and photo-catalytic degradation property of nano structured-ZnO with different morphology, *Materials Letters*, 62(16) 2359-2362 (2008).
126. Wang, YX, Li, XY, Lu, G, Quan X and **Chen, G.**, Highly oriented 1-D ZnO nanorod arrays on zinc foil: Direct growth from substrate, optical properties and photocatalytic activities, *Journal of Physical Chemistry C*, 112(19) 7332-7336 (2008).
127. Fang, Y., Hu, H. and **Chen, G.**, In Situ Assembly of Zeolite Nanocrystals into Mesoporous Aggregate with Single-crystal-like Morphology without Secondary Template, *Chemistry of Materials*, 20(5), 1670-1672 (2008).

128. Fan, L., Zhou, Y., Yang, W., **Chen, G.** and Yang, F., Electrochemical Degradation of Aqueous Solution of Amaranth Azo Dye on ACF under Potentiostatic Model , Dyes and Pigments, 76(2)440-446 (2008).
129. Qu, Y, Li, X, **Chen, G**, Zhang, H. and Chen Y., Synthesis of Cu<sub>2</sub>O nano-whiskers by a novel wet-chemical route, Materials Letters, 62(6-7)886-888 (2008).

### **2006-2007 12 papers**

130. Wei, W., Qin, G., Hu, H., You, L. and **Chen, G.**, Preparation of Supported Carbon Molecular Sieve Membrane from Novolac Phenol-formaldehyde Resin, Journal of Membrane Science, 303(1-2) 80-85(2007).
131. **Chen, G.**, Gupta, M., Chan, K, and Gleason, K, Initiated Chemical Vapor Deposition of Poly(Furfuryl Methacrylate), Macromolecular Rapid Communications, 28(23) 2205-2209 (2007)
132. Wang, W. and **Chen, G.**, Freeze Drying with Dielectric-Material-Assisted Microwave Heating: Experimental and Theoretical Investigations, AIChE J. 53(12) 3077-3088 (2007).
133. Guo, L. and **Chen, G.**, Long Term Stable Ti/BDD Electrode Fabricated with HFCVD Method using 2-stage Substrate Temperature, Journal of Electrochemical Society, 154 (12) D657-D661 (2007).
134. Zhang, J., Chen, X., Yao, P., and **Chen G.**, Anodic Oxidation of Salicylic Acid at Ta/BDD Electrode, Journal of Zhejiang University – Science A, 8(9)1457-1461(2007).
135. Lu, N., Quan, X., Li, J., Chen, S., Yu, H. and **Chen, G.**, Fabrication of Boron-doped TiO<sub>2</sub> Nanotube Array Electrode and Investigation of its Photoelectrochemical Capability, Journal of Physical Chemistry C, 111 (32): 11836-11842 (2007).
136. Wang, W., **Chen, G.** and Mujumdar, A.S., Physical Interpretation of Solids Drying: An Overview on Mathematical Modeling Research, Drying Technology - An International Journal, 25(4) 659-668 (2007).
137. **Chen, G.** and Wang, W., Role of Freeze Drying in Nanotechnology, Drying Technology - An International Journal, 25(1) 29-35 (2007).
138. Hu J., Lo, I.M.C. and **Chen, G**, Performance and Mechanism of Chromate (VI) by  $\gamma$ -Fe<sub>2</sub>O<sub>3</sub> Nanoparticles Coated with  $\delta$ -FeOOH, Separation and Purification Technology, 56, 76-82 (2007).
139. Hu J., Lo, I.M.C. and **Chen, G.**, Comparative Study of Various Magnetic Nanoparticles for Cr(VI) Removal, Separation and Purification Technology, 56, 249-256 (2007).
140. Hu AJ , Zhao SN , Liang HH , Qiu TQ, **Chen G**, Ultrasound Assisted Supercritical Fluid Extraction of Oil and Coixenolide from Adlay Seed, Ultrasonics Sonochemistry 14 (2): 219-224 (2007).
141. Guo L. and **Chen, G.**, High-Quality Diamond Film Deposition on Titanium Substrate using Hot-Filament Chemical Vapor Deposition Method, Diamond and Related Materials, 16: 1530-1540 (2007).

### **2005-2006 6 papers**

142. Liu P, Li XY, Wang YX, Ju XD, **Chen G.**, Construction and Photoelectrocatalytic Properties of TiO<sub>2</sub> Nanotubes Arrays on Titanium Substrates, Chemical Journal of Chinese Universities-Chinese 27 (12): 2411-2413 (2006).
143. Fan L., Zhou, Y., Yang, W., **Chen, G.** and Yang, F., Electrochemical Degradation of Amaranth Azo Dye in Water on ACF, Journal of Hazardous Materials, B137, 1182-1188 (2006).
144. Tian, Y., Chen, X., Shang, C. and **Chen, G.**, Active and Stable Ti/Si/BDD Anode for Electro-oxidation, Journal of Electrochemical Society, 153 (7): J80-J85 (2006).
145. Hu, J., **Chen, G.** and Lo, I.M.C., Selective Removal and Recovery of Various Heavy Metals by Maghemite ( $\gamma$ -Fe<sub>2</sub>O<sub>3</sub>) Nanoparticles: performance and mechanism, Journal of Environmental Engineering, 132 (7) 709-715 (2006).
146. Chen, X. and **Chen, G.**, Anodic oxidation of Orange II on Ti/BDD electrode: variable effects, Separation and Purification Technology, 48(1) 45-49 (2006).
147. Fang, Q., Shang, C., and **Chen, G.**, MS2 Inactivation by Chloride-Assisted Electrochemical Disinfection, Journal of Environmental Engineering, 132(1) 13-22 (2006).

### **2004-2005, 12 papers**

148. Cao, Y., Meng, Q., Yang, W. Yao, J., Shu, Y., Wang, W. and **Chen, G.**, "Effect of Plasma Treatment on Surface Properties of TiO<sub>2</sub> Nanoparticulate Films", Colloids and Surfaces A: Physicochem. Eng. Aspects, 262 (1-3): 181-186 (2005).
149. Hu, J., Lo, I.M.C. and **Chen, G.**, "Fast Adsorption and Recovery of Cr (VI) using surface-modified Jacobsite (MnFe<sub>2</sub>O<sub>4</sub>) Nanoparticles", Langmuir, 21(24) 11173-11179 (2005).
150. Wang W. and **Chen, G.**, "Heat And Mass Transfer Model In Dielectric-Material-Assisted Microwave Freeze Drying Of Skim Milk, A Porous Hygroscopic Material", Chemical Engineering Science, 60(23), 6542-6550 (2005).
151. Wang W. and **Chen G.**, "Theoretical Study on Microwave Freeze-Drying of an Aqueous Pharmaceutical Excipient with the Aid of Dielectric Material", Drying Technology – An International Journal, 23(9-11), 2147-2168(2005).
152. Hu, J., **Chen, G.** and Lo, I.M.C., "Removal and Recovery of Cr (VI) from Electroplating Wastewater by Maghemite Nanoparticles", Water Research, 39(18), 4528-4536 (2005).
153. Zhao, L., Li J., Pan Y., **Chen G.**, and Mujumdar, A.S., "Thermal Drying Of Fruits and Vegetables", Drying Technology – An International Journal, 23(9-11), 2249-2260(2005).
154. Chen, X and **Chen, G.**, "Stable Ti/RuO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Electrodes for O<sub>2</sub> Evolution", Electrochimica ACTA, 50 (20) 4155-4159 (2005).
155. Chen, X and **Chen, G.**, "Investigation of Ti/IrO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Electrodes for O<sub>2</sub> Evolution: Calcination Temperature and Precursor Composition Effects", Journal of the Electrochemical Society, 152(7) J59-J64 (2005).
156. Gao, P., Chen, X., Shen, F. and **Chen, G.**, "Removal of Chromium (VI) from Wastewater by Combined Electrocoagulation-Electroflotation Without a Filter", Separation & Purification Technology, 43 (2) 117-123 (2005).
157. Chen, X., Gao, F. and **Chen, G.**, "Comparison of Ti/BDD and Ti/SnO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub> Electrodes for Pollutant Oxidation", Journal of Applied Electrochemistry, 35, 185-191 (2005).

158. Wang W., **Chen G.** and Gao, F., "Effect of Dielectric Material on Microwave Freeze-Drying of Skim Milk", *Drying Technology – An International Journal*, 23(1&2), 317-340 (2005).
159. Tao, Z., Wu, H., **Chen, G.** and Deng, H., "Numerical simulation of conjugate heat and mass transfer process within cylindrical porous media with cylindrical dielectric cores in microwave freeze-drying", *International Journal of Heat and Mass Transfer*, 48, 561-572 (2005).

### **2003-2004, 18 Papers**

160. Hu J., Lo, I.M.C. and **Chen G.**, "Removal of Cr(VI) by Magnetite Nanoparticle", *Water Science & Technology*, 50(12) 139–146 ( 2004).
161. Wu, HW., Tao, Z., Gao, P. and **Chen, G.**, "Ice crystal sizes and their impact on microwave assisted freeze drying", *Chinese Journal of Chemical Engineering*, 12(6) 831-835 (2004).
162. Li, J., Zhao, L., Pan, Y., **Chen, G.**, and Mujumdar, A.S., "Fluidized-Bed Drying of Biological Materials: Two Cases Studies", *Chinese Journal of Chemical Engineering*, 12 (6) 840-842 (2004).
163. Chen, X., F. Gao and **Chen, G.**, "On-line Soft-sensor Measurement of Melt-flow-length during Injection Mold Filling", *Materials Science and Engineering: A*, **384**, 245-254 (2004).
164. Chen, X. and **Chen, G.**, "Improvement of ATO Electrode Stability by Doping With a Trace Amount of Ir", *Electrochemical and Solid-State Letters*, 7(9) J33-J35 (2004).
165. Chen X., **Chen, G.** and Gao, F., "Capacitive Transducer for In-mold Monitoring of Injection Molding", *Polymer Engineering and Science*, 44(8) 1571-1578 (2004).
166. Chen, X. and **Chen, G.**, "Proper HFCVD Conditions for Fabrication of Ti/BDD Electrodes", *Journal of Electrochemical Society*, 151(4) B214-219 (2004).
167. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", *Separation & Purification Technology*, 38(1) 11-41 (2004).
168. Wu HW, Tao Z, **Chen G.**, Deng HW, Xu GQ, Ding ST, "Conjugate heat and mass transfer process within porous media with dielectric cores in microwave freeze drying", *Chemical Engineering Science*, 59 (14) 2921-2928 (2004).
169. Hu HQ, Zhou QA, Zhu SW, Meyer B, Krzack S, **Chen G.**, "Product distribution and sulfur behavior in coal pyrolysis", *Fuel Processing Technology*, 85 (8-10) 849-861 (2004).
170. Liu QR, Hu HQ, Zhou QA, Zhu SW, **Chen G.**, "Effect of mineral on sulfur behavior during pressurized coal pyrolysis", *Fuel Processing Technology*, 85 (8-10): 863-871 (2004).
171. Liu QR, Hu HQ, Zhou Q, Zhu SW, **Chen G.**, "Effect of inorganic matter on reactivity and kinetics of coal pyrolysis", *Fuel*, 83 (6): 713-718 (2004).
172. Wei W, Hu HQ, Qin GT, You LB, **Chen G.**, "Pore structure control of phenol-formaldehyde based carbon microfiltration membranes", *Carbon*, 42 (3): 679-681 (2004).
173. Zhao, L., Pan, Y., Li, J., **Chen, G.** and Mujumdar, A.S., "Drying of Dilute Suspension in a Revolving Flow Fluidized Bed of Inert Particles", *Drying Technology – An International Journal*, 22 (1&2), 363-376 (2004).

174. Lai, C.K., **Chen, G.** and Lo, M.C., "Salinity Effect On Freeze/Thaw Conditioning Of Activated Sludge With And Without Chemical Addition", Separation & Purification Technology, **34**(1-3), 155-164 (2004).
175. Yang, SG, Quan, X, Li, XY, Liu, YZ, Chen, S and **Chen G**, "Preparation, characterization and photoelectrocatalytic properties of nanocrystalline Fe<sub>2</sub>O<sub>3</sub>/TiO<sub>2</sub>, ZnO/TiO<sub>2</sub>, and Fe<sub>2</sub>O<sub>3</sub>/ZnO/TiO<sub>2</sub> composite film electrodes towards pentachlorophenol degradation", Physical Chemistry Chemical Physics, 6 (3), 659-664 (2004).
176. Song, CC, Hu, HQ, Zhu, SW, Wang, G and **Chen G**, "Nonisothermal catalytic liquefaction of corn stalk in subcritical and supercritical water", Energy & Fuel, 18 (1) 90-96 (2004).
177. Quan, X., Chen, S., Su. J., Chen, J. and **Chen, G.**, "Synergetic Degradation of 2,4-D by Integrated Photo- and Electrochemical Catalysis on a Pt Doped TiO<sub>2</sub>/Ti Electrode", Separation & Purification Technology, **34**(1-3), 73-79 (2004).

### **2002-2003, 15 papers**

178. Li, XY, **Chen, G**, Yue, P.L. and Kutil, C, "Photocatalytic oxidation of cyclohexane over TiO<sub>2</sub> nanoparticles by molecular oxygen under mild conditions", Journal of Chemical Technology and Biotechnology, 78 (12), 1246-1251 (2003).
179. Cao, S., **Chen, G.**, Hu, X. and Yue, P.L., "Catalytic Wet Air Oxidation of Wastewater Containing Ammonia and Phenol over Activated Carbon Supported Pt Catalysts", Catalysis Today, **88**(1-2), 37-47 (2003).
180. Chen, X, **Chen, G.**, F., Gao and Yue, P.L., "High Performance Ti/BDD Electrode for Pollution Oxidation", Environmental Science & Technology, 37(21) 5021-5026 (2003).
181. Pan, Y.K., Zhao, L.J., Zhang, Y., **Chen, G.** and Mujumdar, A.S., "Osmotic Dehydration Pretreatment in Drying of Fruits and Vegetables", Drying Technology – An International Journal, **21** (6), 1103-1116 (2003).
182. Liu, H., He, G., Li, X. and **Chen, G.**, "Separation of Copper (II) by Emulsion Liquid Membrane", Chemical Industry and Engineering Progress (Chn), **22**, 155-158, (2003).
183. Wang, W. and **Chen, G.**, "Numerical Investigation on Dielectric Material Assisted Microwave Freeze-Drying of Aqueous Mannitol Solution", Drying Technology – An International Journal, **21** (6), 995-1017 (2003).
184. Su, J., Quan, X., Zhao, Y.Z., **Chen, G.**, "Electrically Enhanced Photodegradation of an Azo Dye (Acid Orange II) Using a Pt/TiO<sub>2</sub> Film Electrode Irradiating with an UV Lamp", Journal of Environmental Sciences-China, 15 (1) 60-64 (2003).
185. Chen, X., **Chen, G.** and Yue, P.L., "Anodic Oxidation of Reactive Dyes on Ti/B-Diamond Electrodes", Chemical Engineering Science, **58**(3-6) 987-993 (2003).
186. Shen, F., Gao, P., Chen, X., and **Chen, G.**, "Electrochemical Method of Fluorine Removal", Chemical Engineering Science, **58**(3-6) 995-1001 (2003).
187. **Chen, G.**, C. K. Lai, and M.C. Lo, "Behavior of Electro-osmotic Dewatering of Biological Sludge with Salinity", Separation Science & Technology, 38(4) 899-911 (2003).
188. Lin, C., He, G., Li, J. and **Chen, G.**, "Preparation and Stability of Oil in Water Emulsified SBS Paper-plastic Laminating Adhesives", Modern Chemical Industry (Chn), **23**, 209-211, (2003).

189. **Chen, G.**, Lei, L., Hu, X., and Yue, P.L, "Kinetic Study into the Wet Air Oxidation of Printing and Dyeing Wastewater", *Separation and Purification Technology*, **31**(1) 71-76 (2003).
190. **Chen, G.** and He, G., "Separation of Water and Oil from Water-in-Oil Emulsion by Freeze/Thaw Method", *Separation and Purification Technology*, **31**(1) 83-89 (2003).
191. Liu, Y., Yang, F., Chen, J., Gao L. and **Chen G.**, "Linear Free Energy Relationships for Dechlorination of Aromatic Chlorides by Pd/Fe", *Chemosphere*, **50**, 1275-1279 (2003).
192. Zhang, W., He, G., P. Gao and **Chen, G.**, "Development and Characterization of Composite Nanofiltration Membranes and Their Application in Concentration of Antibiotics", *Separation and Purification Technology*, **30** (1) 27-35 (2003).

### **2001-2002, 13 papers**

193. **Chen, G.**, Chen, X., and Yue, P.L., "Electrochemical Behavior of Stable Ti/IrO<sub>x</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Anodes for Oxygen Evolution", *Journal of Physical Chemistry B*, **106** (17) 4364-4369 (2002).
194. Li, X., **Chen, G.**, Yue, P.L. and Katal, C., "Preparation and Characterization of Superparamagnetic Nanocrystalline Cobalt Ferrite Materials", *Journal of Materials Science Letters*, **21** (23) 1881-1883 (2002).
195. Wang, W., Thorat, B.N., **Chen, G.** and Mujumdar, A.S., "Simulation of Fluidized Bed Drying of Carrot with Microwave Heating", *Drying Technology – An International Journal*, **20** (9) 1855-1867 (2002).
196. Chen, X.M., **Chen, G.** and Yue, P.L, "Investigation on the Electrolysis Voltage of Electrocoagulation", *Chemical Engineering Science*, **57** (13), 2449-2455 (2002).
197. Chen, X.D., Lin, SXQ, **Chen, G.**, "On the Ratio of Heat and Mass Transfer Coefficient for Water Evaporation and its Impact upon Drying Modeling", *International Journal of Heat and Mass Transfer*, **45**(21), 4369-4372 (2002).
198. **Chen, G.**, Lee, H., Yeung, K.L., Yue, P.L., Wong, A., Tao, T., Choi, K.K., "Glass Recycling in Cement Production – An Innovative Approach", *Waste Management*, **22** (7), 747-753 (2002).
199. He, G. and **Chen, G.**, "Lubricating Oil Sludge and Its Demulsification", *Drying Technology - an International Journal*, **20**(4), 1009-1018 (2002).
200. **Chen, G.**, Yue, P.L. and Mujumdar, A.S., "Sludge Dewatering and Drying", *Drying Technology - an International Journal*, **20**(4), 883-916 (2002).
201. Chen, X., **Chen, G.**, and Yue, P.L., "A Novel Electrode System for Electro-flotation of Wastewaters", *Environmental Science & Technology*, **36**(4) 778-783, (2002).
202. Hu, H., Bai, J., Guo, S. and **Chen, G.**, "Coal Liquefaction with in situ Impregnated Fe<sub>2</sub>(MoS<sub>4</sub>)<sub>3</sub> Bimetallic Catalyst", *Fuel*, **81**, 1521-1524 (2002).
203. Yang, S., Hu, H. and **Chen, G.**, "Preparation of Carbon Adsorbents with High Specific Surface Area and a Model for Calculating Surface Area", *Carbon*, **40**(3), 277-284 (2002).
204. Wei W., Hu, H., You, L. and **Chen G.**, "Preparation of Carbon Molecular Sieve Membrane from Phenol-formaldehyde Novolac Resin", *Carbon*, **40**(3), 465-467 (2002).

205. **Chen, G.** and Mujumdar, A.S. "Application of Electrical Field in Dewatering and Drying", Developments in Chemical Engineering and Mineral Processing – the Australian Research Journal, **10** (3/4), 429-442 (2002).

### **2000-2001, 8 papers**

206. Lo, M.C., Lai, C.K., and **Chen, G.**, "Salinity Effect on Mechanical Dewatering of Sludge with and without Chemical Conditioning", Environmental Science & Technology, **35** (23), 4691-4696 (2001).
207. **Chen, G.**, Wang, W. and Mujumdar, A.S. "Theoretical Study of Microwave Heating Patterns on Batch Fluidized Bed Drying of Porous Material", Chemical Engineering Sciences, **56**(24) 6823-6835 (2001).
208. Lee, H., **Chen, G.** and Yue, P.L., "Integration Of Chemical And Biological Treatments For Textile Industry Wastewater: A Possible Zero-Discharge System", Water Science Technology, **44** (5), 75-83 (2001).
209. Chen, X., **Chen, G.** and Yue, P.L., "Stable Ti/IrO<sub>x</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Anode for O<sub>2</sub> Evolution with Low Ir content", Journal of Physical Chemistry B, **105**, 4623-4628, (2001).
210. Hu, H., Bai, J., Zhu, H., Wang, Y., Guo, S. and **Chen, G.**, "Catalytic Liquefaction of Coal with Highly Dispersed Fe<sub>2</sub>S<sub>3</sub> Impregnated In-Situ", Energy & Fuels, **15**, 830-834, (2001).
211. Ho, M.Y. and **Chen, G.**, "Enhanced Electro-osmotic Dewatering of Fine Particle Suspension Using a Rotating Electrode", Industrial Engineering and Chemistry Research, **40**, 1859-1863, (2001).
212. Liu, Y., Yang, F.L., Yue, P.L. and **Chen, G.**, "Dechlorination of Chlorophenols by Palladium/Iron", Water Research, **35**(8), 1887-1890, (2001).
213. Hu, X., Lei, L., **Chen, G.** and Yue, P.L., "On the Degradability of Printing and Dyeing Wastewater by Wet Air Oxidation", Water Research, **35**(8), 2078-2080 (2001).

### **1999-2000, 10 papers**

214. Hu, H., Sha, G. and **Chen, G.**, "Effect of Solvent Swelling on Liquefaction of Xinglong Coal at Less Severe Conditions", Fuel Processing Technology, **68**(1) 33-43, (2000).
215. **Chen, G.**, Lei, L., Yue, P. L. and Cen, P., "Treatment of Desizing Waste Water Containing Poly-vinyl Alcohol by Wet Air Oxidation", Industrial Engineering and Chemistry Research, **39**(5), 1193-1197 (2000).
216. Lei, L., Hu, X., **Chen, G.**, Porter, J.F. and Yue, P.L., "Wet Air Oxidation of Desizing Wastewater from the Textile Industry", Industrial Engineering and Chemistry Research, **39**(8), 2896-2901 (2000).
217. **Chen, G.**, Chen, X. and Yue, P.L., "Electrocoagulation and Electroflotation of Restaurant Wastewater", Journal of Environmental Engineering, **126**(9), 858-863 (2000).
218. Lei, L., **Chen, G.**, Hu, X. and Yue, P.L., "Homogenous Catalytic Wet Air Oxidation for the Treatment of Textile Wastewater", Journal of Water Environment Research, **72**(2), 147-151 (2000).

219. Chen, X., **Chen, G.** and Yue, P.L., "Separation of Pollutants from Restaurant Wastewaters", *Separation and Filtration Technology*, **19**(1-2), 65-76 (2000).
220. Wang, Z. and **Chen, G.**, "Theoretical Study of Fluidized Bed Drying with Microwave Heating", *Industrial Engineering and Chemistry Research*, **59**(3) 775-782 (2000).
221. Wang, Z. and **Chen, G.**, "Heat and Mass Transfer in Batch Fluidized Drying of Porous Particles", *Chemical Engineering Science*, **55** (10) 1857-1869 (2000).
222. He, G. and **Chen, G.**, "Determination of Water Content in w/o Emulsion by TG", *Petrochemical Technology (Chn)*, **29** (7), 526-529 (2000).
223. Liu, Y., Quan, X., Chen, J.W., Yang, F., and **Chen, G.**, "Study on Quantitative Structure-Properties Relationship for Catalytic Dechlorination of Chlorinated Aromatics Hydrocarbons", *J. of Dalian University of Technology (Chn)*, **40**(3), 301-304 (2000).

### **1998-1999, 9 papers**

224. He, G., Mi, Y., Yue, P.L., and **Chen, G.**, "Theoretical Study on Concentration Polarization in Gas Separation Membrane Processes", *Journal of Membrane Science*, **153**, 243-258 (1999).
225. **Chen, G.**, Lei, L. and Yue, P.L., "Wet Oxidation of High Concentration Reactive Dye Solutions", *Industrial Engineering and Chemistry Research*, **38** (5) 1837-1843 (1999).
226. Chai, X., Mi, Y., Yue, P.L. and **Chen, G.**, "Bean Curd Wastewater Treatment by Membrane Separation", *Separation and Filtration Technology*, **15**, 175-180 (1999).
227. Jian, X., Dai, Y., He, G. and **Chen, G.**, "Preparation of UF and NF poly (phthalazine ether sulfone ketone) membranes for high temperature application", *Journal of Membrane Science*, **161**(1-2), 185-191 (1999).
228. **Chen, G.** and Douglas, W.J.M., "Quantification of Through Drying Rate Data", *International Journal of Drying Technology*, **17**(7&8), 1707-1723(1999).
229. Hu, H., Zhang, J., Guo, S. and **Chen, G.**, "Extraction of Huadian Oil Shale with Water in Sub- and Supercritical States", *Fuel*, **78**(6) 645-651 (1999).
230. Wang, Z. and **Chen, G.**, "Heat and Mass Transfer during Low Intensity Convection Drying", *Chemical Engineering Science*, **54**(17) 3899-3908 (1999).
231. Wang, Z. and **Chen, G.**, "Heat and Mass Transfer in Fixed Bed Drying of Moist Porous Particles", *Chemical Engineering Science*, **54**(20), 4233-4243(1999).
232. Xue, D., Zhao, Y., Quan, X., Chen, J., Chen S. and **Chen, G.**, "Solid Waste Management in Hong Kong", *Advances in Environmental Science (Chn)*, **7**(6) 141-152 (1999).

### **1995-1998, 9 papers**

233. **Chen, G.** and Douglas, W.J.M., "Combined Impingement and Through Air Drying of Paper: A Comprehensive Model", *TAPPI J*, **81**(1), 244-253 (1998).
234. **Chen, G.**, Crotogino, R. H. and Douglas, W.J.M., "Fundamental Characteristics of Combined Impingement and Through Air Drying of Paper", *Canadian Journal of Chemical Engineering*, **75**(1), 167-175 (1997).

235. **Chen, G.**, Crotogino, R. H. and Douglas, W.J.M., "Quantitative Analysis of Combined Impingement and Through Air Drying of Paper", Canadian Journal of Chemical Engineering, **75**(1), 176-189 (1997).
236. **Chen, G.** and Douglas, W.J.M., "Combined Impingement and Through Flow Air Drying of Paper", International Journal of Drying Technology, **15** (2), 315 - 339 (1997).
237. Chai, X., **Chen, G.**, Yue, P.L. and Mi. Y., "Pilot Scale Membrane Separation of Electroplating Waste Water by Reverse Osmosis", Journal of Membrane Science, **123** (2), 235 - 242 (1997).
238. **Chen, G.**, Chai, X., Yue, P.L. and Mi, Y., "Treatment of Textile Desizing Waste Water by Pilot Scale Nanofiltration Membrane", Journal of Membrane Science, **127**(1), 93-99 (1997).
239. Lei, L., X. Hu, H.P. Chu, **Chen, G.** and Yue, P.L., "Catalytic Wet Air Oxidation of Dyeing and Printing Wastewater", Journal of Water Science and Technology, **35**(4), 311-319 (1997).
240. **Chen, G.** and Douglas, W.J.M., "Through Drying of Paper", International Journal of Drying Technology, **15** (2), 295 - 314 (1997).
241. **Chen, G.**, Gomes, V. G. and Douglas, W.J.M., "Impingement Drying of Paper", International Journal of Drying Technology, **13** (5-7), 1331 - 1344 (1995).

## **Book and Book Chapter**

1. **Chen, G.**, “Impingement and Through Drying”, in *Modern Drying Technology*, Ed. Y. Pan, Chinese Chemical Industry Publication Inc., 1998, pp.589-614.
2. **Chen, G.** and Mujumdar, A.S., “Use of Electrical Fields for Dewatering and Drying”, in *Guide To Industrial Drying: Principles, Equipment and New Developments*, Ed., Arun S. Mujumdar, Vindhya Press, 2004.
3. **Chen, G.**, Devahastin, S. and Thorat, B.T., *Topics in Heat and Mass Transfer*, Vindhya Press, India, 2004, ISBN 81-902594-0-7.
4. **Chen, G.** and Hung, Y.T., “Electrochemical Wastewater Treatment Processes”, In *Advanced Physicochemical Treatment Technologies Book Series: Handbook Of Environmental Engineering Series*, Volume 5, Chapter 2, Ed. Lawrence K. Wang, Yung-Tse Hung, and Nazih K. Shammas, The Humana Press Inc. Totowa, NJ, USA, 2006.
5. **Chen, G.** and Mujumdar, A.S., “Drying of Herbal Medicines and Tea”, Chapter 26 of *Handbook of Industrial Drying*, Ed. A.S. Mujumdar, Dekker, 3<sup>rd</sup> edition, 635-345, 2006.
6. **Chen, G.**, Yue, P. L. and Mujumdar, A.S., “Dewatering and Drying of Wastewater Treatment Sludge”, Chapter 38 of *Handbook of Industrial Drying*, Ed. A.S. Mujumdar, Dekker, 3<sup>rd</sup> edition, 1063-1079, 2006.
7. **Chen, G.**, “Chemical Engineering, Vision of the World”, Chinese Translation, Chemical Industry Press, China, 2006.
8. **Chen, G.**, “Proceedings of the 5<sup>th</sup> Asia-Pacific Drying Conference”, Vol. 1,2&3, World Scientific Publishing, Hong Kong, 2007.
9. Guo, L., Li, X.Y. and **Chen, G.**, Techniques of Electrode Fabrication, Chapter 3, in *Electrochemistry for the Environment*, Eds, Comninellis and Chen, 2009, Springer.
10. Chen, X. and **Chen, G.**, Electroflootation, Chapter 11, in *Electrochemistry for the Environment*, Eds, Comninellis and Chen, 2009, Springer.
11. Zhang, H., **Chen, G.** and Bahnemann D., Photoelectrocatalytic Materials for Environmental Applications, Chapter 16, in *Electrochemistry for the Environment*, Eds, Comninellis and Chen, 2009, Springer.
12. Zhang, H., Li, X.Y. and **Chen, G.**, Fabrication of photoelectrode materials, Chapter 18, in *Environmental Electrochemistry*, Eds, Comninellis and Chen, 2009, Springer.
13. Comninellis, Ch and **Chen, G.**, *Electrochemistry for the Environment*, 2009, Springer.
14. Chen, X.M. and Chen, G., Fabrication and application of Ti/BDD for Wastewater Treatment, Chapter 15, in *Synthetic Diamond Films: Preparation, Electrochemistry, Characterization, and Applications*, Eds, Brillas and Martínez-Huitl, 2011, John Wiley & Sons, Inc.

## **Journal Issues Guest Edited**

1. **Chen, G.**, Pan, Y.K., Cao, C.W., “Selected Papers Presented at the 6<sup>th</sup> China Drying Symposium”, *Drying Technology – An International Journal*, **17** (9) 1999.
2. **Chen, G.** and Mujumdar, A.S., “Developments in Drying and Dewatering”, *Developments in Chemical Engineering and Mineral Process – The Australasian Research Journal*, **10** (3/4) 2002.

3. **Chen, G.** and Kudra, T., “Sludge Dewatering and Drying”, *Drying Technology – An International Journal*, **20** (4/5) 2002.
4. **Chen, G.** and Chen, X.D., “Selected Papers of the 6<sup>th</sup> World Congress of Chemical Engineers”, *Drying Technology – An International Journal*, **21** (2) 2003.
5. Liu, X.D. and **Chen, G.**, “Special Issue on the 75<sup>th</sup> Birthday of Prof. Chongwen Cao”, *Drying Technology – An International Journal*, **21** (6) 2003.
6. **Chen, G.**, “Selected Papers of ISCRE17 – Environmental and Membrane Reactor”, *Separation & Purification Technology*, **34** (1-3), 2004.
7. **Chen, G.**, Liu, X.D. and Y.X. Qu, “Selected Papers of IDS2002”, *Chinese Journal of Chemical Engineering*, **12** (6) 2004.
8. Chen, X.D. and **Chen, G.**, “Developments in Food Engineering”, *Developments in Chemical Engineering and Mineral Process – The Australasian Research Journal*, **12**(3/4) 2004.
9. Huang, L., **Chen, G.** and Mujumdar, A.S., “Thermal Dehydration”, *Asia-Pacific Journal of Chemical Engineering*, **2** (1) 2007.
10. Ray, M. and **Chen, G.**, “Advanced technologies for environmental remediation and management”, *International Journal of Environmental Technology and Management*, **9**(1) 2008.
11. Law, C.L., and **Chen, G.**, Special Issue on Selected Papers from ADC07, *Drying Technology – An International Journal*, **26**(11) 2008.
12. Patterson, D. and **Chen, G.**, “Selected Papers from CHEMeca 2006”, *International Journal of Environment and Waste Management*, 2009.
13. Huang, L. and **Chen, G.**, Drying and Dewatering of Food – Selected Papers from ADC07, *International Journal of Food Engineering*, 2009.
14. Zhu, J., Yan, Z., Silva, M.A., **Chen, G.**, Special Issue of Drying of Nanomaterials and Green Drying Technology, *Drying Technology – An International Journal*, **27**(4) 2009.
15. Wang, W., Li, Z., and **Chen, G.**, Selected Papers from ADC07, *International Journal of Food Engineering*, 2009.

### **Invited Lectures and Conference Publications**

1. Su, J., Bai, Z., Huang, B., Quan, X. and **Chen, G.**, Unique three dimensional architecture using a metal-free semiconductor cross-linked bismuth vanadate for efficient photoelectrochemical water oxidation, **Keynote Lecture**, Advanced Functional Materials and Devices Conference, Suzhou, China, 12-14 August 2016.
2. Wang, W., Li, H., Hu, D.P., Pan, Y.Q. and **Chen, G.**, Freeze-Drying of Ceftriaxone Sodium Solution Frozen With Prefabricated Porosity, The 20<sup>th</sup> International Drying Symposium (IDS 2016), Gifu, Japan, 7-10 August 2016.
3. Xu, H., Yang, Y., Su, J. and **Chen, G.**, Ti<sub>4</sub>O<sub>7</sub>-Filled Nitrogen-Doped Hollow Carbon Spheres as Sulfur Host for Advanced Sulfur Cathode, The 18<sup>th</sup> International Meeting on Lithium Batteries, Chicago, 19-24 June, 2016.

4. Halder, A. and **Chen, G.**, Ionically Crosslinked Chitosan-tripolyphosphate Binder for Silicon Anode in Lithium Ion Batteries, The 18<sup>th</sup> International Meeting on Lithium Batteries, Chicago, 19-24 June, 2016.
5. Zhang, L., **Chen, G.**, Berg, E. J. and Tarascon, J-M, Triggering the In Situ Electrochemical Formation of High Energy Density Cathode Material from MnO, The 18<sup>th</sup> International Meeting on Lithium Batteries, Chicago, 19-24 June, 2016.
6. **Chen, G.**, Chemical Products Design and Entrepreneurship, Panel Discussion, Sino-US Conference, ECUST, Shanghai, China, 16 October 2015.
7. Yang, Y., Xu, H., Qin, X., Deng, Y. and **Chen, G.**, Carbonized Polydopamine/Sulfur Composite with One-Dimensional Structure for High Performance Lithium Sulfur Batteries, The 66<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Taipei, 4-9 October 2015.
8. Zhang, L. and **Chen, G.**, Systematic Syntheses of LiFeSO<sub>4</sub>F as a Novel Cathode Material for Lithium-ion Batteries, The 66<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, Taipei, 4-9 October 2015.
9. Zhang, L., Tarascon, J.M. and **Chen, G.**, Influence of humid environment on the handling of LiFeSO<sub>4</sub>F electrode for Li-ion batteries, Lithium Battery Discussions, LIBD, Arcachon, France, 21-26 June 2015.
10. Geng, P. and **Chen, G.**, Electricity-assisted Antifouling Ceramic Membrane Modified by Magnéli Titanium Sub-oxides for Environmental and Biological Applications, The 66<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, **Keynote Lecture**, Taipei, 4-9 October 2015.
11. Geng, P. and **Chen, G.**, Electricity-assisted Antifouling Ceramic Membrane Modified by Magnéli Titanium Sub-oxides for Environmental and Biological Applications, Chang Kung University, **Invited Seminar**, Taoyuan, 6 October 2015.
12. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, The Satellite Conference of the 66<sup>th</sup> ISE Annual Meeting, HKUST, 1-3 October 2015.
13. Su, J., Geng, P. and **Chen, G.**, Graphene Linked Graphitic Carbon Nitride/TiO<sub>2</sub> Nanowire Arrays Heterojunction for Efficient Solar-driven Water Splitting, The Satellite Conference of the 66<sup>th</sup> ISE Annual Meeting, HKUST, 1-3 October 2015.
14. Su, J., Li, X., Quan, X. and **Chen, G.**, Efficient photoelectrochemical water oxidation from nanoporous bismuth vanadate photoanode decorated by graphene linked graphitic carbon nitride, The 16<sup>th</sup> Asian-Pacific Chemical Confederation of Chemical Engineering Congress, Melbourne, 27 September - 1 October 2015.
15. Liu, Q., Xu, H., Lau, K.K. and **Chen, G.**, Oxidative Chemical Vapor Deposition: a Novel, Solvent-Free and Conformal Conductive Polymer Coating of Li<sub>1.2</sub>Mn<sub>0.54</sub>Co<sub>0.13</sub>Ni<sub>0.13</sub>O<sub>2</sub> Cathode Materials for Secondary Lithium-Ion Batteries, The 16<sup>th</sup> Asian-Pacific Chemical Confederation of Chemical Engineering Congress, Melbourne, 27 September - 1 October 2015.
16. **Chen, G.**, Greener Products for Energy Storage and Conversion, The 16<sup>th</sup> Asian-Pacific Chemical Confederation of Chemical Engineering Congress, **Plenary Lecture**, Melbourne, 27 September - 1 October 2015.

17. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, The 8<sup>th</sup> Elite Symposium of Chinese Chemical Engineers Cross Taiwan Strait, **Invited Lecture**, Xi'an, 8-11 September, 2015.
18. **Chen, G.**, Introduction of HKUST and CBME Department, **Invited Talk**, The Joint Dean/HoD Symposium of Chinese School/Dept of Chemical Engineering, Hefei, 28 August 2015.
19. Geng, P. and **Chen, G.**, Electricity-assisted Antifouling Ceramic Membrane Modified by Magnéli Titanium Sub-oxides for Environmental and Biological Applications, University of Science and Technology China, **Invited Seminar**, Hefei, 27 August 015.
20. **Chen, G.**, **Invited Talk** on Strategies of Internationalization, Dalian University of Technology, 7 January 2015.
21. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, The 7<sup>th</sup> Elite Symposium of Chinese Chemical Engineers Cross Taiwan Strait, **Invited Lecture**, Dalian, 31 October – 2 November, 2014.
22. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, The First National Conference on Energy Conversion and Storage, **Invited Lecture**, Shanghai, 22-25 October, 2014.
23. Zhao, Y. and **Chen, G.**, The Effect of Ir Content on the Service Life of Ti/IrO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> DSA for O<sub>2</sub> evolution, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, **Keynote Lecture**, Lausanne, Switzerland, 31 August - 5 September, 2014.
24. Zhang, L. and **Chen, G.**, Systematic Syntheses of LiFeSO<sub>4</sub>F as a Novel Cathode Material for Lithium-ion Batteries, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Lausanne, Switzerland, 31 August - 5 September, 2014.
25. Halder A. and **Chen G.**, Chitosan Based Hydrogels as Binders for Silicon Anodes, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Lausanne, Switzerland, 31 August - 5 September, 2014.
26. Xu, H. and **Chen G.**, A Polyaniline-coated Li-rich Oxide Cathode for Li-ion Batteries, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Lausanne, Switzerland, 31 August - 5 September, 2014.
27. Geng, P., Miles, C., Comninellis Ch. and **Chen G.**, Magnéli Ti<sub>4</sub>O<sub>7</sub> Nanotube Arrays as Novel Anodes for Water Treatment, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, **Best poster**, Lausanne, Switzerland, 31 August - 5 September, 2014.
28. Liang R. and **Chen G.**, A Polydopamine-coated Sulfur/Carbon Composite as a Cathode Material for Lithium/Sulfur Batteries, The 65<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Lausanne, Switzerland, 31 August - 5 September, 2014.
29. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, **Invited Lecture**, The HKUST Energy Institute Opening Ceremony and Forum on Sustainable Energy, 13-14 March 2014.
30. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, **Keynote Lecture**, 2014 Asia-Pacific Conference on Energy Storage and Conversion, Brisbane, Australia, 5-8 February 2014.

31. **Chen, G.**, Dimensionally Stable Anodes (DSA): Preparation and Application in Wastewater Treatment, **Invited Lecturer**, Water Research Workshop 2013, National Chiao Tung University, Hsin Chu, 18 December 2013.
32. **Chen, G.**, Advanced Cathode Materials for High-performance Li-S Batteries, **Invited Lecture**, Guangzhou Institute of Energy Conversion, CAS, 29 October 2013.
33. Geng, P. and **Chen, G.**, Electrochemical Antifouling Ceramic Membrane for Oily Wastewater Treatment, The 9<sup>th</sup> World Congress of Chemical Engineering, Seoul, Korea, 18-23 August 2013.
34. Xu, H. and **Chen, G.**, Improved Performance of  $\text{Li}_{1.2-x}\text{Mg}_x\text{Mn}_{0.54}\text{Ni}_{0.13}\text{Co}_{0.13}\text{O}_2$  for Li-Ion Battery Cathode, The 9<sup>th</sup> World Congress of Chemical Engineering, Seoul, Korea, 18-23 August 2013.
35. **Chen, G.**, Process Engineering: Some Challenges and Perspectives, **Invited Lecture**, The 5<sup>th</sup> Global Chinese Symposium of Chemical Engineering, Xi'an, 23 July 2013.
36. **Chen, G.**, Process Engineering: Some Challenges and perspectives, **Invited Lecture**, Forum on Process Engineering and Technology, CAE, Shanghai, 12 May 2013.
37. **Chen, G.**, Lithium Ion Batteries: History, Present and Future, **Invited Lecture**, Science for Lunch, HKUST, 13 March 2013.
38. **Chen, G.**, Advanced in Lithium Ion Batteries, **Invited Lecture**, Hong Kong Science Park, Inno Talk @ InnoCarnival 2012, 4 November, 2012.
39. **Chen, G.**, Advances in Electrode Materials for Lithium Ion Batteries, **Keynote**, Frontier in Chemical Engineering: the Fourth Global Chinese Chemical Engineers Symposium, Birmingham, 26-28August 2012.
40. Yang, B. and **Chen, G.**, Electrochemical Anti-fouling of Membrane in Oily Wastewater treatment, **Plenary Lecture**, The 8<sup>th</sup> International Conference on Sustainable Water Environment, Guilin, 17-19 July 2012.
41. Shi, Z., Zhang, L. and **Chen, G.**, Modified  $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$  as cathode material for high power lithium ion batteries, **Invited Talk**, International Conferences on Frontiers of Advanced Batteries, Shenzhen, 22-24 June 2012.
42. **Chen, G.**, Electrode Materials for Environmental Applications: Fabrication and Characterization, **Plenary Lecture**, The 16<sup>th</sup> National Meeting of Electrochemical Society, Chongqing, 14 October 2011.
43. **Chen, G.**, Controllable synthesis of spinel nano- $\text{ZnMn}_2\text{O}_4$  as an anode material with high capacity retention for lithium ion batteries via a single-source precursor route, **Invited Talk**, The 3<sup>rd</sup> Symposium of Global Chinese Chemical Engineering, Tsinghua University, Beijing, 18 July, 2011.
44. **Chen, G.**,  $\text{Ti}/\text{IrO}_2\text{-SnO}_2\text{-Sb}_2\text{O}_5$  electrode for  $\text{O}_2$  evolution, **Invited Seminar**, School of Chemical Engineering, University Sains Malaysia, 29 March 2011.
45. Shi, Z.C. and **Chen, G.**, High energy density electrode materials for next-generation lithium ion batteries, **Invited Lecture**, China-Korea Lithium Battery Workshop, Guangzhou, 9 October, 2010.

46. Xiong, M.Y., Barford, J, **Chen, G.**, Coenzyme preference alteration of xylose reductase to improve ethanol production from xylose in recombinant *Saccharomyces cerevisiae*, The 13<sup>th</sup> Asia-Pacific Confederation of Chemical Engineering, Taipei, 5-8 October, 2010.
47. Yang, B., Hou, Y, Li, X.Y., **Chen, G.**, Facile Fabrication of IrO<sub>2</sub> Nanorods on Porous Substrate via Direct Thermal Decomposition, The 13<sup>th</sup> Asia-Pacific Confederation of Chemical Engineering, Taipei, 5-8 October, 2010.
48. He, J., Zhang, T.Y., **Chen, G.**, Miniemulsion polymerization and fluorescent behaviors of poly (2-(acetoacetoxy)ethyl methacrylate), The 13<sup>th</sup> Asia-Pacific Confederation of Chemical Engineering, Taipei, 5-8 October, 2010.
49. **Chen, G.** and Wang, W., Drying of Porous Materials: From a general mathematical model to specific applications, **Keynote lecture**, The 17<sup>th</sup> International Drying Symposium, Magdeburg, 3-6 October 2010.
50. **Chen, G.**, Ag/TiO<sub>2</sub> nanocomposite: synthesis, characterization and application, **Invited Seminar**, MT3C Centre, National University of Singapore, 2 April, 2010.
51. Zhang, H.J. and **Chen, G.**, Ag/TiO<sub>2</sub> nanocomposite: synthesis, characterization and application, **Invited Lecture**, The 13<sup>th</sup> Asia Conference of Chemistry, Shanghai, 15-17 September, 2009.
52. **Chen, G.**, Fabrication of Ti/IrO<sub>2</sub>-SnO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub> for O<sub>2</sub> evolution electrode, The 2<sup>nd</sup> Symposium of Chinese Chemical Engineers Across the Taiwan Strait, **Invited Lecture**, Shanghai, 7-10 September, 2009.
53. **Chen, G.**, Ag/TiO<sub>2</sub> nanocomposite: synthesis, characterization and application, **NASA EPSCoR Speaker**, University of Wyoming, 27-29 August, 2009.
54. Zhang, H.J. and **Chen, G.**, One-Pot Synthesis of Ag/TiO<sub>2</sub> Nanoparticles With Potent Antibacterial Activity, The 8<sup>th</sup> World Congress of Chemical Engineering, Montreal, 23-27 August, 2009.
55. Yang, B. and **Chen, G.**, Effects of Influent Oil Concentration on The Performances of Membrane Bioreactor in Wastewater Treatment, The 8<sup>th</sup> World Congress of Chemical Engineering, Montreal, 23-27 August, 2009.
56. Qin, X.S., Gao, F. and **Chen, G.**, Development of Wastewater Quality Monitoring System Using Sensor Fusion And Machine Learning Techniques, The 8<sup>th</sup> World Congress of Chemical Engineering, Montreal, 23-27 August, 2009.
57. Wang, W. and **Chen, G.**, Freeze-Drying of Initially Porous Frozen Material From Aqueous Solution, The 8<sup>th</sup> World Congress of Chemical Engineering, Montreal, 23-27 August, 2009.
58. Jia, J. and **Chen, G.**, Fabrication of High Quality One Material Anode and Cathode for Water Electrolysis in Alkaline Solution, **Keynote Lecture**, 60<sup>th</sup> Annual Meeting of ISE, Beijing, 16-21 August, 2009.
59. **Chen, G.**, Electrochemical Technologies in Wastewater Treatment, **Invited Lecture**, Eco Asia Conference, Hong Kong, October 29, 2008.
60. Wang, S., **Chen, G.** and Yang, F., HFCVD of Diamond and its Application as Electrode in Aluminum Electrolysis, The 5th International Conference on Hot-Wire Chemical Vapor Deposition, MIT, Cambridge, 20-24 August 2008.

61. **Chen, G.**, Lau, K. K.S. and Gleason, K.K., iCVD Growth of Poly(vinylimidazole) and Poly(vinylimidazole)-vinyl(pyrrolidone), The 5th International Conference on Hot-Wire Chemical Vapor Deposition, MIT, Cambridge, 20-24 August 2008.
62. Lin, O.C.C. and **Chen, G.**, Innovation and Challenges for Chemical Engineering in the Knowledge- Based Economy, **Keynote Lecture**, The 12th APCChE Congress, Dalian, August 4 - 6 2008.
63. **Chen, G.**, Hot-filament chemical vapor deposition method to fabricate stable diamond film electrodes for wastewater treatment, **Invited Lecture**, The 6th Spring Meeting of the International Society of Electrochemistry, Iguassu, March 16-19, 2008.
64. **Chen, G.**, Innovative and Novel Methods in Wastewater Treatment, **Invited Lecture**, Symposium on Sustainable Soil and Water, Taichung, January 10, 2008.
65. Ma, H., Tao, Z., Wang, W. and **Chen, G.**, Synthesis and Characterization of Monolithic PVA-Doped Silica Gel Via Freeze Drying, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
66. He, J., Wang, W., Yuan, C., **Chen, G.** and Zhang, T., Mechanical Properties Improvement of Waterborne Polyurethane Coating Films After Rewetting and Drying, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
67. Ma, H., Tao, Z., Wang, W. and **Chen, G.**, Experimental Study on Microwave Freeze Drying of Silica Gel with Dielectric Material Enhancement, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
68. Xian, H., Liu, D., Shang, F., Yang, Y. and **Chen, G.**, Experimental Study on the Heat Transfer Enhancement of Oscillating-Flow Heat Pipe by Acoustic Cavitation, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
69. Shang, F., Liu, D., Xian, H., Yang, Y., Du X. and **Chen, G.**, Experiments on Enhanced Heat Transfer of Self-Exciting Mode Oscillating-Flow Heat Pipe with Non-Uniform Structure, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
70. Wang, W. and **Chen, G.**, Issues in Freeze Drying/Lyophilization of Aqueous Solutions, **Keynote Lecture**, The 5<sup>th</sup> Asia-Pacific Drying Conference, Hong Kong, August 13-15, 2007.
71. Qin, X., Gao, F. and **Chen, G.**, Electrocoagulation and Electroflotation of Restaurant Wastewater – Pilot Plant Study, **Invited Speech**, Advanced Technologies for Environmental Remediation – A Symposium in Honour of Professor Po Lock Yue, Hong Kong, June 15, 2007.
72. **Chen, G.**, How to make an effective presentation, **Invited Seminar**, University of Kuopio, Mikkeli, May 9, 2007.
73. **Chen, G.**, Advanced Technologies in Wastewater Treatment, **Plenary Lecture**, The 8<sup>th</sup> Finnish Conference of Environmental Sciences, Mikkeli, Finland, May 10-11, 2007.
74. Guo, L. and **Chen, G.**, Simple and Effective Way to Improve the Stability of Titanium Based Boron Doped Diamond Film Electrode, MRS Fall Annual Meeting, Boston, USA, November 27-December 1, 2006.
75. **Chen, G.**, Recent Developments of Active and Stable Ti/BDD Anode Material for Electro-oxidation, **Invited Speech**, The Croucher Foundation Advanced Study Institute 2006 -- Leading-edge Strategies and

Technologies for Sustainable Urban Water Management, Hong Kong, September 16-20, 2006.

76. **Chen, G.** and Wang, W., Freeze Drying of Mannitol Aqueous Solution with Dielectric-Material-Assisted Microwave Heating, The 17<sup>th</sup> International Congress of Chemical and Process Engineering, Praha, Czech Republic, **Keynote Speech**, August 27-31, 2006.
77. **Chen, G.**, Role of Freeze Drying in Nanotechnology, **Keynote Speech**, The 15<sup>th</sup> International Drying Symposium, Budapest, Hungary, August 20-23, 2006.
78. **Chen, G.**, Removal and Recovery of Cr(VI) with Magnetic Nanoparticles, **Invited Seminar**, Arizona State University, March 31, 2006.
79. **Chen, G.**, Removal and Recovery of Cr(VI) with Magnetic Nanoparticles, **Invited Seminar**, University of Delaware, February 25, 2006.
80. **Chen, G.**, Chemical Engineering in the 21<sup>st</sup> Century, **Invited Seminar**, Shenyang Institute of Chemical Technology, December 22, 2005.
81. **Chen, G.**, Metal Oxide Materials in Making Active and Stable Anodes for Oxygen Evolution, **K.C. Wong Education Fund Seminar**, Shenyang Metal Research Institute, CAS, December 22, 2005.
82. Wang, W. and **Chen, G.**, "Dielectric material assisted freeze-drying of skim milk with microwave heating, theory and experimental results", **Invited Speech**, The 4<sup>th</sup> Asia-Pacific Drying Conference, Kolkata, India December 11-15, 2005.
83. Hu J., Lo M. C. and **Chen G.** "Effect of metal-doping among nanoscale maghemite on Cr(VI) adsorption and nanoparticle dissolution", *International Congress of Nanotechnology*, The International Association of Nanotechnology (IANT), San Francisco, USA, 31 Oct- 4 Nov., 2005.
84. Hu J., Lo M. C. and **Chen G.** Equilibrium, FTIR and XPS studies of chromate adsorption onto inorganic-coated maghemite nanoparticles. *International Congress of Nanotechnology*, IANT, San Francisco, USA, 31 Oct- 4 Nov, 2005.
85. Wang W. and **Chen, G.**, "Physical interpretation of solid drying: an overview on mathematical modeling research", **Keynote Speech**, The 10<sup>th</sup> China Drying Conference, September, 2005.
86. **Chen G.** and Chen, X., "Investigation of Ti/IrO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Electrodes for O<sub>2</sub> Evolution: Calcination Temperature and Precursor Composition Effects", **Invited Speech**, The 56<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Pushan, Korea, September 19-23, 2005.
87. **Chen G.**, "Electrochemical Technology in Wastewater Treatment", The 56<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Pushan, Korea, September 19-23, 2005.
88. Fan, L., Lau, J., Kwok, C. and **Chen, G.**, "Electrochemical Treatment of Oily Wastewaters", The 56<sup>th</sup> Annual Meeting of International Society of Electrochemistry, Pushan, Korea, September 19-23, 2005.
89. **Chen, G.** and Wang, W., "Mathematical modeling of solids drying - a comprehensive review", **Keynote Speech**, The 3<sup>rd</sup> Inter-American Drying Conference, Montreal, August 19-23, 2005.

90. **Chen, G.**, “Ti/IrO<sub>2</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Anode for O<sub>2</sub> Evolution”, **Invited Seminar**, School of Environmental Engineering, Dalian University of Technology, May, 2005.
91. **Chen, G.**, “How to make an effective presentation in English”, **Invited Seminar**, School of Environmental Engineering, Dalian University of Technology, May, 2005.
92. **Chen, G.**, “How to make an effective presentation in English”, **Invited Seminar**, School of Chemical Engineering, Dalian University of Technology, May, 2005.
93. Hu J., **Chen G.** and Lo I. M. C. “Selective removal and recovery of various heavy metals by maghemite nanoparticles”, *International Symposium on Nanotechnology in Environmental Protection and Pollution*, Asia Pacific Nanotechnology Forum (APNF), Bangkok, Thailand, January 12-14, 2005.
94. Hu J., **Chen G.** and Lo I.M.C. “Comparison of various magnetic nanoparticles for Cr(VI) removal”, *International Symposium on Nanotechnology in Environmental Protection and Pollution*, APNF, Bangkok, Thailand, January 12-14, 2005.
95. Wang W. and **Chen, G.**, “Heat And Mass Transfer In Dielectric Material Assisted Microwave Freeze-Drying: A Multiphase Flow Model”, International Workshop & Industrial Drying, Mumbai, India, December 20-23, 2004.
96. **Chen, G.** and Mujumdar, A.S., “Application of Electrical Field in Drying/Dewatering”, **Invited Lecture**, International Workshop & Industrial Drying, Mumbai, India, December 20-23, 2004.
97. Devahastin, S., **Chen, G.**, Passos, M.L., and Huang, L., “A Look At Professor Arun S. Mujumdar From Different Angles – A Tribute”, **Invited Speech**, in *Topics in Heat and Mass Transfer*, Chen, G., Devahastin and Thorat, B.T. (Eds), *International Workshop & Industrial Drying, Mumbai, India, December 20-23, 2004*.
98. Devahastin, S. and **Chen, G.**, “A Brief Overview of Professor Arun S. Mujumdar’s Research Contributions”, **Invited Speech**, in *Topics in Heat and Mass Transfer*, Chen, G., Devahastin and Thorat, B.T. (Eds), *International Workshop & Industrial Drying, Mumbai, India, December 20-23, 2004*.
99. Wang, W. and **Chen, G.**, “Theoretical Study On Microwave Freeze-Drying Of An Aqueous Solution Of Lactose With The Aid Of Dielectric Material”, The 14th International Drying Symposium, San Paulo, Brazil, August 25-27, 2004.
100. **Chen, G.**, “Electrochemical Technologies in Environmental Engineering”, **Invited Speech**, The 3<sup>rd</sup> Annual Meeting of China Outstanding Young Environmental Scientists, Hangzhou, May, 2004.
101. **Chen, G.**, “Search of Anode Materials for Wastewater Treatment”, **Invited Speech**, Symposium of Oversea Scholars, School of Chemical Engineering, Dalian University of Technology, May, 2004.
102. Li, J., Zhao, L., Pan, Y., **Chen, G.**, and Mujumdar, A.S., “Fluidized-Bed Drying of Biological Materials: Two Cases Studies”, The 14th International Drying Symposium, San Paulo, Brazil, August 25-27, 2004.
103. Zhao, L., Li J., Pan Y., **Chen G.**, and Mujumdar, A.S., “Thermal Drying Of Fruits and Vegetables”, The 14th International Drying Symposium, San Paulo, Brazil, August 25-27, 2004.

104. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", **Invited Seminar**, East China University of Science and Technology, December, 2003.
105. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", **Invited Seminar**, Shanghai Jiaotong University, December, 2003.
106. Liu, Q., Hu, H., Zou, Q., Zhu, S. and **Chen, G.**, "Effect of Inorganic Matter on Reactivity and Kinetics of Coal Pyrolysis", Fuel Chemistry, Division, ACS Meeting, 48(1), 368-369 (2003).
107. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", **Invited Seminar**, National Research Council, Ottawa, Canada, July 2nd, 2003.
108. Liu, H., He, G., Li, X. and **Chen, G.**, "Separation of Copper (II) by Emulsion Liquid Membrane", The 2<sup>nd</sup> National Transfer Processes Academic Conference, Dalian, China, August 22-25, 2003.
109. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", **Invited Seminar**, University of New Brunswick, Canada, August 4, 2003.
110. Hu, J., Lo, IMC and **Chen, G.**, "Adsorption of Cr (VI) by Magnetite Nanoparticles", IWA International Conference on Nano and Microparticles in Water and Wastewater Treatment, Zurich, Switzerland, September 22-24, 2003.
111. **Chen, G.**, "Active and Stable Anode for Electrooxidation", **Invited Seminar**, South China University of Technology, January 2003.
112. Chen, X, **Chen, G.** and Yue, P.L., "High Performance Ti/BDD Electrode for Pollution Oxidation", AIChE Annual Meeting, Indianapolis, USA, November 2002.
113. **Chen, G.**, "Electrochemical Technologies in Wastewater Treatment", **Invited Seminar**, Xiamen University, November, 2002.
114. **Chen, G.**, Chen, X and Yue, P.L., "Fabrication, Characterization and Application of a Stable and Active Anode for Pollution Oxidation", The Eighth International Conference on Advanced Oxidation Technologies for Water and Air Remediation, Toronto, Canada, November 2002.
115. Wong, H. M., Shang, C., Cheung, Y. K. and **Chen, G.**, "Chloride Assisted Electrochemical Disinfection", The Eighth Mainland-Taiwan Environmental Protection Conference, Tsin Chu, Taiwan, October, 2002.
116. Pan, Y., Zhao, L., Li, J., **Chen, G.** and Mujumdar, A.S., "Revolving Flow Fluidized Bed Dryer of Inert Particles", The 13th International Drying Symposium, Beijing, August 2002.
117. Wu, H., Tao, Z. Gao, P. and **Chen, G.**, "Ice Crystal Sizes and Their Impact on Microwave Assisted Freeze Drying", The 13th International Drying Symposium, Beijing, August 2002.
118. Wang W., Thorat B.N., **Chen, G.** and Mujumdar, A.S., "Fluidized-bed Drying of Heat Sensitive Porous Material with Microwave Heating", The 13th International Drying Symposium, Beijing, August 2002.
119. Song, C., Hu, H., Wang, G., and **Chen, G.**, "Liquefaction of Biomass with Water in Sub- and Supercritical States", ISCRE17, Hong Kong, August 2002.
120. Shen, F., Gao, P., Chen, X., and **Chen, G.**, "Electrochemical Method of Fluorine Removal", ISCRE17, Hong Kong, August 2002.

121. Chen, X., **Chen, G.** and Yue, P.L., "Anodic Oxidation of Reactive Dyes on Ti/B-Diamond Electrodes", ISCRE17, Hong Kong, August 2002.
122. Chen, X., **Chen, G.** and Yue P. L., "High-performance Ti/BDD Electrodes for Anodic Oxidation", **Invited Speech**, The 2<sup>nd</sup> Forum of China Young Leading Scholars in Environmental Science and Technology, Tsinghua, China, June, 2002.
123. Wang, W., **Chen, G.** and A.S. Mujumdar, "Theoretical Study of Microwave Heating Patterns on Batch Fluidized Bed Drying of Porous Material", in *Proceedings of the 8<sup>th</sup> China Drying Conference*, Harbin, China, January 2002.
124. **Chen, G.**, Chen, X.M., and Yue, P.L., "A Novel Oxygen Evolution Electrocatalyst", *The CD-ROM Proceedings of the 6<sup>th</sup> World Congress of Chemical Engineering*, Melbourne, September 2001.
125. Chen, X.M., **Chen, G.**, and Yue, P.L., "Stable Ti/IrO<sub>x</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Anode for Electroflotation of Wastewater", *The CD-ROM Proceedings of the 6<sup>th</sup> World Congress of Chemical Engineering*, Melbourne, September 2001.
126. **Chen, G.**, Lai, C.K. and Lo, M.C., "Behavior of Electro-osmotic Dewatering of Biological Sludge with Salinity", in *Proceedings of the 2<sup>nd</sup> Asian-Oceanic Drying Conference*, ed., Daud, W.R.W., Penang, Malaysia, August 2001.
127. **Chen, G.** and A.S. Mujumdar, "Application of Electrical Field in Dewatering and Drying", *Proceedings of the 2<sup>nd</sup> Asian-Oceanic Drying Conference*, ed., Daud, W.R.W., Penang, Malaysia, August 2001.
128. **Chen, G.**, Chen, X. and Yue, P.L., "Electrochemical Behavior of the Stable Ti/IrO<sub>x</sub>-Sb<sub>2</sub>O<sub>5</sub>-SnO<sub>2</sub> Anode for Oxygen Evolution", **Invited Speech**, The 1<sup>st</sup> Forum of China Young Leading Scholars in Environmental Science and Technology, Shenzhen, China, June, 2001.
129. Cao, S., **Chen, G.**, Hu, X., and Yue, P.L., "Catalytic Wet Air Oxidation of Ammonia", The Eighth International Conference on Advanced Oxidation Technology, Niagara Falls, Canada, June 2001.
130. **Chen, G.**, Lai C.K., and M.C. Lo, "The Effect of Salinity on Mechanical Dewatering of Sludge With and Without Chemical Addition", in *Proceedings of Sludge Management Entering the 3<sup>rd</sup> Millennium*, ed., Lee, DJ, Taipei, March 2001.
131. **Chen, G.**, Yue, P.L, and He, G., "Separation of Water and Oil Water from Water-in-Oil Emulsion by Freeze/Thaw Method", in *Proceedings of Sustainable Energy and Environmental Technology*, Hong Kong, December 2000.
132. **Chen, G.**, Lei, L., Hu, X., and Yue, P.L., "Kinetic Study into the Wet Air Oxidation of Printing and Dyeing Wastewater", in *Proceedings of Sustainable Energy and Environmental Technology*, Hong Kong, December 2000.
133. **Chen, G.**, He, G. and Yue, P.L., "Removal of from Water-in-Oil Emulsion by Freeze/Thaw Method", The 50<sup>th</sup> Canadian Chemical Engineering Conference, Montreal, October 2000.
134. Hu, H., Bai, J., Zhu, H., Wang, Y., Guo, S. and **Chen, G.**, "Catalytic Liquefaction of Coal with Highly Dispersed Fe<sub>2</sub>S<sub>3</sub> Impregnated In-situ", In: *Proceedings 17<sup>th</sup> International Pittsburgh Coal Conference*, Pittsburgh, USA, September 2000.
135. Bai, J.F., Wang, Y., Hu, H.Q. and **Chen, G.**, "Effect of solvent swollen coal and impregnated ATTM on coal liquefaction", In: *Proceedings, 3<sup>rd</sup> China - Korea Joint*

*Workshop on Coal and Clean Energy Utilization Technology*, Taiyuan, Shanxi, China, August 2000.

136. Ho, M.Y. and **Chen, G.**, "Enhanced Electro-osmotic Dewatering of Fine Particle Suspension Using a Rotating Electrode", in *Proceedings of the 12<sup>th</sup> International Drying Symposium*, ed. Kirkhof, P.J.A.M., Coumans, W.J., and Mooiweer, G.D., Noordwijkhout, The Netherlands, August 2000.
137. Wong, A., Tao, T., Choi, K.K., **Chen, G.**, Lee, H., Yeung, K.L. and Yue, P. L., **Invited speech**, "Glass Recycling in Cement Production – An Innovative Approach", in *Proceedings of Recycle 2000*, Hong Kong, June 2000.
138. Lee, H., **Chen, G.** and Yue, P.L., "Integration Of Chemical And Biological Treatments For Textile Industry Wastewater: A Possible Zero-Discharge System", CUTEC, Germany, June 2000.
139. Pan, Y.K., Zhao, L.J., Zhang, Y., **Chen, G.** and Mujumdar, A.S., "Osmotic Dehydration Pretreatment In Drying Of Fruits And Vegetables", in *Proceedings of Symposium on Energy Engineering 2000*, ed., Cheng, P., Hong Kong, January 2000.
140. Wang, Z.H. and **Chen, G.**, "Heat and Mass Transfer in Fluidized Bed Drying", in *Proceedings of the 7<sup>th</sup> National Drying Symposium (chn)*, Jinan, China, October 1999.
141. Wang, Z.H. and **Chen, G.**, "Fluidized Bed Drying with Microwave Heating", The 1999 CICHE Annual Meeting and Conferences, in *Proceedings 1999 Symposium on Transport Phenomena and Applications*, Taipei, October 1999.
142. He, G., Yue, P.L. and **Chen, G.**, "Lubricating Oil Sludge and its Demulsification", in *Proceedings of the 8<sup>th</sup> Congress of Asian Pacific Confederation of Chemical Engineering*, Seoul, Korea, August 1999.
143. Chen, X., Yue, P.L. and **Chen, G.**, "Characterization and Electrocoagulation of Restaurant Wastewater", in *Proceedings of the 8<sup>th</sup> Congress of Asian Pacific Confederation of Chemical Engineering*, Seoul, Korea, August 1999.
144. Liu, Y., Yang, F., Yue, P.L. and **Chen, G.**, "Catalytic Dechlorination of Chlorophenols in Water by Palladium/Iron", in *Proceedings of Asia-Pacific Chemical Reaction Engineering Symposium '99*, Hong Kong, June 1999.
145. Ho, M., Yue, P.L. and **Chen, G.**, "Catalytic Wet Air Oxidation of High Concentration Surfactant Solution", in *Proceedings of Asia-Pacific Chemical Reaction Engineering Symposium '99*, Hong Kong, June 1999.
146. Hu, H., Sha, G., Guo, S. and **Chen, G.**, "Investigation on Liquefaction of Solvent Swollen Coal", in *Proceedings of The 6<sup>th</sup> Japan-China Symposium on Coal and C1 Chemistry*, Miyagi, Japan, October 1998.
147. **Chen, G.**, Lei, L., Yue, P. L. and Cen, P., "Treatment of Desizing Waste Water Containing Poly-vinyl Alcohol by Wet Air Oxidation", 15<sup>th</sup> International Symposium on Chemical Reaction Engineering, Newport Beach, California September 1998.
148. **Chen, G.** and Douglas, W.J.M., "Quantification of Through Drying Rate Data", in *Proceedings of the 11<sup>th</sup> International Drying Symposium*, ed. Akritidis, C.B., Marinos-Kouris, D. and Saravakos, G.D., Thessaloniki, Greece, August 1998.
149. **Chen, G.**, Lu, W., Yue, P.L. and Mi, Y. "Treatment of Heavy Metal Containing Wastewaters by Reverse Osmosis: Concentration Polarization Effect and Optimal Operating

- Pressure”, in *Proceedings of Sustainable Energy and Environmental Technology, Proceedings of the 2<sup>nd</sup> Asia Pacific Conference*, ed. Lu, G.Q., Rudolph, V., and Greenfield, P.F., Gold Coast, Australia, June 1998.
150. Dai, Y., Jian, X., Liu, X., He, G. and **Chen, G.**, “Thermostable Nanofiltration Membrane of Sulfonated Poly (Phthalazine-based Ether Sulfone Ketone), in *Proceedings of International Conference on Membrane Science and Technology*, Beijing, June 1998.
  151. Chai, X., Mi, Y., Yue, P.L. and **Chen, G.**, “Treatment of Bean Curd Wastewater by Membrane Separation”, in *Proceedings of Environmental Strategies for the 21<sup>st</sup> Century – An Asia Pacific Conference*, Singapore, April 1998.
  152. **Chen, G.**, “Sludge Dryers – The Application and Development Abroad”, **Keynote lecture** at the 6<sup>th</sup> All China Drying Symposium, Wuxi, China, October 1997.
  153. Lei, L., **Chen, G.**, Hu, X., Porter, J. and Yue, P.L., “Homogenous Catalytic Wet Air Oxidation for the Treatment of Textile Wastewater”, Fourth International Conference on Advanced Oxidation Technologies, Orlando, Florida, September 1997.
  154. **Chen, G.**, Lei, L., J. F. Porter and P.L. Yue, “Wet Oxidation of High Concentration Reactive Dyes”, Fourth International Conference on Advanced Oxidation Technologies, Orlando, Florida, September 1997.
  155. Chai, X., **Chen, G.**, Yue, P.L. and Mi, Y., “Pilot Scale Membrane Separation of Electroplating Wastewater by Reverse Osmosis and of Textile Dyeing Wastewater by Nanofiltration”, The 1996 International Congress on Membrane and Membrane Processes, Yokohama, Japan, August, 1996.
  156. Lei, L., **Chen, G.**, Porter, J. F. and Yue, P.L., “Treatment of PVA-Containing Desizing Wastewater by Promoted Wet Oxidation”, The Third International Conference on Advanced Oxidation Technologies, Cincinnati, USA, October, 1996.
  157. Lei, L., Hu, X., **Chen, G.**, Porter, J. F. and Yue, P.L., “Wet air oxidation of desizing wastewater from the textile industry”, in *Proceedings of Asia – Pacific Conference on Sustainable Energy and Environmental Technology*, Singapore, June 1996.
  158. Douglas, W.J.M. and **Chen, G.**, “Combined Impingement and Through Air Drying of Paper”, **Keynote lecture** in *Proceedings of the 10<sup>th</sup> International Drying Symposium*, Krakow, Poland, July, 1996.
  159. Chai, X., **Chen, G.**, Yue, P.L. and Mi, Y., “Treatment of Electroplating Waste Water and Textile Dyeing Water by Pilot Plant Scale Membrane Separation of Reverse Osmosis and Nanofiltration”, 8<sup>th</sup> Annual Meeting of the North American Membrane Society, Ottawa, Canada, May, 1996.
  160. Porter, J. F., Hu, X., **Chen, G.** and Yue, P.L., “The Use of Advanced Oxidation Processes for the Treatment of Wastewaters in Hong Kong”, World Environmental Congress ’95, London, Ontario, Canada, September, 1995.
  161. **Chen, G.**, Gomes, V. G. and Douglas, W.J.M., “Impingement Drying of Paper”, in *Proceedings of the 9<sup>th</sup> International Drying Symposium*, Goldcoast, Australia, August, 1994.

**Patents:**

1. Hu, J., **Chen, G.** and Lo, M.C., Synthesis and application of modified maghemite and jacosite nanoparticles for the removal and recovery of heavy metals from industrial wastewater, US Patent 7,622,423 B1.
2. Guo, L. and **Chen, G.**, Method for making highly stable diamond film on titanium substrate, US Patent 7,833,581 B2.
3. Yuan, C., **Chen, G.**, Zhang, X., Li, Z., Liu, Z., Method for Preparing Aqueous Polyacrylate Modified Polyurethane Dispersions, US Patent, Filing No. 60/997,108.

**4. List of Research Grants as Principle Investigator for the Past 10 Years**

During the past ten years, I have attracted research funding from various agencies, including the HK Research Grants Council for fundamental studies, the Environmental Conservation Fund for applied research on environmental protection, the Innovative Technology Fund from Hong Kong SAR Government, one high impact area grant and one Research Project Competition from HKUST. Particularly, the total amount awarded to me as principal investigator is over **HK\$ 33,500,000**.

**NOTE:**

DAG:	Direct Allocation Grant, HKUST
ECF:	Environmental Conservation Fund
ITF:	Innovation Technology Fund
NSFC:	National Natural Science Foundation of China
RGC:	Research Grant Council, HK
RGC-GRF:	RGC-General Research Fund
RTG:	Research Travel Grant, HKUST

<b>Project Title and Duration</b>	<b>Grant Source</b>	<b>Amount</b>
Oxidative Chemical Vapor Deposition of Conductive Polymers on Particle Materials as Cathodes for Lithium Ion Batteries (2017-2020)	RGC-GRF	540,824
Fundamental Investigation of Magneli Phase Titanium Oxide Nanotube Arrays as Host of Sulfur for Cathode of High Performance Lithium-Sulfur Batteries (2016-2019)	RGC-GRF	501,255
The green production of lithium iron phosphate particles using microwave heated solution chemistry method (2013-2016)	RGC-GRF	645,500
Fabrication and characterization of novel inorganic membrane for electrochemical-membrane-filtration of oily wastewater (2012-2015)	RGC-GRF	500,000
Novel Highly Ordered Micro-( Nano-) Tube Electrode Materials: Preparation, Characterization and Application in Photoelectrochemical Degradation of Priority PTS Pollutants (2011-2014)	RGC-NSFC	500,000
Development of polyurethane based water-borne coating for construction industries (2010-2011)	ITF	1,000,842
Lithium ion EV batteries - development and production (2009-2011)	ITF	3,450,000
Carbon Nanotube Production and its Application as Catalyst Support and Advanced Material for Energy Storage (2009-2011)	NAMI	3,991,000
Center for Green Products and Processing Technologies (2007-2011)	FYTGS	6,180,188
Science and technologies for a sustainable supply	RPC	620,000

of renewable energy from biomass (2007-2009)		
The 5 <sup>th</sup> Asia-Pacific Drying Conference	KC Wong Foundation	45,000
Fundamental study of -FeOOH coated maghemite nanoparticles for fast adsorption and recovery of Cr(VI) (2007-2009)	RGC	538,460
Combined Electrochemical process and Membrane Biological Reactor (MBR) for Treatment and Reuse of Restaurant Wastewater (2005-2008)	RGC	684,906
Innovative synthesis, formulation, production and application of environmental friendly paint for coatings of woodenware (2005-2007)	ITF	5,812,780
Nanoparticle materials fabrication	Topin Battery Ltd.	120,000
Innovative technologies for conversion of MSW and C&D waste into various forms of valuable products (2004-2005, PM M.C. Lo)	Emerging High Impact Area, HKUST	1,000,000
Microwave freeze-drying of aqueous solution of high value products with variable initial porosity (2004-2007)	RGC	378,000
Symposium on Developments of Chemical Engineering in Asia (2004)	K.C. Wong Education Fund	90,000
Development and characterization of high activity and high stability boron doped diamond electrode on silicon coated titanium substrate for anodic oxidation of refractory pollutants in wastewater (2003-2006)	RGC	380,000
Fabrication and study of Ti/IrOx-Sb <sub>2</sub> O <sub>5</sub> -SnO <sub>2</sub> electrocatalysts for O <sub>2</sub> evolution (2003-2006)	DAG	67,150
Innovative textile processing technologies (2003)	Link Dyeing	60,000
Oily wastewater treatment and reuse system - a demonstration project (2003-2005)	ECF	331,000
Waste Glass Management and Application of Glassphalt in Hong Kong (2003-2005)	Environmental Protection Department, HK	1,270,000
Development of integrated advanced computer control system for injection molding machines (2003-2005) (PM, F. Gao)	ITF	5,705,300
Advanced processing of Chinese medicine (2002-2006)	Huashu Zhongkang	180,000

## List of Students Supervised or Supervising

<b>Ph.D. Students Graduated (13)</b>		
Xueming Chen	1998-2001	Electrochemical Treatment of Refractory Wastewaters (Co-Supervisor Prof. P.L. Yue)
Hongwei Wu	2001-2003	Corrugated Heat and Mass Transfer in Microwave Freeze Drying of Material with a Dielectric Core (Co-Supervisor Prof. Z. Tao of Beihang University)
Jing Hu	2002-2005	Fast Adsorption and Recovery of Heavy Metals by Magnetic Nanoparticles (Co-Supervisor Prof. M.C. Lo of Civil)
Wei Wang	2001-2005	Dielectric Material Assisted Freeze Drying of Extract of American Ginseng Using Microwave Heating
Liang Guo	2003-2007	Fabrication of Stable and Active Diamond Film Anode for Electrooxidation
Tanja Tuutijärvi	2005-2009	Fundamental Study of Arsenate Removal From Water by Maghemite Nanoparticles (University of Kuopio, Finland, Prof. Mika Sillanpää, co-Supervisor)
Huanjun Zhang	2004-2009	Photoelectrochemical Oxidation of Refractory Water Pollutants
Xusong Qin	2004-2011	Pilot-scale electrocoagulation-electroflootation of restaurant wastewater : stable DSA fabrication, effluent quality monitoring, and operating cost control (Prof. F. Gao, Co-supervisor)
Jing He	2006-2012	Poly (2-(acetoacetoxy) ethyl methacrylate) : environmentally friendly synthesis, fluorescent properties and optical sensing for ammonia (Prof. T.Y. Zhang of ME, co-supervisor)
Bin Yang	2006-2012	A novel electrocatalytic membrane : preparation, characterization, and applications (Prof. G.H. Chen of Civil, co-supervisor)
Hongjie Xu	2010-2015	High capacity Co-Ni-Mn materials synthesis for cathode of lithium ion batteries
Ping Geng	2010-2015	Development of porous ceramic membrane with a conductive layer made from Magneli titanium oxides
Jingyang Su	2012-2016	TiO <sub>2</sub> -Based Nanostructured Photoelectrodes: Synthesis, Characterizations and Environmental Applications

<b>Ph.D. Students Supervising (7)</b>		
Arindam Haldar	2012-	Advanced binder materials for high performance anodes of lithium ion batteries
Yuebin Yang	2013-	High performance dual carbon based batteries
Qiang Liu	2013-	Chemical vapor deposition polymer coating of nanoparticles for lithium ion batteries
Soumyadip Majumder	2014-	High performance graphene-based Li-S batteries

Leiting Zhang	2014-	Exploring LiF-based composites for high energy density positive electrode materials (Prof. J-M Tarascon, College of France, co-supervisor)
Zhaowen Bai	2015-	Theoretical investigation of high voltage cathode materials for lithium ion batteries
Kunjilna Bharatha Lekha	2015-	Desalination with microbial fuel cell

<b>Master of Philosophy Students Graduated (36)</b>		
Man Yin Ho	1997-1999	Enhanced Electro-osmosis Dewatering of Fine Particle Suspension Using a Rotating Electrode
Chun Kit Lai	1998-2000	Biological Sludge Dewatering (Co-supervisor Prof. M.C. Lo of Civil)
Feng Shen	1999-2001	Removal of pollutants from wastewaters using electrochemical methods (Co-supervisor Prof. P. Gao)
Shengli Cao	1999-2001	Simultaneous Removal of COD and Ammonia from Wastewater Using Wet Air Oxidation (Co-supervisors: Prof. X. Hu & P.L. Yue)
Hoi Wei Lee	1999-2001	Integrated Wastewater Treatment System for Textile Wastewaters (Co-supervisor Prof. P.L. Yue)
Qian Fang	2002-2004	MS2 Inactivation by Chloride-Assisted Electrochemical Disinfection (Co-supervisor Prof. C Shang of Civil)
Yuan Tian	2002-2004	Fabrication and Characterization of Active and Stable Ti/Si/BDD Anodes for Electrooxidation
Tony Lam	2005-2007	Biodegradability Study of PA-PU Water-Borne Coating
Jingshu Jia	2007-2008	Novel Materials for both Hydrogen and Oxygen Evolution
Feray Wong	2009-2011	Making of high quality lithium ferrous phosphate nanomaterials for cathode of lithium ion batteries
Boris Choi	2009-2011	Development of ionic liquid facilitated separators for lithium ion batteries
Yunxian Qian	2011-2013	Synthesis and Characterization of Morphology-Controllable $\text{Li}_{(1+x)}\text{Mn}_{1.5}\text{Ni}_{0.5}\text{O}_4$ ( $0 \leq x \leq 0.11$ ) as Cathode Materials for Lithium-ion Batteries
Nan Lin	2011-2013	Electrochemical-Mechanical Model for the Solid-Electrolyte Interphase Evolution in Lithium-ion Batteries with Uncertainty Quantification (Prof. Francesco Ciucci of ME, Co-supervisor)
Zhanen Li	2011-2013	Synthesis and Characterization of $\text{MnCO}_3$ and $\text{Mn}_2\text{O}_3$ Anode Materials for Lithium Ion Batteries
Yang Zhao	2011-2013	The Effect of Ir Content on the Service Life of $\text{Ti}/\text{IrO}_2\text{-Sb}_2\text{O}_5\text{-SnO}_2$ DSA for $\text{O}_2$ Evolution
Jingsong Chen	2011-2014	Coupled Electrochemical-thermal Model for $\text{LiFePO}_4$ -Graphite Lithium-ion Batteries
Xiwen Guan	2011-2014	Formulation and Performance Study on of Refrigerants for Moderately High Temperature Heat Pump
Cheng Sun	2011-2014	Preparation and Characterization of Silicon/Graphene Oxide-Based Anode for Lithium Ion Battery

Zhantao Liu	2011-2014	Synthesis and Characterization of LiTi <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> /C Composites as Anode Materials for Aqueous Rechargeable Lithium Ion Batteries
Leiting Zhang	2012-2014	Synthesis and Characterization of LiFeSO <sub>4</sub> F as Novel Cathode Material for Lithium-ion Batteries
Lin Zhu	2012-2014	Graphitic Carbon Nitride Quantum Dots Modified TiO <sub>2</sub> Nanotube Arrays: Synthesis, Characterization, and Environmental Applications
Rui Liang	2012-2014	A Polydopamine-coated Sulfur/CMK-3 Composite as a Cathode Material for Lithium-Sulfur Batteries
Zhaowen Bai	2012-2015	Theoretical Investigations on Lithium-Ion Activation in Lithium Cobalt Pyrophosphate Li <sub>2</sub> CoP <sub>2</sub> O <sub>7</sub>
Chengcheng Fang	2012-2015	Modification of SnO <sub>2</sub> and Si-based/graphene oxide composites as high-performance anode materials for lithium ion batteries
Sichao Guo	2012-2015	Improved High-Voltage LiMn <sub>1.5</sub> Ni <sub>0.5</sub> O <sub>4</sub> Cathode Coated with Ionic Conductor Li <sub>3</sub> VO <sub>4</sub>
Fangxi Xie	2012-2015	MgTi <sub>2</sub> O <sub>5</sub> /Carbon Composite Materials as Anode with Superior Rate Performance for Lithium and Sodium Ion Batteries
Fan Zheng	2012-2015	Simulation of Electrochemical-Thermal Characteristics of Cylindrical Li <sub>x</sub> Mn <sub>2</sub> O <sub>4</sub> Battery Under Air-Cooled Condition
Yang Han	2013-2015	Additives for electrolyte of high voltage lithium ion batteries
Cancan Lu	2013-2015	Advanced supercapacitors with surface modified RGO
Zhenyu Zhao	2013-2016	Heat Pump Drying of Food at Moderately High Temperature
Jiaying Li	2013-2016	The effect of Ru content on the durability of Ti/RuO <sub>2</sub> -SnO <sub>2</sub> -Sb <sub>2</sub> O <sub>5</sub> anodes for oxygen evolution

<b>Master of Philosophy Students Supervising (4)</b>		
Hsi-wen Wu	2013-	LTO enhanced Li-S batteries
Yanting Shi	2014-	Li-S batteries with in-situ formed sulfur from the oxidation of FeS <sub>2</sub> (Prof. Baohua Li, Tsinghua U, co-supervisor)
Michael Li	2015-	Continuous Production of LiFePO <sub>4</sub> with Microwave Heating
Jing Li	2016-	Anode material for Li-S batteries (Prof. Baohua Li, Tsinghua U, co-supervisor)