

RESUME



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School of Environment, Beijing Normal University
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EDUCATION

- **Sept. 2000-July 2004:** Ph.D. Program
MAJOR: *Environmental Science: Thermodynamics*
School of Environment
Peking University, Beijing, P.R. China
- **Sept. 1997-July 2000:** M. Eng. Program
MAJOR: *Industrial Automation: Nonlinear Dynamics*
School of Electrical Engineering
Guangxi University, Nanning, Guangxi, P.R. China
- **Sept. 1990-July 1994:** B.Eng. Program
MAJOR: *Electrical Engineering*
Department of Electrical Engineering
Zhejiang University, Hangzhou P.R. China

HONORS AND AWARDS

CPSF POSTDOCTORAL SCHOLARSHIP,	2005-2006
FIRST PRIZE FOR S&T PROGRESS IN UNIVERSITY (MOE, CHINA)	2009
NEW CENTURY EXCELLENT TALENTS IN UNIVERSITY (CHINA)	2009
MOST CITED ARTICLES AWARD FROM ELSEVIER	2010
YOUNG SCIENCE & TECHNOLOGY AWARD (CSES)	2010

PROFESSIONAL ACTIVITIES

- **2010-present:** Secretary for *International Society for Ecological Modelling-Asia/Australia*.
- **2009-2010:** Guest Editor for *Ecological Modelling* (Elsevier).
- **2010-present:** Guest Editor for *Ecological Informatics* (Elsevier).

- **2010-present:** Guest Editor for *Acta Ecologica Sinica* (Elsevier).
- **2011-present:** Guest Editor for *Energies* (MDPI).
- **2008-present:** Member of Editorial Board in *Frontiers of Earth Science* (Springer).
- **2010-present:** Member of Editorial Board in *Journal of Environmental Management* (Elsevier).
- **2010-present:** Member of Editorial Board in *Ecological Modelling* (Elsevier).
- **2011-present:** Member of Editorial Board in *ISRN Renewable Energy* (Hindawi).
- **2011-present:** Member of Editorial Board in *Computational Ecology and Software* (ISCE).

Symposium and Conference Organizations:

- 2007: *Symposium on Environmental Management* in 6th International Conference on Environmental Informatics (ISEIS 2007) , Bangkok, Thailand.
- 2009: *Symposium on Ecological Accounting* in 2009 ISEM 2009 Conference-Ecological Modelling for Enhanced Sustainability in Management, Quebec, Canada.
- 2009: *Symposium on Ecological Modelling for Environmental Flows* in 2009 IISEM 2009 Conference-Ecological Modelling for Enhanced Sustainability in Management, Quebec, Canada.
- 2009: *Symposium on Human Resilience and Adaptation to Global Change* in the International Workshop in Conservation and Sustainable Development: Understanding Coupled Socio-Cultural and Natural Systems in Fragile Landscapes, Beijing, China.
- 2010: Co- Chair for *International Workshop on Low Carbon Industry and Multi-scale Input-output Modelling* in IEMSS2010, Ottawa, Canada.
- 2010: Assistant Secretary-in-General for 7th International Conference on Environmental Informatics (ISEIS 2010), Beijing, China.
- 2011: General Secretary for *International Workshop on Blueprint for Sustainable, Ecologically-based Watershed Management in China*, Beijing, China.
- 2011: General Secretary for *International Workshop on Environmental and Water Resources (EWR)*, Beijing, China.
- 2011: General Secretary for *International Conference- Ecological Modelling for Global Change and Coupled Human and Natural Systems*, ISEM 2011 Beijing, China.

- **Professional Paper Reviews:**

Energy
 Entropy
 Exergy
 Energy Policy
 Energy Conservation and Management
 Journal of Cleaner Production
 Environmental Science & Technology
 Journal of Environmental Management
 Ecological Modelling
 Ecological Informatics
 Ecological Engineering

Journal of Environmental Informatics
 Journal of Industrial Ecology
 Information Science
 Mathematics and Computer in Simulation
 Communications in Nonlinear Science and Numerical Simulation
 Neural Computing and Applications
 Environmental Science & Policy
 Land Degradation & Development
 Population and Environment
 Regional Studies
 International Journal of Energy and Environment
 Environmental Engineering and Management
 Fresenius Environmental Bulletin
 Scientific Research and Essays
 African Journal of Biotechnology

WORK EXPERIENCE

- **2011- present :** Professor, Assistant Dean
Researches: *Energy accounting*
Thermodynamics
Ecological modelling
Where: School of Environment, State Key Joint Laboratory of Environmental Simulation and Pollution Control, Beijing Normal University, Beijing
- **2007-2010:** Associate Professor, Assistant Dean
Researches: *Environmental modeling*
Thermodynamics
Ecological accounting
Where: School of Environment, State Key Joint Laboratory of Environmental Simulation and Pollution Control, Beijing Normal University, Beijing
- **2006-2007:** Assistant Professor
Researches: *Systems dynamics*
Energy and exergy analysis
Integrated water resources management
Environmental modeling for urban ecosystem
Where: School of Environment, State Key Joint Laboratory of Environmental Simulation and Pollution Control, Beijing Normal University, Beijing
- **2004-2006:** Postdoctoral Fellow
Duties: *Energy and resources accounting, Materials flow analysis*
Where: Department of Mechanics, State Key Laboratory of Turbulence and Complex Systems, Peking University, Beijing
- **1994-1997:** Design Engineer
Duties: *Systems optimization*
Where: Guangxi Electric Power Industry Investigation Design and Research

Institute, Guangxi, P. R. China

RESEARCH FUNDING

- National Postdoctoral Fellow Science Foundation (05): Ecological thermodynamics and energy and resource accounting (PI: Bin Chen), \$ 3,000
- Beijing Municipal Natural Science Foundation-Key Program (06-08): Designing, evaluation and regulation for the constructed wetland in the northern China (PI: Bin Chen), \$ 20,000
- National Basic Research Program of China -973 Project (06-10): Theory of system characterization and mechanism of ecological adjustment for modern urban “diseases (PI: Bin Chen), \$ 70,000
- National Basic Research Program of China -973 Project (06-10): Hydro-ecological processes, water-environmental effects and integrated control of ecological security for wetlands in Huang-Huai-Hai region of China (PI: Bin Chen), \$ 40,000
- National Science and Technology Support Program (07-10): Eco-security assessment and regulation methods and technologies for urban planning (PI: Bin Chen), \$ 15,000
- National Natural Science Foundation (08-10): Theory and methodology on the assessment of the available ecological water resources in the river basin (PI: Bin Chen), \$ 30,000
- Sino-UK Joint Project (09-10): Low-carbon economy planning for Chongqing city (PI: Bin Chen), \$ 30,000
- National Natural Science Foundation-Key Program (09-11): Ecological risk analysis and security regulation for the dams (PI: Bin Chen), \$ 60,000
- New Century Excellent Talents in University (NCET) Program (10-12): Multi-scale ecological modeling for ecosystems (PI: Bin Chen), \$ 70,000
- World Bank Project (10-12): Environmental modeling and assessment of biogas projects in the rural areas (PI: Bin Chen), \$ 70,000
- National High-tech R&D Program of China -863 Project (10-13): Environmental modeling and emergency management for urban areas (PI: Bin Chen), \$ 400,000

PUBLICATIONS

Edited Special Issue

Z.F. Yang and B. Chen (2011), *Wetlands in China*, A special issue *Journal of Ecological Modelling*, Elsevier.

Z.F. Yang and B. Chen (2011), *ISEIS 2010*, Vol.2, *Procedia of Environmental Sciences*, Elsevier.

B. Chen and S.Y Zhou (2011), *iEMSs2010*, Vol.5, *Procedia of Environmental Sciences*, Elsevier.

Z.F. Yang and B. Chen (2011), *Ecological Informatics for Ecosystem Conservation*, A special issue *Journal of Ecological Informatics*, Elsevier.

B. Chen (2011), *Low-carbon Transition Worldwide*, A special issue *Energies*, MDPI.

Journal Papers

Selected Published papers

1. B. Chen, G. Q. Chen (2006), “Exergy analysis for resource conversion of the Chinese society 1993 under the material product system”, *Energy*, 31, 1115-1150.
2. B. Chen, G. Q. Chen, Z.F. Yang (2006), “Exergy-based resource accounting for China” , *Ecological Modelling*, 196, 313-328.
3. G.Q. Chen, M.M. Jiang, B. Chen, Z.F. Yang, C. Lin (2006), “Emergy based analysis of Chinese agriculture

- 1980-2000”, *Agriculture, Ecosystems & Environment*, 115, 161-173.
4. B. Chen, G. Q. Chen (2006), “Ecological footprint accounting based on emergy-A case study of the Chinese society”, *Ecological Modelling*, 198, 101-114.
 5. B. Chen, G. Q. Chen (2007), “Ecological footprint accounting and analysis of the Chinese Society 1981-2001 based on embodied exergy”, *Ecological Economics*, 61(2-3), 355-376. (Most cited paper from Chinese Mainland Authors)
 6. B. Chen, G. Q. Chen, Z.F. Yang, M.M Jiang (2007), “Ecological footprint accounting for energy and resource in China”, *Energy Policy*, 35, 1599-1609.
 7. G. Q. Chen, B. Chen (2007), “Resource analysis of the Chinese Society 1980-2002 based on exergy-Part 1: Fossil Fuels and Energy Minerals”, *Energy Policy*, 35, 2038-2050.
 8. B. Chen, G. Q. Chen (2007), “Resource analysis of the Chinese Society 1980-2002 based on exergy-Part 2: Renewable Energy Sources and Forest”, *Energy Policy*, 35, 2051-2064.
 9. B. Chen, G. Q. Chen (2007), “Resource analysis of the Chinese Society 1980-2002 based on exergy-Part 3: Agricultural Products”, *Energy Policy*, 35, 2065-2078.
 10. B. Chen, G. Q. Chen (2007),” Resource analysis of the Chinese Society 1980-2002 based on exergy-Part 4: Fishery and Rangeland”, *Energy Policy*, 35, 2079-2086.
 11. G. Q. Chen, B. Chen (2007), “Resource analysis of the Chinese Society 1980-2002 based on exergy-Part 5: Resource Structure and Intensity”, *Energy Policy*, 35, 2087-2095.
 12. M.M. Jiang, B. Chen, Zhou, J.B., Tao, F.R., Li, Z., Yang, Z.F., Chen, G.Q. (2007), “Emergy account for biomass resource exploitation by agriculture in China”. *Energy Policy* 35, 4704-4719.
 13. B. Chen, L.Z. Xia, G.Q. Chen (2001), “Retrospect and prospect of watershed hydrological model”, *Communications in Nonlinear Science and Numerical Simulation*, 6(3), 172-177.
 14. L Q. Huang, G. Q. Chen, Yong Z, B. Chen, S J. Luan (2007), “Exergy as a unified measure of water quality”, *Communications in Nonlinear Science and Numerical Simulation*, 12(5), 663-672.
 15. Z.M. Chen, B. Chen, J.B. Zhou, Z. Li, Y. Zhou, X.R. Xi, C. Lin, G.Q. Chen (2008), “Constructed wetland treatment of municipal wastewater in Longdao River, Beijing”. *Communications in Nonlinear Science and Numerical Simulation*, 13(9), 1986-1997.
 16. X.H. Yuan, Xi Ji, H. Chen, B. Chen, G.Q. Chen (2008), “Urban dynamics and multiple-objective programming: A case study of Beijing”. *Communications in Nonlinear Science and Numerical Simulation*, 13(9), 1998-2017.
 17. X. H. Zhang, H.W. Zhang, B. Chen*, G Q. Chen (2008), “Water resources strategic planning based on system dynamics- a case study of Tian’jin city”, *Communications in Nonlinear Science and Numerical Simulation*, 13(10), 2328-2336.
 18. M M. Jiang, J B. Zhou, B. Chen, G Q. Chen (2008), “Emergy account of the Chinese Economy 2004”, *Communications in Nonlinear Science and Numerical Simulation*, 13, 2337–2356.
 19. X. H. Zhang, H. W. Zhou., B. Chen*, H. C. Guo, G. Q. Chen, B. A., Zhang (2009), “An inexact-stochastic dual water supply programming model”, *Communications in Nonlinear Science and Numerical Simulation*, 14(1), 301-309.
 20. B. Chen, Z. M. Chen, Y. Zhou, J B. Chow, G.Q. Chen (2009), “Emergy as embodied energy based assessment for local sustainability of a constructed wetland in Beijing”, *Communications in Nonlinear Science and Numerical Simulation*, 14(2), 622-635.
 21. B. Chen, G. Q. Chen, F. H. Hao, Z. F. Yang (2009), “The water resources assessment based on resource exergy for the mainstream Yellow River”, *Communications in Nonlinear Science and Numerical Simulation*, 14(1), 331-334.
 22. Y. H. Qu, C. Lin., W. Zhou, Y. Li, B. Chen, G. Q. Chen (2009), “Effects of CO2 concentration and moisture content of sugar-free media on the tissue-cultured plantlets in large growth chamber”, *Communications in Nonlinear Science and Numerical Simulation*, 14(1), 322-330.
 23. X. Wang. Z.F. Yang, G. Huang, B. Chen (2009), “A high-order compact difference scheme for 2D Laplace and Poisson equations in non-uniform grid systems”, *Communications in Nonlinear Science and Numerical Simulation*, 14(2), 379-398.

24. X. Wang, L. Meng, B. Chen, Z. F. Yang, C. Li (2009), "Simulation of nitrogen contaminant transportation by a high-order compact difference scheme in the downstream Yellow River, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(3), 935-945.
25. B. Chen, Z. F. Yang, F. H. Hao, G. Q. Chen (2009), "Emergy-based energy and material metabolism of the Yellow River Basin", *Communications in Nonlinear Science and Numerical Simulation*, 14(3), 923-934.
26. X. M. Wei, B. Chen, Y.H. Qu, G.Q. Chen, C. Lin (2009), "Emergy analysis for 'Four in One' peach production system in Beijing", *Communications in Nonlinear Science and Numerical Simulation*, 14(3), 946-958.
27. B. Chen, G.Q. Chen, F.H. Hao, Z.F. Yang (2009), "Exergy-based water resource allocation of the mainstream Yellow River". *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1721-1728.
28. Q. Yang, B. Chen, Xi Ji, Y.F. He, G.Q. Chen (2009), "Exergetic evaluation of corn-ethanol production in China". *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2450-2461.
29. Y.H. Qu, X.M. Wei, Y.F. Hou, B. Chen, G.Q. Chen, C. Lin (2009), "Analysis for an environmental friendly seedling breeding system". *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1766-1772.
30. J.B. Zhou, M.M. Jiang, B. Chen, G.Q. Chen (2009), "Emergy evaluations for constructed wetland and conventional wastewater treatments". *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1781-1789.
31. G.Y. Liu, Z.F. Yang, B. Chen, Y. Zhang, L.X. Zhang, Y.W. Zhao, M.M. Jiang (2009), "Emergy-based urban ecosystem health assessment: a case study of Baotou, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(3), 972-981.
32. M.R. Su, Z.F. Yang, B. Chen (2009), "Set pair analysis for urban ecosystem health assessment", *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1773-1780.
33. Z.M. Chen, G.Q. Chen, B. Chen, J.B. Zhou, Z.F. Yang, Y. Zhou (2009), "Net ecosystem services value of wetland: Environmental economic account". *Communications in Nonlinear Science and Numerical Simulation*, 14(6), 2837-2843.
34. H. Zhou, B. Chen*, Z.X. Han, F.Q. Zhang (2009), "Study on probability distribution of prices in electricity market: a case study of Zhejiang, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2255-2265.
35. H. Zhou, B. Chen*, Z.X. Han, F.Q. Zhang (2009), "Study on economic withholding in electricity market of Zhejiang Province, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2495-2501.
36. Y. Zhang, Y.W. Zhao, Z. F. Yang, B. Chen, G.Q. Chen (2009), "Measurement and evaluation of the metabolic capacity of an urban ecosystem", *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1758-1765.
37. L.X. Zhang, B. Chen, Z.F. Yang, G.Q. Chen, M.M. Jiang, G.Y. Liu (2009), "Comparison of typical mega cities in China using emergy synthesis", *Communications in Nonlinear Science and Numerical Simulation*, 14(6), 2827-2836.
38. M.M. Jiang, J.B. Zhou, B. Chen, Z.F. Yang, X. Ji, L.X. Zhang, G.Q. Chen (2009), "Ecological evaluation of Beijing economy based on emergy indices". *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2482-2494.
39. Z.F. Yang, T. Sun, B.S. Cui, B. Chen, G.Q. Chen (2009), "Environmental flow requirements for integrated water resources allocation in the Yellow River Basin, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2469-2481.
40. R. Zhao, Z.F. Yang, T. Sun, B. Chen, G.Q. Chen (2009), "Freshwater inflow requirements for the protection of the critical habitat and the drinking water sources in the Yangtze River Estuary, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(5), 2507-2518.
41. Y.W. Zhao, Y. Qin, B. Chen, X. Zhao, Y. Li, X.A. Yin, G.Q. Chen (2009), "GIS-based optimization for the locations of sewage treatment plants and sewage outfalls - A case study of Nansha District in Guangzhou City, China", *Communications in Nonlinear Science and Numerical Simulation*, 14(4), 1746-

- 1757.
42. X. Zhao, B. Chen, Z.F. Yang (2009), "National water footprint in an input-output framework-a case study of China 2002", *Ecological Modelling*, 220, 245-253.
 43. G.Q. Chen, M.M. Jiang, J.B. Chow, B. Chen (2009), "Exergy account for ecological economic system: Chinese agriculture", *Ecological Modelling*, 220(3), 397-410.
 44. Z.F. Cai, Q. Yang, B. Zhang, H. Chen, B. Chen* G.Q. Chen (2009), "Water resources in unified accounting for natural resources", *Communications in Nonlinear Science and Numerical Simulation*, 14(9-10), 3693-3704.
 45. X. Ji, G. Q. Chen, B. Chen*, M.M. Jiang (2009), "Exergy-based assessment for waste gas emissions from Chinese Transportation", *Energy Policy*, 37, 2231-2240.
 46. L.X. Zhang, Z.F. Yang, B. Chen, G.Q. Chen, Y.Q. Zhang (2009), "Temporal and spatial variations of rural energy consumption in China", *Communications in Nonlinear Science and Numerical Simulation*, 14(11), 4022-4031.
 47. L.X. Zhang, Z.F. Yang, B. Chen*, G.Q. Chen (2009), "Rural energy in China: pattern and policy", *Renewable Energy*, 34(12), 2813-2823.
 48. G.Q. Chen, B. Chen* (2009), "Extended exergy analysis of the Chinese society". *Energy*, 34(9), 1127-1144.
 49. M.R. Su, Z.F. Yang, B. Chen, S. Ulgiati (2009), "Set pair analysis for urban ecosystem based on emergy", *Ecological Modelling*, 220(18), 2341-2348.
 50. G.Y. Liu, Z.F. Yang, B. Chen, S. Ulgiati (2009), "Emergy-based urban health evaluation and spatial development pattern", *Ecological Modelling*, 220(18), 2291-2301.
 51. Y. Li, B. Chen, Z.F. Yang (2009), "Ecological network analysis for the water use system-a case study of the Yellow River Basin", *Ecological Modelling*, 220(22), 3163-3173.
 52. B.S. Cui, H.J. Zhai, S.K. Dong, B. Chen, S.L. Liu (2009), "Multivariate analysis of the effects of edaphic and topographical factors on plant distribution in the Yilong Lake Basin of Yun-Gui Plateau, China", *Canadian Journal of Plant Science*, 89(1): 209-219.
 53. S.L. Liu, Y. H. Dong, M.X. Wen, B. Chen (2009), "Quantify the landscape effect and environmental sustainability of rural region planning at town scale near metropolis", *Frontiers of Earth Science in China*, 39(1), 112-117.
 54. G. Yan, J. J. Lin, B. Chen* (2009), "The relationship between urban energy consumption and atmospheric environment in China", *Frontiers of Earth Science in China*, 39(3), 337-348.
 55. Y. Li, B. Chen* (2009), "Study on sustainable water use of the Haihe River Basin using ecological network analysis", *Frontiers of Earth Science in China*, 39(4), 419-430.
 56. Z.F. Yang, M M. Jiang, B. Chen, J.B. Zhou, G Q. Chen (2010), "Emergy based analysis of Chinese economy 1978-2004", *Energy Policy*, 38(2), 875-886.
 57. L. Zeng, Z.L. Luo, B. Chen*, Z.F. Yang, Z. Li, W.X. Lin, G.Q. Chen (2010), "Numerical analysis of a lock-release oil slick", *Communications in Nonlinear Science and Numerical Simulation*, 15(8), 2222-2230.
 58. Z.M. Chen, G.Q. Chen, J.B. Zhou, M.M. Jiang, B. Chen (2010), "Ecological input-output modeling for embodied resources and emissions in Chinese economy", *Communications in Nonlinear Science and Numerical Simulation*, 15(7), 1942-1965.
 59. X. Zhao, H. Yang, Z.F. Yang, B. Chen, Y. Qin (2010), "Applying the input-output method to account for water footprint and virtual water trade in the Haihe River basin in China", *Environmental Science and Technology*, 44(23), 9150-9156.
 60. S. Gao, Z.F. Yang, B. Chen (2010), "Network environ analysis for the holistic spatial arrangement of reserves in Wuyishan Nature Reserve, China", *Journal of Environmental Informatics*, 15(2), 74-86.
 61. J. Dai, J. Qi, J.J. Chi, B. Chen* (2010), "Integrated water resource security evaluation of Beijing based on GRA and TOPSIS", *Frontiers of Earth Science in China*, 4(3), 357-362.
 62. Y.P. Cai, G.H. Huang, Q. Tan, B. Chen, I. Maqsood (2011), "Identification of optimal strategies for improving eco-resilience to floods in ecologically vulnerable regions of a wetland", *Ecological Modelling*, 222(2), 360-369.

63. J.H. Bai, B.S. Cui, B. Chen, K.J. Zhang, W. Deng, H.F. Gao, R. Xiao (2011), "Spatial distribution and ecological risk assessment of heavy metals in surface sediments from a typical plateau lake wetland, China", *Ecological Modelling*, 222(2), 301-306.
64. F.L. Xu, J.J. Wang, B. Chen, Y. Wang, W.J. Wang, N. Qin (2011), "The variations of exergies and structural exergies along eutrophication gradients in Chinese and Italian lakes", *Ecological Modelling*, 222(2), 337-350.
65. Z.M. Chen, B. Chen*, G. Q. Chen (2011), "Cosmic exergy based ecological assessment for a constructed wetland in Beijing", *Ecological Modelling*, 222(2), 322-329.
66. L.X. Zhang, S. Ulgiati, Z.F. Yang, B. Chen (2011), "Emergy evaluation and economic analysis of three wetland fish farming systems in Nansi Lake area, China", *Journal of Environmental Management*, 92(3), 683-694.
67. F. Xu, Z.F. Yang, B. Chen, Y.W. Zhao (2011), "Ecosystem health assessment of the plant-dominated Baiyangdian Lake based on eco-exergy", *Ecological Modelling*, 222(1), 201-209.
68. M.R. Su, Z.F. Yang, B. Chen (2011), "Relative urban ecosystem health assessment: A method integrating comprehensive evaluation and detailed analysis", *Ecohealth*, 7, 459-472.
69. Z.F. Yang, B. Chen (2011), "Systematic studies on wetlands in China", *Ecological Modelling*, 222(2), 221-223.
70. G.Y. Liu, Z.F. Yang, B. Chen, L.X. Zhang (2011), Emergy-based multiple spatial scale analysis framework combining resources and emissions impact for urban ecological economic evaluation. *Entropy*, 13(3): 720-743.
71. L.P. Ju, B. Chen* (2011), "Embodied energy and emergy evaluation of a typical biodiesel production chain in China", *Ecological Modelling*, 2385-2392.
72. Larocque, G.R, D. Mailly, T.-X. Yue, M. Anand, C. Peng, C. Kazanci, M. Etersson, P. Goethals, S.E. Jørgensen, J.R. Schramski, E.J.B. McIntire, D. Marceau, B. Chen, G.Q. Chen, Z.F. Yang, B. Novotna, N. Luckai, J.S. Bhatti, J. Liu, A. Munson, A.M. Gordon, J. Ascough II, Synthesis of facilitated discussions held at the symposia organized for the 2009 conference of the International Society for Ecological Modelling in Quebec City, Canada (October 6-9, 2009), 222: 2456-2468.
73. S.Q. Chen, B. Chen*(2011), "Assessing inter-city ecological and economic relations: An emergy-based conceptual model", *Frontiers of Earth Science*, 2011. 5(1), 97-102.
74. S. Q. Chen, B. Chen* (2011), "Information-based Network Environ Analysis: A system perspective for ecological risk assessment", *Ecological Indicators*, 11: 1664-1672.
75. M.M. Jiang, B. Chen* (2011), "Ecological evaluation of Beijing based on embodied exergy", *Ecological Modelling*, 222: 2149-2165.
76. M.R. Su, Z.F. Yang, B. Chen (2011)," Emergy analysis for urban ecosystem", *International Journal of Exergy*, 192-209.
77. G.Y. Liu, Z.F. Yang, B. Chen (2011), "Ecological network analysis for urban health evaluation-a case study of Beijing", *International Journal of Exergy*, 168-190.
78. G.Y. Liu, Z.F. Yang, B. Chen (2011), "Monitoring trends of urban development and environmental impact of Beijing, 1999-2006", *Science of the Total Environment*, 18:3295-3308.
79. G.Y. Liu, Z.F. Yang, B. Chen (2011), "Ecological network determination of sectoral linkages, utility relations and structural characteristics on urban ecological economic system", *Ecological Modelling*, 222:2825-2834.
80. J. Yang, B. Chen*(2011), "Using LMDI method to analyze the change of industrial CO₂ emission from energy use in Chongqing", *Frontiers of Earth Science*, 103-115.
81. J. Yang, W.C. Chen, B. Chen*(2011), "Impacts of biogas projects on agro-ecosystem in rural areas — A case study of Gongcheng", *Frontiers of Earth Science*, 5(3), 317-322.
82. S. Q. Chen, B. Chen* (2011), "Modeling ecological risk on the system scale: A review and perspectives", *Journal of Environmental Informatics*, dx.doi.org/10.1016/j.ecoinf.2011.05.005.
83. J.H. Bai, L.B. Huang, B. Chen, K.J. Zhang, C. Huang, P.P. Liu (2011), "Effects of 1cultivation on soil properties of salt marshes in the Yellow River Delta, China", *Ecological Informatics*, in press.

84. W.B. Lin, J. Yang, B. Chen (2011), “Temporal and spatial analysis of integrated energy and environment efficiency in China based on the Green GDP Index”, *Energies*, in press.
85. J. Yang, B. Chen* (2011), “Urban energy security evaluation based on modified Grey Relational Analysis”, *Journal of Environmental Informatics*, in press.
86. G.Y. Liu, Z.F. Yang, B. Chen (2011), “Extended exergy-based urban ecosystem network analysis: a case study of Beijing, China”, *Journal of Environmental Informatics*, in press.
87. G.Y. Liu, Z.F. Yang, B. Chen, L.X. Zhang (2011), Modelling a thermodynamic-based comparative framework for urban sustainability: Incorporating economic and ecological losses into emergy analysis. *Energy Sources Part B*, in press.
88. F. Xu, Z.F. Yang, B. Chen, Y.W. Zhao (2011), “Development of a structurally dynamic model for ecosystem health prognosis of Baiyangdian Lake, China”, *Ecological Indicators*, in press.
89. L.X. Zhang, B. Song, B. Chen (2011), “Emergy-based analysis of four farming systems: Insight into agricultural diversification in rural China”, *Journal of Cleaner Production*, revised.

Submitted manuscript for journal publication

1. J. Dai, B. Chen*, E. Sciubba (2011), “Ecological accounting for China based on exergy”, *Renewable and Sustainable Energy Reviews*.
2. J. Dai, B. Chen*, E. Sciubba (2011), “Extended exergy analysis for Chinese transportation system”, *Renewable and Sustainable Energy Reviews*.
3. L.P. Ju, B. Chen (2011), “Categorization of Tier 3 for economic sector CO2 Emissions”, *Energy Policy*.
4. X. F. Mao, Z.F. Yang, B. Chen (2011), “Examination of wetlands system using ecological network analysis: A case study of Baiyangdian Basin, China”, *Environmental Science and Technology*.

Referred Conference Papers and Presentations

1. B. Chen*, “ Ecological accounting for biogas-linked agro-ecosystem”, 2011, National Institute of Agricultural Sciences and Technology (NIAST), Korea, June 20, 2011.
2. B. Chen*, “ Ecological modelling for urban metabolic system”, 2011, Kyung-Hee University, Korea, June 21, 2011.
3. B. Chen*, “ Biophysical metrics for water resource assessment: focusing on metabolism”, 2011, Pusan University, Korea, June 23, 2011.
4. B. Chen*, “Ecological accounting based on thermodynamic metrics”, 2011 Headquarter Meeting of Ecological Modelling in Asia , Yamaguchi University, Japan, January 7-8, 2011.
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6. J. Dai, B. Chen*, “Extended exergy-based ecological accounting of China during 2000-2007”, 2010 International Congress on Environmental Modelling and Software, Modelling for Environment’s Sake, Fifth Biennial Meeting, Ottawa, Canada, July 5-8, 2010.
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