

CURRICULUM VITAE

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Personal Data	Born October 4, 1944 in Wuyuan County of Jiangxi Province, Married with two children
Address	Department of Modern Physics (MPHY) University of Science and Technology of China (USTC) Hefei, Anhui 230026, P R China
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Current Occupation	Professor, Ph.D. Doctor's Adviser of Theoretical Physics Director, Institute of Theoretical Physics, USTC Superintendent, National Key Important Specialty of Theoretical Physics, USTC Director, Institute of Complex Adaptive System, Shanghai Academy of System Science, Shanghai, China Superintendent, Nonlinear Science Center, USTC President, Nonlinear Science Society of Anhui Province, P.R.China
Education	1962-1967, Theoretical Physics Specialty, Department of Modern Physics, University of Science and Technology of China (USTC), Beijing 1982-1985 Post Doctoral Research, Department of Physics, Stevens Institute of Technology, USA

Distinctions / Honours	<p>[1] Wang Bing-Hong: <i>"Analytical Study of Bifurcation, Chaos, and Intermittency"</i> Science and Technology Research Advance Award, Education Council of Anhui Province, China, 1995</p> <p>[2] Wang Bing-Hong, Zhen Zhaobi and Li Dongsheng: <i>"The Application of Nonlinear Science in Earthquake Prediction Research"</i> Science and Technology Research Advance Award Education Council of Anhui Province, China, 1995</p> <p>[3] Wang Bing-Hong, He Da-Ren, Qu Shixian, Wu Sunguang: <i>"Study of Universal Behaviors for Bifurcation, Chaos, and Intermittency in Nonlinear Systems"</i> Science and Technology Research Advance Award, 2nd Rank, National Education Council, 1996</p> <p>[4] He Da-Ren and Wang Bing-Hong: <i>"New Dynamical Behaviour of the Relaxation Oscillation System"</i> Science and Technology Research Advance Award, Second Rank, Education Council of Shanxi Province, China, 1996,</p>
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	<p>[5] Wang Lei and Wang Bing-Hong: <i>"A New Traffic Flow Model Between FI-type and NS-type"</i> The Award of Outstanding Excellent Thesis in 3rd Academic Conference of Young Scientists in Anhui Province «Aurora for Prosperity of Anhui»</p> <p>[6] Wang Bing-Hong: Advanced Education Award of Wang Kuan-Cheng Foundation, 1996</p> <p>[7] Wang Bing-Hong and Hui Pak-Ming: <i>"The Improved Mean Field Theory of Two Dimensional Traffic Flow Model"</i> The Second Anhui Province Award for Excellent Scientific Research Thesis in Year 1994-1997</p> <p>[8] Wang Bing-Hong and He Da-Ren: <i>"Escape from Strange Sets"</i> The Second Anhui Province Award for Excellent Scientific Research Thesis in Year 1994-1997,</p> <p>[9] Wang Bing-Hong, Chen Guo-Yi, Gu Guo-Qing: <i>"Universal Transition of Plateau Structure for Lyapunov Exponent"</i> Certificate for Major Scientific and Academic Achievements for Chinese of World, Sponsor: International Economic Estimate (HK) Centre, Wen Wei Po, Issuing Authority: Evaluation and Appraisal Committee of Major Scientific and Academic Achievements for Chinese, Issuing Date: Jan. 5th, 1999</p> <p>[10] Wang Bing-Hong, Pak-Ming Hui, Wang Lei: <i>"New Method of Statistical Mechanical Approach to Traffic Flow Cellular Automaton Model"</i> Science and Technology Research Advance Award, Second Rank, Education Council of Anhui Province, China, 1999</p> <p>[11] Wang Bing-Hong, Wang Lei, Hui Pak-Ming, and Kuang Le-Qi: The New Method for Statistical Approach to Traffic Flow Cellular Automaton Models, The recommended advancements by Chinese Academy of Science (Registration number: 990821, The Classification number: O212 U491.112) The Research Achievement Bulletin for Science and Technology, No. 4, 1999, Published by State Committee of Science and Technology</p> <p>[12] Wang Bing-Hong <i>"The Statistical Mechanical Approach to Fukui-Ishibashi Traffic Flow Model"</i> The Fourth Anhui Province Award for Excellent Nature Scientific Research Thesis in Year 2000-2003, The First Rank</p> <p>[13] Song WG, Fan WC, Wang Bing-Hong: <i>"Self-organized criticality of forest fire in China"</i> The Fourth Anhui Province Award for Excellent Nature Scientific Research Thesis in Year 2000-2003</p>
Employment Record	Current Position: Professor, Ph.D. Doctor's Adviser of Theoretical Physics Director, Institute of Theoretical Physics, USTC Superintendent, National Key Important Specialty of Theoretical Physics, USTC

	<p>Director, Institute of Complex Adaptive System, Shanghai Academy of System Science, Shanghai, China Executive Director, Nonlinear Science Center, USTC President, Nonlinear Science Society of Anhui Province, P.R.China</p> <p>2001-2005 Academic Consultant, Complexity Science Special Project, NSFC 2001-2005, Director, Science Committee, Institute of Theoretical Physics, USTC 2000-, Deputy Director, Nonlinear Science Center, USTC 1997- Doctor's Advisor of Theoretical Physics, USTC 1996-2003 Deputy Director, Nonlinear Science Society of Anhui Province 1996- Full Professor, USTC 1993-, Deputy Director, Science Committee, Institute of Theoretical Physics, USTC 1990-, Research Professor, NSC, USTC 1989-1995 Associate Professor, MPHY, USTC 1982-1988, Lecturer, MPHY, USTC 1973-1981, Associate Lecturer, MPHY, USTC</p>
Visiting Positions	<p>Postdoctoral Research, Department of Physics, Stevens Institute of Technology, USA, 1982–1985 Visiting Scholar, Department of Physics, Chinese University of Hong Kong, 1995, 1996, 2000, 2001, 2004, 2006 Research Fellow (supported by C.N.Yang Visiting Foundation) CUHK, 1998 Visiting Professor, Korea Advanced Institute of Science and Technology, 1997 Research Fellow, Center for Nonlinear Studies and Department of Physics, Hong Kong Baptist University, 1998-1999 Research Fellow, Institute of Physics, Academia Sinica, Taipei, Taiwan 2002, 2005, 2006 Senior Research Fellow, Department of Computational Science and Department of Physics, National University of Singapore, 2003, 2004, 2005, 2006</p>
Adjunct Professor	<p>School of Systems Science, Shanghai University of Science and Technology, Shanghai 1993-1999; 2005-2008 Complex System Research Center, Faculty of Science, Yangzhou University, Yangzhou, 2000-2004 Institute of Applied Mathematics and Mechanics, Shanghai University, 2001- Department of Physics, Zhejiang University, P.R.China, 2005-2008</p>
Academic Consultant	<p>Complex Science Center, Faculty of Science, Yangzhou University, Yangzhou, 2000-2004 Complexity Science Special Project, National Natural Science Foundation of China 2001-2004</p>
Reviewer and Referee	<p>Editor: Journal of Nonlinear Dynamics in Science and Technology (China), Reviewer: Mathematical Reviews (USA) Referee: Physical Review E; Physica A; Acta Physica Sinica, Chinese Physics Letters, Science of China, National Natural Science Foundation of China</p>

Research Interests	<p>Statistical physics: Equilibrium and Non-Equilibrium Statistical Mechanics, Self-Organization Criticality and Phase Transition Theory</p> <p>Nonlinear Physics: Nonlinear dynamics, Theory of chaos and fractals, Chaos Controlling and Chaos Synchronization, Nonlinear analysis method of time series, Frenkel-Kontorova model, Dynamical Behavior of Complex System, Plasma Physics Dynamics</p> <p>Complexity Science: Forest Fire Model, Instability of Fire Combustion System, Cellular Automaton, Microscopic High Speed Simulation of Traffic flow, Earthquake prediction research, Neural Network theory, Complexity, Models of Complex System, Complex Adaptive System,</p> <p>Econophysics: Empirical Analysis of Financial Data, Agent-Based Physical Model of Financial Market, Minority game,</p> <p>Complex Networks: Structure, Function and Dynamics</p>
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Research Funding	<p>National Basic Research Program of China (973 Project) 《Nonlinear Science》 “Chaos and Stochastic Dynamics” (2001-2005) 《The basic science research for the problems at urban traffic choke points》 “Temporal and special evolution complexity and structure bottleneck of the urban transportation systems” (Grant No. 2006CB705500; 2006-2011)</p> <p>The National Climbing-Up Project for Basic Research "Nonlinear Science" (1) "Chaos in Conservative Systems" (1991-1995) (2) “Research on Complex System Dynamics” (1996-2000)</p> <p>Specialized Research Fund for the Doctoral Program of Higher Education (No. SRFDP 20020358009) “Self organization criticality of traffic flow and agent based econophysics model research” (2003-2005) “The structure, function and dynamics of the complex network” (2007-2009)</p> <p>The Key Important Project of National United Earthquake Science Foundation, SSB, China Grant: "Interpretation of earthquake time series and research on prediction algorithms" (1993-1995)</p> <p>Cooperation Research supported by the Research Grants Council of the Hong Kong SAR Government Grant No. RGC-CUHK4191/97P “Traffic Flow Research” (with: Pak-Ming Hui, 1997-1999) ; Grant No. RGC-CUHK4241/01P “Complexity Adaptive System and Minority Game Research” (with: Pak- Ming Hui, 2001-2003)</p> <p>The Knowledge Innovation Project of Chinese Academy of Science: “Study on Dynamical Theory for Nonlinear and Non-Equilibrium Complexity System Related to Fire Combustion Phenomena” (2000—2001)</p> <p>Special Project Supported by President Fund of Chinese Academy of Science</p>
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	<p>“Study of Structure, Function and Dynamical Property of Complex Network” (2006-2007)</p> <p>Eastern and Western China Region Cooperation Project of Special Fund for Theoretical Physics “Research on Evolution and Synchronization of Complex Networks” (As Eastern Cooperation Advisor) Grant No. 10547004 (2006-2008)</p> <p>The Key Important Project of National Natural Science Foundation Grant No.19932020: "Research on Traffic Flow in Cities" (2000-2003) Grant No.10532060 “Nonlinear Dynamics Characteristics Research for City Traffic System” (2006-2009) Grant No. 10635040 “Study of the dynamical and statistical behaviours of the complex systems based on complex network” (2007-2010)</p> <p>Special Funds for Theoretical Physics Research in China “Research on the evolution mechanism and dynamical behaviors of the complex network” Grant No, A0524701 (2006-2007)</p> <p>The General Project of National Natural Science Foundation of China: (1) "Study on stochastic heating and acceleration of particles in plasma by electromagnetic wave" (1989-1991) (2) "Study on Plasma Strong Turbulence and Caviton Theory" (1989-1991) (3) "Nonlinear analysis of time series and application to earth science" (1995- 1997) (4) Grant No.59876039: "Research on Nonlinear Instabilities of Basic Fire Combustion System" (1999-2001) (5) Grant No.19974039: "Research on Self-Organization Criticality and Phase Transition of Traffic Flow Complex System" (2000-2002) (6) Grant No.70271070: “Statistical Analysis of Price and Study of Agent Interaction Model for Financial Market” (2003-2005) (7) Grant CCUIPP-NSFC (No.70142005) ”Statistical Analysis Of Economical Data And Agent-Based Model Research Of Financial Market With Its Complex Adaptive Behavior” the China-Canada University Industry Partnership Program (2001-2002) (8) Grant No. 10472116 “Study for Dynamics of traffic flow along the highways and transmission flow along the networks” (2005-2007)</p>
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PUBLICATIONS **(since 2001)**

A. Papers in International Periodicals:

- 33 Lei Wang, Bing-Hong Wang and Bambi Hu
Traffic flow in a model with stochastic delays for cars following the trail of the car ahead
Physical Review E 63, 5 (2001) 056117
- 34 Jian Wang, Xiaoling Ding, Bambi Hu, Bing-Hong Wang, Jian-Shan Mao, and Da-Ren He
Characteristics of a piecewise smooth area-preserving map
Physical Review E 64, 2 (2001) 026202
- 35 Bing-Hong Wang and Pak-Ming Hui:
The distribution and scaling of fluctuations for Hang Seng Index in Hong Kong stock market European Physical Journal B 20 (2001) 573-579
- 36 Dafang Zheng, Bing-Hong Wang:
Statistical properties of the attendance time series in the minority game
Physica A: Statistical and Theoretical Physics 300 (2001) 560-566
- 37 Kuen Lee, P.M. Hui, B.H. Wang, N.F. Johnson,
Effects of announcing global information in a two-route traffic flow model
Journal of Physical Society of Japan 70, 12 (2001) 3507-3510
- 38 Song Wei Guo, Fan Weicheng, Wang Binghong, Zhou Jianjun
Self-Organized Criticality of Forest Fires in China
Ecological Modelling 145 (2001) 61 – 68

- 39 Wang Jian, Ding Xiaolin, Wang Bing-Hong, He Da-ren,
Quasi-attractors in a piece-wise smooth area-preserving map
Chinese Physics Letters 18, 1 (2001) 13-15
- 40 QUAN Hong-Jun, WANG Bing-Hong, Hui Pak-Ming, LUO Xiao-Shu,
Cooperation in the mixed population minority game with imitation
Chinese Physics Letters 18, 9 (2001) 1156-1158
- 41 Song Weiguo, Fan Weicheng, Wang Binghong
Study on self-organized criticality of forest fires in China
Chinese Science Bulletin 46, 13 (2001) 1134-1137
- 42 Luo Xiaoshu, Wang Bing-Hong, Jiang Feng, Gao Yuan:
Using random proportional pulse feedback of system variables to control chaos and hyper-chaos
Chinese Physics Vol.10, No.1 (2001) 17-20
- 43 Yanbo Xie, Bing-Hong Wang, HJ Quan, W Yang, and P. M. Hui,
Finite size effect in the Eguiluz and Zimmermann model of herd formation and information transmission
Physical Review E 65, 4 (2002) 046130
- 44 Hongjun Quan, Bing-Hong Wang, P.M Hui.
Effects of imitation in a competing and evolving population,
Physica A: Statistical and Theoretical Physics 312, No.3/4 (2002) 619-626
- 45 Kuen Lee, Pak Ming Hui, Dan Mao, Bing-Hong Wang and Qing-Song Wu
Fukui-Ishibashi Traffic Flow Models with Anticipation of the Car Ahead
Journal of Physical Society of Japan 71, 7 (2002) 1651-1654
- 46 Hong-Jun Quan, Bing-Hong Wang, Xiao-Shu Lo:
Hall mobility in n-type 4H-SiC: Calculation using hydrodynamic balance equations
International Journal of Modern Physics B Vol.16, No.3 (2002) 463-471
- 47 SONG W G, FAN W C, WANG B H.
Influences of Finite-size Effects on the Self-organized Criticality of Forest-fire Model
Chinese Science Bulletin 47, 3 (2002) 177-180
- 48 Rui Jiang, Qing-Song Wu, and Bing-Hong Wang, *Cellular-automata model simulating traffic interaction between on-ramp and main road*
Phys. Rev. E 66,3(2002) 036104
- 49, Liu Nai-An, Wang Bing-Hong, Fan WC,
Kinetic Compensation Effect In Biomass Thermal Decomposition
Fire Safety Science Vol.11, No.2 (2002) 63-69
- 50 Xiao-Shu Luo, Jin-Qing Fang, Pin-Qun Jiang, Bing-Hong Wang,
A Method of Digital Secure Communication Based on Chaos Synchronization,
Dynamics of Continuous, Discrete and Impulsive Systems (DCDIS) Added Volume

- Proceedings 1 (2003) 136-142 Intelligent and Complex Systems (Watam Press)
- 51 Hongjun Quan, Bing-Hong Wang, P.M.Hui, and Xiao-Shu Luo:
Self-segregation and enhanced cooperation in an evolving population through local information transmission
Physica A 321 (2003) 300-308
- 52 Dan Mao, Bing-Hong Wang, Lei Wang, Pak-Ming Hui, *Traffic flow CA model in which only the cars following the trail of the ahead car can be delayed*
International Journal of Nonlinear Science and Numerical Simulation
vol. 4, no.3 (2003) 239-250
- 53 Yi-ming WEI, Shang-jun YING, Ying FAN, Bing-Hong WANG:
The cellular automaton model of investment behavior in the stock market
Physica A Vol 325(2003) 507-516
- 54 Luo Xiao-Shu, Chen GR, Wang BH:
Hybrid Control of Period-Doubling Bifurcation and Chaos in discrete Nonlinear Dynamical Systems
Chaos, Solitons and Fractals, Vol.18, No.4, (2003) 775
- 55 Luo Xiao-Shu and Wang Bing-Hong,
Controlling Chaos and Hyperchaos Using Continuous Proportional Feedback of Dynamical Variables with Their Derivatives
International Journal of Modern Physics B Vol 17, No.22-24(2003) 4272-4278
- 56 Weisong Yang, Bing-Hong Wang, Peng He, Weining Wang,
Sub-strategy updating evolution in minority game
Chinese Physics vol.12, no.9 (2003) 931-935
- 57 Luo Xiao-Shu, Chen GR, **Wang Bing-Hong**:
Hybrid Control of Period-Doubling Bifurcation and Chaos in Discrete Nonlinear Dynamical Systems
Chaos, Solitons and Fractals, Vol.18, No.4, (2003) 775
- 58 Yang WS, Wang BH, Quan HJ, Hu CK
Strategy Uniform Crossover Adaptation Evolution in a Minority Game
Chinese Physics Letters 20,10 (2003)1659-1661
- 59 BH Wang, D Mao, L Wang, P.M. Hui,
Spacing-Oriented Analytical Approach to a Middle Traffic Flow CA Model Between FI-Type and NS-Type 《Traffic and Granular Flow'01》
(M.Fukui, Y.Sugiyama, M.Schreckenberg and D.E.Wolf Editors) pp. 51-64
Springer-Verlag 2003
- 60 Yan-Li Zou, Xiao-Shu Luo, Pin-Qun Jiang, Bing-Hong Wang, Guanrong Chen,
Controlling the Chaotic n-Scroll Chua's Circuit.
International Journal of Bifurcation and Chaos, Vol.13, No.9 (2003),2709-2714

- 61 Jiang Rui, Wu Qing-Song, Wang Bing-Hong,
Reply to ‘Comment on “Cellular automata model simulating traffic interactions between on-ramp and main road” ‘
Physica Review E, Vol.67 (2003), 068102
- 62 SL Bu, **Bing-Hong Wang**,
Improving the security of chaotic encryption by using a simple modulating method
Chaos, Solitons and Fractals Vol.19, No.4, (2004) 919-924
- 63 Shouliang Bu, Bing-Hong Wang, Pin-Qun Jiang
Detecting unstable periodic orbits in chaotic systems by using an efficient algorithm
Chaos, Solitons and Fractals Vol.22 (2004) 237-241
- 64 Kan Chen, Bing-Hong Wang, and Baosheng Yuan
Adiabatic theory for the population distribution in the evolutionary minority game
Physical Review E 69 rapid communications (2004) No.025102: 1-4
- 65 XIE Yanbo, WANG Binghong, YANG Weisong, & WANG Weining
The mechanism for the self-adaptation behaviors in the evolutionary minority game
Chinese Science Bulletin Vol. 49 No. 5 (2004) 432-437
- 66 Huiping Chen, Xia Sun, Ziqin Wu and Binghong Wang
Enlightenment from Various Conditional Probabilities about Hang Seng Index in Hong Kong Stock Market
Physica A-Vol.335(2004)183-196
- 67 Wei-Song Yang, Bing-Hong Wang, Yi-Lin Wu, Yan-Bo Xie,
Searching good strategies in evolutionary minority game using variable length genetic algorithm
Physica A 339 (2004) 583 – 590
- 68 Shouliang Bu, Bing-Hong Wang and Pin-Qun Jiang,
Chaos-assisted tunneling in a triple-well potential,
International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) 2669 – 2673
- 69 Pin-Qun Jiang, Bing-Hong Wang, Shou-Liang Bu, Qing-Hua Xia, Xiao-Shu Luo
Hyperchaotic Synchronization In Deterministic Small-World Dynamical Networks
International Journal of Modern Physics B Vol.18 , Nos.17-19 (2004) . 2674-2679
- 70 Li Ping, Liu Yang-zheng, Hu Ke-le, Wang Bing-Hong, Quan Hong-jun,
The Chaotic Control On The Occasional Nonlinear Time-Delayed Feedback
International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) . 2680-2685
- 71 Xiao-Shu Luo, Bing-Hong Wang,
Controlling Chaos And Hyperchaos By Switching Modulation Of Systems Parameters,
International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) . 2686-2690
- 72 H.J.Quan, Bing-Hong Wang, W.S.Yang, P.M.Hui, X.S.Luo
Cooperation in the evolutionary multiple-choice minority game,

- International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) 2691-2696
- 73 Bing-Hong Wang, Shouliang Bu, *Controlling the Ultimate State of Projective Synchronization in Chaos: Application to Chaotic Encryption*, International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) 2415-2421
- 74 Tao Zhou, Pei-Ling Zhou, Bing-Hong Wang, Zi-Nan Tang, and Jun Liu *Modeling Stock Market Based on Genetic Cellular Automata*, International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) . 2697-2702
- 75 Huiping Chen, Xia Sun, Huixuan Chen, Ziqin Wu, Binghong Wang *Evaluation Of Some Calculated Partial Multifractal Spectra*, International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) 2569-2574
- 76 Kan Chen, Bing-Hong Wang, Baosheng Yuan *Theory of the Three-Group Evolutionary Minority Game* International Journal of Modern Physics B Vol.18, Nos.17-19 (2004) 2387-2393
- 77 Huiping Chen, Xia Sun, Huixuan Chen, Ziqin Wu, Binghong Wang: *Some problems in multifractal spectrum computation using a statistical method* New Journal of Physics Vol.6 (2004) No.84 (<http://www.njp.org>) 1-17
- 78 Chin-Kun Hu, Zhong-Can Ou-Yang, Bambi Hu and Bing-Hong Wang (Editors) *«Progress in Statistical and Nonlinear Physics»* , *Proceedings of the First Cross Taiwan-Strait Conference on Statistical Physics*, International Journal of Modern Physics B Vol.18, Nos.17-19 SPECIAL ISSUE (2004)
- 79, Wen-Xu Wang, Bing-Hong Wang, Bo Hu, Gang Yan, Qing Ou *General dynamics of topology and traffic on weighted technological networks* Physical Review Letters Vol.94, No.18 (2005) 188702
- 80, Yan-Bo Xie, Bing-Hong Wang, Bo Hu, Tao Zhou, *Power law distribution of wealth in population based on a modified Equyluz-Zimmermann model* Physical Review E Vol.71, 1 (2005) 046135
- 81, Tao Zhou, Gang Yan, and Bing-Hong Wang, *Maximal planar networks with large clustering coefficient and power-law degree distribution* Physical Review E Vol.71, 1 (2005) 046141
- 82, Tao Zhou, Wen-Jie Bai, Long-Jiu Cheng, and Bing-Hong Wang¹, *Continuous extremal optimization for Lennard-Jones clusters* Physical Review E Vol.72, 1(2005) 016702
- 83, Tao Zhou, Gang Yan, and Bing-Hong Wang *Erratum: Maximal planar networks with large clustering coefficient and power-law degree distribution [Phys. Rev. E 71, 046141 (2005)]* Phys. Rev. E 72, 029905 (2005)

- 84 Fangcui Zhao, Huijie Yang, and Binghong Wang
Scaling invariance in spectra of complex networks: A diffusion factorial moment approach
Physical Review E Vol.72, No.4 (2005) 046119
- 85 Tao Zhou, Bing-Hong Wang, Pei-Ling Zhou, Chun-Xia Yang, Jun Liu
Self-organized Boolean game on networks
Physical Review E Vol.72, No.4 (2005) 046139
- 86 Wen-Xu Wang, Bo Hu, Tao Zhou, Bing-Hong Wang, Yan-Bo Xie
Mutual selection model for weighted networks
Physical Review E Vol.72, No.4 (2005) 046140
- 87 Ming Zhao, Tao Zhou, Bing-Hong Wang, and Wen-Xu Wang
Enhanced synchronizability by structural perturbations
Phys. Rev. E 72, 057102 (2005)
- 88 Wen-Xu Wang, Bing-Hong Wang, Wen-Chen Zheng, Chuan-Yang Yin, and Tao Zhou
Advanced information feedback in intelligent traffic systems
Phys. Rev. E 72, 066702 (2005)
- 89 Yan-Bo Xie, Bing-Hong Wang, Chin-Kun Hu, Tao Zhou,
Global optimization of minority game by intelligent agents
European Physical Journal B 47(2005) 587-593
- 90 Bo Hu, Xin-Yu Jiang, Jun-Feng Ding, Yan-Bo Xie and Bing-Hong Wang:
A Weighted Network Model for Interpersonal Relationship Evolution
Physica A 353 (2005) pp. 576-594.
- 91 Jie Wang, Chun-Xia Yang, Pei-Ling Zhou, Ying- Di Jin, Tao Zhou
and Bing-Hong Wang
Evolutionary Percolation Model of Stock Market with variable agent number
Physica A 354 (2005) pp. 505-517
- 92 P-L Zhou, C-X Yang, T.Zhou, M.Xu, J.Liu, Bing-Hong Wang,
Avalanche dynamics of the financial market
New Mathematics and Natural Computation Vol. 1, No. 2 (2005) 275-283
- 93 YAN Gang, ZHOU Tao, WANG Jie, FU Zhong-Qian, WANG Bing-Hong:
Epidemic Spread in Weighted Scale-Free Networks
Epidemic Spread in Weighted Scale-Free Networks
Chinese Physics Letters Vol.22, No.2 (2005) 510-513
- 94 Zhou Tao, Wang Bing-Hong, *Catastrophes in Scale-Free Networks*
Chinese Physics Letters Vol.22 No.5 (2005) 1072-1075
- 95 Jiang Pin-Qun, Wang Bing-Hong, Zhou Tao, Jin Ying-Di, Fu Zhong-Qian,
Zhou Pei-Ling, Luo Xiao-Shu

- Networks emerging from the competition of pullulation and decrepitude*
Chinese Physics Letters Vol.22 No.5 (2005) 1285-1288
- 96 Yang Chunxia , Wang Jie , Zhou Tao , Zhou Peiling & Wang Binghong,
Financial market model based on self-organized percolation
Chinese Science Bulletin Vol. 50 No. 19 (October, 2005) 2140-2144
- 97 Jiang DP, Luo XS, Wang BH, Fang JQ
Study on Proportional Synchronization of Hyperchaotic Chua's Circuit,
Communications in Theoretical Physics Vol.43,4(2005),671
- 98 Wen-Xu Wang, Bo Hu, Bing-Hong Wang, Gang Yan
Mutual attraction model for both assortative and disassortative weighted networks
Physical Review E 73 (2006) 016133
- 99 Wen-Xu Wang, Bing-Hong Wang, Chuan-Yang Yin, Yan-Bo Xie, and Tao Zhou,
Traffic dynamics based on local routing protocol on a scale-free network,
Physical Review E 73 (2006)026111
- 100 Tao Zhou, Ming Zhao, Bing-Hong Wang:
Better synchronizability predicted by crossed double cycle
Physical Review E 73 (2006) 037101
- 101 Gang Yan, Tao Zhou, Bo Hu, Zhong-Qian Fu, Bing-Hong Wang,
Efficient routing on complex networks,
Physical Review E 73 (2006) 046108
- 102 T. Zhou, G. Yan and B. -H. Wang,
*“Reply to “Comment on “Maximal planar networks with large clustering coefficient
and power-law degree distribution””””,*
Physical Review E 73 (2006) 058102
- 103 Wen-Xu Wang, Chuan-Yang Yin, Gang Yan, Bing-Hong Wang
Integrating local static and dynamic information for routing traffic
Physical Review E 74(2006) 016101
- 104 Chuan-Yang Yin, Wen-Xu Wang , Guanrong Chen, and Bing-Hong Wang,
Decoupling process for better synchronizability on scale-free networks
Physical Review E 74 , (2006). 047102
- 105 Tao Zhou, Jian-Guo Liu, Wen-Jie Bai, Guanrong Chen, and Bing-Hong Wang
*Behaviors of susceptible-infected epidemics on scale-free networks
with identical infectivity*
Physical Review E 74_(2006) 056109
- 106 Wen-Xu Wang, Jie Ren, Guanrong Chen, and Bing-Hong Wang
Memory-based snowdrift game on networks
Physical Review E 74_(2006) 056113

- 107 Huijie Yang, Fangcui Zhao, Binghong Wang
Synchronizabilities of networks: A new index
Chaos 16(2006) 043112
- 108 C.-Y. Yin, B.-H. Wang, W.-X. Wang, G. Yan, and H.-J. Yang
Traffic dynamics based on an efficient routing strategy on scale free networks
European Physical Journal B 49 (2006) 205-211
- 109 M.-B. Hu, W.-X. Wang, R. Jiang, Q.-S. Wu, **Bing-Hong Wang**,
A unified framework for the pareto law and matthew effect using scale-free network
European Physical Journal B 53(2006) 273-277
- 110 M. Zhao, T. Zhou, B. -H. Wang, Q. Ou, and J. Ren,
“Better synchronizability predicted by a new coupling method”,
European Physical Journal B 53, (2006). 375
- 111 C.-L. Tang, W.-X. Wang, X. Wu, and **B.-H. Wang**
Effects of average degree on cooperation in networked evolutionary game
European Physical Journal B 53, (2006) 411–415
- 112 Huijie Yang, Fangcui Zhao, Gujian Zhong, **Binghong Wang**.
Nonlinear Modeling Approach to Human Promoter Sequences,
Journal of Theoretical Biology 241 (2006) 765–773
- 113 Chuan-Yang Yin, Bing-Hong Wang, Wen-Xu Wang, Tao Zhou, Hui-Jie Yang
Efficient routing on scale-free networks based on local information
Physics Letters A 351(2006)220-224
- 114 Pei-Pei Zhang, Kan Chen, Yue He, Tao Zhou, Bei-Bei Su, Yingdi Jin, Hui Chang,
Yue-Ping Zhou, Li-Cheng Sun, Bing-Hong Wang, Da-Ren He,
Model and empirical study on some collaboration networks
Physica A 359 (2006) 835-852
- 115 Weiguo Song, Xuan Xua, Bing-Hong Wang, Shunjiang Nia
Simulation of evacuation processes using a multi-grid model for pedestrian dynamics
Physica A 363 (2006) 492–500
- 116 Huijie Yang, Fangcui Zhao and Binghong Wang
Collective chaos induced by structures of complex networks
Physica A 364 (2006) 544–556
- 117 Cai Shi-Min, Zhou Pei-Ling, Yang Hui-Jie, Yang Chun-Xia, Wang Bing-Hong
and Zhou Tao,
Diffusion entropy analysis on the scaling behavior of financial markets
Physica A 367(2006)337--344
- 118 Tao Zhou, Bing-Hong Wang, P.M. Hui, K.P. Chan
Topological properties of integer networks

- Physica A 367 (2006) 613–618
- 119 Ming Zhao, Tao Zhou, Bing-Hong Wang, Gang Yan, Hui-Jie Yang, Wen-Jie Bai
Relations between Average Distance, Heterogeneity and Network Synchronizability
Physica A 371 (2006) 773-780
- 120 Qiang Guo, Tao Zhou, Jian-Guo Liu, Wen-Jie Bai, Bing-Hong Wang, Ming Zhao
Growing scale-free small-world networks with tunable assortative coefficient
Physica A 371 (2006) 814–822
121. Zhou T, Yan G, Wang BH, et al. *Traffic dynamics on complex networks*
Dynamics Of Continuous Discrete And Impulsive Systems-Series B-Applications &
Algorithms 13 (3-4): 463-469 JUN 2006
- 122 Wang WX, Wang BH, Zhou T, et al. *Traffic driven model for weighted networks*
Dynamics Of Continuous Discrete And Impulsive Systems-Series B-Applications &
Algorithms 13 (3-4): 481-488 JUN 2006
- 123 Gu ZM, Zhou T, Wang BH, et al. *Simplex triangulation induced scale-free networks*
Dynamics Of Continuous Discrete And Impulsive Systems-Series B-Applications &
Algorithms 13 (3-4): 505-510 JUN 2006
- 124 LI Ping, WANG Binghong, *An approach to Hang Seng Index in Hong Kong stock market based on network topological statistics*
Chinese Science Bulletin Vol. 51 No. 5 (2006) 624—629
- 125 T. Zhou, Z. -Q. Fu, and B. -H. Wang, *Epidemic Dynamics on Complex Networks*
Progress of Natural Science 16-5 (2006)452-457
- 126 Wu Xiang, Wang Bing-Hong, Zhou Tao, Wang Wen-Xu, Zhao Ming, Yang Hui-Jie,
Synchronizability of Highly Clustered Scale-Free Networks
Chinese Physics Letters 23-4(2006)1046-1049
- 127 Cai Shi-Min, Zhou Pei-Ling, Yang Hui-Jie, Yang Chun-Xia, Wang Bing-Hong,
Empirical Study on the Volatility of Hang-Seng Index
Chinese Physics Letters 23-3(2006)754-757
- 128 Yang Wei-Song, Li Ping, Zou Shan-Shan Wang Bing-Hong
Local Minority Game with Evolutionary Strategies
Chinese Physics Letters 23-8(2006)1961-1964
- 129 Zhou Tao, Liu Jian-Guo, Wang Bing-Hong
Notes on the Algorithm for Calculating Betweenness
Chinese Physics Letters Vol23, No.8, (2006) 2327-2329
- 130 BuSL ZhangYW WangBH
Synchronizing Complex Networks by an Adaptive Adjustment Mechanism
Chinese Physics Letters 23-11 (2006) 2909-2912
- 131 Yuan Wu-Jie, Luo Xiao-Shu, Wang Bing-Hong, Wang Wen-Xu, Fagn Jin-Qing,

- Excitation properties of the biological neurons with side-inhibition mechanism in small-world networks,*
CHIN.PHYS.LETT. Vol.23, No.11 (2006) 3115-3118
- 132 LI Ping, XIONG Xing, QIAO Zhong-Liang, YUAN Gang-Qiang, SUN Xing, WANG Bing-Hong
Topological Properties of Urban Public Traffic Networks in Chinese Top-Ten Biggest Cities
Chinese Physics Letters 2006 23 (12): 3384-3386
- 133 Bu SL, Wang BH and Zhou T, *Gaining scale-free and high clustering complex networks*
Physica A374(2007)864-868
- 134 .Wu-Jie Yuan, Xiao-Shu Luo, Pin-Qun Jiang, Bing-Hong Wang, Jin-Qing Fang,
Stability of a complex dynamical network model,
Physica. A 374 (2007) 478-482
- 135 Bing-Hong Wang, and Tao Zhou,
Traffic Flow and Efficient Routing on Scale-Free Networks: A Survey
Journal of the Korean Physical Society Vol50, No.1, (2007)
- 136 Chuan-Ji Fu, Bing-Hong Wang, C-Y Yin, T. Zhou, B. Hu, and K. Gao:
Analytical studies on a modified Nagel-Schreckenberg model with the Fukui-Ishibashi acceleration rule
Chaos, Solitons and Fractals, vol.31 (2007) 772-776
- 137 Wu-Jie Yuan, Xiao-Shu Luo, Pin-Qun Jiang, Bing-Hong Wang, Jin-Qing Fang
Transition to chaos in small-world dynamical network
Chaos, Solitons and Fractals (2007) in press
- 138 Rui Yang, Bing-Hong Wang, Jie Ren, Wen-Jie Bai, Zhi-Wen Shi, Wen-Xu Wang,
Epidemic spreading on heterogeneous networks with identical infectivity
arXiv:physics/0609150 v1 17 Sep 2006 (accepted by Phys. Lett. A)

B. Papers in National Periodicals (in Chinese)

- 41 Luo Xiaoshu and **Wang Binghong**:
Controlling spatiotemporal chaos in coupled map lattice by delayed feedback
Science and Technology of Atomic Energy Vol.35 No.1 (2001) 56-59
- 42 Luo Xiaoshu, **Wang Bing-Hong**, Jiang Feng, Gao Yuan:
Using random proportional pulse feedback of system variables to control chaos and hyper-chaos,
Chinese Physics Vol.10, No.1 (January 2001) 17-20
- 43 Quan Hongjun, **Wang Bing-Hong**:
Study of electron transportation in SiC and the simplified scattering rate calculation

- Progress in Natural Science (in Chinese) 11,5 (2001) 465-470,
- 44 Wang Jian, Ding Xiaolin, **Wang Bing-Hong**, He Da-ren,
Quasi-attractors in a piece-wise smooth area-preserving map
Chinese Physics Letters. Vol.18, No.1 (2001) 13-15
- 45 Song Weiguo, Fan Weicheng, **Wang Binghong**:
Study on self-organized criticality of forest fires in China
Science Bulletin (Ke Xue Tong Bao) Vol.46, No.6 (2001) 512-525
- 46 Song Wei-guo, Fan Wei-cheng, **Wang Bing-hong**:
Study on Self-Organized Criticality of Forest Fire in China
Fire Safety Science, Vol.10, No.1, (Jan. 2001) 53-56
- 47 Quan Hong-Jun, **Wang Bing-Hong**, Hui Pak-Ming
A physical model of competing and adaptation amongst agents in the financial market
《Wuli》 Journal of Physics, Vol.30, No.10 (2001) 606-611
- 48 Luo Xiao-shu, **Wang Bing-hong**, Quan Hong-jun, Fang Jin-qing
Numerical Simulation investigation on chaos control in modified Chua's circuit
Journal of Circuits and Systems, vol. 6, No.2, (2001) 90-93
- 49 **Wang Binghong**, Quan Hongjun, Wang Weining,
Imitation effect in alloy minority game
Journal of Nonlinear Dynamics in Science and Technology Vol.8-.4 (2001) 328-334
- 50 Song WG, Fan WC, **Wang BH**,
Influences of Finite-size Effects on the Self-organized Criticality of Forest-fire Model
Ke Xue Tong Bao (Chinese Science Bulletin in Chinese)
Vol. 48 No.21 (2001) 1841- 1845
- 51 Jiang PQ, Luo XS, **Wang BH**,
Hyperchaos cryptosystems design based on state observer
Journal of Guangxi Normal University (Natural Science Edition)
Vol.19(2001)No.4, 7-11
- 52 Luo Xiao-Shu, **Wang Bing-Hong**, Chen guan-Rong, Jiang Pin-Qun,
Study of parameter switching modulation for chaos control
Acta Physica Sinica, Vol.51, No.5, (2002) 988-993
- 53 Wei BL, Luo XS, **Wang Bing-Hong**, Quan HJ,
A method based on the third-order Volterra filter for adaptive predictions of chaotic time series
Acta Physica Sinica, Vol.51, No.10, (2002) 2205-2210
- 54, Jiang Pin-Qun, Luo Xiao-Shu, **Wang Bing-Hong**, et al,
Synchronization in unidirectionallity coupled hyperchaotic oscillators with a single variable and its realization of circuit experimental simulations
Acta Physica Sinica, Vol.51, No.9, (2002) 1937-1941

- 55, Quan Hong-Jun, **Wang Bing-Hong**, Yang Wei-Song, Wang Wei-Ning, Luo Xiao-Shu
The self-organized segregation effect of evolutionary minority game with imitation
Acta Physica Sinica, Vol.51, No.12, (2002) 2667-2670
- 56, Song Wei-guo, **Wang Bing-hong**, Fan Wei-cheng, Zhao Lin-cheng, Xiong Jian-ming,
Influences of the forest type on the self-organized criticality of forest fires
Fire Safety Science, Vol.11, No.1, (2002) 31-34
- 57, **Wang Bing-hong**, *Statistical Analysis of Price*
Journal of Guangxi Normal University, (Natural Science Edition)
Vol.20, No.1, (2002) 19-26
- 58, **Wang Bing-hong**, MaoDan, Wang Lei, Hui Pak-ming,
Study on self-organization criticality in traffic flow
Journal of Guangxi Normal University, (Natural Science Edition)
Vol.20, No.1, (2002) 45-51
- 59, Wei BL, Luo XS, **Wang Bing-Hong**,
《Adaptive prediction of Volterra filter for EEG signal》
Journal of Guangxi Normal University, (Natural Science Edition)
Vol.20, No.2 (2002) 14-
- 60, Jiang Pin-Qun, Luo Xiao-shu, Zou Yan-li, **Wang Bing-hong**
Study of Phase switching modulation for chaos control
Journal of Guangxi Normal University, (Natural Science Edition)
Vol.20, No.3, (2002) 5-8
- 61, Zou Yan-li, Luo Xiao-shu, Fang Jin-qing, **Wang Bing-Hong**, Chen Guan-rong,
Jiang Pin-qun
Using a proportional and differential controller to control chaos
Journal of Guangxi Normal University, (Natural Science Edition)
Vol.20, No.3, (2002) 9-13
- 62, Jiang Pin-qun, **Wang Bing-Hong**, Luo Xiao-shu, Zou Yan-li, Fang Jin-qing,
Parameter modulation control in a hyperchaotic circuit
Journal of Circuits and Systems, Vol.7, No.4, (2002) 112-114
- 63, WG Song, **Bing-Hong Wang**, L.T. Shu, K.Satoh, W.C. Fan, L.Zhao
Self-organization criticality and large-scale forest fire prevention
Advances in Natural Science, Chinese Edition, Vol.12, No.10 (2002), 1105-1108
- 64, Luo XS, **Wang BH**, Chen GR, Quan HJ, Fang JQ
Research on bifurcation behavior and chaos control for DC—DC BUCK transformer
Acta Physica Sinica Vol.52, No.1 (2003) 12-17
- 65, X. Luo, G. Chen, **Bing-Hong Wang** J.Fang, Y. Zou:
Period-doubling bifurcation and chaos in discontinuous nonlinear systems controlled by state feedback and parameter adjustment

- Acta Physica Sinica Vol.52, 4(2003) 790-794
- 66 Y.Xie, **Bing-Hong Wang**, H. Quan, W. Yang, W. Wang
Finite Size effect in EZ model
Acta Physica Sinica Vol.52 , No.10 (2003) 2399-2403
- 67, Zou Yan Li, Luo Xiao Shu, Fang Jin Qing, **Wang BingHong**
Using pulse voltage differential feedback method to control chaos in the buck converter
Acta Physica Sinica Vol.52,12 (2003) 2978-2984
- 68 X. Luo, **Bing-Hong Wang**, Y. Zou
Research Advances of Nonlinear Dynamical Behaviour in DC—DC BUCK power transformer
Progress of Mechanics Vol.33 No.4 (2003) 471-
- 69, Jiang PQ, **Wang Bing-Hong**, Luo XS,
Study of single direction coupling synchronization for four-th order Chua's hyper-chaotic circuit
Systems Engineering and Electronics, Vol.25, No.9 (2003) 1119-1121
- 70 YING Shang-jun, WEI Yi-ming, FAN Ying, **WANG Bing-hong**
Study On Complexity In Stock Market Based Cellular Automata
System Engineering: Theory and Practice Vol.23, No. 12 (2003) 18-24
- 71 . Wei BL, Luo XS, **Wang Bing-Hong** ,
EEG Signals PredictionBy Radial Basic Function in Neural Network
Chinese Journal of Biomedical Engineering Vol12, No.6 (Dec.2003) 488
- 72, Luo XS, **Wang BH**, Jiang PQ, Fang JQ,
《A method for digital secrecy communication based on asymptotic chaos synchronization》
Journal of China Communication vol.24, no.1 (2003) 60-65
- 73 Wang Weining, **Wang Bing-Hong**, Cheng Xi;
The statitic analysis of the index of Shanghai securities
Operations Research and Management Science 12-4(2003)85-90
- 74 Quan Hong-Jun, **Wang Bing-Hong**, Luo Xiao-Shu
Optimal Level of Self-Organizaioed Segregation of Evolutionary Minority Game
Journal of the Graduate School of the Chinese Academy of Sciences
Vol.20, 2 (2003) 191-195
- 75 Li Ping, **Wang Bing-Hong**
DNA Series Analysis Method Applied in Study of Financial Time Series
Journal of the Graduate School of the Chinese Academy of Sciences
Vol.20, 2 (2003) 200-204
- 76 Song Wei-Guo, **Wang Bing-Hong**, Shu Li-Fu, Zhao Lin-Cheng

Self-Organized Criticality and Macro-Characteristics of Forest Fire System
Journal of the Graduate School of the Chinese Academy of Sciences
Vol.20, 2 (2003) 205-211

- 77 Jiang Yu-Mei, Lu Yun-Qing, Chao Xiao-Gang, Shen Ying, Wang Ying-Mei, Wang Wen-Xiu, Chen He-Sheng, Ding Xiao-Ling, Wang Xu-Ming, He Da-Ren, **Wang Bing-Hong**
Charateristics of Quasi-Dissipative Systems
Journal of the Graduate School of the Chinese Academy of Sciences
Vol.20, 2 (2003) 196-199
- 78, Xia Qing-hua, **Wang Bing-hong**, Jiang Pin-qun,
A discussion on nonlinear mechanical problem
DAXUE WULI (College Physics) Vol. 22, No.10 (2003) p.3-4,& 8
- 79 Xia Qinghua, Wang Bing-Hong:
The Analytical Solution of A Nonlinear Mechanical Problem
Journal of Higher Correspondence Education (Natural Sciences) Vol. 16 No. 2
(April 2003) 4-6
- 80, Yanbo Xie, **Bing-Hong Wang**, Wei-Song Yang:
Studies of the mechanism for the self-segregation and the clustering behaviors in the evolutionary minority game model
KEXUE TONGBAO Vol.49 No.4 (February 2004)
315-320
- 81 Jiang, PQ; **Wang, BH**; Xia, QH; et al.
Control of spatio-temporal chaos in coupled map lattices by state feedback
ACTA PHYSICA SINICA, 53, 10: (2004) 3280-3286
- 82 LUO Xiao-shu , **WANG Bing-hong** , CHEN Guan-rong
On dynamics of discrete model based on investment competition
Journal of Management Science in China Vol.7,3(2004),7-12,
- 83, Ying Shangjun, Fan Ying, Wei Yiming and **Wang Binghong**
An Investment-Analysis-Based Cellular Automaton Model for Evolving Simulation in Stock market
Management Review Vol.16, No.11 (2004) 4-9
- 84, Wang Weining, **Wang Bing-Hong**, Shi Xiaoping
An analysis of chaotic behavior in volatility of financial price
Quantitative & Technical Economics, 21-4 (2004) 141-147
- 85 LI Xiao-lin , LUO Xiao-shu , RONG Xiao-ge , LIANG Zong-jing ,
WANG Bing-hong
Using Pulse Nonlinear State Feedback to Control Chaos
Bulletin of Science and Technology 20, 3 (2004) , 179 - 183

- 86 Li Ping , Wang Bing-Hong, Quan Hongjun:
*Some Problems and Progress about Econophysics (I) —
Statistical Analysis of Price and Stochastic Process Model for Price Fluctuation,*
Journal of Physics (Advance at Frontier) Vol33, No.1 (2004) 28-33
- 87 Li Ping , Wang Bing-Hong, Quan Hongjun:
*Some Problems and Progress about Econophysics (II)
— Modeling and analysis on agent based dynamica models*
Journal of Physics (Advance at Frontier) Vol.33, No. 2 (2004) 205-212
- 88 Li Ping, Hu Ke-le, **Wang Bing-hong**,
Design and Application about Computing Program of Material Multifractal Spectrum
Journal of Nanjing University of Aeronautics & Astronautics Vol.36, No.1
(Feb.2004) 77-81
- 89 Xia QH, **Wang Bing-Hong**, Jiang PQ
Study of Problem on Movement of the Particles Restricted in Smoothing Parabola
Mechanics and Practice 26-3 (2004) 84-85
- 90, Zhou T, Fu ZQ, Niu YW, Wang D, Zeng Y, Wang Bing-Hong, Zhou PL,
Review of Research on Spreading Dynamics along Complex Network
Progress of Nature Science (2005) 15-5 (2005) 513-518
- 91 Zhao Ming, Wang Bing-Hong, Jiang Pin-qun, Zhou Tao,
*Recent Advancement in research of synchronization of dynamical systems
on complex networks*
Progress in Physics, Vol.25, No.3 (2005) 273-295
- 92 Wang Binghong, Zhou Tao, He Daren,
The Trend Of Recent Research On Statistical Physics And Complex Systems
China Basic Science (Vol.7, No.45) 2005.3, pp.37-43
- 93, **Bing-Hong Wang**, Kan Chen and Baosheng Yuan,
*Statistical Mechanics Analysis of the Phase Transition for Population
Distribution in Complex Adaptive Systems*
Complex Systems and Complexity Science Vol.2 (2005) 36-44
- 94, Han Xiao-Pu, Zhou Tao, **Wang Bing-Hong**
Nation Evolutionary Model Base on Cellular Automata
Complex Systems and Complexity Science Vol.2 , No.4 (2005) 74-78
- 95 ZHOU Tao , ZHOU Pei-ling , LIU Jun。 , W ANG Bing-Hong :
Dissipation Cascading Dynamics on Regular Networks
Complex Systems and Complexity Science Vol.2 , No.1 (2005) 18-23
- 96 Bai WJ, Wang BH, Zhou T:
从复杂网络的观点看大停电事故

Complex Systems and Complexity Science Vol 2, No.3 (2005) 29-37

- 97 Zhou Tao, Bai Wen-Jie, **Wang Bing-Hong**, Liu Zhi-Jing, Yan Gang:
A brief review of complex networks
Physics, Vol.34-1 (2005) 31-36
- 98 Zhao YB, Luo XS, Fang JQ, Wang BH,
Study on stability of the voltage-mode DC-DC converters
Acta Physica Sinica, Vol.54,11(2005), 5022
- 99 Zhou Tao, Zhou Pei-ling, Wang Bing-Hong, Yang Chun xia, Cai Shi-min
Brief review of artificial financial markets based on cellular automaton
Complex System and Complexity Science Vol.2, No.4 (2005) 10-15
- 100 Zhang PP, He Y, Zhou T, Su BB, Chang H, Zhou YP, Wang BH, He DR
A model describing the degree distribution of collaboration networks
Acta Physica Sinica, 55-1 (2006) 60-67
- 101 Wang Bing-Hong, Wang WX, Zhou T:
A Weighted Complex network Model By Traffic Flow
Physics,35-2 (2006) 227-233
- 102 Fu Chuan-Ji, Wang Bing-Hong, Yin Chuan-Yang, Gao Kun
Intelligent decision-making in a two-route traffic flow model
Acta Physica Sinica Vol.55, No.8 (2006) 4032-4038
- 103 Li P, Bing-Hong Wang
An approach to Hang Seng Index in Hong Kong stock market based on network topological statistics
Ke Xue Tong Bao 51-2(2006)235-240
- 104 LI Ping, ZHANG Ting-an, WANG Bing-hong, DOU Zhi-he
Grey Level Threshold Used to Extract Fractal Characteristic Parameter of Surface Topography Image
Journal of Northeastern University (Natural Science) Vol.27, No.1 (2006) 57-60
- 105 Li Ji, Wang Bing-Hong, Jiang Pin-Qun, Zhou Tao, Wang Wen-Xu
Growing complex network model with acceleratingly increasing number of nodes
Acta Physica Sinica Vol 55, No.8 (2006) 4051-4057
- 106 Wei Du-Qu, Luo Xiao-Shu, Fang Jin-Qing, Wang Bing-Hong
Controlling chaos in permanent magnet sunchromous motor based on the differential geometry method
Acta Physica Sinica 55-1(2006) 54-59

C. Monographs:

- 1, **Wang Bing-Hong:** 《Introductory Theory of Chaotic Dynamics》

- State Seismology Beaurau Press (Beijing, 1992), pp.175 (in Chinese)
- 2, **Wang Bing-Hong:** 《Selected Lectures on Nonlinear Science》
USTC Publishing House (Hefei,1994) pp.240 (with Y.Li, K.Wang, G.Guo) (in Chinese)
 - 3, **Wang Bing-Hong:** 《Stochastic Web in Hamiltonian Systems》
Graduate School, USTC (Hefei, 1994) (in Chinese)
 - 4, **Wang Bing-Hong:** 《Weak Chaos and Quasi-Regular Patterns》
Advanced Series in Nonlinear Science, (in Chinese)
Shanghai Scientific and Technological Education Publishing House, Shanghai, 1995
 - 5, He Da-Ren, **Wang Bing-Hong**, Wang Ying-Mei, and Niu Jian-Jun (ed.)
《Introduction to Nonlinear Dynamics —The dynamical characteristics of the smoothing and piece-wise smoothing systems》 Shanxi Science and Education Publishing House (May 2001, First Edition), Xian (Monograph In Chinese)
 - 6 Guo Chao-Hao, Zhu Zhao-Xuan, Chen Shou-ji, Wang K.L, **Wang Bing-Hong**, et al.
《There Is Another Sky—Introduction To Nonlinear Science》 (Trade Book of Climbing Project 4) Hunan Scientific and Technological Publishing House,
 - 7 **BH Wang**, D Mao, L Wang, P.M. Hui, *Spacing-Oriented Analytical Approach to a Middle Traffic Flow CA Model Between FI-Type and NS-Type* 《Traffic and Granular Flow'01》
(M.Fukui, Y.Sugiyama, M.Schreckenberg and D.E.Wolf Editors) pp. 51-64
Springer-Verlag 2003

D. Invited Talk and Reports in International Conferences

- 1 《Computational Physics》 Proceedings of International Conference on Computaional Physics, Beijing,1989, World Scientific, Singapone (1990) 278-283
Wang Bing-Hong: *Global Convergence of Chaotic Orbit Computations*
- 2 Proceedings of International Workshop on Statistical Physics (Beijing 1993) 299-317
Wang Bing-Hong, *The Plateau and Symmetrical Structure of Lyapunove Exponent*
- 3 《Dynamical Systems And Chaos》 Vol.2: Physics Proceedings of the International Conference on Dynamical Systems and Chaos (Tokyo, Japan,1994)
Y.Aizawa, S.Saito, K. Shiraiwa, ed.
World Scientific Press 270-273 (1994)He Da-ren, **Wang Bing-Hong:**
Interaction between discontinuity and non-invertibility in circle map.
- 4 《STATPHYS 19》 The 19th IUPAP International Conference on Statistical Physics (Xiamen, 1995) Programme and Abstracts Th. P. 119, p.159 **Wang Bing-Hong:**

Universal plateau structure of Lyapunov exponent for period doubling cascade attractors

- 5 《STATPHYS 19》 The 19th IUPAP International Conference on Statistical Physics (Xiamen, 1995) Programme and Abstracts Th. P.100, p.154
Da-ren He, **Bing-Hong Wang**
Some specific dynamic behaviours in 1D discontinuous maps,
- 6 30th International Geological Congress (Beijing, 1996)
Wang Bing-Hong, Li Dongsheng, Zhen Zhaobi:
Intermediate-term symptoms of strong earthquake approach
- 7 30th International Geological Congress (1996, Beijing)
Wang Bing-Hong, Zhen Zhaobi, Li Dongsheng, Zhang Jun:
The multifractal singularity spectra of Liyang earthquake distribution
- 8 International Conference on General Systematology Method and Its Applications (Wuhan, 1996)
Wang Bing-Hong, *Perspective of study of nonlinear analysis of observable chaotic data*
- 9 IASPEI Regional Assembly in Asia, Asia Seismological Commission (Tangshan, China, August, 1996) S1-89
Wang Bing-Hong, Li Dongsheng, Zhen Zhaobi, Zhang Jun:
The intermediate-term prediction significance of D_q spectra of earthquake distribution
- 10 Proc.1997 China-Japan Joint Symposium on Advanced Energy and Transportation Engineering:
Wang Bing-Hong: *Fundamental Diagram of Fukui-Ishibashi Cellular Automaton Model for Traffic Flow on Highway*
- 11 《STATPHYS 20》 The 20th IUPAP International Conference on Statistical Physics, (Paris, July 20-24, 1998) UNESCO Sorbonne, Topic 12 (Applications to Economics and other fields) oral contribution **Bing-Hong Wang**, P.M.Hui, Bambi Hu:
Exact Analytical Statistical Mean Field Equation For The Traffic Flow Models
Of High Speed Car With Random Delay
- 12 《STATPHYS 20》 The 20th IUPAP International Conference on Statistical Physics, (Paris, July 20-24, 1998) A Gervois, M Gingold, D Iagolnitzer, ed
Topic 2 (Nonequilibrium Systems) T0791; PO02/146
Wang Bing-Hong:
Statistical Mechanical Approach to Phase Transition in Traffic Flow Model
- 13 《ETOPIM5》 The 5th International Conference on Electrical Transport and Optical Properties of Inhomogeneous Media (Hong Kong, June 21-25, 1999)
Proceedings p.81
Bing-Hong Wang, Lei Wang, Pak-Ming Hui, Bambi Hu:
Steady state traffic flow in a model with gradual acceleration and stochastic delay

- 14 《Dynamics Days Asia-Pacific》 First International Conference on Nonlinear Science (13-16 July 1999 Hong Kong) Proceedings p.110 Bing-Hong Wang, Y.R.Kwong, P.M.Hui, B.Hu,
Cellular automaton models of driven diffusive Frenkel-Kontorova-type systems
- 15 The Third Joint Meeting of Chinese Physicists World-Wide: Role of Physics in the New Millennium: Research, Education & Society, (July 31 - Aug 4, 2000 Hong Kong) oral report STM1(M3)-2 Abstract Book, p.9, & p.97 **Bing-Hong Wang**, Pak-Ming Hui, B.Hu
Scaling and Statistical Properties of fluctuations in the Hang Seng Index of the Hong Kong Stock Market,
- 16 The Third Joint Meeting of Chinese Physicists World-Wide: Role of Physics in the New Millennium: Research, Education & Society, (July 31 - Aug 4, 2000 Hong Kong) oral report CMT7(F2)-7 Abstract Book, p.20, & p.81 Lei Wang, **Bing-Hong Wang**
A new traffic flow model in which only the car following the trail of the ahead car may be delayed
- 17 The Workshop of Finance Physics, The Chinese Center of Advanced Science and Technology, (Beijing, August, 11-15, 2000) Invited report,
Bing-Hong Wang 1, *The distribution and scaling of Hang Seng Index returns*
2, *The recent research progress of minority game in financial physics*
- 18 The Second International Conference on Application of Physics in Financial Analysis, University of Liege, Institut Zoologique Liege, Belgium July 13 - 15, 2000
Bing-Hong Wang and Pak-Ming Hui:
The truncated Lévy distribution and scaling of returns for Hong Kong Hang Seng Index
- 19 Second School on the Mathematics of Economics, ICTP (the abdu salam international centre for theoretical physics), Trieste, Italy, 21 August-1 September 2000
Bing-Hong Wang: *Analysis of Statistical Property for Hang Seng Index in Hong Kong stock market*
- 20 The International Workshop on Econophysics and the International Conference on Finance Complexity, USTC, Hefei, September 21-29, 2000
Bing-Hong Wang: *Statistical Analysis of Hang Seng Stock Index Returns*
- 21 《Traffic and Granular Flow '01》 International Conference, October 15-17, 2001, Symposium, [Nagoya University](#), Japan
Bing-Hong Wang (Invited Speaker):
"The spacing-oriented analytical study of traffic flow cellular automaton models".
- 22 International Conference: Statistical Physics 2002 Taiwan
Bing-Hong Wang (as an International Advisor and Invited Speaker)
"Self-Segregation Effects of Imitation in Evolutionary Minority Game"

- 23 Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts, Oral talk, p.51
Bing-Hong Wang, Weiguo Song,
Study of self-organized criticality of forest fires in China and its finite-size effects
- 24 Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts, Oral Talk, p.52
Bing-Hong Wang, D. Mao, P.M.Hui, and Kuen Lee,
Decision dynamics in a two-route traffic flow model
- 25 Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts Oral Talk p.38
Luo Xiao-Shu, **Wang Bing-Hong**, Zhou Yan-Li, Quan Hong-Jun, Jiang Pin-Qun
Controlling Chaos and Hyperchaos using continuous proportional feedback to the system variables and its differential
- 26 **Bing-Hong Wang**, Hongjun Quan, P.M.Hui
Self-Segregation effects of imitation in evolution minority game Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts Poster p.73
- 27 **Bing-Hong Wang**, Dan Mao, Pak-Ming Hui
Analytical study of the two-way decision traffic flow model Proceedings of The Fourth International Conference on Nonlinear Mechanics (ICNM-IV) Shanghai, Aug. 2002, 983-1000 **B**
- 28 **Bing-Hong Wang**, Hong-jun Quan, P.M.Hui,
The evolutionary minority game consisting of a competing population with imitation possibility Proceedings of The Fourth International Conference on Nonlinear Mechanics (ICNM-IV) Shanghai, Aug. 2002, pp.1000-1007, p.204-211
- 29 **Bing-Hong Wang**, Dan Mao, Pak-Ming Hui
The two-way decision traffic flow model: Mean field theory Proceedings of The Second International Symposium on Complexity Science, Shanghai, August 6-7, 2002, pp.204-211
- 30 **Wang Bing-Hong**, Quan Hong-Jun:
Evolutionary minority game introducing imitation
Proceedings of The Second International Symposium on Complexity Science, Shanghai, August 6-7, 2002, p.229-233
- 31 Xiao-Shu Luo, Jin-Qing Fang, Pin-Qun Jiang, **Bing-Hong Wang**, Hong-Jun Quan,
A Method of Digital Secure Communication Based on Chaos Synchronization,

Proceedings of International Conference on Dynamics of Continuous, Discrete and Impulsive Systems

- 32 Bing-Hong Wang (Invited Talk)
"Self-Segregation Effects of Imitation in Evolutionary Minority Game"
StatPhys-Taiwan-2002, Lattice Models and Complex Systems,
The 2nd APCTP and 6th Taiwan International Symposium on Statistical Physics
(Academia Sinica, Taipei, 26 May-1 June, 2002)
- 33 Bing-Hong Wang, Weiguo Song,
Study of self-organized criticality of forest fires in China and its finite-size effect
Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science
Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts, Oral talk, p.51
- 34 Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science
Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts, Oral Talk, p.52
Bing-Hong Wang, D. Mao, P.M.Hui, and Kuen Lee,
Decision dynamics in a two-route traffic flow model
- 35 Luo Xiao-Shu, Wang Bing-Hong, Zhou Yan-Li, Quan Hong-Jun, Jiang Pin-Qun
*Controlling Chaos and Hyperchaos using continuous proportional feedback
to the system variables and its differential*
Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science
Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts Oral Talk p.38
- 36 Bing-Hong Wang, Hongjun Quan, P.M.Hui
Self-Segregation effects of imitation in evolution minority game
Dynamics Days Asia-Pacific: Second International Conference on Nonlinear Science
Zhejiang University, 8-12 August 2002, Hangzhou China
DDAP2, Program & Abstracts Poster p.73
- 37 Bing-Hong Wang: *Analytical study of the two-way decision traffic flow model*
The Fourth International Conference on Nonlinear Mechanics (ICNM-IV)
Shanghai, Aug. 2002,
- 38 Bing-Hong Wang:
*The evolutionary minority game consisting of a competing population
with imitation possibility*
The Fourth International Conference on Nonlinear Mechanics (ICNM-IV)
Shanghai, Aug. 2002,
- 39 Bing-Hong Wang,(Invited Talk):
Evolutional Minority Game with imitation mechanism
The Second International Symposium on Complexity Science,
Shanghai, August 6-7, 2002

- 40 Shanghai NSA'03, Shanghai International Symposium on Nonlinear Science & Applications (November 9-13, 2003, Ocean Hotel, Shanghai, China) as a member of International Advisory Committee
Bing-Hong Wang: *Analytical Approach to Two Way Selecting Decision Traffic Flow*
- 41 International Workshop on Quantum Computation and Communication (November 21 - 23, 2003 Hong Kong)
B. H. Wang: *A Discussion On Quantum Game*
- 42 International Conference on Physics Education and Frontier Research (The Fourth joint Meeting of Chinese Physicists Worldwide) Shanghai, June 28-July 1, 2004. Bing-hong Wang :
Hyper-chaotic Synchronization In Deterministic Small-World Dynamical Networks .
(Invited Talk, SN3 Networks, Thursday, 9-10:30 am) OCPA4
- 43 Dynamics Days Asia Pacific 2004 – The Third International Conference on Nonlinear Science,
30 June – 2 July 2004, Singapore, a satellite conference of STATPHYS 22 (4-9 July 2004, Bangalore, India).Invited Talk, Quantum Chaos
Bing Hong Wang: *Chaos-assisted tunneling in a triple-well potential*
- 44 Oral Contribution in Topic 12: Other applications of statistical physics (networks, traffic flows, algorithmic problems, econophysics, astrophysical applications, etc.). STATPHYS 22, the 22nd international conference on statistical physics of the international union of pure and applied physics (IUPAP), Bangalore, India , 4 to 9 July 2004. Bing-Hong Wang, *Searching good strategies in evolutionary minority game using variable length genetic algorithm*
- 45 The 1st International Workshop on Simulational Physics, November 5 - 7, 2004, Zhejiang University, Hangzhou
Bing-Hong Wang, *The minority game of Boolean agent on network*
- 46, THE SECOND SHANGHAI INTERNATIONAL SYMPOSIUM ON NONLINEAR SCIENCE AND APPLICATIONS (Shanghai NSA'05, June 3 - 7, 2005) Bing-Hong Wang: Proportional Synchronization Approach of Hyper-Chaotic System and Its' Applications in Chaotic Communications (China) 062
- 47, Bing-Hong Wang: Interplay of Dynamics, Traffic and Topology on Weighted Technological Networks
International Conference on Complex Systems and Complex Networks, Seoul, Korea, June 10-12, 2005
- 48 《StatPhys-Taiwan 2005》 2005 Taiwan Summer Symposium on Statistical and Nonlinear Physics (31 July ~ 6 August 2005) Institute of Physics, Academia Sinica, Taipei, 31-July-3 August, Chung Yung Christian University, Chungli, 4-6 August
(invited as a member of Advisory Committee and a Plenary Speaker) :

- 49, Bing-Hong Wang:
Weighted Technology Networks Driven By Traffic Flow-Interplay Between Topology
And Traffic Dynamics In Networks, 13:30-14:15, Sept.92005 NCTS September
Workshop on Critical Phenomena and Complex Systems Ta-Yi Building,
Department of Physics, Chinese Culture University, Taipei, 9-10 September 2005
(Organized by National Center for Theoretical Sciences (Critical Phenomena and
Complex Systems focus group) , Institute of Physics of Academia Sinica (Taipei)
and Department of Physics, Chinese Culture University, Taipei