

Curriculum Vitae

Qunsheng Peng

1. Personal

Sex: Male
Date of Birth: May 7, 1947
Occupation: Professor, Vice Chairman of Lab Academic Committee
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2. Education:

Undergraduate: Dept. of Automation, Beijing Mechanical College, 1965- 1970.
Postgraduate: Dept. of Manufacturing Engineering, Beijing University of Aeronautics and Astronautics, 1978-1980.
Ph.D Candidate: School of Computing Studies, University of East Anglia, U.K., 1980-1983

3. Professional Background:

Dr. Peng's research interests include computer simulation and animation, scientific data visualization, realistic image synthesis, geometric modeling, etc. In the past years, he published more than 200 papers concerned with shading models, real time rendering, curved surface modeling, and infrared image synthesis on academic journals and conferences. Among them, two papers won respectively the Best Paper Award of J. Computer & Graphics 1988-1989 and the Best Paper Award of Eurographics'89. He accomplished successively several NSFC projects as the principal investigator and received various kinds of awards. Prof. Peng also teaches graduate student courses in graphics, solid modeling and realistic image synthesis.

4. Professional Experience:

1984—1986 Lecturer, Dept. of Applied Mathematics, Zhejiang University, taught graduate courses in solid modeling and computer graphics.
1986—1988 Associate professor, supervisor of graduate students, Dept. of Applied Mathematics, Zhejiang University, taught graduate courses in 3D geometric modeling and realistic image synthesis, conducted research in solid modeling with trimmed free-form surface patches and ray tracing.
1988—1997 Professor, Vice director of State Key Lab of CAD&CG, Zhejiang University, teaches graduate courses in 3D geometric modeling and realistic image synthesis, conducts research work in advanced radiosity method and scientific data visualization.
1997—2002 Professor, Director of State Key Lab of CAD&CG,
2002— Professor, Vice Chairman of Lab Academic Committee

5. Honors and Awards:

A. Awards:

1. First prize of Science and Technology Progress of State Education Commission of China, 1987.
2. Best Paper Award of J. Computers & Graphics for the period of 1988—1989.
3. Best Paper Award (2nd Prize) of Eurographics'89.
4. Second Prize of Science and Technology Progress of State Education Commission of China, 1990.
5. Third Prize of National Natural Science of China, 1991.
6. Golden Ox Award of prominent individuals of State Key Labs of China, 1994.
7. Special Grade Prize of Nation-wide Best teachers of Baogang Scholarship, 1996.
8. Second Prize of Teaching Achievements Award of Zhejiang Province, 1996.
9. Second Prize of Science and Technology Progress of State Ministry of Education of China, 1998.
10. Computer Graphics Achievement Award of China, Chinagraph'2000

B. Editorships:

1. Editorial Board, J. of Computing Science & Technology, 1991—present
2. Editorial Board, J. of CAD & CG (Chinese), 1996—present
3. Editorial Board, Chinese J. of Computers, 1997---present.
4. Editorial Board, Chinese J. of Software, 1999---present.
5. Editorial Board, J. of Zhejiang University (Science), 2000---present
6. Editorial Board, The Visual Computer, 2002---present

6. Selected Publications:

- Procedural Elements for Realistic Image Synthesis, Published by Science Press, Beijing, 1999.6 (Co-authored with Hujun Bao et al)
- Computer Graphics Course Notes (Revised Edition), Published by Science Press, Beijing, 2000. (Co-authored with Rongxi Tang et al)
- Procedural Elements for Computer Animation, Published by Zhejiang University Press, Hangzhou, 2000. (Co-authored with Hujun Bao et al)
- Real-time Soft Shadows in Dynamic Scenes using Spherical Harmonic Exponentiation , Siggraph 2006/ ACM Transactions on Graphics, Vol. 25, No. 3, 2006 (SCI)(Co-authored with Rui Wang et al)
- Easy Matting , Eurographics 2006 / Computer Graphics Forum, Vol.25,2006 (SCI,EI) (Co-authored with Yu Guan et al)
- Variational Sphere Set Approximation for Solid Objects , Pacific Graphics 2006 / The Visual Computer, Vol. 22 , 2006 (SCI,EI)(Co-authored with Rui Wang et al)
- Dynamic Anisotropic Occlusion ,Eurographics 2006 (short paper) (Co-authored with Yi Gong et al)

- Modelling and Rendering of Realistic Waterfall Scenes with Dynamic Texture Sprites , Computer Animation and Virtual Worlds, Vol. 17, 2006 (SCI,EI)(Co-authored with Yu Guan et al)
- Mean shift denoising of point-sampled surfaces , The Visual Computer, 2006, 22(3): 147-157 (SCI,EI)(Co-authored with Guofei Hu et al)
- A Dynamic Balanced Flow for Filtering Point-sampled Geometry, The Visual Computer, 2006, 22(3): 210-219 (SCI,EI)(Co-authored with Chunxia Xiao et al)
- Synthesizing trees from samples , The Visual Computer, 2006, 22(4): 238-248 (SCI,EI) (Co-authored with Rui Wang et al)
- Real-time Snowing Simulation , The Visual Computer, 2006, 22(5): 315-323 (SCI,EI , ISTP)(Co-authored with Changbo Wang et al)
- Video-based facial animation with detailed appearance texture, Progress in Natural Science , 2006 , 16 (3): 297-306 (SCI,EI , ISTP)(Co-authored with Jin Wang et al)
- Physically Based Simulation of Buddha Glory , Progress in Natural Science , 2006 , 16(6) : 656-662 (SCI,EI)(Co-authored with Shiguang Liu et al)
- A novel variational image model: Towards a unified approach to image editing , JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY , 2006 , 21 (2): 224-231 (SCI,EI) (Co-authored with Yun Zeng et al)
- IMAGE FEATURE DETECTION AS ROBUST MODEL FITTING , Asian Conference on Computer Vision (ACCV) 2006 (SCI,EI)(Co-authored with Dengfeng Chai)
- Appearance and Geometry Completion with Constrained Texture Synthesis , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Chunxia Xiao et al)
- An Approximate Image-Space Approach for Real-Time Rendering of Deformable Translucent Objects , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Yi Gong et al)
- Direct Volume Rendering of Volumetric Data of Proteins , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Ming Hu et al)
- Automatic foreground extraction of head shoulder images , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Jin Wang et al)
- A Feature-Preserving and Volume-Constrained Flow for Fairing Irregular Meshes , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Chunxia Xiao et al)
- Real-Time Simulation of Dynamic Mirage Scenes , Proc. of Computer Graphics International 2006, Hangzhou, China (SCI,EI)(Co-authored with Changbo Wang et al)

- Physically Based Modeling and Animation of Tornado , Journal of Zhejiang University SCIENCE A,7(7):1152-1159, 2006 , (EI)(Co-authored with Shiguang Liu et al)
- Image Inpainting based on Large Displacement View Images ,Journal of Software(Suppl.), 2006,16 (EI)(Co-authored with Chunxiao Liu et al)
- Multiresolution Shape Editing of Point-sampled Geometry , Journal of Software, 2006,16 (EI)(Co-authored with Chunxia Xiao et al)
- View Dependent Layer Sampling: A New Approach to Hardware Implementation of Volume Ray Casting ,Journal of Software, 2006,16(EI) (Co-authored with Wei Chen et al)
- A global approach for video matching , Journal of Software, 2006,16 (EI)(Co-authored with Dengfeng Chai et al)
- Modeling and Real-Time Walkthrough System of Infrared Dynamic Scenes (Vision 1.0), Chinese Software Registration under Grant No. 036664, April, 2005 (Co-authored with Zhangye Wang et al)
- Feature Analysis and Visualization of 3D Scalar Field with the Applications to the Macromolecule, Journal of Software(Supplement), 2006,16(EI) (Co-authored with Wei Han et al, in Chinese)
- A Non-local Geometry Signal Based Algorithm for Point Models Denoising, Journal of Software (Supplement), 2006,16(EI)(Co-authored with Chunxia Xiao et al, in Chinese)
- Real-time rendering of ray scattering effect under the conditions of rain and fog, Journal of Software (Supplement) , 2006,16 (EI) (Co-authored with Lei Huang et al, in Chinese)
- Boolean Operations on Sampling Point Models, Journal of Software (Supplement) , 2006,16 (EI) (Co-authored with Lanfang Miao et al, in Chinese)
- Texture Mapping on Real World Models from Multiple Photographic Images, Journal of Software, 2006,16(11):2014-2020 (EI) (Co-authored with Gang Liu et al, in Chinese)
- Realistic Image Synthesis of Flying Scenes of Spacecraft, Chinese Journal of Computers, 2005 , 28 (1) : 68-74 (EI) (Co-authored with Shiguang Liu et al, in Chinese)
- Realistic synthesis of cao shu of Chinese calligraphy , Computers & Graphics, 29(1): 145-153, 2005 (SCI, EI)(Co-authored with Yinhui Yu et al)
- Dynamic Modeling and Rendering of Grass Wagging in Wind , Computer Animation and Virtual Worlds, Vol. 16, No. 3-4(Special Issue), pp. 377-389, 2005 (SCI, EI)(Co-authored with Changbo Wang et al)
- Image and Video Retexturing , Computer Animation and Virtual Worlds, Vol. 16, No. 3-4(Special Issue), pp. 451-461, 2005 (SCI, EI)(Co-authored with Yanwen Guo et al)
- A Novel Constrained Texture Mapping Method Based on Harmonic Map , Computers & Graphics, 29(6), 2005 , pp.972-979 (SCI, EI)(Co-authored with Yanwen Guo et al)

- Generation of Dynamic Infrared Outer Space Scene , International Journal of Infrared and Millimeter Waves, Vol. 26, No. 11, pp. 1627-1638, 2005 (SCI, EI)(Co-authored with Zhifeng Zhang et al)
- Smooth feature line detection for meshes , Journal of Zhejiang University(Science), 2005 , Vol. 6A, No. 5, pp. 460-468 (EI)(Co-authored with Yanwen Guo et al)
- Constrained Branch-and-Bound Algorithm for Image Registration , Journal of Zhejiang University(Science), 2005 , Vol. 6A Suppl 1, pp. 94-99 (EI)(Co-authored with Yanwen Guo et al)
- A new cloud removal algorithm for multi-spectral images , Proc. of SPIE on MIPPR 2005: SAR and Multispectral Image Processing, SPIE 6043, pp. 60430W~1-11 (EI , ISTP) (Co-authored with Zhangye Wang et al)
- Generation of multispectral scene images under different weather conditions ,Proc. of SPIE on MIPPR 2005, Geospatial Information, Data Mining, and Application,SPIE 6045, pp. 60450J~1-10 (EI , ISTP)(Co-authored with Changbo Wang et al)
- Mesh based automatic image registration , Proc. of SPIE on MIPPR 2005: Image Analysis Techniques , SPIE 6044, pp. 604402~1-6 (EI , ISTP)(Co-authored with Dengfeng Chai et al)
- A New Approach for Examining the Similarity of Protein 3D Shape , International Journal of Information Technology, 2005 , Vol. 11,No. 8, pp. 9-16 (Co-authored with Ming Hu et al)
- High Quality Real-time Rendering of Large Scale Point Model, Chinese Journal of Computers, 2005 ,28(2): 241-249(EI)(Co-authored with Long Zhang et al, in Chinese)
- Realistic Image Synthesis of Flying Scenes of Spacecraft, Chinese Journal of Computers, 2005 , 28 (1) : 68-74 (EI) (Co-authored with Shiguang Liu et al, in Chinese)
- Geodesic Path Computation and Region Decomposition of Point-based Surface Based on Level Set Method, Chinese Journal of Computers, 2005 ,28(2):250-258(EI)(Co-authored with Chunxia Xiao et al, in Chinese)
- Realistic Rendering of Sky Scene Considering Atmospheric Refraction, Chinese Journal of Computers, 2005 , 28 (6) : 939-949 (EI) (Co-authored with Changbo Wang et al, in Chinese)
- Robust morphing of point-sampled geometry, Computer Animation and Virtual Worlds, 2004, Special Issue, pp. 201-210, June, 2004(SCI, EI ,ISTP)(Co-authored with Chunxia Xiao et al)
- Robust Mesh Smoothing , Journal of Computer Science & Technology, Vol. 19, No. 4, pp. 521-528, 2004 (SCI, EI)(Co-authored with Guofei Hu et al)

- Interactive Collision Detection for Complex and Deformable Models using Programmable Graphics Hardware , Proceedings of the ACM Symposium on Virtual Reality Software and Technology, Hong Kong, China, November 10-12, 2004, pp. 10-15 (EI , ISTP) (Co-authored with Wei Chen et al)
- Infrared image synthesis for bridge , Proc. Of SPIE on Defense and Security, SPIE 5405, 2004, pp.177-188, Orlando, Florida, U.S.A. (EI , ISTP)(与 Co-authored with Zhaoyi Jiang et al)
- New model for realistic IR image rendering of city building ,Proc. Of SPIE on Defense and Security, SPIE 5405, 2004, pp. 167-176, Orlando, Florida, U.S.A. (EI , ISTP) (Co-authored with Zhangye Wang et al)
- Watermarking on 3D mesh based on spherical wavelet transform , JOURNAL OF ZHEJIANG UNIVERSITY (SCIENCE), 2004, Vol.5 No.3, pp. 251-259 (EI , ISTP) (Co-authored with Jianqiu Jin et al)
- Real-time Voxelization of Complex Objects , Proceedings of Pacific Graphics 2004,Seoul, Korea, pp.43-50, 2004 (EI , ISTP)(Co-authored with Zhao Dong et al)
- Adaptive Color Transfer, Chinese Journal of Computers, 2004 , 27 (9) :1245-1249 (EI) (Co-authored with Guofei Hu et al, in Chinese)
- A real-time global relighting algorithm, Journal of Software,14 (Supplement) : 252-258 (EI) (Co-authored with Xiangyang Wu et al)
- Anisotropic Denoising of Pointsampled Models, Journal of Software, 14 (Supplement) : 215-221 (EI) (Co-authored with Guofei Hu et al, in Chinese)
- Neighborhood Centroid Constrained Fairing Algorithm for Point Clouds, Journal of Software, 14 (Supplement) : 230-238 (EI) (Co-authored with Zhengyu Yang et al, in Chinese)
- Generating Visual Hulls from Freely Moving Camera, Journal of Computer-Aided Design & Computer Graphics, 2004, 16 (11) : 1501-1504 (Co-authored with Gang Liu et al, in Chinese)
- An Optimal Fusion Method of Multi-spectral Images under Correlation Coefficient Criteria, Journal of Computer-Aided Design & Computer Graphics, 2004,16(12) : 1656-1661 (Co-authored with Jianqiu Jin et al, in Chinese)
- A new Wavelet Image Fusion Algorithm Based on Human Visual System, Journal of Image And Graphics, 2004,9A (9) : 1088-1094 (Co-authored with Li Zhou et al, in Chinese)
- Digital Image Inpainting with Radial Basis Functions, Journal of Image and Graphics, 2004,9A (10) : 1190-1196 (Co-authored with Tingfang Zhou et al, in Chinese)
- A Realistic Image Synthesis Model for Infrared Scene ,International Journal of Infrared and Millimeter Waves, 2003, Vol. 24, No. 7, pp. 1149-1160(SCI)(Co-authored with Zhangye Wang et al)

- Wavelength Independent Texture for Multi-spectral Scene Simulation , Proc. Of SPIE on Multi-spectral Image Process and Pattern Recognition, SPIE 5268, 2003, pp.717-722 (EI,ISTP) (Co-authored with Changbo Wang et al)
- Optimization Techniques for Assembly Planning of Complex Models in Large-scale Virtual Environments, International Journal of Image and Graphics , 3(2) , 2003:379-398 (Co-authored with Huagen Wan et al)
- Real-time Generation of Dynamic Infrared Scene, International Journal of Infrared & Millimeter Waves, 24(10), 2003 (SCI) (Co-authored with Zhaoyi Jiang et al)
- Image-based Synthesis of Chinese Landscape Painting, Journal of Computer Science and Technology, 18(1),2003: 22-28 (SCIE\AHCI) (Co-authored with Jinhui Yu et al)
- Wavelength Independent Texture for Multi-spectral Scene Simulation, Proc. Of SPIE on Multi-spectral Image Process and Pattern Recognition, Beijing, China,2003 (Co-authored with Changbo Wang et al)
- Real-time Walkthrough of Infrared Scene, Proc. Of CAD/Graphics'2003, Macao, China,2003 (Co-authored with Zhangye Wang et al)
- An Interactive Image-Based Modeling Approach with Scene Constraints, Proc. Of CAD/Graphics'2003, Macao, China,2003 (Co-authored with Gang Liu et al)
- Real-time Simulation of Ocean Wave Based on Cellular Automata, Proc. Of CAD/Graphics'2003, Macao, China,2003 (Co-authored with Changbo Wang et al)
- Real-time Ray Casting Rendering of Volume Clipping in Medical Visualization, Journal of Computer Science and Technology,2003 (SCI) (Co-authored with Wei Chen et al)
- B-spline free-form deformation of polygonal object as trimmed Bezier surfaces, Visual Computer,2002, 18, 493-510 (Co-authored with Jieqing Feng et al)
- An efficient line clipping algorithm based on adaptive line rejection, COMPUTERS & GRAPHICS,2002,26,409-415 (SCI) (Co-authored with Guodong Lu et al)
- BRDC:binary representation of displacement code for line, COMPUTERS & GRAPHICS,2002,26,401-408 (SCI) (Co-authored with Lanfang Miao et al)
- Termination criterion for subdivision of triangular Bezier patch, COMPUTERS & GRAPHICS,2002,26:67-74 (SCI) (Co-authored with Yongqin Li et al)
- AN INFRARED IMAGE SYNTHESIS MODEL FOR HIGH-SPEED TARGETS, INT J. Infrared and Millimeter Waves,2002,23(12) : 1743-1751 (SCI) (Co-authored with Weijie Yu et al)
- A Novel Volume Constrained Smoothing Method for Meshes ,Graphical Models,2002,64(3-4) : 169,182 (SCI) (Co-authored with Xinguo Liu et al)
- Hierarchical surface fragments, Progress in Natural Science,2002,12(9),701-709 (SCI) (Co-authored with Wei Hua et al)
- G3 continuous curve modeling with rational cubic Bezier spline, Progress in Natural Science,2002,12 (3) : 1-7 (SCI) (Co-authored with Jinhui Chen et al)
- Adaptive and Fast Construction of Distance Fields for Dense Meshes,Natural Development of Science (Chinese),2002,12(7),737-741 (Co-authored with Xiang Fang et al)
- Automatic Image-Based Pencil Sketch Rendering, J. Comput. Sci. & Technol., 2002, 17(3),347-355 (SCI) (Co-authored with Jin Wang et al)

- Study on Infrared Characteristics of City Buildings with Season Changes and Their Images, Chinese J. of Infrared & Millimeter Waves,2002, 21(5):377-381 (SCI) (Co-authored with Yanqing Lu et al)
- Animating Water in Chinese Painting Using Autoregressive Model, Chinese Journal of Software,2002,13(4) , 475-481 (EI) (Co-authored with Jinhui Yu et al)
- An Algorithm to Generate Visual Hulls,Chinese Journal of Software,2002,13(9),1823-1829 (EI) (Co-authored with Gang Liu et al)
- A Rain model for Cartoon Animation, Chinese Journal of Software,2002 , 13(9), 1881-1886 (EI) (Co-authored with Jinhui Yu et al)
- Continuous Multiresolution Modeling Based on Interpolation Subdivision, Chinese Journal of Software,2002,13(4) , 652-658 (EI) (Co-authored with Weiquan Cao et al)
- BernsteinPolynomial Composition through Interpolation and Its Application in Curves and Surfacws, Chinese Journal of Software,2002,13(10) , 2014-2019 (Co-authored with Jieqing Feng et al)
- Feature Validity Maintaining Approach Based on Local Feature Recognition, Chinese Journal of Software,2002,13(4) ,552-560(EI) (Co-authored with Zhengming Chen et al)
- An Adaptive Multi-pixel Line Drawing Algorithm Based on Displacement Code, Chinese Journal of Software,2002,13(4), 637-642 (EI) (Co-authored with Lanfang Miao et al)
- Convolution Surface Modeling Based on Line Segment Primitive with Polynomial Density Distribution , Chinese Journal of Computer,2002 , 25(3) , 320-324 (Co-authored with Xiaogang Jin et al)
- An Efficient Algorithm of Line Clipping Against Polygonal Window Based on the Vertex Encoding, Chinese Journal of Computer,2002,25(9) , 987-993 (EI) (Co-authored with Guodong Lu et al)
- A Quantity Optics Based Illumination Model for Infrared Image Synthesis, Chinese Journal of Computer,2002,25(9) , 897-903 (EI) (Co-authored with Zhangye Wang et al)
- The Realistic Fusion of Multi-spectral Images, Chinese Journal of Image and Graphics, 2002, 7(A),9:926-931 (Co-authored with Jianqiu Jin et al)
- VDVAS: An Integrated Virtual Design and Virtual Assembly System, Chinese Journal of Image and Graphics,2002, 7(A):27-35 (Co-authored with Huagen Wan et al)
- A Minimum Features Based Algorithm for Rapid Modeling of Faces from Video, Chinese Journal of Computer-aided Design & Computer Graphics,2002,14(9),840-844 (Co-authored with Jin Wang et al)
- Realistic Synthesis Between Infrared Target and Its Background , Chinese Journal of Computer-aided Design & Computer Graphics ,2002,14(11):1001-1004(EI) (Co-authored with Zhangye Wang et al)
- A Free-hand Navigation System for Brachytherapy, Chinese Journal of Computer-aided Design & Computer Graphics,2002,14(9) , 870-876 (Co-authored with Wei Chen et al)
- The Global Occlusion Map: A New Occlusion Culling Approach, VRST 2002,ACM Symp. On Virtual Reality Software and Technology,Hong Kong,,155-162 (Co-authored with Wei Hua et al)

- Rendering of Virtual Environments Based on Polygonal & Point-based Models, VRST 2002, ACM Symp. On Virtual Reality Software and Technology, Hong Kong, 25-32 (Co-authored with Wenting Zheng et al)
- Fast Adaptive Structure Of Dense Grid Distance Field, Progress In Natural Science, 2002, 12 (7), 737-741 (Co-authored with Xiang Fang et al, in Chinese)
- Study on Infrared Characteristics of City Buildings With Season Changes and Their Images, Journal of Infrared and Millimeter Waves, 2002,21(5) , 377-381 (SCI) (Co-authored with Yanqing Lu et al, in Chinese)
- An Algorithm to Generate Visual Hulls, Journal of Software, 2002,13(9),1823-1829 (EI) (Co-authored with Gang Liu et al)
- A Rain Model for Cartoon Animation, Journal of Software, 2002 , 13(9), 1881-1886(EI) (Co-authored with Jinhui Yu et al, in Chinese)
- Continuous Multiresolution Modeling Based on Interpolation Subdivision, Journal of Software, 2002,13(4) , 652-658 (EI) (Co-authored with Weiqun Cao et al, in Chinese)
- Bernstein Polynomial Composition Through Interpolation and Its Applications in Curves and Surfaces, Journal of Software, 2002,13(10) , 2014-2019 (Co-authored with Jieqing Feng et al, in Chinese)
- Feature Validity Maintaining Approach Based on Local Feature Recognition, Journal of Software, 2002,13(4) ,552-560(EI) (Co-authored with Zhengming Chen et al, in Chinese)
- An Adaptive Multi-Pixel Line Drawing Algorithm Based on Displacement Code, Journal of Software, 2002,13(4), 637-642(EI) (Co-authored with Lanfang Miao et al, in Chinese)
- Convolution Surface Modeling Based on Line Segment Primitive with Polynomial Density Distribution, Chinese Journal of Computers, 2002 , 25(3) , 320-324 (Co-authored with Xiaogang Jin et al, in Chinese)
- An Efficient Algorithm of Line Clipping Against Polygonal Window Based on the Vertex Encoding, Chinese Journal of Computers, 2002,25(9) , 987-993 (EI) (Co-authored with Guodong Luet al, in Chinese)
- A Quantity Optics Based Illumination Model for Infrared Image Synthesis, Chinese Journal of Computers, 2002,25(9) , 897-903 (EI) (Co-authored with Zhangye Wang et al, in Chinese)
- The Realistic Fusion of Multi-spectral Images, Chinese Journal of Image and Graphics, 2002,7(A),9,926-931 (Co-authored with Jianqiu Jin et al, in Chinese)
- VDVAS: An Integrated Virtual Design and Virtual Assembly Environment, Journal of Image And Graphics, 2002,7(A), 27-35 (Co-authored with Huagen Wan et al, in Chinese)
- A Minimum Features Based Algorithm for Rapid Modeling of Faces From Video, Journal of Computer-Aided Design & Computer Graphics, 2002,14(9),840-844 (Co-authored with Jin Wang et al, in Chinese)
- Realistic Image Synthesis of Infrared Target with Background, Journal of Computer-Aided Design & Computer Graphics, 2002,14(11):1001-1004 (EI) (Co-authored with Zhangye Wang et al, in Chinese)
- Free Hand Navigation System for Brachytherapy, Journal of Computer-Aided Design & Computer Graphics, 2002,14(9) , 870-876 (Co-authored with Wei Chen et al, in Chinese)

- Constrained Fairing for meshes, COMPUTER GRAPHICS Forum , 2001, 20(2):115-123 (SCI) (Co-authored with Xinguo Liu et al)
- A Global Infrared Image Synthesis Model for Large-scale Complex Urban Scene, International Journal of Infrared Millimeter Waves , 2001, 22(8):1193-1208 (SCI) (Co-authored with Zhangye Wang et al)
- Continuous field based free-form surface modeling and morphing , Computers & Graphics , 2001,25:235-243 (SCI) (Co-authored with Xiang Fang et al)
- The synthesis of infrared ground target and its background, Proc. of SPIE, 2001, Vol. 4553: 173-178 (EI) (Co-authored with Zhangye Wang et al)
- A New Approach of Point-Based Rendering, Proceedings Computer Graphics International 2001, Hong Kong, 275-284 (ISTP)
- A Hardware Assisted LDI Building Algorithm with Application to Hybrid Volume Rendering,CAD/Graphics'2001, Kunming ,2001, 225-232 (ISTP) (Co-authored with Wei Chen et al)
- Video Tracked Facial Expression Animation, CAD/Graphics'2001, Kunming , 2001, 372-378 (ISTP) (Co-authored with Li Mei et al)
- Virtual Bio_Molecular Modeling, CAD/Graphics'2001, Kunming , 2001, 506-509 (ISTP) (Co-authored with Yiyu Cai et al)
- G3 Continuous Curve Modeling with Rational Cubic Bezier Spline, Natural Development of Science (Chinese),2001.7,11(7),pp747-753 (Co-authored with Jinhui Chen et al)
- Geometric Deformations Based on 3D Volume Morphing, Journal of Computer Science and Technology , 2001,16(5), pp443-449 (SCI) (Co-authored with Xiaogang Jin et al)
- An Algorithm for LOD by Merging Near Coplanar Faces Based on Gauss Sphere, Journal of Computer Science and Technology , 2001,16(5), pp450-457 (SCI) (Co-authored with Weiqun Cao et al)
- Controllable 3D Morphing ,Chinese Journal of Software ,2001,12(6), pp856-863 (EI) (Co-authored with Xiang Fang et al)
- A Cartoon Water Model for Stereo Animation, Chinese Journal of Software,2001,12(7),pp960-966 (EI) (Co-authored with Jinhui Yu et al)
- Modeling and Rendering of Trimmed Implicit Surface, Chinese Journal of Software , 2001,12(1), pp111-116 (EI) (Co-authored with Zhengsheng Yu et al)
- An Approach to Naming and Identifying Topological Entities, Chinese Journal of Computer, 2001, 24(11), pp1170-1177 (Co-authored with Zhengming Chen et al)
- Continuity-Based Contour Line Extraction Method, Chinese Journal of Computer,2001,24(9), pp938-943 (EI) (Co-authored with Weiqing Li et al)
- Cartoon Water Forms Synthesis Using Random Sinusoidal Function, Chinese Journal of Computer Research & Development,2001,38(5):519-523 (Co-authored with Jinhui Yu et al)
- Algorithm for Fast Calculating the Nearest Distance Between Space Point and Arbitrary Polyhedron, Chinese Journal of Computer-aided Design & Computer Graphics , 2001,3(9), pp788-792 (Co-authored with Xiang Fang et al)

- Fast Algorithm for Composition of the Bernstein Polynomials, Chinese Journal of Computer-aided Design & Computer Graphics , 2001,13(2),pp163-167 (Co-authored with Jieqing Feng et al)
- A Fast Intersecting Feature Check and Detection Approach Based on Persistently Naming Geometric Entities and Its Application , Chinese Journal of Computer-aided Design & Computer Graphics , 2001,13(5), pp385-390 (Co-authored with Zhengming Chen et al)
- New Conversion Between Triangular and Tensor-Product Bezier Patches , Chinese Journal of Computer-aided Design & Computer Graphics, 2001,13(5),pp467-472 (Co-authored with Jieqing Feng et al)
- Mating Dimension Inheritance and Testing Based on Assembly Drawing Information , Chinese Journal of Computer-aided Design & Computer Graphics , 2001,13(6), pp509-513 (Co-authored with Shuyou Zhang et al)
- Research on Automatic Dimensioning Based on Divide and Conquer Strategy , Chinese Journal of Computer-aided Design & Computer Graphics , 2001,13(6), pp521-526 (Co-authored with Guodong Lu et al)
- A General and Fast Triangulation Algorithm , Chinese Journal of Computer-aided Design & Computer Graphics , 2001,13(9),pp769-773 (Co-authored with Weiqing Li et al)
- Fast Distance Surface Computation Based on Optimized Arc Spline Approximation , Chinese Journal of Image and Graphics , 2001, 6(A), 5, pp486-490 (Co-authored with Xiaogang Jin et al)
- Parallel Visualization for Large-scale Datasets , Journal of Zhejiang University (Science Edition) , 2001,28(2), pp.222-226 (Co-authored with Li Chen et al)
- Modelling of G3-Continuity Rational Cubic Bezier Spline Curve, Progress in Natural Science, 2001.7,11 (7), pp. 747-753 (Co-authored with Jinhui Chen et al, in Chinese)
- Controllable 3D Morphing, Journal of Software, 2001,12(6), pp856-863 (EI) (Co-authored with Xiang Fang et al, in Chinese)
- Modeling and Rendering of Implicit Trimmed Surfaces, Journal of Software, 2001,12(1), pp111-116 (EI) (Co-authored with Zhengshen Yu et al, in Chinese)
- An approach to naming and identifying topological entities, Chinese Journal of Computers, 2001, 24(11), pp1170-1177 (Co-authored with Zhengming Chen et al, in Chinese)
- Continuity-Based Contour Line Extraction Method, Chinese Journal of Computers, 2001,24(9), pp938-943 (EI) (Co-authored with Weiqing Li et al, in Chinese)
- Cartoon Water Forms Synthesis using Random Sinusoidal Functions, Journal of Computer Research and Development, 2001,38(5), pp519-523 (Co-authored with Jinhui Yu et al, in Chinese)
- Algorithm for Fast Calculating the Nearest Distance Between Space Point and Arbitrary Polyhedron, Journal of Computer-Aided Design & Computer Graphics, 2001,3(9), pp788-792 (Co-authored with Xiang Fang et al, in Chinese)
- Fast Algorithm for Composition of the Bernstein Polynomials, Journal of Computer-Aided Design & Computer Graphics, 2001,13(2),pp163-167 (Co-authored with Jieqing Feng et al, in Chinese)

- Intersecting Feature Check and Detection Approach Based on Persistently Naming Geometric Entities and Its Application, *Journal of Computer-Aided Design & Computer Graphics*, 2001,13(5), pp385-390 (Co-authored with Zhengming Chen et al, in Chinese)
- New Conversion between Triangular and Tensor-Product Bézier Patches, *Journal of Computer-Aided Design & Computer Graphics*, 2001,13(5),pp467-472 (Co-authored with Jieqing Feng et al, in Chinese)
- Mating Dimension Inheritance and Testing Based on Assembly Drawing Information, *Journal of Computer-Aided Design & Computer Graphics*, 2001,13(6), pp509-513 (Co-authored with Shuyou Zhang et al, in Chinese)
- Research on Automatic Dimensioning Based on Divide and Conquer Strategy, *Journal of Computer-Aided Design & Computer Graphics*, 2001,13(6), pp521-526 (Co-authored with Guodong Lu et al, in Chinese)
- A General and Fast Triangulation Algorithm, *Journal of Computer-Aided Design & Computer Graphics*, 2001,13(9),pp769-773 (Co-authored with Weiqing Li et al, in Chinese)
- Fast Distance Surface Computation Based on Optimized Arc Spline Approximation, *Journal of Image and Graphics*, 2001, 6(A), 5, pp486-490 (Co-authored with Xiaogang Jin et al, in Chinese)
- Parallel visualization for large-scale datasets, *Journal of Zhejiang University (Science Edition)*, 2001, 28(2), pp222-226 (Co-authored with Li Chen et al, in Chinese)
- An Infrared Image Synthesis Model of City Building Based on Meteorology and heat Transfer, *Journal of System Simulation*, 12(5), 2000:517-523 (Co-authored with Zhangye Wang)
- The Infrared Signature of a Moving Targets Accounting for Atmospheric Attenuation, *Journal of System Simulation*, 12(5), 2000:524-527 (Co-authored with Zhifeng Zhang)
- Computer Simulation of Infrared Image for High-speed Objects, *Journal of System Simulation*, 2000, 12(5),pp. 560-564 (Co-authored with Weijue Yu)
- Recognition of Engineering Semantics Implied in Engineering Drawings, *Journal of Image and Graphics*, 2000, 5(A)(10), pp. 861-867 (Co-authored with Guodong Lu)
- Realistic Reconstruction of Human Face Based on Images, *Chinese Journal of Computers*, 2000, 23(9), pp. 996-1002 (Co-authored with Li Mei)
- An 2D Grid Subdivision Algorithm with C2 Continuity and Application, *Chinese Journal of Computers*, 2000, 23(9), pp. 899-904 (EI)(Co-authored with Jin Wang)
- Study on Dimensions Validation Based on Basic-space Coordinates, *Chinese Journal of Computers*, 2000, 23(9),pp. 982-986 (Co-authored with Shuyou Zhang)
- Implicit Surface Modeling Based on General Skeletons, *Journal of Software*, 2000, 11(9), pp. 1214-1220 (Co-authored with Xiang Fang)
- Incremental Geometric Compression, *Journal of Software*, 2000, 11(9),pp. 1167-1175 (Co-authored with Xinguo Liu)
- Real-time Walkthrough Algorithm for Virtual Environments with Global Specular Reflection, *Journal of Software*, 2000, 11(9), pp. 1241-1247(Co-authored with Wei Hua)
- Continuous Multiresolution Modeling Based on Implicit Function Interpolation, *Journal of Software*, 2000, 11(9) pp. 1248-1256(Co-authored with Weiqun Cao)
- Distributed virtual reality system based on hybrid rendering , *PROGRESS IN NATURAL SCIENCE* , 2000, 19(3),pp. 218-224 (SCI)(Co-authored with Wenting Zheng)
- Noise removal algorithm for polygonal meshes, *PROGRESS IN NATURAL SCIENCE*, 2000, 10(10), pp. 774:779 (SCI)(Co-authored with Xinguo Liu)
- Real-time rendering algorithm based on a hybrid rendering scheme, *PROGRESS IN NATURAL SCIENCE*, 2000, 10(2), pp. 141-146 (SCI)(Co-authored with Wenting Zheng)

- General constrained deformations based on generalized metaballs, COMPUTERS & GRAPHICS, 2000, 24, pp. 219-231 (SCI) (Co-authored with Xiaogang Jin)
- An approach to solid modeling in a semi-immersive virtual environment, COMPUTERS & GRAPHICS, 2000, 24, pp. 191-202 (SCI) (Co-authored with Shumin Gao)
- The Infrared Signature of a Moving Targets Based on Atmospheric Propagation Modeling, Journal of System Simulation, 2000,12(5), pp. :524-527 (Co-authored with Zhifeng Zhang et al, in Chinese)
- Computer Simulations of Infrared Image for High-speed Objects, Journal of System Simulation, 2000, 12(5), pp. 560-564 (Co-authored with Weijie Yu et al, in Chinese)
- Research on Engineering Semantics Orient to Graph Recognition, Journal of Image and Graphics, 2000, 5A (10), pp. 861-867 (Co-authored with Guodong Lu et al, in Chinese)
- Realistic Reconstruction of Human Face Based on Images, Chinese Journal of Computers, 2000, 23(9), pp. 996-1002 (Co-authored with Li Mei et al, in Chinese)
- An 2D Grid Subdivision Algorithm Based on C2 and Application, Chinese Journal of Computers, 2000, 23(9), pp. 899-904 (EI) (Co-authored with Jin Wang et al, in Chinese)
- Research on the Check for Dimension Based on Spatial Basic-Coordinates, Chinese Journal of Computers, 2000, 23(9), pp. 982-986 (Co-authored with Shuyou Zhang et al, in Chinese)
- Implicit Surface Modeling Based on General Skeletons, Journal of Software, 2000, 11(9),pp. 1214-1220(EI) (Co-authored with Xiang Fang et al, in Chinese)
- Incremental Geometric Compression, Journal of Software, 2000, 11(9), pp. 1167-1175 (EI) (Co-authored with Xinguo Liu et al, in Chinese)
- Real-Time Walkthrough Algorithm for Virual Environments with Global Specular Reflections, Journal of Software, 2000, 11(9), pp.1241-1247(EI) (Co-authored with Wei Hua et al, in Chinese)
- Continuous Multiresolution Modeling Based on Implicit Function Interpolation, Journal of Software, 2000,11(9), pp.1248-1256 (Co-authored with Weiqun Cao et al, in Chinese)
- Nonlinear View Interpolation, J. of Visualization and Computer Animation, 1999, 10(4):233-241(Co-authored with Hujun Bao)
- Functional Compositions via Shifting Operators for Bezier Patches and Their Applications, Journal of Software, 10(12), Dec., 1999, pp. 1316-1322(Co-authored with Jieqing Feng)
- A New general constrained deformation model, PROGRESS IN NATURAL SCIENCE, 9 (11), Nov 1999, pp. 855-862(Co-authored with Xiaogang Jin)
- 3D Reconstruction Based on 2D View Features, Chinese Journal of Computers, 1999, 22(6):481-485(Co-authored with Wei Gao)
- A Optical Model of Volume Rendering Based on Features of Biological Surface, Computer Research and Development, 1999,36(2): 197-203(Co-authored with Honghui Guo)
- “Accelerated Walkthroughs of Complex Scenes Based on Visibility Culling and Image-Based Rendering “J. Comput. Sci. & Technol., 1998, 13 (Suppl.): 9-16(Co-authored with Hujun Bao)
- Merged Quadtree Fractal Image Compression, Optical Engineering, 1998, 37(8): 2284-2289(Co-authored with Yigang Wang)
- An Infrared Image Synthesis Model Based on Infrared Physics and Heat Transfer, International J. of Infrared and Millimeter Waves, 1998, 19(12): 1661-1669(SCI)(Co-authored with Weijue Yu)
- Accelerated Walkthroughs of Virtual Environments Based on Visibility Preprocessing and Simplification, Computer Graphics Forum, 1998, 17(3): 187-194 (SCI)(Co-authored with Yigang Wang)
- Interactive 3D Morphing, Computer Graphics Forum, 1998, 17(3): 23-30 (SCI)(Co-authored with Hujun Bao)

- A United Global Vectorization Algorithm Based on Scan Strip , Journal of Software , 1998, 9(6): 426-431 (EI)(Co-authored with Bin Li)
- Constraint Based Solid Modeling in a Virtual Environment, Proc. of ASME DETC'98, Atlanta, U.S.A.(Co-authored with Shumin Gao)
- New Illumination Model for Scenes Containing Diffraction Gratings, Progress in Natural Science, 1998, 8(2): 174-179 (SCI)(Co-authored with Jiang Li)
- A Real Time Walkthrough Algorithm Based On Overlay Techniques For Virtual Reality, Chinese Journal of Computers, 1998 (Supplement) :315-322 (Co-authored with Sheng Fu, in Chinese)