Eduard GrÃ¶ller

List of Publications by Year
in descending order

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163	3,527	147801	206112
papers	citations	31 h-index	48 g-index

167	167	167	2203
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Importance-Driven Focus of Attention. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 933-940.	4.4	136
2	Importance-Driven Feature Enhancement in Volume Visualization. IEEE Transactions on Visualization and Computer Graphics, 2005, 11, 408-418.	4.4	119
3	Uncertaintyâ€Aware Exploration of Continuous Parameter Spaces Using Multivariate Prediction. Computer Graphics Forum, 2011, 30, 911-920.	3.0	101
4	Geometry of Mixed-Mode Oscillations in the 3-D Autocatalator. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 1998, 08, 505-519.	1.7	99
5	World Lines. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1458-1467.	4.4	98
6	Two-level volume rendering. IEEE Transactions on Visualization and Computer Graphics, 2001, 7, 242-252.	4.4	96
7	Exploded Views for Volume Data. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 1077-1084.	4.4	95
8	Style Transfer Functions for Illustrative Volume Rendering. Computer Graphics Forum, 2007, 26, 715-724.	3.0	90
9	State of the Art in Transfer Functions for Direct Volume Rendering. Computer Graphics Forum, 2016, 35, 669-691.	3.0	79
10	Enhancing Depth-Perception with Flexible Volumetric Halos. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1344-1351.	4.4	76
11	Illustrative Context-Preserving Exploration of Volume Data. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 1559-1569.	4.4	74
12	Fast Visualization of Object Contours by Non-Photorealistic Volume Rendering. Computer Graphics Forum, 2001, 20, 452-460.	3.0	72
13	Strategies for interactive exploration of 3D flow using evenly-spaced illuminated streamlines. , 2003, , .		65
14	Nonlinear ray tracing: Visualizing strange worlds. Visual Computer, 1995, 11, 263-274.	3.5	57
15	BrainGazer - Visual Queries for Neurobiology Research. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 1497-1504.	4.4	53
16	Instant Volume Visualization using Maximum Intensity Difference Accumulation. Computer Graphics Forum, 2009, 28, 775-782.	3.0	52
17	Modeling and visualization of knitwear. IEEE Transactions on Visualization and Computer Graphics, 1995, 1, 302-310.	4.4	51
18	Semantic Layers for Illustrative Volume Rendering. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1336-1343.	4.4	48

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19	Gradient Estimation in Volume Data using 4D Linear Regression. Computer Graphics Forum, 2000, 19, 351-358.	3.0	46
20	Interactive High-Quality Maximum Intensity Projection. Computer Graphics Forum, 2000, 19, 341-350.	3.0	43
21	CoViCAD: Comprehensive Visualization of Coronary Artery Disease. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1632-1639.	4.4	43
22	Exploration of 4D MRI Blood Flow using Stylistic Visualization. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1339-1347.	4.4	42
23	Surface Extraction from Multi-Material Components for Metrology using Dual Energy CT. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1520-1527.	4.4	41
24	The Seismic Analyzer: Interpreting and Illustrating 2D Seismic Data. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1571-1578.	4.4	39
25	Comparative Visualization for Parameter Studies of Dataset Series. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 829-840.	4.4	37
26	Interactive Virtual Probing of 4D MRI Blood-Flow. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 2153-2162.	4.4	36
27	Nodes on Ropes: A Comprehensive Data and Control Flow for Steering Ensemble Simulations. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 1872-1881.	4.4	36
28	VAICo: Visual Analysis for Image Comparison. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2090-2099.	4.4	36
29	Instant Construction and Visualization of Crowded Biological Environments. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 862-872.	4.4	36
30	Multipath Curved Planar Reformation of the Peripheral Arterial Tree in CT Angiography. Radiology, 2007, 244, 281-290.	7.3	35
31	Visual Human+Machine Learning. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 1327-1334.	4.4	35
32	Volume visualization based on statistical transfer-function spaces. , 2010, , .		34
33	FiberScout: An Interactive Tool for Exploring and Analyzing Fiber Reinforced Polymers. , 2014, , .		33
34	Illustrative visualization. Computer Graphics, 2008, 42, 1-8.	0.1	33
35	<italic>Cupid</italic>: Cluster-Based Exploration of Geometry Generators with Parallel Coordinates and Radial Trees. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 1693-1702.	4.4	32
36	Visual Analysis and Steering of Flooding Simulations. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 1062-1075.	4.4	30

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37	Image segmentation based on active contours without edges. , 2012, , .		29
38	Survey of the Visual Exploration and Analysis of Perfusion Data. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 205-220.	4.4	28
39	A Model for Structure-Based Comparison of Many Categories in Small-Multiple Displays. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2287-2296.	4.4	28
40	Event Tunnel: Exploring Event-Driven Business Processes. IEEE Computer Graphics and Applications, 2008, 28, 46-55.	1.2	27
41	Visual Optimality and Stability Analysis of 3DCT Scan Positions. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1477-1486.	4.4	27
42	Visual Analysis of Spatioâ€Temporal Data: Applications in Weather Forecasting. Computer Graphics Forum, 2015, 34, 381-390.	3.0	27
43	LiveSync: Deformed Viewing Spheres for Knowledge-Based Navigation. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1544-1551.	4.4	26
44	Volume Analysis Using Multimodal Surface Similarity. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 1969-1978.	4.4	25
45	Stream arrows: enhancing the use of stream surfaces for the visualization of dynamical systems. Visual Computer, 1997, 13, 359-369.	3.5	24
46	Towards Quantitative Visual Analytics with Structured Brushing and Linked Statistics. Computer Graphics Forum, 2016, 35, 251-260.	3.0	24
47	The Event Tunnel: Interactive Visualization of Complex Event Streams for Business Process Pattern Analysis. , 2008, , .		23
48	Interactive Volume Visualization of General Polyhedral Grids. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 2115-2124.	4.4	23
49	ViSlang: A System for Interpreted Domain-Specific Languages for Scientific Visualization. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 2388-2396.	4.4	23
50	Multiscale Molecular Visualization. Journal of Molecular Biology, 2019, 431, 1049-1070.	4.2	23
51	A refined data addressing and processing scheme to accelerate volume raycasting. Computers and Graphics, 2004, 28, 719-729.	2.5	22
52	Projection-Based Metal-Artifact Reduction for Industrial 3D X-ray Computed Tomography. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 2193-2202.	4.4	22
53	Reinventing the Contingency Wheel: Scalable Visual Analytics of Large Categorical Data. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 2849-2858.	4.4	22
54	Vessel Visualization using Curvicircular Feature Aggregation. Computer Graphics Forum, 2013, 32, 231-240.	3.0	22

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55	Vis-A-Ware: Integrating Spatial and Non-Spatial Visualization for Visibility-Aware Urban Planning. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1139-1151.	4.4	22
56	AnimoAminoMiner: Exploration of Protein Tunnels and their Properties in Molecular Dynamics. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 747-756.	4.4	21
57	Placenta Maps: In Utero Placental Health Assessment of the Human Fetus. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1612-1623.	4.4	21
58	Ray Tracing with Extended Cameras. Computer Animation and Virtual Worlds, 1996, 7, 211-227.	0.9	20
59	Hybrid visibility compositing and masking for illustrative rendering. Computers and Graphics, 2010, 34, 361-369.	2.5	20
60	MObjects--A Novel Method for the Visualization and Interactive Exploration of Defects in Industrial XCT Data. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2906-2915.	4.4	20
61	Maximum intensity projection at warp speed. Computers and Graphics, 2000, 24, 343-352.	2.5	19
62	Feature peeling. Proceedings - Graphics Interface, 2007, , .	0.5	19
63	High-performance GPU-based rendering for real-time, rigid 2D/3D-image registration and motion prediction in radiation oncology. Zeitschrift Fur Medizinische Physik, 2012, 22, 13-20.	1.5	19
64	Porosity Maps â€“ Interactive Exploration and Visual Analysis of Porosity in Carbon Fiber Reinforced Polymers. Computer Graphics Forum, 2012, 31, 1185-1194.	3.0	19
65	Visual Analysis of Defects in Glass Fiber Reinforced Polymers for 4DCT Interrupted In situ Tests. Computer Graphics Forum, 2016, 35, 201-210.	3.0	19
66	LiteVis: Integrated Visualization for Simulation-Based Decision Support in Lighting Design. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 290-299.	4.4	19
67	Multiscale Visualization and Scale-Adaptive Modification of DNA Nanostructures. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 1014-1024.	4.4	19
68	Dynamic Volume Lines: Visual Comparison of 3D Volumes through Space-filling Curves. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 1040-1049.	4.4	19
69	Interactionâ€Dependent Semantics for Illustrative Volume Rendering. Computer Graphics Forum, 2008, 27, 847-854.	3.0	18
70	Real-Time Maximum Intensity Projection. Eurographics, 1999, , 135-144.	0.4	18
71	Biopsy Planner â€“ Visual Analysis for Needle Pathway Planning in Deep Seated Brain Tumor Biopsy. Computer Graphics Forum, 2012, 31, 1085-1094.	3.0	16
72	Visualization Multi-Pipeline for Communicating Biology. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 883-892.	4.4	16

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73	Labels on Levels: Labeling of Multi-Scale Multi-Instance and Crowded 3D Biological Environments. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 977-986.	4.4	16
74	Visualization of Myocardial Perfusion Derived from Coronary Anatomy. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1595-1602.	4.4	15
75	A Visual Approach to Efficient Analysis and Quantification of Ductile Iron and Reinforced Sprayed Concrete. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 1343-1350.	4.4	15
76	InSpectr: Multiâ€Modal Exploration, Visualization, and Analysis of Spectral Data. Computer Graphics Forum, 2014, 33, 91-100.	3.0	15
77	Modeling and rendering of nonlinear iterated function systems. Computers and Graphics, 1994, 18, 739-748.	2.5	14
78	Optimal specimen placement in cone beam X-ray computed tomography. NDT and E International, 2012, 50, 42-49.	3.7	14
79	Run Watchers: Automatic Simulation-Based Decision Support in Flood Management. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 1873-1882.	4.4	14
80	YMCA — Your mesh comparison application. , 2014, , .		14
81	JiTTree: A Just-in-Time Compiled Sparse GPU Volume Data Structure. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 1025-1034.	4.4	14
82	Ten Open Challenges in Medical Visualization. IEEE Computer Graphics and Applications, 2021, 41, 7-15.	1.2	14
83	Knowledge-assisted visualization of seismic data. Computers and Graphics, 2009, 33, 585-596.	2.5	13
84	Sketching Uncertainty into Simulations. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 2255-2264.	4.4	13
85	Vessel Visualization using Curved Surface Reformation. IEEE Transactions on Visualization and Computer Graphics, 2013, 19, 2858-2867.	4.4	13
86	Managing Spatial Selections With Contextual Snapshots. Computer Graphics Forum, 2014, 33, 132-144.	3.0	13
87	Efficient reconstruction from non-uniform point sets. Visual Computer, 2008, 24, 555-563.	3.5	12
88	Albero: A Visual Analytics Approach for Probabilistic Weather Forecasting. Computer Graphics Forum, 2017, 36, 135-144.	3.0	12
89	DimSUM: Dimension and Scale Unifying Map for Visual Abstraction of DNA Origami Structures. Computer Graphics Forum, 2018, 37, 403-413.	3.0	12
90	The geometry of Wonderland. Chaos, Solitons and Fractals, 1996, 7, 1989-2006.	5.1	11

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91	Fast generation of curved perspectives for ultra-wide-angle lenses in VR applications. Visual Computer, 1999, 15, 365-376.	3.5	11
92	On Visualization and Reconstruction from Nonâ€Uniform Point Sets using Bâ€splines. Computer Graphics Forum, 2009, 28, 1007-1014.	3.0	11
93	Contextual picking of volumetric structures. , 2009, , .		11
94	The Spinel Explorerâ€"Interactive Visual Analysis of Spinel Group Minerals. IEEE Transactions on Visualization and Computer Graphics, 2014, 20, 1913-1922.	4.4	11
95	Visualization of Objectâ€Centered Vulnerability to Possible Flood Hazards. Computer Graphics Forum, 2015, 34, 331-340.	3.0	11
96	PorosityAnalyzer: Visual analysis and evaluation of segmentation pipelines to determine the porosity in fiber-reinforced polymers. , 2016, , .		11
97	Scale Trotter: Illustrative Visual Travels Across Negative Scales. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 654-664.	4.4	11
98	Cuttlefish: Color Mapping for Dynamic Multiâ€Scale Visualizations. Computer Graphics Forum, 2019, 38, 150-164.	3.0	11
99	The moving target of visualization software for an increasingly complex world. Computers and Graphics, 2020, 87, 12-29.	2.5	11
100	Modeling Textiles as Three Dimensional Textures. Eurographics, 1996, , 205-214.	0.4	11
101	Visualizing the dynamical behavior of Wonderland. IEEE Computer Graphics and Applications, 1997, 17, 71-79.	1.2	10
102	Caricaturistic Visualization. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 1085-1092.	4.4	10
103	BoundarySeer: Visual analysis of 2D boundary changes. , 2014, , .		10
104	Fuzzy feature tracking: Visual analysis of industrial 4D-XCT data. Computers and Graphics, 2015, 53, 177-184.	2.5	10
105	VAPOR: Visual Analytics for the Exploration of Pelvic Organ Variability in Radiotherapy. Computers and Graphics, 2020, 91, 25-38.	2.5	10
106	Visualization of dynamical systems. Future Generation Computer Systems, 1999, 15, 75-86.	7.5	9
107	Semantics by analogy for illustrative volume visualization. Computers and Graphics, 2012, 36, 201-213.	2.5	9
108	Towards an Unbiased Comparison of CC, BCC, and FCC Lattices in Terms of Prealiasing. Computer Graphics Forum, 2014, 33, 81-90.	3.0	9

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109	Molecumentary: Adaptable Narrated Documentaries Using Molecular Visualization. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 1733-1747.	4.4	9
110	Automatized summarization of multiplayer games. , 2015, , .		8
111	HyperLabels: Browsing of Dense and Hierarchical Molecular 3D Models. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 3493-3504.	4.4	7
112	Visual analytics and rendering for tunnel crack analysis. Visual Computer, 2016, 32, 859-869.	3.5	6
113	Metamorphers. , 2017, , .		6
114	Parallel Generation and Visualization of Bacterial Genome Structures. Computer Graphics Forum, 2019, 38, 57-68.	3.0	6
115	Reconstruction Issues in Volume Visualization. , 2003, , 109-124.		6
116	Mastering Windows: Improving Reconstruction. , 2000, , .		5
117	Exploring visual prominence of multi-channel highlighting in visualizations. , 2017, , .		5
118	Relaxing Dense Scatter Plots with Pixel-Based Mappings. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 2205-2216.	4.4	5
119	Spinel web: an interactive web application for visualizing the chemical composition of spinel group minerals. Earth Science Informatics, 2021, 14, 521-528.	3.2	5
120	Hornero: Thunderstorms Characterization using Visual Analytics. Computer Graphics Forum, 2021, 40, 299-310.	3.0	5
121	Smallest second-order derivatives for efficient volume-data representation. Computers and Graphics, 2002, 26, 229-238.	2.5	4
122	Exploiting the Hessian matrix for content-based retrieval of volume-data features. Visual Computer, 2002, 18, 207-217.	3.5	4
123	Visual Coherence for Largeâ€Scale Lineâ€Plot Visualizations. Computer Graphics Forum, 2011, 30, 643-652.	3.0	4
124	Data-sensitive visual navigation. Computers and Graphics, 2017, 67, 77-85.	2.5	4
125	Visual Quantification of the Circle of Willis: An Automated Identification and Standardized Representation. Computer Graphics Forum, 2017, 36, 393-404.	3.0	4
126	Slice and Dice: A Physicalization Workflow for Anatomical Edutainment. Computer Graphics Forum, 2020, 39, 623-634.	3.0	4

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127	Multiscale Unfolding: Illustratively Visualizing the Whole Genome at a Glance. IEEE Transactions on Visualization and Computer Graphics, 2021, PP, 1-1.	4.4	4
128	Semi-automatic vessel detection for challenging cases of peripheral arterial disease. Computers in Biology and Medicine, 2021, 133, 104344.	7.0	4
129	Fractals and Solid Modeling. Computer Graphics Forum, 1992, 11, 415-424.	3.0	3
130	Contextual Snapshots. , 2013, , .		3
131	ViviSection: Skeletonâ€based Volume Editing. Computer Graphics Forum, 2013, 32, 461-470.	3.0	3
132	Multipath Curved Planar Reformations of Peripheral CT Angiography: Diagnostic Accuracy and Time Efficiency. CardioVascular and Interventional Radiology, 2017, 41, 718-725.	2.0	3
133	ManyLands: A Journey Across 4D Phase Space of Trajectories. Computer Graphics Forum, 2019, 38, 191-202.	3.0	3
134	Visual Analytics in Dental Aesthetics. Computer Graphics Forum, 2020, 39, 635-646.	3.0	3
135	Insight into Data through Visualization. Lecture Notes in Computer Science, 2002, , 352-366.	1.3	3
136	Salient Representation of Volume Data. Eurographics, 2001, , 203-211.	0.4	3
137	On the Role of Topology in Focus+Context Visualization. Mathematics and Visualization, 2007, , 171-181.	0.6	3
138	Nanotilus: Generator of Immersive Guided-Tours in Crowded 3D Environments. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 1860-1875.	4.4	3
139	<title>Case study: visualizing various properties of dynamical systems</title>. , 1998, 3346, 146.		2
140	VOTS: VOlume doTS as a Point-Based Representation of Volumetric Data. Computer Graphics Forum, 2004, 23, 661-668.	3.0	2
141	Integrating volume visualization techniques into medical applications. , 2008, , .		2
142	Enhancing visualization with real-time frequency-based transfer functions. , 2011, , .		2
143	New hybrid reformations of peripheral CT angiography: do we still need axial images?. Clinical Imaging, 2015, 39, 603-607.	1.5	2
144	Depth functions as a quality measure and for steering multidimensional projections. Computers and Graphics, 2016, 60, 93-106.	2.5	2

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145	Multi-Scale Procedural Animations of Microtubule Dynamics Based on Measured Data. IEEE Transactions on Visualization and Computer Graphics, 2019, 26, 1-1.	4.4	2
146	Interactive exploration of large time-dependent bipartite graphs. Journal of Computer Languages, 2020, 57, 100959.	2.1	2
147	Nonlinear ray tracing: visualizing strange worlds. Visual Computer, 1995, 11, 263-274.	3.5	2
148	AlVis - An Aluminium-Foam Visualization and Investigation Tool. Eurographics, 2000, , 229-238.	0.4	2
149	Hierarchical difference scatterplots. SIGKDD Explorations: Newsletter of the Special Interest Group (SIG) on Knowledge Discovery & Data Mining, 2010, 11, 49-58.	4.0	2
150	Concept splatters: Exploration of latent spaces based on human interpretable concepts. Computers and Graphics, 2022, 105, 73-84.	2.5	2
151	Fuzzy feature tracking. , 2015, , .		1
152	Interactive semi-automatic categorization for spinel group minerals. , 2015, , .		1
153	Data-sensitive visual navigation. , 2017, , .		1
154	InCorr: Interactive Data-Driven Correlation Panels for Digital Outcrop Analysis. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 755-764.	4.4	1
155	‹title›Fast shadow profiler and its applications‹/title›. , 1998, , .		0
156	Capstone. Computer Graphics Forum, 2011, 30, xiv-xiv.	3.0	0
157	Unified Boundary-Aware Texturing for Interactive Volume Rendering. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 1942-1955.	4.4	0
158	Guest editorialâ€”Uncertainty and parameter space analysis in visualization. Computers and Graphics, 2014, 41, A1-A2.	2.5	0
159	Visualization Working Group at TU Wien. Visual Informatics, 2021, 5, 76-84.	4.4	0
160	Fuzzy Spreadsheet: Understanding and Exploring Uncertainties in Tabular Calculations. IEEE Transactions on Visualization and Computer Graphics, 2023, 29, 1463-1477.	4.4	0
161	N-dimensional Data-Dependent Reconstruction Using Topological Changes. Mathematics and Visualization, 2007, , 183-198.	0.6	0
162	The Haunted Swamps of Heuristics: Uncertainty in Problem Solving. Mathematics and Visualization, 2014, , 51-60.	0.6	0

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163	Modeling and rendering of nonlinear iterated function systems. , 1998, , 401-410.		0