Klaus Mueller

List of Publications by Year
in descending order

66 papers	1,079 citations	687363 13 h-index	477307 29 g-index
70 all docs	70 docs citations	70 times ranked	944 citing authors

#	Article	IF	Citations
1	Real-time 3D computed tomographic reconstruction using commodity graphics hardware. Physics in Medicine and Biology, 2007, 52, 3405-3419.	3.0	203
2	Accelerating popular tomographic reconstruction algorithms on commodity PC graphics hardware. IEEE Transactions on Nuclear Science, 2005, 52, 654-663.	2.0	193
3	Color Design for Illustrative Visualization. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1739-1754.	4.4	96
4	The Visual Causality Analyst: An Interactive Interface for Causal Reasoning. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 230-239.	4.4	49
5	Empty space skipping and occlusion clipping for texture-based volume rendering. , 0, , .		47
6	The Data Context Map: Fusing Data and Attributes into a Unified Display. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 121-130.	4.4	41
7	Model-driven Visual Analytics. , 2008, , .		30
8	A network-based interface for the exploration of high-dimensional data spaces. , 2012, , .		29
9	Melting and flowing in multiphase environment. Computers and Graphics, 2006, 30, 519-528.	2.5	26
10	Efficient lowâ€dose CT artifact mitigation using an artifactâ€matched prior scan. Medical Physics, 2012, 39, 4748-4760.	3.0	24
11	Low dose CT image restoration using a database of image patches. Physics in Medicine and Biology, 2015, 60, 869-882.	3.0	21
12	ColorMapND: A Data-Driven Approach and Tool for Mapping Multivariate Data to Color. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 1361-1377.	4.4	21
13	Databaseâ€assisted lowâ€dose CT image restoration. Medical Physics, 2013, 40, 031109.	3.0	18
14	A Visual Analytics Approach for Categorical Joint Distribution Reconstruction from Marginal Projections. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 51-60.	4.4	16
15	A Look-Up Table-Based Ray Integration Framework for 2-D/3-D Forward and Back Projection in X-Ray CT. IEEE Transactions on Medical Imaging, 2018, 37, 361-371.	8.9	16
16	RadViz Deluxe: An Attribute-Aware Display for Multivariate Data. Processes, 2017, 5, 75.	2.8	15
17	Ultra-fast 3D filtered backprojection on commodity graphics hardware. , 0, , .		13
18	A visual analytics approach to model learning. , 2010, , .		13

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19	Human Computation in Visualization: Using Purpose Driven Games for Robust Evaluation of Visualization Algorithms. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 2104-2113.	4.4	13
20	Uniform texture synthesis and texture mapping using global parameterization. Visual Computer, 2005, 21, 801-810.	3.5	12
21	A Data-Driven Approach to Hue-Preserving Color-Blending. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 2122-2129.	4.4	11
22	An interactive visual analytics framework for multi-field data in a geo-spatial context. Tsinghua Science and Technology, 2013, 18, 111-124.	6.1	11
23	DQS advisor: a visual interface and knowledge-based system to balance dose, quality, and reconstruction speed in iterative CT reconstruction with application to NLM-regularization. Physics in Medicine and Biology, 2013, 58, 7857-7873.	3.0	11
24	Creating optimal code for GPUâ€accelerated CT reconstruction using ant colony optimization. Medical Physics, 2013, 40, 031110.	3.0	9
25	Towards a unified framework for rapid 3D computed tomography on commodity GPUs. , 0, , .		8
26	Rapid rabbit: Highly optimized GPU accelerated cone-beam CT reconstruction. , 2013, , .		8
27	Does 3D really make sense for visual cluster analysis? yes!. , 2014, , .		8
28	Hardware assisted multichannel volume rendering. , 2003, , .		7
29	Dispersion simulation and visualization for urban security. , 0, , .		7
30	Fast Marching Method to Correct for Refraction in Ultrasound Computed Tomography. , 0, , .		7
31	A framework to visualize temporal behavioral relationships in streaming multivariate data. , 2016, , .		7
32	Big Data Management with Incremental K-Means Treesâ€“GPU-Accelerated Construction and Visualization. Informatics, 2017, 4, 24.	3.9	7
33	Evaluating popular non-linear image processing filters for their use in regularized iterative CT. , 2010, , .		6
34	Improving the fidelity of contextual data layouts using a Generalized Barycentric Coordinates framework. , 2015, , .		6
35	Graphoto: Aesthetically Pleasing Charts for Casual Information Visualization. IEEE Computer Graphics and Applications, 2018, 38, 67-82.	1.2	6
36	A GPU-Accelerated Multivoxel Update Scheme for Iterative Coordinate Descent (ICD) Optimization in Statistical Iterative CT Reconstruction (SIR). IEEE Transactions on Computational Imaging, 2018, 4, 355-365.	4.4	6

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37	Infomages: Embedding Data into Thematic Images. Computer Graphics Forum, 2020, 39, 593-606.	3.0	6
38	Can Computers Master the Art of Communication?: A Focus on Visual Analytics. IEEE Computer Graphics and Applications, 2011, 31, 14-21.	1.2	5
39	Taxonomizer: Interactive Construction of Fully Labeled Hierarchical Groupings from Attributes of Multivariate Data. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 2875-2890.	4.4	5
40	Identifying the skeptics and the undecided through visual cluster analysis of local network geometry. Visual Informatics, 2022, 6, 11-22.	4.4	5
41	WhereAmI: Energy Efficient Positioning using Partial Textual Signatures. , 2015, , .		4
42	Model-driven visual analytics for big data. , 2016, , .		4
43	FastSplats: optimized splatting on rectilinear grids. , 0, , .		3
44	Reconstruction for proton computed tomography: a practical approach. , 0, , .		3
45	Accelerating regularized iterative ct reconstruction on commodity graphics hardware (GPU). , 2009, , .		3
46	Cache-aware GPU memory scheduling scheme for CT back-projection. , 2010, , .		3
47	GPU-accelerated incremental correlation clustering of large data with visual feedback. , 2013, , .		3
48	Optimal sampling lattices for high-fidelity CT reconstruction. , 2009, , .		2
49	Low dose CT image restoration using a localized patch database. , 2013, , .		2
50	Streaming Classical Multidimensional Scaling. , 2018, , .		2
51	Coding Ants: Optimization of GPU code using ant colony optimization. Computer Languages, Systems and Structures, 2018, 54, 119-138.	1.4	2
52	Metal Artifact Reduction in X-ray CT via Ray Profile Correction. Applied Sciences (Switzerland), 2020, 10, 66.	2.5	2
53	Feature preserving distance fields. , 0, , .		1
54	StreamVisND: Visualizing relationships in streaming multivariate data. , 2015, , .		1

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55	MADR: metal artifact detection and reduction. Proceedings of SPIE, 2016, , .	0.8	1
56	Progressive clustering of big data with GPU acceleration and visualization. , 2017, , .		1
57	Guest Editors' Introduction: Special Section on IEEE Visualization Applications. IEEE Transactions on Visualization and Computer Graphics, 2005, 11, 483-484.	4.4	0
58	Accelerated, high-quality refraction computations for volume graphics. Volume Graphics International Symposium on Volume Graphics, 2005, , .	2.0	0
59	VACT: Visualization-aware CT reconstruction. , 2013, , .		0
60	Balanced layouts using the composite data-variable matrix. , 2014, , .		0
61	A study of sparse detector designs with interpolation for multi-slice spiral CT. , 2015, , .		0
62	A Message from the New Editor-in-Chief. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 1267-1268.	4.4	0
63	State of the Journal. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 1440-1441.	4.4	0
64	Visual Analytics for Scientific Data in NSLS-II. , 2020, , 159-168.		0
65	IEEE VR 2022 Introducing the Special Issue. IEEE Transactions on Visualization and Computer Graphics, 2022, 28, vi-vi.	4.4	0
66	Cluster Appearance Glyphs: A Methodology for Illustrating High-Dimensional Data Patterns in 2-D Data Layouts. Information (Switzerland), 2022, 13, 3.	2.9	0