

Gerik Scheuermann

List of Publications by Year in descending order

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53
papers

1,172
citations

331670

21
h-index

414414

32
g-index

56
all docs

56
docs citations

56
times ranked

839
citing authors

#	ARTICLE	IF	CITATIONS
1	Stress Visualization for Interface Optimization of a Hybrid Component Using Surface Tensor Spines. IEEE Computer Graphics and Applications, 2022, 42, 45-55.	1.2	1
2	Special Issue on Visualization in Manufacturing. IEEE Computer Graphics and Applications, 2022, 42, 8-9.	1.2	0
3	MDsrv: visual sharing and analysis of molecular dynamics simulations. Nucleic Acids Research, 2022, 50, W483-W489.	14.5	6
4	The Making of Continuous Colormaps. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 3048-3063.	4.4	18
5	Visualization of Tensor Fields in Mechanics. Computer Graphics Forum, 2021, 40, 135-161.	3.0	8
6	Automatic Improvement of Continuous Colormaps in Euclidean Colorspaces. Computer Graphics Forum, 2021, 40, 361-373.	3.0	5
7	Uncertainty-aware Visualization in Medical Imaging – A Survey. Computer Graphics Forum, 2021, 40, 665-689.	3.0	16
8	Visualizing Multimodal Deep Learning for Lesion Prediction. IEEE Computer Graphics and Applications, 2021, 41, 90-98.	1.2	12
9	How to deal with Uncertainty in Machine Learning for Medical Imaging?. , 2021, , .		8
10	Detection and Visualization of Splat and Antisplat Events in Turbulent Flows. IEEE Transactions on Visualization and Computer Graphics, 2020, 26, 3147-3162.	4.4	10
11	Tensor Spines - A Hyperstreamlines Variant Suitable for Indefinite Symmetric Second-Order Tensors. , 2020, , .		5
12	Collaborating Successfully with Domain Experts. , 2020, , 285-293.		1
13	The tropical-subtropical coupling in the Southeast Atlantic from the perspective of the northern Benguela upwelling system. PLoS ONE, 2019, 14, e0210083.	2.5	18
14	Visualization of Symmetries in Fourth-Order Stiffness Tensors. , 2019, , .		4
15	Extremal curves and surfaces in symmetric tensor fields. Visual Computer, 2018, 34, 1427-1442.	3.5	9
16	Predominance Tag Maps. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 1893-1904.	4.4	11
17	Hierarchical Correlation Clustering in Multiple 2D Scalar Fields. Computer Graphics Forum, 2018, 37, 1-12.	3.0	7
18	Challenges and strategies for the visual exploration of complex environmental data. International Journal of Digital Earth, 2017, 10, 1070-1076.	3.9	13

#	ARTICLE	IF	CITATIONS
19	Demystification of the geometric Fourier transforms and resulting convolution theorems. <i>Mathematical Methods in the Applied Sciences</i> , 2016, 39, 1877-1890.	2.3	2
20	2D Vector field approximation using linear neighborhoods. <i>Visual Computer</i> , 2016, 32, 1563-1578.	3.5	14
21	Ontology for assessment studies of human-computer-interaction in surgery. <i>Artificial Intelligence in Medicine</i> , 2015, 63, 73-84.	6.5	9
22	Visualizing simulated electrical fields from electroencephalography and transcranial electric brain stimulation: A comparative evaluation. <i>NeuroImage</i> , 2014, 101, 513-530.	4.2	25
23	Convolution Products for Hypercomplex Fourier Transforms. <i>Journal of Mathematical Imaging and Vision</i> , 2014, 48, 606-624.	1.3	23
24	Detection of Outer Rotations on 3D-Vector Fields with Iterative Geometric Correlation and its Efficiency. <i>Advances in Applied Clifford Algebras</i> , 2014, 24, 403-421.	1.0	2
25	Customized TRS invariants for 2D vector fields via moment normalization. <i>Pattern Recognition Letters</i> , 2014, 46, 46-59.	4.2	8
26	A General Geometric Fourier Transform Convolution Theorem. <i>Advances in Applied Clifford Algebras</i> , 2013, 23, 15-38.	1.0	24
27	Interactive comparison of multifield scalar data based on largest contours. <i>Computer Aided Geometric Design</i> , 2013, 30, 521-528.	1.2	13
28	LineAO-Improved Three-Dimensional Line Rendering. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2013, 19, 433-445.	4.4	31
29	Analysis of Streamline Separation at Infinity Using Time-Discrete Markov Chains. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2012, 18, 2140-2148.	4.4	3
30	On the Interpolation of Data with Normally Distributed Uncertainty for Visualization. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2012, 18, 2305-2314.	4.4	41
31	Drawing Contour Trees in the Plane. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2011, 17, 1599-1611.	4.4	22
32	Visualization of High-Dimensional Point Clouds Using Their Density Distribution's Topology. <i>IEEE Transactions on Visualization and Computer Graphics</i> , 2011, 17, 1547-1559.	4.4	43
33	In Silico Evolution of Early Metabolism. <i>Artificial Life</i> , 2011, 17, 87-108.	1.3	10
34	Direct visualization of fiber information by coherence. <i>International Journal of Computer Assisted Radiology and Surgery</i> , 2010, 5, 125-131.	2.8	12
35	Topology Aware Stream Surfaces. <i>Computer Graphics Forum</i> , 2010, 29, 1153-1161.	3.0	16
36	BarMap: RNA folding on dynamic energy landscapes. <i>Rna</i> , 2010, 16, 1308-1316.	3.5	53

#	ARTICLE	IF	CITATIONS
37	Illustrative Stream Surfaces. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1329-1338.	4.4	36
38	Visualization of Graph Products. IEEE Transactions on Visualization and Computer Graphics, 2010, 16, 1082-1089.	4.4	11
39	Smooth Stream Surfaces of Fourth Order Precision. Computer Graphics Forum, 2009, 28, 871-878.	3.0	18
40	Visual Exploration of Climate Variability Changes Using Wavelet Analysis. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 1375-1382.	4.4	38
41	Pathline predicates and unsteady flow structures. Visual Computer, 2008, 24, 1039-1051.	3.5	53
42	Lagrangian Visualization of Flow-Embedded Surface Structures. Computer Graphics Forum, 2008, 27, 1007-1014.	3.0	25
43	Brushing of Attribute Clouds for the Visualization of Multivariate Data. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1459-1466.	4.4	55
44	Interactive Comparison of Scalar Fields Based on Largest Contours with Applications to Flow Visualization. IEEE Transactions on Visualization and Computer Graphics, 2008, 14, 1475-1482.	4.4	54
45	Computation of Localized Flow for Steady and Unsteady Vector Fields and Its Applications. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 641-651.	4.4	24
46	Generalized Streak Lines: Analysis and Visualization of Boundary Induced Vortices. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1735-1742.	4.4	33
47	Multifield. IEEE Transactions on Visualization and Computer Graphics, 2007, 13, 1384-1391.	4.4	52
48	Streamline Predicates. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 1601-1612.	4.4	63
49	Visualization of Barrier Tree Sequences. IEEE Transactions on Visualization and Computer Graphics, 2006, 12, 781-788.	4.4	13
50	Clifford Fourier Transform on Vector Fields. IEEE Transactions on Visualization and Computer Graphics, 2005, 11, 469-479.	4.4	102
51	Topological segmentation in three-dimensional vector fields. IEEE Transactions on Visualization and Computer Graphics, 2004, 10, 198-205.	4.4	46
52	Visualizing local vector field topology. Journal of Electronic Imaging, 2000, 9, 356.	0.9	32
53	Prototype of a Virtual Experiment Information System for the Mont Terri Underground Research Laboratory. Frontiers in Earth Science, 0, 10, .	1.8	4