Reinhard Klein

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5031771/publications.pdf

Version: 2024-02-01

71 papers 3,009 citations

16 h-index 223800 46 g-index

72 all docs 72 docs citations

times ranked

72

2637 citing authors

| # | Article | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Efficient RANSAC for Point-Cloud Shape Detection. Computer Graphics Forum, 2007, 26, 214-226. | 3.0 | 1,398 |
| 2 | Shape retrieval using 3D Zernike descriptors. CAD Computer Aided Design, 2004, 36, 1047-1062. | 2.7 | 264 |
| 3 | State of the Art on 3D Reconstruction with RGBâ€D Cameras. Computer Graphics Forum, 2018, 37, 625-652. | 3.0 | 191 |
| 4 | Completion and Reconstruction with Primitive Shapes. Computer Graphics Forum, 2009, 28, 503-512. | 3.0 | 91 |
| 5 | Acquisition, Synthesis, and Rendering of Bidirectional Texture Functions. Computer Graphics Forum, 2005, 24, 83-109. | 3.0 | 82 |
| 6 | Mobile bin picking with an anthropomorphic service robot. , 2013, , . | | 67 |
| 7 | GPU-based trimming and tessellation of NURBS and T-Spline surfaces. ACM Transactions on Graphics, 2005, 24, 1016-1023. | 7.2 | 65 |
| 8 | A geometric approach to 3D object comparison. , 0, , . | | 58 |
| 9 | A VR System for Immersive Teleoperation and Live Exploration with a Mobile Robot. , 2019, , . | | 54 |
| 10 | Photoâ€realistic Rendering of Metallic Car Paint from Imageâ€Based Measurements. Computer Graphics Forum, 2008, 27, 527-536. | 3.0 | 51 |
| 11 | Material Classification Based on Training Data Synthesized Using a BTF Database. Lecture Notes in Computer Science, 2014, , 156-171. | 1.3 | 48 |
| 12 | Real-time point cloud compression. , 2015, , . | | 46 |
| 13 | Simple and Efficient Mesh Editing with Consistent Local Frames. , 2007, , . | | 44 |
| 14 | Design and Implementation of Practical Bidirectional Texture Function Measurement Devices Focusing on the Developments at the University of Bonn. Sensors, 2014, 14, 7753-7819. | 3.8 | 39 |
| 15 | GPU-based Collision Detection for Deformable Parameterized Surfaces. Computer Graphics Forum, 2006, 25, 497-506. | 3.0 | 36 |
| 16 | BTF Compression via Sparse Tensor Decomposition. Computer Graphics Forum, 2009, 28, 1181-1188. | 3.0 | 33 |
| 17 | Advances in geometry and reflectance acquisition (course notes). , 2015, , . | | 33 |
| 18 | A Multi-camera, Multi-projector Super-Resolution Framework for Structured Light. , 2011, , . | | 29 |

| # | Article | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Hybrid tree reconstruction from inhomogeneous point clouds. Visual Computer, 2014, 30, 763-771. | 3.5 | 27 |
| 20 | Heightfield and spatially varying BRDF Reconstruction for Materials with Interreflections. Computer Graphics Forum, 2009, 28, 513-522. | 3.0 | 21 |
| 21 | Teaching the incompressible Navier–Stokes equations to fast neural surrogate models in three dimensions. Physics of Fluids, 2021, 33, . | 4.0 | 21 |
| 22 | 'Visual-fidelity' dataglove calibration. , 0, , . | | 20 |
| 23 | BTFâ€CIELab: A Perceptual Difference Measure for Quality Assessment and Compression of BTFs. Computer Graphics Forum, 2009, 28, 101-113. | 3.0 | 20 |
| 24 | Accurate Interactive Visualization of Large Deformations and Variability in Biomedical Image Ensembles. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 708-717. | 4.4 | 18 |
| 25 | Fast vector quantization for efficient rendering of compressed point-clouds. Computers and Graphics, 2008, 32, 246-259. | 2.5 | 15 |
| 26 | A visual analytics perspective on shape analysis: State of the art and future prospects. Computers and Graphics, 2015, 53, 63-71. | 2.5 | 15 |
| 27 | Constraint-Based Optimized Human Skeleton Extraction from Single-Depth Camera. Sensors, 2019, 19, 2604. | 3.8 | 15 |
| 28 | Patchâ€based Texture Interpolation. Computer Graphics Forum, 2010, 29, 1421-1429. | 3.0 | 14 |
| 29 | Combining contour and shape primitives for object detection and pose estimation of prefabricated parts., 2013,,. | | 14 |
| 30 | Data Driven Surface Reflectance from Sparse and Irregular Samples. Computer Graphics Forum, 2012, 31, 315-324. | 3.0 | 12 |
| 31 | Data-driven Local Coordinate Systems for Image-Based Rendering. Computer Graphics Forum, 2006, 25, 369-378. | 3.0 | 11 |
| 32 | Markerless 4 gestures 6 DOF real-time visual tracking of the human hand with automatic initialization. Computer Graphics Forum, 2007, 26, 467-476. | 3.0 | 10 |
| 33 | Mixed reality based respiratory liver tumor puncture navigation. Computational Visual Media, 2019, 5, 363-374. | 17.5 | 10 |
| 34 | Towards quantitative and intuitive percutaneous tumor puncture via augmented virtual reality. Computerized Medical Imaging and Graphics, 2021, 90, 101905. | 5.8 | 10 |
| 35 | Towards Tangible Cultural Heritage Experiences—Enriching VR-based Object Inspection with Haptic Feedback. Journal on Computing and Cultural Heritage, 2022, 15, 1-17. | 2.1 | 9 |
| 36 | Variational Surface Approximation and Model Selection. Computer Graphics Forum, 2009, 28, 1985-1994. | 3.0 | 8 |

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| 37 | Spectralization: Reconstructing spectra from sparse data. Computer Graphics Forum, 2010, 29, 1347-1354. | 3.0 | 8 |
| 38 | Exampleâ€based Interpolation and Synthesis of Bidirectional Texture Functions. Computer Graphics Forum, 2013, 32, 361-370. | 3.0 | 8 |
| 39 | Temporal Upsampling of Point Cloud Sequences by Optimal Transport for Plant Growth Visualization. Computer Graphics Forum, 2020, 39, 167-179. | 3.0 | 8 |
| 40 | A Visual Analytics Approach to Study Anatomic Covariation. , 2014, , . | | 7 |
| 41 | Texture Atlas Generation for Inconsistent Meshes and Point Sets. , 2007, , . | | 6 |
| 42 | Semantically steered visual analysis of highly detailed morphometric shape spaces. , 2011, , . | | 6 |
| 43 | Learned Fitting of Spatially Varying BRDFs. Computer Graphics Forum, 2019, 38, 193-205. | 3.0 | 5 |
| 44 | Material Recognition for Efficient Acquisition of Geometry and Reflectance. Lecture Notes in Computer Science, 2015, , 321-333. | 1.3 | 5 |
| 45 | Fast and memory efficient view-dependent trimmed NURBS rendering. , 0, , . | | 4 |
| 46 | Consistent normal orientation for polygonal meshes. , 0, , . | | 4 |
| 47 | Fast environmental lighting for local-PCA encoded BTFs. , 0, , . | | 4 |
| 48 | Interactive fragment tracing. Visual Computer, 2005, 21, 591-600. | 3.5 | 4 |
| 49 | Rapid material capture through sparse and multiplexed measurements. Computers and Graphics, 2018, 73, 26-36. | 2.5 | 4 |
| 50 | Albedo estimation for real-time 3D reconstruction using RGB-D and IR data. ISPRS Journal of Photogrammetry and Remote Sensing, 2019, 150, 213-225. | 11.1 | 4 |
| 51 | An Efficient Statistical Data Representation for Real-Time Rendering of Metallic Effect Car Paints. Lecture Notes in Computer Science, 2017, , 51-68. | 1.3 | 4 |
| 52 | Augmented Reality Guided Respiratory Liver Tumors Punctures: A Preliminary Feasibility Study. , 2019, , . | | 4 |
| 53 | Automatic texture atlas generation from trimmed NURBS models. Computer Graphics Forum, 2003, 22, 453-461. | 3.0 | 3 |
| 54 | Are reflectance field renderings appropriate for optical flow evaluation?., 2014,,. | | 3 |

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|----|---|-----|-----------|
| 55 | Inverse Procedural Modeling of Knitwear., 2019, , . | | 3 |
| 56 | Versatile multi-constrained planning for thermal ablation of large liver tumors. Computerized Medical Imaging and Graphics, 2021, 94, 101993. | 5.8 | 3 |
| 57 | Multiplexed acquisition of bidirectional texture functions for materials. Proceedings of SPIE, 2015, , . | 0.8 | 2 |
| 58 | Parameter identification for the simulation of the periodontal ligament during the initial phase of orthodontic tooth movement. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 333-348. | 1.6 | 2 |
| 59 | Efficient representation and extraction of 2-manifold isosurfaces using kd-trees., 0,,. | | 1 |
| 60 | Probabilistic motion sequence generation., 0, , . | | 1 |
| 61 | Nonâ€Local Image Reconstruction for Efficient Computation of Synthetic Bidirectional Texture Functions. Computer Graphics Forum, 2013, 32, 61-71. | 3.0 | 1 |
| 62 | Efficient multi-constrained optimization for example-based synthesis. Visual Computer, 2015, 31, 893-904. | 3.5 | 1 |
| 63 | Extrapolation of bidirectional texture functions using texture synthesis guided by photometric normals. Proceedings of SPIE, 2015, , . | 0.8 | 1 |
| 64 | OctreeBTFs $\hat{a} \in A$ compact, seamless and distortion-free reflectance representation. Computers and Graphics, 2017, 68, 21-31. | 2.5 | 1 |
| 65 | Real-Time Multi-Material Reflectance Reconstruction for Large-Scale Scenes Under Uncontrolled Illumination from RGB-D Image Sequences. , 2019, , . | | 1 |
| 66 | 3D superimposition of dental casts based on coloured landmark detection using combined computer vision and 3D computer graphics techniques. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2020, 8, 87-93. | 1.9 | 1 |
| 67 | Exploring shape spaces of 3D tree point clouds. Computers and Graphics, 2021, 100, 21-31. | 2.5 | 1 |
| 68 | Visualization aspects in the MERCW project. , 2006, , . | | 0 |
| 69 | Per-Image Super-Resolution for Material BTFs. , 2020, , . | | 0 |
| 70 | 10.1063/5.0047428.1., 2021, , . | | 0 |
| 71 | Perception and appearance bending of material properties. Journal of Vision, 2017, 17, 21. | 0.3 | 0 |