

# Henry Fuchs

## List of Publications by Year in descending order

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95  
papers

5,091  
citations

185998

28  
h-index

189595

50  
g-index

96  
all docs

96  
docs citations

96  
times ranked

2290  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hogel-Free Holography. ACM Transactions on Graphics, 2022, 41, 1-16.	4.9	9
2	Mobile. Egocentric Human Body Motion Reconstruction Using Only Eyeglasses-mounted Cameras and a Few Body-worn Inertial Sensors. , 2021, , .		6
3	Gaze-Contingent Retinal Speckle Suppression for Perceptually-Matched Foveated Holographic Displays. IEEE Transactions on Visualization and Computer Graphics, 2021, 27, 4194-4203.	2.9	22
4	The A-Desk: A Unified Workspace of the Future. IEEE Computer Graphics and Applications, 2020, 40, 56-71.	1.0	1
5	Learned hardware-in-the-loop phase retrieval for holographic near-eye displays. ACM Transactions on Graphics, 2020, 39, 1-18.	4.9	71
6	Computing high quality phase-only holograms for holographic displays. , 2020, , .		5
7	Improved vergence and accommodation via Purkinje Image tracking with multiple cameras for AR glasses. , 2020, , .		14
8	Stimulating the Human Visual System Beyond Real World Performance in Future Augmented Reality Displays. , 2020, , .		3
9	Towards Eyeglass-style Holographic Near-eye Displays with Statically. , 2020, , .		5
10	Towards a Switchable AR/VR Near-eye Display with Accommodation-Vergence and Eyeglass Prescription Support. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 3114-3124.	2.9	33
11	Development of augmented reality applications in otolaryngology head and neck surgery. Laryngoscope, 2019, 129, S1-S11.	1.1	34
12	Varifocal Occlusion-Capable Optical See-through Augmented Reality Display based on Focus-tunable Optics. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 3125-3134.	2.9	38
13	Enhancing A Laparoscopy Training System with Augmented Reality Visualization. , 2019, , .		4
14	Implementation and Evaluation of a 50 kHz, $\mu\text{s}$ Motion-to-Pose Latency Head Tracking Instrument. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 1970-1980.	2.9	6
15	Manufacturing Application-Driven Foveated Near-Eye Displays. IEEE Transactions on Visualization and Computer Graphics, 2019, 25, 1928-1939.	2.9	43
16	Wirtinger holography for near-eye displays. ACM Transactions on Graphics, 2019, 38, 1-13.	4.9	105
17	An Extended Depth-at-Field Volumetric Near-Eye Augmented Reality Display. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 2857-2866.	2.9	64
18	Towards Fully Mobile 3D Face, Body, and Environment Capture Using Only Head-worn Cameras. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 2993-3004.	2.9	30

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19	FocusAR: Auto-focus Augmented Reality Eyeglasses for both Real World and Virtual Imagery. IEEE Transactions on Visualization and Computer Graphics, 2018, 24, 2906-2916.	2.9	54
20	Towards Efficient 3D Calibration for Different Types of Multi-view Autostereoscopic 3D Displays. , 2018, , .		3
21	Steerable application-adaptive near eye displays. , 2018, , .		3
22	10â€¹: Towards Varifocal Augmented Reality Displays using Deformable Beamsplitter Membranes. Digest of Technical Papers SID International Symposium, 2018, 49, 92-95.	0.1	8
23	Mitigating vergence-accommodation conflict for near-eye displays via deformable beamsplitters. , 2018, , .		14
24	Wide Field Of View Varifocal Near-Eye Display Using See-Through Deformable Membrane Mirrors. IEEE Transactions on Visualization and Computer Graphics, 2017, 23, 1322-1331.	2.9	126
25	Scene-adaptive high dynamic range display for low latency augmented reality. , 2017, , .		9
26	Optimizing placement of commodity depth cameras for known 3D dynamic scene capture. , 2017, , .		6
27	Membrane AR. , 2017, , .		8
28	Real-world occlusion in optical see-through AR displays. , 2017, , .		8
29	Faster feedback for remote scene viewing with pan-tilt stereo camera. , 2016, , .		2
30	From Motion to Photons in 80 Microseconds: Towards Minimal Latency for Virtual and Augmented Reality. IEEE Transactions on Visualization and Computer Graphics, 2016, 22, 1367-1376.	2.9	75
31	Immersive Learning Experiences for Surgical Procedures. Studies in Health Technology and Informatics, 2016, 220, 55-62.	0.2	4
32	3D scanning deformable objects with a single RGBD sensor. , 2015, , .		97
33	Pinlight displays. ACM Transactions on Graphics, 2014, 33, 1-11.	4.9	100
34	36.1: Wide Field of View Compressive Light Field Display using a Multilayer Architecture and Tracked Viewers. Digest of Technical Papers SID International Symposium, 2014, 45, 509-512.	0.1	5
35	Minimizing latency for augmented reality displays: Frames considered harmful. , 2014, , .		38
36	Pinlight displays. , 2014, , .		42

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37	Temporally enhanced 3D capture of room-sized dynamic scenes with commodity depth cameras. , 2014, , .		19
38	Immersive 3D Telepresence. Computer, 2014, 47, 46-52.	1.2	71
39	Wide field of view compressive light field display using a multilayer architecture and tracked viewers. Journal of the Society for Information Display, 2014, 22, 525-534.	0.8	8
40	Computational augmented reality eyeglasses. , 2013, , .		74
41	General-purpose telepresence with head-worn optical see-through displays and projector-based lighting. , 2013, , .		49
42	Kinect Shadow Detection and Classification. , 2013, , .		9
43	Focus 3D. ACM Transactions on Graphics, 2013, 32, 1-13.	4.9	65
44	The Design and Evaluation of a Large-Scale Real-Walking Locomotion Interface. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 1053-1067.	2.9	58
45	Reducing interference between multiple structured light depth sensors using motion. , 2012, , .		80
46	Real-time volumetric 3D capture of room-sized scenes for telepresence. , 2012, , .		28
47	Enhanced personal autostereoscopic telepresence system using commodity depth cameras. Computers and Graphics, 2012, 36, 791-807.	1.4	60
48	Continual surface-based multi-projector blending for moving objects. , 2011, , .		8
49	Encumbrance-free telepresence system with real-time 3D capture and display using commodity depth cameras. , 2011, , .		143
50	An evaluation of navigational ability comparing Redirected Free Exploration with Distractors to Walking-in-Place and joystick locomotion interfaces. , 2011, , 55-62.		61
51	Animatronic shader lamps avatars. Virtual Reality, 2011, 15, 225-238.	4.1	19
52	Encumbrance-free telepresence system with real-time 3D capture and display using commodity depth cameras. , 2011, , .		16
53	A practical multi-viewer tabletop autostereoscopic display. , 2010, , .		17
54	Improved Redirection with Distractors: A large-scale-real-walking locomotion interface and its effect on navigation in virtual environments. , 2010, 2010, 35-38.		69

#	ARTICLE	IF	CITATIONS
55	Random Hole Display: A non-uniform barrier autostereoscopic display. , 2009, , .		12
56	A Distributed Cooperative Framework for Continuous Multi-Projector Pose Estimation. , 2009, , .		16
57	Evaluation of Reorientation Techniques and Distractors for Walking in Large Virtual Environments. IEEE Transactions on Visualization and Computer Graphics, 2009, 15, 383-394.	2.9	119
58	Exploring the potential of video technologies for collaboration in emergency medical care: Part I. Information sharing. Journal of the Association for Information Science and Technology, 2008, 59, 2320-2334.	2.6	6
59	Exploring the potential of video technologies for collaboration in emergency medical care: Part II. Task performance. Journal of the Association for Information Science and Technology, 2008, 59, 2335-2349.	2.6	6
60	Head Mounted Displays for Medical Use. Journal of Display Technology, 2008, 4, 468-472.	1.3	37
61	Optimizing a head-tracked stereo display system to guide hepatic tumor ablation. Studies in Health Technology and Informatics, 2008, 132, 126-31.	0.2	4
62	Real-Time Projector Tracking on Complex Geometry Using Ordinary Imagery. , 2007, , .		20
63	Simplified Belief Propagation for Multiple View Reconstruction. , 2006, , .		7
64	Adaptive Instant Displays: Continuously Calibrated Projections Using Per-Pixel Light Control. Computer Graphics Forum, 2005, 24, 705-714.	1.8	27
65	Combining Head-Mounted and Projector-Based Displays for Surgical Training. Presence: Teleoperators and Virtual Environments, 2004, 13, 128-145.	0.3	12
66	Augmented reality guidance for needle biopsies: An initial randomized, controlled trial in phantomsâ€œA preliminary version of this paper was presented at the Medical Image Computing and Computer-Assisted Intervention (MICCAI) 2001 conference in Utrecht. The Netherlands (Rosenthal et) Tj ETQq0 0 0 rgt /Overflock 10 T	7.0	112
67	Life-sized projector-based dioramas. , 2001, , .		55
68	Augmented Reality Guidance for Needle Biopsies: A Randomized, Controlled Trial in Phantoms. Lecture Notes in Computer Science, 2001, , 240-248.	1.0	27
69	Optical Versus Video See-Through Head-Mounted Displays in Medical Visualization. Presence: Teleoperators and Virtual Environments, 2000, 9, 287-309.	0.3	267
70	Augmented reality visualization for laparoscopic surgery. Lecture Notes in Computer Science, 1998, , 934-943.	1.0	172
71	The office of the future. , 1998, , .		581
72	Towards performing ultrasound-guided needle biopsies from within a head-mounted display. Lecture Notes in Computer Science, 1996, , 591-600.	1.0	53

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73	Technologies for augmented reality systems. , 1996, , .		152
74	<title>Comparison of optical and video see-through, head-mounted displays</title>. , 1995, 2351, 293.		83
75	VISTAnet: interactive real-time calculation and display of 3-dimensional radiation dose: An application of gigabit networking. International Journal of Radiation Oncology Biology Physics, 1993, 25, 123-129.	0.4	16
76	A demonstrated optical tracker with scalable work area for head-mounted display systems. , 1992, , .		69
77	Merging virtual objects with the real world. Computer Graphics, 1992, 26, 203-210.	0.1	300
78	Three-Dimensional High-Resolution Volume Rendering (HRVR) of Computed Tomography Data. Laryngoscope, 1991, 101, 573-582.	1.1	14
79	A real-time optical 3D tracker for head-mounted display systems. Computer Graphics, 1990, 24, 205-215.	0.1	15
80	Systems for Display of Three-Dimensional Medical Image Data. , 1990, , 315-331.		7
81	Pixel-planes 5: a heterogeneous multiprocessor graphics system using processor-enhanced memories. Computer Graphics, 1989, 23, 79-88.	0.1	131
82	VLSI-Intensive Graphics Systems. , 1988, , 221-240.		0
83	VLSI for Graphics. , 1987, , 281-294.		2
84	Quadratic Surface Rendering on a Logic-Enhanced Frame-Buffer Memory. IEEE Computer Graphics and Applications, 1986, 6, 48-59.	1.0	17
85	Fast constructive-solid geometry display in the pixel-powers graphics system. Computer Graphics, 1986, 20, 107-116.	0.1	47
86	Image rendering by adaptive refinement. Computer Graphics, 1986, 20, 29-37.	0.1	81
87	Image rendering by adaptive refinement. , 1986, , .		18
88	Fast spheres, shadows, textures, transparencies, and image enhancements in pixel-planes. Computer Graphics, 1985, 19, 111-120.	0.1	138
89	Near real-time shaded display of rigid objects. , 1983, , .		55
90	Near real-time shaded display of rigid objects. Computer Graphics, 1983, 17, 65-72.	0.1	71

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91	On visible surface generation by a priori tree structures. , 1980, , .		281
92	Predetermining visibility priority in 3-D scenes (Preliminary Report). Computer Graphics, 1979, 13, 175-181.	0.1	11
93	An expandable multiprocessor architecture for video graphics (Preliminary Report). , 1979, , .		30
94	Generating smooth 2-D monochrome line drawings on video displays. Computer Graphics, 1979, 13, 260-269.	0.1	23
95	Distributing a visible surface algorithm over multiple processors. , 1977, , .		37