Alexey Voloboy

List of Publications by Year
in descending order

48	168	1307594 7	1474206 9
papers	citations	h-index	g-index

49	49	49	53
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Photorealistic Rendering of Images Formed by Augmented Reality Optical Systems. Programming and Computer Software, 2018, 44, 213-224.	0.9	10
2	Modeling and computer design of liquid crystal display backlight with light polarization film. Optical Review, 2014, 21, 642-650.	2.0	9
3	Efficient Implementation of OpenGL SC for Avionics Embedded Systems. Programming and Computer Software, 2018, 44, 207-212.	0.9	9
4	Calculation of MIS weights for bidirectional path tracing with photon maps in presence of direct illumination. Mathematica Montisnigri, 2020, 48, 86-102.	0.3	9
5	An Effective Tone Mapping Operator for High Dynamic Range Images. Programming and Computer Software, 2004, 30, 266-272.	0.9	8
6	Reconstruction of scattering properties of rough air-dielectric boundary. Optical Review, 2016, 23, 834-841.	2.0	8
7	Image Synthesis Pipeline for CNN-Based Sensing Systems. Sensors, 2022, 22, 2080.	3.8	8
8	Bidirectional Ray Tracing for the Integration of Illumination by the Quasi-Monte Carlo Method. Programming and Computer Software, 2004, 30, 258-265.	0.9	7
9	Integration of Realistic Computer Graphics into Computer-Aided Design and Product Lifecycle Management Systems. Programming and Computer Software, 2018, 44, 225-232.	0.9	7
10	Examination of the Nvidia RTX. , 2019, , .		7
11	Visualization Component for the Aircraft Real-Time Operating System JetOS. Programming and Computer Software, 2020, 46, 167-175.	0.9	6
12	Neural Acceleration of Scatteringâ€Aware Color 3D Printing. Computer Graphics Forum, 2021, 40, 205-219.	3.0	6
13	Light Transport in Realistic Rendering: State-of-the-Art Simulation Methods. Programming and Computer Software, 2021, 47, 298-326.	0.9	6
14	Automatic design of illumination systems. Optical Review, 2013, 20, 155-159.	2.0	5
15	Automated Software Testing Technologies for Realistic Computer Graphics. Programming and Computer Software, 2021, 47, 76-87.	0.9	5
16	Hybrid ray tracing method for photorealistic image synthesis in head-up displays. , 2018, , .		5
17	High Speed Visualization in the JetOS Aviation Operating System Using Hardware Acceleration. , 0, , short3-1-short3-9.		5
18	Illumination Modeling and Generation of Realistic Images Using Internet Technologies. Programming and Computer Software, 2005, 31, 282-291.	0.9	4

#	Article	IF	Citations
19	Testing of systems for illumination simulation and synthesis of realistic images. Programming and Computer Software, 2014, 40, 166-173.	0.9	4
20	Photorealistic volume scattering model in the bidirectional stochastic ray tracing problem. Programming and Computer Software, 2015, 41, 295-301.	0.9	4
21	An efficient mulithreading algorithm for the simulation of global illumination. Programming and Computer Software, 2017, 43, 217-223.	0.9	4
22	Noise Dependence on the Number of Rays in Bidirectional Stochastic Ray Tracing with Photon Maps. Programming and Computer Software, 2021, 47, 194-200.	0.9	4
23	Simulation of natural daylight illumination determined by a high dynamic range image. Programming and Computer Software, 2006, 32, 284-297.	0.9	3
24	Realistic image synthesis in presence of birefrigent media by backward ray tracing technique. , 2018, , .		3
25	Multi-windows Rendering Using Software OpenGL in Avionics Embedded Systems. , 2019, , .		3
26	Use of computer graphics methods for efficient stray light analysis in optical design. , 2018, , .		3
27	Simulation of color shift in fluorescent LED cap. Optical Review, 2013, 20, 132-136.	2.0	2
28	Simulation of the BSDF measurement capabilities for various materials with GCMS-4 gonio-spectrophotometer. , 2016, , .		2
29	Light scattering in automotive paints: continuous medium approach vs correlations between particles. , 2021, , .		2
30	The use of coherent ray tracing for physically accurate rendering. Programming and Computer Software, 2008, 34, 294-303.	0.9	1
31	Simulation and rendering algorithms for optically complex materials by the example of fabric. Programming and Computer Software, 2010, 36, 237-246.	0.9	1
32	Visual analysis of the computer simulation for both imaging and non-imaging optical systems. , 2016, , .		1
33	Device for Measuring Spectral â€“ Spatial Distribution of Light Dispersed by Surfaces. Annals of DAAAM & Proceedings, 2011, , 1459-1460.	0.1	1
34	Efficient Implementation of OpenGL SC for Avionics Embedded Systems. Programmirovanie, 2018, , 3-10.	0.0	1
35	Visualization of ray propagation in physically accurate lighting simulation. Scientific Visualization, 2018, 10, 75-92.	0.4	1
36	Peculiarities of optical element manufacturing in the Chinese optical industry. , 2018, , .		1

#	Article	IF	Citations
37	Calculation of MIS Weights for Bidirectional Path Tracing with Photon Maps. , 2020, , .		1
38	Multiwindow Rendering on a Cockpit Display Using Hardware Acceleration. Programming and Computer Software, 2021, 47, 457-465.	0.9	1
39	Efficient Rendering for the Cockpit Display System Designed in Compliance with the ARINC 661 Standard. Programming and Computer Software, 2022, 48, 147-154.	0.9	1
40	Improved model of IBL sunlight simulation. , 2010, , .		0
41	Detection and 3D Reconstruction of Buildings from Aerial Images. Programming and Computer Software, 2019, 45, 311-318.	0.9	0
42	Optimal number of rays in bi-directional stochastic ray tracing with photon maps. , 2021, , .		0
43	Realistic rendering of scenes with anisotropic media. Optical Engineering, 2019, 58, 1.	1.0	0
44	Optimization of Illumination through Windows for MCRT. , 2019, , .		0
45	RANSAC ART Tomography. , 2019, , .		0
46	Calculation of Noise Components for Bidirectional Path Tracing with Photon Maps. , 0, , short2-1-short2-6.		0
47	Elaboration of New Viewing Modes in CATIA CAD for Lighting Simulation Purpose. , 0, , short1-1-short1-7.		0
48	Pyramid of Filters - Fast Image Filtering without FFT. , 0, , paper4-1-paper4-11.		0