LÃ¡szlÃ³ Kalos Szirmay-Kalos

List of Publications by Year
in descending order

82	840	14	25
papers	citations	h-index	g-index

623734 (above h-index box)
580821 (above g-index box)

85	85	85	474
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Adapting Game Engines to Curved Spaces. Visual Computer, 2022, 38, 4383-4395.	3.5	2
2	Higher Order Automatic Differentiation with Dual Numbers. Periodica Polytechnica Electrical Engineering and Computer Science, 2021, 65, 1-10.	1.0	2
3	Modeling of Depth of Interaction with Inter-crystal Scattering for PET Reconstruction. , 2020, , .		0
4	Kinetic Model Fitting with Forced Convexification. , 2019, , .		0
5	Motion Compensation for Dynamic PET with Continuous Motion Blur. , 2019, , .		0
6	Improving Positron Emission Tomography with Guided Filtering. , 2019, , .		0
7	Multiple importance sampling characterization by weighted mean invariance. Visual Computer, 2018, 34, 843-852.	3.5	12
8	Multiple Scattering in Inhomogeneous Participating Media Using Rao–Blackwellization and Control Variates. Computer Graphics Forum, 2018, 37, 63-74.	3.0	4
9	Modeling and simulation framework of aortic valve for hemodynamic evaluation of aortic root replacement surgery outcomes. IFAC-PapersOnLine, 2018, 51, 258-263.	0.9	3
10	Controlling TV Regularization with Deep Learning. , 2018, , .		0
11	Dynamic PET Reconstruction on the GPU. Periodica Polytechnica Electrical Engineering and Computer Science, 2018, 62, 134-143.	1.0	7
12	Multiple importance sampling revisited: breaking the bounds. Eurasip Journal on Advances in Signal Processing, 2018, 2018, .	1.7	20
13	An image-based method for animated stroke rendering. Visual Computer, 2018, 34, 817-827.	3.5	6
14	Volume enhancement with externally controlled anisotropic diffusion. Visual Computer, 2017, 33, 331-342.	3.5	4
15	Unbiased Light Transport Estimators for Inhomogeneous Participating Media. Computer Graphics Forum, 2017, 36, 9-19.	3.0	20
16	Improved stratification for Metropolis light transport. Computers and Graphics, 2017, 68, 11-20.	2.5	5
17	Gradient-Domain PET Reconstruction. , 2017, , .		1
18	Variance Analysis of Multi–sample and One–sample Multiple Importance Sampling. Computer Graphics Forum, 2016, 35, 451-460.	3.0	13

#	Article	IF	Citations
19	Regularizing direct parametric reconstruction for dynamic PET with the method of sieves. , 2016, , .		6
20	Filtering and Gradient Estimation for Distance Fields by Quadratic Regression. Periodica Polytechnica Electrical Engineering and Computer Science, 2015, 59, 175-180.	1.0	3
21	Multiple Importance Sampling for PET. IEEE Transactions on Medical Imaging, 2014, 33, 970-978.	8.9	8
22	Stackless Multiâ€BVH Traversal for CPU, MIC and GPU Ray Tracing. Computer Graphics Forum, 2014, 33, 129-140.	3.0	18
23	Efficient Bregman iteration in fully 3D PET. , 2014, , .		3
24	On-The-Fly Monte Carlo Methods In Iterative Pet Reconstruction. , 2014, , 21-39.		0
25	Averaging and Metropolis Iterations For Positron Emission Tomography. IEEE Transactions on Medical Imaging, 2013, 32, 589-600.	8.9	11
26	Smooth shadow boundaries with exponentially warped Gaussian filtering. Computers and Graphics, 2013, 37, 214-224.	2.5	6
27	Higher order scattering estimation for PET. , 2012, , .		4
28	Fast positron range calculation in heterogeneous media for 3D PET reconstruction. , 2012, , .		2
29	Filtered sampling for PET. , 2012, , .		3
30	Monte Carlo Photon Transport on the GPU. , 2011, , 247-262.		1
31	Free Path Sampling in High Resolution Inhomogeneous Participating Media. Computer Graphics Forum, 2011, 30, 85-97.	3.0	44
32	Hatching for Motion Picture Production. Computer Graphics Forum, 2011, 30, 533-542.	3.0	13
33	Parallel Iteration to the Radiative Transport in Inhomogeneous Media with Bootstrapping. IEEE Transactions on Visualization and Computer Graphics, 2011, 17, 146-158.	4.4	5
34	Shadow map filtering with Gaussian shadow maps. , 2011, , .		3
35	Performance evaluation of scatter modeling of the GPU-based “Tera-Tomo” 3D PET reconstruction. , 2011, , .		15
36	Scatter Estimation for PET Reconstruction. Lecture Notes in Computer Science, 2011, , 77-86.	1.3	6

#	Article	IF	Citations
37	Volumetric Ambient Occlusion for Real-Time Rendering and Games. IEEE Computer Graphics and Applications, 2010, 30, 70-79.	1.2	29
38	Volumetric ambient occlusion for volumetric models. Visual Computer, 2010, 26, 687-695.	3.5	6
39	An anisotropic BRDF model for fitting and Monte Carlo rendering. Computer Graphics, 2010, 44, 1-15.	0.1	31
40	Adaptive sampling for environment mapping. , 2010, , .		0
41	Partial, multi-scale precomputed radiance transfer. , 2010, , .		0
42	Examining the Distribution of Sampling Point Sets on Sphere for Monte Carlo Image Rendering. , 2010, , .		0
43	Environment Mapping with Floyd-Steinberg Halftoning. , 2010, , 291-304.		2
44	Analysis of the Monte Carlo Image Creation by Uniform Separation. Lecture Notes in Computer Science, 2010, , 419-426.	1.3	1
45	Gamma Photon Transport on the GPU for PET. Lecture Notes in Computer Science, 2010, , 435-442.	1.3	3
46	Efficient methods for ambient lighting. , 2009, , .		1
47	Specular Effects on the GPU: State of the Art. Computer Graphics Forum, 2009, 28, 1586-1617.	3.0	8
48	Deterministic Importance Sampling with Error Diffusion. Computer Graphics Forum, 2009, 28, 1055-1064.	3.0	11
49	Displacement Mapping on the GPU â€" State of the Art. Computer Graphics Forum, 2008, 27, 1567-1592.	3.0	61
50	Improving Multipath Radiosity with Bundles of Parallel Lines. Computer Graphics Forum, 2008, 27, 1632-1646.	3.0	0
51	An Analysis of Quasi-Monte Carlo Integration Applied to the Transillumination Radiosity Method. Computer Graphics Forum, 2008, 16, C271-C281.	3.0	0
52	GPU-Based Techniques for Global Illumination Effects. Synthesis Lectures on Computer Graphics and Animation, 2008, 2, 1-275.	0.1	4
53	Indirect diffuse and glossy illumination on the GPU. , 2006, , .		4
54	Shape based computer aided diagnosis and automated navigation in virtual colonoscopy. , 2006, , .		2

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55	Approximate Ray-Tracing on the GPU with Distance Impostors. Computer Graphics Forum, 2005, 24, 695-704.	3.0	65
56	Stochastic glossy global illumination on the GPU. , 2005, , .		3
57	Real-time Light Animation. Computer Graphics Forum, 2004, 23, 291-299.	3.0	9
58	Combined Correlated and Importance Sampling in Direct Light Source Computation and Environment Mapping. Computer Graphics Forum, 2004, 23, 585-593.	3.0	15
59	Multiple strategy stochastic iteration for architectural walkthroughs. Computers and Graphics, 2003, 27, 285-292.	2.5	0
60	Weighted importance sampling in shooting algorithms. , 2003, , .		4
61	Accelerating animation through verification of shooting walks. , 2003, , .		3
62	Combining global and local global-illumination algorithms. , 2003, , .		3
63	A Multiple Depth Buffer Implementation for Radiosity. Lecture Notes in Computer Science, 2003, , 346-355.	1.3	1
64	Hemicube shooting for non-diffuse global illumination. , 2002, , .		1
65	On the efficiency of ray-shooting acceleration schemes. , 2002, , .		24
66	A Simple and Robust Mutation Strategy for the Metropolis Light Transport Algorithm. Computer Graphics Forum, 2002, 21, 531-540.	3.0	112
67	A hardware based implementation. , 2002, , 377-388.		3
68	A Simple and Robust Mutation Strategy for the Metropolis Light Transport Algorithm. Computer Graphics Forum, 2002, 21, 531-540.	3.0	18
69	Global Illumination as a Combination of Continuous Random Walk and Finite-Element Based Iteration. Computer Graphics Forum, 2001, 20, 288-298.	3.0	7
70	Development of process visualization systems: An object-oriented approach. Journal of Systems Architecture, 2000, 46, 275-296.	4.3	5
71	Compact Metallic Reflectance Models. Computer Graphics Forum, 1999, 18, 161-172.	3.0	43
72	Stochastic Iteration for Non-diffuse Global Illumination. Computer Graphics Forum, 1999, 18, 233-244.	3.0	17

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73	Reflectance Models with Fast Importance Sampling. Computer Graphics Forum, 1999, 18, 249-265.	3.0	9
74	Global ray-bundle tracing with infinite number of rays. Computers and Graphics, 1999, 23, 193-202.	2.5	1
75	Importance driven quasi-random walk solution of the rendering equation. Computers and Graphics, 1999, 23, 203-211.	2.5	8
76	Analysis and construction of worst-case optimal ray shooting algorithms. Computers and Graphics, 1998, 22, 167-174.	2.5	4
77	Worst-case versus average case complexity of ray-shooting. Computing (Vienna/New York), 1998, 61, 103-131.	4.8	27
78	Global Ray-bundle Tracing with Hardware Acceleration. Eurographics, 1998, , 247-258.	0.4	19
79	An Analysis of Quasi-Monte Carlo Integration Applied to the Transillumination Radiosity Method. Computer Graphics Forum, 1997, 16, C271-C281.	3.0	15
80	Ray Coherence Between a Sphere and a Convex Polyhedron. Computer Graphics Forum, 1992, 11, 163-172.	3.0	4
81	Quadratic interpolation in hardware Phong shading and texture mapping. , 0, , .		2
82	Robust compartmental model fitting in direct emission tomography reconstruction. Visual Computer, 0, , 1.	3.5	2