Denis Zorin

List of Publications by Year
in descending order

22 papers	2,304 citations	516561 16 h-index	794469 19 g-index
22 all docs	22 docs citations	22 times ranked	1270 citing authors

#	Article	IF	Citations
1	A kernel-independent adaptive fast multipole algorithm in two and three dimensions. Journal of Computational Physics, 2004, 196, 591-626.	1.9	366
2	Interpolating Subdivision for meshes with arbitrary topology. , 1996, , .		342
3	Quadâ€Mesh Generation and Processing: A Survey. Computer Graphics Forum, 2013, 32, 51-76.	1.8	229
4	4â€"8 Subdivision. Computer Aided Geometric Design, 2001, 18, 397-427.	0.5	165
5	Piecewise smooth subdivision surfaces with normal control. , 2000, , .		152
6	A boundary integral method for simulating the dynamics of inextensible vesicles suspended in a viscous fluid in 2D. Journal of Computational Physics, 2009, 228, 2334-2353.	1.9	136
7	A high-order 3D boundary integral equation solver for elliptic PDEs in smooth domains. Journal of Computational Physics, 2006, 219, 247-275.	1.9	123
8	A fast algorithm for simulating vesicle flows in three dimensions. Journal of Computational Physics, 2011, 230, 5610-5634.	1.9	115
9	A unified framework for primal/dual quadrilateral subdivision schemes. Computer Aided Geometric Design, 2001, 18, 429-454.	0.5	109
10	An <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:mi>O</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>N</mml:mi><mml:mo stretchy="false">)</mml:mo></mml:math> direct solver for integral equations on the plane. Applied and Computational Harmonic Analysis, 2015, 38, 284-317.	1.1	76
11	A massively parallel adaptive fast multipole method on heterogeneous architectures. Communications of the ACM, 2012, 55, 101-109.	3.3	74
12	A Method for Analysis ofC1-Continuity of Subdivision Surfaces. SIAM Journal on Numerical Analysis, 2000, 37, 1677-1708.	1.1	65
13	A fast platform for simulating semi-flexible fiber suspensions applied to cell mechanics. Journal of Computational Physics, 2017, 329, 173-209.	1.9	65
14	A massively parallel adaptive fast-multipole method on heterogeneous architectures. , 2009, , .		60
15	A numerical method for simulating the dynamics of 3D axisymmetric vesicles suspended in viscous flows. Journal of Computational Physics, 2009, 228, 7233-7249.	1.9	60
16	A fast solver for the Stokes equations with distributed forces in complex geometries. Journal of Computational Physics, 2004, 193, 317-348.	1.9	58
17	A free-space adaptive FMM-Based PDE solver in three dimensions. Communications in Applied Mathematics and Computational Science, 2011, 6, 79-122.	0.7	39
18	Boundary integral method for the flow of vesicles with viscosity contrast in three dimensions. Journal of Computational Physics, 2015, 298, 766-786.	1.9	30

#	Article	IF	Citations
19	Dyadic T-mesh subdivision. ACM Transactions on Graphics, 2015, 34, 1-12.	4.9	18
20	Contact-aware simulations of particulate Stokesian suspensions. Journal of Computational Physics, 2017, 347, 160-182.	1.9	12
21	A robust solver for elliptic PDEs in 3D complex geometries. Journal of Computational Physics, 2021, 442, 110511.	1.9	7
22	Scalable topology optimization with the kernel-independent fast multipole method. Engineering Analysis With Boundary Elements, 2017, 83, 123-132.	2.0	3