Romain Aubry

List of Publications by Year
in descending order

33 papers	602 citations	687363 13 h-index	610901 24 g-index
33 all docs	33 docs citations	33 times ranked	385 citing authors

#	Article	IF	Citations
1	Capstone mesh generation speed improvements. , 2022, , .		0
2	Anisotropic sources for surface and volume boundary layer mesh generation. Journal of Computational Physics, 2021, 424, 109855.	3.8	4
3	Anisotropic sizing field construction. , 2021, , .		0
4	Robust implementation of tangential adaptivity. , 2020, , .		0
5	Recent improvements in HPCMP CREATE^{TM}Capstone unstructured meshing. , 2019, , .		0
6	Entropy solution at concave corners and ridges, and volume boundary layer tangential adaptivity. Journal of Computational Physics, 2019, 376, 1-19.	3.8	3
7	Boundary layer mesh generation on arbitrary geometries. International Journal for Numerical Methods in Engineering, 2017, 112, 157-173.	2.8	10
8	Mesh generation for high-lift geometry configuration using Capstone. , 2017, , .		2
9	Yet another hexahedral dominant meshing algorithm: HexDom. Finite Elements in Analysis and Design, 2017, 136, 1-17.	3.2	1
10	Smooth anisotropic sources with application to three-dimensional surface mesh generation. Engineering With Computers, 2016, 32, 313-330.	6.1	8
11	A Novel Double Link Structure (DLS) with Applications to Computational Engineering and Design. , 2016, , .		0
12	Entropy solution at concave corners and ridges. , 2016, , .		1
13	An Entropy Satisfying Boundary Layer Surface Mesh Generation. SIAM Journal of Scientific Computing, 2015, 37, A1957-A1974.	2.8	8
14	On the â€˜most normalâ€™ normalâ€”Part 2. Finite Elements in Analysis and Design, 2015, 97, 54-63.	3.2	12
15	A robust conforming NURBS tessellation for industrial applications based on a mesh generation approach. CAD Computer Aided Design, 2015, 63, 26-38.	2.7	10
16	A three-dimensional parametric mesher with surface boundary-layer capability. Journal of Computational Physics, 2014, 270, 161-181.	3.8	17
17	A Chimera method for the incompressible Navierâ€“Stokes equations. International Journal for Numerical Methods in Fluids, 2014, 75, 155-183.	1.6	16
18	A parallel coupling strategy for the Chimera and domain decomposition methods in computational mechanics. Computers and Fluids, 2013, 80, 128-141.	2.5	12

#	Article	IF	Citations
19	An algorithm for discrete booleans with applications to finite element modeling of complex systems. Finite Elements in Analysis and Design, 2013, 68, 10-27.	3.2	8
20	Linear Sources for Mesh Generation. SIAM Journal of Scientific Computing, 2013, 35, A886-A907.	2.8	16
21	Extension of fractional step techniques for incompressible flows: The preconditioned Orthomin(1) for the pressure Schur complement. Computers and Fluids, 2011, 44, 297-313.	2.5	48
22	Some useful strategies for unstructured edgeâ€based solvers on shared memory machines. International Journal for Numerical Methods in Engineering, 2011, 85, 537-561.	2.8	14
23	A surface remeshing approach. International Journal for Numerical Methods in Engineering, 2011, 85, 1475-1498.	2.8	19
24	Deflated preconditioned conjugate gradient solvers for linear elasticity. International Journal for Numerical Methods in Engineering, 2011, 88, 1112-1127.	2.8	10
25	Generation of viscous grids at ridges and corners. International Journal for Numerical Methods in Engineering, 2009, 77, 1247-1289.	2.8	51
26	A massively parallel fractional step solver for incompressible flows. Journal of Computational Physics, 2009, 228, 6316-6332.	3.8	78
27	On the â€˜most normalâ€™ normal. Communications in Numerical Methods in Engineering, 2008, 24, 1641-1652.	1.3	30
28	Deflated preconditioned conjugate gradient solvers for the Pressureâ€“Poisson equation. Journal of Computational Physics, 2008, 227, 10196-10208.	3.8	39
29	The ALE/Lagrangian Particle Finite Element Method: A new approach to computation of free-surface flows and fluidâ€“object interactions. Computers and Fluids, 2007, 36, 27-38.	2.5	82
30	Advances in stabilized finite element and particle methods for bulk forming processes. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 6750-6777.	6.6	21
31	Fractional Step Like Schemes for Free Surface Problems with Thermal Coupling Using the Lagrangian PFEM. Computational Mechanics, 2006, 38, 294-309.	4.0	20
32	Particle finite element method in fluid-mechanics including thermal convection-diffusion. Computers and Structures, 2005, 83, 1459-1475.	4.4	62
33	Possibilities of the particle finite element method for fluid-structure interaction problems with free surface waves. Revue Europeenne Des Elements, 2004, 13, 637-666.	0.1	0