

Romain Aubry

List of Publications by Year in descending order

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33
papers

602
citations

687363

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610901

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times ranked

385
citing authors

#	ARTICLE	IF	CITATIONS
1	The ALE/Lagrangian Particle Finite Element Method: A new approach to computation of free-surface flows and fluid-object interactions. <i>Computers and Fluids</i> , 2007, 36, 27-38.	2.5	82
2	A massively parallel fractional step solver for incompressible flows. <i>Journal of Computational Physics</i> , 2009, 228, 6316-6332.	3.8	78
3	Particle finite element method in fluid-mechanics including thermal convection-diffusion. <i>Computers and Structures</i> , 2005, 83, 1459-1475.	4.4	62
4	Generation of viscous grids at ridges and corners. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 77, 1247-1289.	2.8	51
5	Extension of fractional step techniques for incompressible flows: The preconditioned Orthomin(1) for the pressure Schur complement. <i>Computers and Fluids</i> , 2011, 44, 297-313.	2.5	48
6	Deflated preconditioned conjugate gradient solvers for the Pressure-Poisson equation. <i>Journal of Computational Physics</i> , 2008, 227, 10196-10208.	3.8	39
7	On the "most normal" normal. <i>Communications in Numerical Methods in Engineering</i> , 2008, 24, 1641-1652.	1.3	30
8	Advances in stabilized finite element and particle methods for bulk forming processes. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2006, 195, 6750-6777.	6.6	21
9	Fractional Step Like Schemes for Free Surface Problems with Thermal Coupling Using the Lagrangian PFEM. <i>Computational Mechanics</i> , 2006, 38, 294-309.	4.0	20
10	A surface remeshing approach. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 85, 1475-1498.	2.8	19
11	A three-dimensional parametric mesher with surface boundary-layer capability. <i>Journal of Computational Physics</i> , 2014, 270, 161-181.	3.8	17
12	Linear Sources for Mesh Generation. <i>SIAM Journal of Scientific Computing</i> , 2013, 35, A886-A907.	2.8	16
13	A Chimera method for the incompressible Navier-Stokes equations. <i>International Journal for Numerical Methods in Fluids</i> , 2014, 75, 155-183.	1.6	16
14	Some useful strategies for unstructured edge-based solvers on shared memory machines. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 85, 537-561.	2.8	14
15	A parallel coupling strategy for the Chimera and domain decomposition methods in computational mechanics. <i>Computers and Fluids</i> , 2013, 80, 128-141.	2.5	12
16	On the "most normal" normal-Part 2. <i>Finite Elements in Analysis and Design</i> , 2015, 97, 54-63.	3.2	12
17	Deflated preconditioned conjugate gradient solvers for linear elasticity. <i>International Journal for Numerical Methods in Engineering</i> , 2011, 88, 1112-1127.	2.8	10
18	A robust conforming NURBS tessellation for industrial applications based on a mesh generation approach. <i>CAD Computer Aided Design</i> , 2015, 63, 26-38.	2.7	10

#	ARTICLE	IF	CITATIONS
19	Boundary layer mesh generation on arbitrary geometries. International Journal for Numerical Methods in Engineering, 2017, 112, 157-173.	2.8	10
20	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
21	An Entropy Satisfying Boundary Layer Surface Mesh Generation. SIAM Journal of Scientific Computing, 2015, 37, A1957-A1974.	2.8	8
22	Smooth anisotropic sources with application to three-dimensional surface mesh generation. Engineering With Computers, 2016, 32, 313-330.	6.1	8
23	Anisotropic sources for surface and volume boundary layer mesh generation. Journal of Computational Physics, 2021, 424, 109855.	3.8	4
24	Entropy solution at concave corners and ridges, and volume boundary layer tangential adaptivity. Journal of Computational Physics, 2019, 376, 1-19.	3.8	3
25	Mesh generation for high-lift geometry configuration using Capstone. , 2017, , .		2
26	Entropy solution at concave corners and ridges. , 2016, , .		1
27	Yet another hexahedral dominant meshing algorithm: HexDom. Finite Elements in Analysis and Design, 2017, 136, 1-17.	3.2	1
28	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
29	A Novel Double Link Structure (DLS) with Applications to Computational Engineering and Design. , 2016, , .		0
30	Recent improvements in HPCMP CREATE TM Capstone unstructured meshing. , 2019, , .		0
31	Robust implementation of tangential adaptivity. , 2020, , .		0
32	Anisotropic sizing field construction. , 2021, , .		0
33	Capstone mesh generation speed improvements. , 2022, , .		0