

# Eugenio Aulisa

## List of Publications by Year in descending order

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69  
papers

1,018  
citations

687363

13  
h-index

454955

30  
g-index

72  
all docs

72  
docs citations

72  
times ranked

671  
citing authors

#	ARTICLE	IF	CITATIONS
1	Efficient quadrature rules for finite element discretizations of nonlocal equations. Numerical Methods for Partial Differential Equations, 2022, 38, 1767-1793.	3.6	3
2	Quaternionic remeshing during surface evolution. AIP Conference Proceedings, 2022, , .	0.4	0
3	Geometric model of the fracture as a manifold immersed in porous media. Journal of Mathematical Physics, 2021, 62, .	1.1	2
4	Accurate Approximate Regulation of Nonlinear Delay Differential Control Systems. , 2021, , .		1
5	Field-of-values analysis of preconditioned linearized Rayleigh-Bénard convection problems. Journal of Computational and Applied Mathematics, 2020, 369, 112582.	2.0	2
6	A field-split preconditioning technique for fluid-structure interaction problems with applications in biomechanics. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3301.	2.1	3
7	Computational p-Willmore Flow with Conformal Penalty. ACM Transactions on Graphics, 2020, 39, 1-16.	7.2	4
8	Tumor ablation due to inhomogeneous anisotropic diffusion in generic three-dimensional topologies. Physical Review E, 2020, 102, 062425.	2.1	2
9	Analysis of the error in an iterative algorithm for asymptotic regulation of linear distributed parameter control systems. ESAIM: Mathematical Modelling and Numerical Analysis, 2019, 53, 1577-1606.	1.9	5
10	Monolithic coupling of the implicit material point method with the finite element method. Computers and Structures, 2019, 219, 1-15.	4.4	6
11	Fracture model reduction and optimization for Forchheimer flows in reservoirs. Journal of Mathematical Physics, 2019, 60, 051504.	1.1	2
12	Construction of H-Refined Continuous Finite Element Spaces with Arbitrary Hanging Node Configurations and Applications to Multigrid Algorithms. SIAM Journal of Scientific Computing, 2019, 41, A480-A507.	2.8	7
13	Fluid-structure interaction simulations of venous valves: A monolithic ALE method for large structural displacements. International Journal for Numerical Methods in Biomedical Engineering, 2019, 35, e3156.	2.1	5
14	Augmented Lagrangian-based preconditioners for steady buoyancy driven flow. Applied Mathematics Letters, 2018, 82, 1-7.	2.7	2
15	Magnetic drug targeting simulations in blood flows with fluid-structure interaction. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2954.	2.1	15
16	Analysis of an iterative scheme for approximate regulation for nonlinear systems. International Journal of Robust and Nonlinear Control, 2018, 28, 3140-3173.	3.7	5
17	FOV-equivalent block triangular preconditioners for generalized saddle-point problems. Applied Mathematics Letters, 2018, 75, 43-49.	2.7	3
18	Convergence estimates for multigrid algorithms with SSC smoothers and applications to overlapping domain decomposition. Applied Numerical Mathematics, 2018, 131, 16-38.	2.1	3

#	ARTICLE	IF	CITATIONS
19	An adaptive mesh refinement strategy for finite element solution of the elliptic problem. Computers and Mathematics With Applications, 2018, 76, 224-244.	2.7	4
20	An improved multigrid algorithm for n-irregular meshes with subspace correction smoother. Computers and Mathematics With Applications, 2018, 76, 620-632.	2.7	5
21	A monolithic ALE Newton-Krylov solver with Multigrid-Richardson-Schwarz preconditioning for incompressible Fluid-Structure Interaction. Computers and Fluids, 2018, 174, 213-228.	2.5	25
22	New preconditioning techniques for the steady and unsteady buoyancy driven flow problems. Journal of Computational Physics, 2018, 371, 244-260.	3.8	5
23	Block triangular preconditioners for linearization schemes of the Rayleigh-Bénard convection problem. Numerical Linear Algebra With Applications, 2017, 24, e2096.	1.6	9
24	A particle tracking algorithm for parallel finite element applications. Computers and Fluids, 2017, 159, 338-355.	2.5	9
25	FLUID-STRUCTURE SIMULATIONS AND BENCHMARKING OF ARTERY ANEURYSMS UNDER PULSATILE BLOOD FLOW. , 2017, , .		4
26	Velocity Control of a Counter-Flow Heat Exchanger. IFAC-PapersOnLine, 2016, 49, 104-109.	0.9	6
27	Well productivity index for compressible fluids and gases. Evolution Equations and Control Theory, 2016, 5, 1-36.	1.3	1
28	Analysis of the Error for Harmonic Tracking Using an Iterative Scheme in Geometric Control. Geometry, Integrability and Quantization, 2016, 17, 143-171.	0.2	0
29	New Advances in the Study of Generalized Willmore Surfaces and Flow. Geometry, Integrability and Quantization, 2016, 17, 133-142.	0.2	2
30	Boundary Control Problems in Convective Heat Transfer with Lifting Function Approach and Multigrid Vanka-Type Solvers. Communications in Computational Physics, 2015, 18, 621-649.	1.7	13
31	The effect of viscosity in a tracking regulation problem for a counter-flow heat exchanger. , 2015, , .		2
32	Macroscopic Theory for Capillary-Pressure Hysteresis. Langmuir, 2015, 31, 2390-2397.	3.5	7
33	Potential and Optimal Target Fixating Control of the Human Head/Eye Complex. IEEE Transactions on Control Systems Technology, 2015, 23, 796-804.	5.2	7
34	MULTIGRID SOLVER WITH DOMAIN DECOMPOSITION SMOOTHING FOR STEADY-STATE INCOMPRESSIBLE FSI PROBLEMS. , 2015, , .		1
35	Continuous-time predator-prey systems with Allee effects in the prey. Mathematics and Computers in Simulation, 2014, 105, 1-16.	4.4	5
36	Upscaling of Forchheimer flows. Advances in Water Resources, 2014, 70, 77-88.	3.8	4

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37	Optimal Eye and Head Movement Control using q-parametrization. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5290-5295.	0.4	2
38	Optimal Control Problems in Binocular Vision. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2014, 47, 5283-5289.	0.4	6
39	Fluid structure interaction problem with changing thickness beam and slightly compressible fluid. Discrete and Continuous Dynamical Systems - Series S, 2014, 7, 1133-1148.	1.1	5
40	Constructing isothermal curvature line coordinates on surfaces which admit them. Open Mathematics, 2013, 11, .	1.0	2
41	Regulation of a controlled Burgers' equation: Tracking and disturbance rejection for general time dependent signals. , 2013, , .		1
42	Tracking and optimal control problems in human head/eye coordination. , 2013, , .		2
43	A multilevel domain decomposition solver for monolithic fluid-structure interaction problems. , 2013, , .		2
44	Stability analysis of non-linear plates coupled with Darcy flows. Evolution Equations and Control Theory, 2013, 2, 193-232.	1.3	1
45	An example of thermal regulation of a two dimensional non-isothermal incompressible flow. , 2012, , .		4
46	Time asymptotics of non-darcy flows controlled by total flux on the boundary. Journal of Mathematical Sciences, 2012, 184, 399-430.	0.4	3
47	Long-term dynamics for well productivity index for nonlinear flows in porous media. Journal of Mathematical Physics, 2011, 52, 023506.	1.1	11
48	Stability analysis of inhomogeneous equilibrium for axially and transversely excited nonlinear beam. Communications on Pure and Applied Analysis, 2011, 10, 1447-1462.	0.8	2
49	Distributed Computational Method for Coupled Fluid Structure Thermal Interaction Applications. Journal of Algorithms and Computational Technology, 2010, 4, 291-309.	0.7	1
50	Geometric framework for modeling nonlinear flows in porous media, and its applications in engineering. Nonlinear Analysis: Real World Applications, 2010, 11, 1734-1751.	1.7	14
51	Analysis of generalized Forchheimer flows of compressible fluids in porous media. Journal of Mathematical Physics, 2009, 50, .	1.1	55
52	MATHEMATICAL FRAMEWORK OF THE WELL PRODUCTIVITY INDEX FOR FAST FORCHHEIMER (NON-DARCY) FLOWS IN POROUS MEDIA. Mathematical Models and Methods in Applied Sciences, 2009, 19, 1241-1275.	3.3	22
53	Benchmark problems for wave propagation in elastic materials. Computational Mechanics, 2009, 43, 797-814.	4.0	49
54	A New Method for Evaluating the Productivity Index of Nonlinear Flows. SPE Journal, 2009, 14, 693-706.	3.1	23

#	ARTICLE	IF	CITATIONS
55	A Multilevel Domain Decomposition Approach for Studying Coupled Flow Applications. Communications in Computational Physics, 2009, , 319-341.	1.7	16
56	A multilevel domain decomposition approach to solving coupled applications in computational fluid dynamics. International Journal for Numerical Methods in Fluids, 2008, 56, 1139-1145.	1.6	8
57	Interface reconstruction with least-squares fit and split advection in three-dimensional Cartesian geometry. Journal of Computational Physics, 2007, 225, 2301-2319.	3.8	200
58	A New Method of Evaluating the Productivity Index for Nonlinear Flows. , 2007, , .		2
59	Computational Modeling of Highly Flexible Membrane Wings in Micro Air Vehicles. , 2006, , .		3
60	A computational multilevel approach for solving 2D Navier-Stokes equations over non-matching grids. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 4604-4616.	6.6	22
61	A novel representation of the surface tension force for two-phase flow with reduced spurious currents. Computer Methods in Applied Mechanics and Engineering, 2006, 195, 6239-6257.	6.6	30
62	Interface tracking with dynamically-redistributed surface markers in unstructured quadrangular grids. Computers and Fluids, 2006, 35, 1332-1343.	2.5	7
63	A Multilevel Domain Decomposition Methodology for Solving Coupled Problems in Fluid-Structure-Thermal Interaction. , 2006, , 417-417.		1
64	A non-conforming computational methodology for modeling coupled problems. Nonlinear Analysis: Theory, Methods & Applications, 2005, 63, e1445-e1454.	1.1	8
65	CFD analysis and overheating control of a turbine. International Journal of Thermal Sciences, 2004, 43, 1119-1124.	4.9	0
66	A surface marker algorithm coupled to an area-preserving marker redistribution method for three-dimensional interface tracking. Journal of Computational Physics, 2004, 197, 555-584.	3.8	72
67	A geometrical area-preserving Volume-of-Fluid advection method. Journal of Computational Physics, 2003, 192, 355-364.	3.8	122
68	A mixed markers and volume-of-fluid method for the reconstruction and advection of interfaces in two-phase and free-boundary flows. Journal of Computational Physics, 2003, 188, 611-639.	3.8	115
69	A Marker-VOF Algorithm for Incompressible Flows With Interfaces. , 2002, , 905.		4