

Stefan Frei

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4553495/publications.pdf>

Version: 2024-02-01

20
papers

235
citations

1163117

8
h-index

1058476

14
g-index

22
all docs

22
docs citations

22
times ranked

138
citing authors

#	ARTICLE	IF	CITATIONS
1	A Locally Modified Parametric Finite Element Method for Interface Problems. SIAM Journal on Numerical Analysis, 2014, 52, 2315-2334.	2.3	43
2	Long-term simulation of large deformation, mechano-chemical fluid-structure interactions in ALE and fully Eulerian coordinates. Journal of Computational Physics, 2016, 321, 874-891.	3.8	31
3	A Nitsche-based formulation for fluid-structure interactions with contact. ESAIM: Mathematical Modelling and Numerical Analysis, 2020, 54, 531-564.	1.9	25
4	Falling balls in a viscous fluid with contact: Comparing numerical simulations with experimental data. Physics of Fluids, 2021, 33, .	4.0	17
5	A second order time-stepping scheme for parabolic interface problems with moving interfaces. ESAIM: Mathematical Modelling and Numerical Analysis, 2017, 51, 1539-1560.	1.9	14
6	Efficient Approximation of Flow Problems With Multiple Scales in Time. Multiscale Modeling and Simulation, 2020, 18, 942-969.	1.6	13
7	Towards a complete numerical description of lubricant film dynamics in ball bearings. Computational Mechanics, 2014, 53, 239-255.	4.0	11
8	A priori error estimates for the finite element discretization of optimal distributed control problems governed by the biharmonic operator. Calcolo, 2013, 50, 165-193.	1.1	10
9	Eulerian time-stepping schemes for the non-stationary Stokes equations on time-dependent domains. Numerische Mathematik, 2022, 150, 423-478.	1.9	8
10	An edge-based pressure stabilization technique for finite elements on arbitrarily anisotropic meshes. International Journal for Numerical Methods in Fluids, 2019, 89, 407-429.	1.6	7
11	Eulerian Techniques for Fluid-Structure Interactions: Part II – Applications. Lecture Notes in Computational Science and Engineering, 2015, , 755-762.	0.3	7
12	A mechanically consistent model for fluid-structure interactions with contact including seepage. Computer Methods in Applied Mechanics and Engineering, 2022, 392, 114637.	6.6	7
13	An Adaptive Newton Algorithm for Optimal Control Problems with Application to Optimal Electrode Design. Journal of Optimization Theory and Applications, 2018, 177, 498-534.	1.5	6
14	Optimizing fiber orientation in fiber-reinforced materials using efficient upscaling. Computational Optimization and Applications, 2015, 62, 111-129.	1.6	5
15	Finite element simulation of fluid dynamics and CO ₂ gas exchange in the alveolar sacs of the human lung. Computational and Applied Mathematics, 2018, 37, 6410-6432.	1.3	4
16	3. An accurate Eulerian approach for fluid-structure interactions. , 2017, , 69-126.		3
17	LocModFE: Locally modified finite elements for approximating interface problems in deal.II. Software Impacts, 2021, 8, 100070.	1.4	3
18	Weak Imposition of Signorini Boundary Conditions on the Boundary Element Method. SIAM Journal on Numerical Analysis, 2020, 58, 2334-2350.	2.3	2

#	ARTICLE	IF	CITATIONS
19	On temporal homogenization in the numerical simulation of atherosclerotic plaque growth. Proceedings in Applied Mathematics and Mechanics, 2021, 21, .	0.2	2
20	3D-2D Stokes-Darcy Coupling for the Modelling of Seepage with an Application to Fluid-Structure Interaction with Contact. Lecture Notes in Computational Science and Engineering, 2021, , 215-223.	0.3	1