Martin Ruess

List of Publications by Year
in descending order

29 papers	1,393 citations	361413 20 h-index	477307 29 g-index
29 all docs	29 docs citations	29 times ranked	704 citing authors

#	Article	IF	Citations
1	Isogeometric stability analysis of thin shells: From simple geometries to engineering models. International Journal for Numerical Methods in Engineering, 2019, 118, 433-458.	2.8	41
2	Multi‐level *h**p*‐finite cell method for embedded interface problems with application in biomechanics. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2951.	2.1	28
3	An efficient mixed variational reduced‐order model formulation for nonlinear analyses of elastic shells. International Journal for Numerical Methods in Engineering, 2018, 113, 634-655.	2.8	39
4	The diffuse Nitsche method: Dirichlet constraints on phase‐field boundaries. International Journal for Numerical Methods in Engineering, 2018, 113, 601-633.	2.8	18
5	On the monolithic and staggered solution of cell contractility and focal adhesion growth. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e3138.	2.1	3
6	A feedback-loop extended stress fiber growth model with focal adhesion formation. International Journal of Solids and Structures, 2017, 128, 160-173.	2.7	3
7	A parameter-free variational coupling approach for trimmed isogeometric thin shells. Computational Mechanics, 2017, 59, 693-715.	4.0	48
8	The tetrahedral finite cell method: Higher‐order immersogeometric analysis on adaptive non‐boundary‐fitted meshes. International Journal for Numerical Methods in Engineering, 2016, 107, 1054-1079.	2.8	42
9	Uncertainty quantification for personalized analyses of human proximal femurs. Journal of Biomechanics, 2016, 49, 520-527.	2.1	12
10	An eigenanalysis-based bifurcation indicator proposed in the framework of a reduced-order modeling technique for non-linear structural analysis. International Journal of Non-Linear Mechanics, 2016, 81, 129-138.	2.6	20
11	Parameter-free, weak imposition of Dirichlet boundary conditions and coupling of trimmed and non-conforming patches. International Journal for Numerical Methods in Engineering, 2015, 101, 670-699.	2.8	36
12	Weak Dirichlet boundary conditions for trimmed thin isogeometric shells. Computers and Mathematics With Applications, 2015, 70, 1425-1440.	2.7	27
13	A layerwise isogeometric approach for NURBS-derived laminate composite shells. Composite Structures, 2015, 124, 300-309.	5.8	40
14	A new robust design for imperfection sensitive stiffened cylinders used in aerospace engineering. Science China Technological Sciences, 2015, 58, 796-802.	4.0	9
15	Stacking sequence influence on imperfection sensitivity of cylindrical composite shells under axial compression. Composite Structures, 2015, 134, 750-761.	5.8	23
16	Nitsche's method for a coupling of isogeometric thin shells and blended shell structures. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 881-905.	6.6	132
17	The Finite Cell Method: A Review in the Context of Higher-Order Structural Analysis of CAD and Image-Based Geometric Models. Archives of Computational Methods in Engineering, 2015, 22, 391-455.	10.2	218
18	Weak coupling of thin-walled multi-patch NURBS structures in the framework of isogeometric analysis. Proceedings in Applied Mathematics and Mechanics, 2014, 14, 271-272.	0.2	1

#	Article	IF	Citations
19	A contact extended isogeometric layerwise approach for the buckling analysis of delaminated composites. Composite Structures, 2014, 116, 55-66.	5.8	36
20	The Koiter–Newton approach using von Kármán kinematics for buckling analyses of imperfection sensitive structures. Computer Methods in Applied Mechanics and Engineering, 2014, 279, 440-468.	6.6	58
21	Weakly enforced essential boundary conditions for NURBS–embedded and trimmed NURBS geometries on the basis of the finite cell method. International Journal for Numerical Methods in Engineering, 2013, 95, 811-846.	2.8	148
22	The Finite Cell Method for linear thermoelasticity. Computers and Mathematics With Applications, 2012, 64, 3527-3541.	2.7	55
23	Small and large deformation analysis with the p- and B-spline versions of the Finite Cell Method. Computational Mechanics, 2012, 50, 445-478.	4.0	145
24	An efficient integration technique for the voxel–based finite cell method. International Journal for Numerical Methods in Engineering, 2012, 91, 457-471.	2.8	65
25	The finite cell method for bone simulations: verification and validation. Biomechanics and Modeling in Mechanobiology, 2012, 11, 425-437.	2.8	99
26	Non-standard bone simulation: interactive numerical analysis by computational steering. Computing and Visualization in Science, 2011, 14, 207-216.	1.2	39
27	Application of the Finite Cell Method to patient-specific femur simulations. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 117-118.	0.2	2
28	The Finite Cell Method for large deformation analysis. Proceedings in Applied Mathematics and Mechanics, 2011, 11, 271-272.	0.2	4
29	An extended QR–solver for large profiled matrices. International Journal for Numerical Methods in Engineering, 2009, 79, 1419-1442.	2.8	2