Manfred Bischoff

List of Publications by Year
in descending order

59	2,268	304743	214800
papers	citations	22 h-index	47 g-index

62	62	62	1112
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Computational co-design framework for coreless wound fibreâ€“polymer composite structures. Journal of Computational Design and Engineering, 2022, 9, 310-329.	3.1	14
2	A Consistent Finite Element Formulation of the Geometrically Non-linear Reissner-Mindlin Shell Model. Archives of Computational Methods in Engineering, 2022, 29, 3387-3434.	10.2	2
3	Strategy for Preventing Membrane Locking Through Reparametrization. , 2022, , 61-73.		0
4	The Structural and Mechanical Basis for Passiveâ€Hydraulic Pine Cone Actuation. Advanced Science, 2022, 9, e2200458.	11.2	23
5	Smooth or with a Snap! Biomechanics of Trap Reopening in the Venus Flytrap (Dionaea) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	11.2	10
6	A study on the approximation power of NURBS and the significance of exact geometry in isogeometric pre-buckling analyses of shells. Computer Methods in Applied Mechanics and Engineering, 2022, 397, 115144.	6.6	7
7	Improving efficiency and robustness of enhanced assumed strain elements for nonlinear problems. International Journal for Numerical Methods in Engineering, 2021, 122, 1911-1939.	2.8	18
8	A variational formulation for motion design of adaptive compliant structures. International Journal for Numerical Methods in Engineering, 2021, 122, 972-1000.	2.8	9
9	Constrained motion design with distinct actuators and motion stabilization. International Journal for Numerical Methods in Engineering, 2021, 122, 2712-2732.	2.8	1
10	Motion Design with Efficient Actuator Placement for Adaptive Structures that Perform Large Deformations. Frontiers in Built Environment, 2021, 7, .	2.3	6
11	Development of a Material Design Space for 4D-Printed Bio-Inspired Hygroscopically Actuated Bilayer Structures with Unequal Effective Layer Widths. Biomimetics, 2021, 6, 58.	3.3	11
12	Input modeling for active structural elements - extending the established FE-Work?ow for modeling of adaptive structures. , 2020, , .		4
13	A Case Study on Design and Optimization of Adaptive Civil Structures. Frontiers in Built Environment, 2020, 6, .	2.3	12
14	Snapping mechanics of the Venus flytrap (Dionaea muscipula). Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 16035-16042.	7.1	65
15	Structural models based on 3D constitutive laws: Variational structure and numerical solution. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112872.	6.6	5
16	Optimal Design of Adaptive Structures vs. Optimal Adaption of Structural Design. IFAC-PapersOnLine, 2020, 53, 8363-8369.	0.9	6
17	Finite Elements for Plates and Shells. , 2020, , 898-920.		0
18	Geometric element parameterization and parametric model order reduction in finite element based shape optimization. Computational Mechanics, 2019, 63, 853-868.	4.0	15

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19	Time step estimates for explicit dynamics with reciprocal mass matrices. Computers and Structures, 2018, 202, 74-84.	4.4	3
20	A variational method to avoid lockingâ€"independent of the discretization scheme. International Journal for Numerical Methods in Engineering, 2018, 114, 801-827.	2.8	29
21	On stability and reflectionâ€transmission analysis of the bipenalty method in contactâ€impact problems: A oneâ€dimensional, homogeneous case study. International Journal for Numerical Methods in Engineering, 2018, 113, 1607-1629.	2.8	7
22	Time step estimates for explicit dynamics with reciprocal mass matrices. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800039.	0.2	0
23	Intrinsically lockingâ€free formulations for isogeometric beam, plate and shell analysis. Proceedings in Applied Mathematics and Mechanics, 2018, 18, e201800399.	0.2	4
24	The implementation of adaptive elements into an experimental highâ€rise building. Steel Construction, 2018, 11, 109-117.	0.8	34
25	Structural stress response of segmented natural shells: a numerical case study on the clypeasteroid echinoid Echinocyamus pusillus. Journal of the Royal Society Interface, 2018, 15, 20180164.	3.4	10
26	How the carnivorous waterwheel plant (Aldrovanda vesiculosa) snaps. Proceedings of the Royal Society B: Biological Sciences, 2018, 285, 20180012.	2.6	46
27	On steady-state disturbance compensability for actuator placement in adaptive structures. Automatisierungstechnik, 2018, 66, 591-603.	0.8	41
28	Einfluss der Geometrieapproximation auf die StabilitÃtsanalyse von Schalentragwerken. , 2018, , 71-73.		0
29	Finite Elements for Plates and Shells. , 2018, , 1-23.		0
30	Hierarchic isogeometric large rotation shell elements including linearized transverse shear parametrization. Computer Methods in Applied Mechanics and Engineering, 2017, 321, 383-405.	6.6	45
31	Variationally consistent inertia templates for B-spline- and NURBS-based FEM: Inertia scaling and customization. Computer Methods in Applied Mechanics and Engineering, 2017, 326, 596-621.	6.6	9
32	A shear deformable, rotation-free isogeometric shell formulation. Computer Methods in Applied Mechanics and Engineering, 2016, 307, 235-255.	6.6	56
33	Structural Design with Biological Methods: Optimality, Multi-functionality and Robustness. Biologically-inspired Systems, 2016, , 341-360.	0.2	2
34	Numerical approaches to stability analysis of cylindrical composite shells based on load imperfections. Engineering Computations, 2015, 32, 498-518.	1.4	7
35	Adaptive discrete-continuous modeling of evolving discontinuities. Engineering Computations, 2014, 31, 1305-1320.	1.4	2
36	Adaptive path following schemes for problems with softening. Finite Elements in Analysis and Design, 2014, 86, 12-22.	3.2	27

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37	Local and global strategies for optimal selective mass scaling. Computational Mechanics, 2014, 53, 1197-1207.	4.0	18
38	Variational methods for selective mass scaling. Computational Mechanics, 2013, 52, 563-570.	4.0	26
39	A hierarchic family of isogeometric shell finite elements. Computer Methods in Applied Mechanics and Engineering, 2013, 254, 170-180.	6.6	223
40	A point to segment contact formulation for isogeometric, NURBS based finite elements. Computer Methods in Applied Mechanics and Engineering, 2013, 255, 27-39.	6.6	65
41	Consistent treatment of boundaries with mortar contact formulations using dual Lagrange multipliers. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1317-1332.	6.6	34
42	Buckling analysis of imperfect I-section beam-columns with stochastic shell finite elements. Computational Mechanics, 2010, 46, 495-510.	4.0	33
43	Numerical efficiency, locking and unlocking of NURBS finite elements. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 374-382.	6.6	143
44	Modeling of material failure by the discrete element method. Proceedings in Applied Mathematics and Mechanics, 2010, 10, 685-688.	0.2	6
45	Non-linear dynamic contact of thin-walled structures. Proceedings in Applied Mathematics and Mechanics, 2008, 8, 10267-10268.	0.2	0
46	A generalization of the method of incompatible modes. International Journal for Numerical Methods in Engineering, 2007, 69, 1851-1868.	2.8	22
47	Incompatible Bubbles: A non-conforming finite element formulation for linear elasticity. Computer Methods in Applied Mechanics and Engineering, 2007, 196, 1662-1672.	6.6	15
48	Discrete Strain Gap (DSG) solid finite elements at large deformations for non-linear analysis of shells and solids. , 2006, , 654-654.		2
49	The discrete strain gap method and membrane locking. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 2444-2463.	6.6	64
50	Improving stability and accuracy of Reissnerâ€“Mindlin plate finite elements via algebraic subgrid scale stabilization. Computer Methods in Applied Mechanics and Engineering, 2004, 193, 1517-1528.	6.6	17
51	Shape optimization of shells and locking. Computers and Structures, 2004, 82, 2551-2561.	4.4	7
52	On the physical significance of higher order kinematic and static variables in a three-dimensional shell formulation. International Journal of Solids and Structures, 2000, 37, 6933-6960.	2.7	129
53	A unified approach for shear-locking-free triangular and rectangular shell finite elements. Computers and Structures, 2000, 75, 321-334.	4.4	348
54	A deformation dependent stabilization technique, exemplified by EAS elements at large strains. Computer Methods in Applied Mechanics and Engineering, 2000, 188, 859-871.	6.6	32

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55	On the mathematical foundation of the (1,1,2)-platemodel. International Journal of Solids and Structures, 1999, 36, 2143-2168.	2.7	25
56	A class of equivalent enhanced assumed strain and hybrid stress finite elements. Computational Mechanics, 1999, 22, 443-449.	4.0	54
57	Shear deformable shell elements for large strains and rotations. International Journal for Numerical Methods in Engineering, 1997, 40, 4427-4449.	2.8	341
58	Nonlinear shell formulations for complete three-dimensional constitutive laws including composites and laminates. Computational Mechanics, 1994, 15, 1-18.	4.0	104
59	Intrinsically Selective Mass Scaling with Hierarchic Structural Element Formulations. , 0, , .		0