Michel Bercovier

List of Publications by Year
in descending order

36	1,337	567281	477307
papers	citations	15	29
		h-index	g-index

37	37	37	786
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A finite-element method for incompressible non-Newtonian flows. Journal of Computational Physics, 1980, 36, 313-326.	3.8	293
2	Efficient simulation of inextensible cloth. ACM Transactions on Graphics, 2007, 26, 49.	7.2	182
3	Consistent vs. reduced integration penalty methods for incompressible media using several old and new elements. International Journal for Numerical Methods in Fluids, 1982, 2, 25-42.	1.6	157
4	A finite element for the numerical solution of viscous incompressible flows. Journal of Computational Physics, 1979, 30, 181-201.	3.8	147
5	Finite Elements and characteristics for some parabolic-hyperbolic problems. Applied Mathematical Modelling, 1983, 7, 89-96.	4.2	69
6	Isogeometric analysis with geometrically continuous functions on planar multi-patch geometries. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 209-234.	6.6	59
7	Hexahedral Mesh Generation using the Embedded Voronoi Graph. Engineering With Computers, 1999, 15, 248-262.	6.1	50
8	VIRTUAL TOPOLOGY OPERATORS FOR MESHING. International Journal of Computational Geometry and Applications, 2000, 10, 309-331.	0.5	47
9	Volume-preserving free-form solids. IEEE Transactions on Visualization and Computer Graphics, 1996, 2, 19-27.	4.4	45
10	A finite element method for the analysis of rubber parts, experimental and analytical assessment. Computers and Structures, 1981, 14, 385-391.	4.4	41
11	Reaction Diffusion Model of the Enzymatic Erosion of Insoluble Fibrillar Matrices. Biophysical Journal, 2002, 83, 776-793.	0.5	39
12	Spline Curve Approximation and Design by Optimal Control Over the Knots. Computing (Vienna/New) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	4.8	38
13	Numerical approximation of a wave equation with unilateral constraints. Mathematics of Computation, 1989, 53, 55-79.	2.1	34
14	Finite elements and characteristics applied to advection-diffusion equations. Computers and Fluids, 1983, 11, 71-83.	2.5	31
15	Smooth Bézier Surfaces over Unstructured Quadrilateral Meshes. Lecture Notes of the Unione Matematica Italiana, 2017, , .	0.4	19
16	The vortex method with finite elements. Mathematics of Computation, 1981, 36, 119-119.	2.1	15
17	Hexahedral meshing of non-linear volumes using Voronoi faces and edges. International Journal for Numerical Methods in Engineering, 2000, 49, 329-351.	2.8	11
18	Semi-automatic computer construction of three-dimensional shapes for the finite element method. Computer Methods and Programs in Biomedicine, 1993, 41, 135-146.	4.7	10

#	Article	IF	Citations
19	Minimization, constraints and composite Bézier curves. Computer Aided Geometric Design, 1994, 11, 533-563.	1.2	9
20	A 4 CST quadrilateral element for incompressible materials and nearly incompressible materials. Calcolo, 1979, 16, 5-19.	1.1	6
21	On c0 beam elements with shear and their corresponding penalty function formulation. Computers and Mathematics With Applications, 1982, 8, 245-256.	2.7	6
22	Enhancement of Gordon-Coons interpolations by "bubble functions". Computer Aided Geometric Design, 1993, 10, 253-265.	1.2	6
23	Detecting Planar Patches in an Unorganised Set of Points in Space. Advances in Computational Mathematics, 2002, 17, 153-166.	1.6	5
24	Simulation of forming processes by FEM with a Bingham fluid model. International Journal for Numerical Methods in Fluids, 1986, 6, 197-218.	1.6	4
25	A comparison of invariant energies for free-form surface construction. Visual Computer, 1999, 15, 199-210.	3.5	4
26	A C0 finite element method for the analysis of inextensible pipe lines. Computers and Structures, 1984, 18, 1019-1023.	4.4	3
27	Selecting the particle size distribution for drugs with low water solubility – mathematical model. Drug Development and Industrial Pharmacy, 2012, 38, 940-951.	2.0	3
28	Approximation of bingham's variational inequalities by a penalty function for the incompressibility constraint. Numerical Functional Analysis and Optimization, 1980, 2, 361-373.	1.4	2
29	A mixed 3D finite element for modelling thick plates. Computational Mechanics, 1994, 13, 332-342.	4.0	2
30	G1 Hierarchical Bezier Surface over Arbitrary Meshes. Computer Graphics Forum, 1999, 18, 223-236.	3.0	0
31	MDS for a Smooth Boundary. Lecture Notes of the Unione Matematica Italiana, 2017, , 93-136.	0.4	0
32	Computational Examples. Lecture Notes of the Unione Matematica Italiana, 2017, , 137-143.	0.4	0
33	Global MDS. Lecture Notes of the Unione Matematica Italiana, 2017, , 73-91.	0.4	0
34	G1-Smooth Surfaces. Lecture Notes of the Unione Matematica Italiana, 2017, , 25-42.	0.4	0
35	MDS: Quadrilateral Meshes and Polygonal Boundary. Lecture Notes of the Unione Matematica Italiana, 2017, , 43-72.	0.4	0
36	Conclusions and Further Research. Lecture Notes of the Unione Matematica Italiana, 2017, , 145-147.	0.4	0