

# Stephane Bordas

## List of Publications by Year in descending order

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196  
papers

14,595  
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16451  
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202  
all docs

202  
docs citations

202  
times ranked

5466  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electromechanical properties identification for groups of piezoelectric energy harvester based on Bayesian inference. Mechanical Systems and Signal Processing, 2022, 162, 108034.	8.0	11
2	Cortex tissue relaxation and slow to medium load rates dependency can be captured by a two-phase flow poroelastic model. Journal of the Mechanical Behavior of Biomedical Materials, 2022, 126, 104952.	3.1	8
3	A Bayesian multiscale CNN framework to predict local stress fields in structures with microscale features. Computational Mechanics, 2022, 69, 733-766.	4.0	31
4	Adaptive enriched geometry independent field approximation for 2D time-harmonic acoustics. Computers and Structures, 2022, 263, 106728.	4.4	14
5	Inverse deformation analysis: an experimental and numerical assessment using the FEniCS Project. Engineering With Computers, 2022, 38, 4099-4113.	6.1	9
6	Seismic Performance of Kiewitt-Sunflower Single Layer Spherical Reticulated Shells. KSCE Journal of Civil Engineering, 2022, 26, 2354-2368.	1.9	1
7	An adapted deflated conjugate gradient solver for robust extended/generalised finite element solutions of large scale, 3D crack propagation problems. Computer Methods in Applied Mechanics and Engineering, 2022, 395, 114937.	6.6	6
8	Probabilistic deep learning for real-time large deformation simulations. Computer Methods in Applied Mechanics and Engineering, 2022, 398, 115307.	6.6	33
9	Bayesian model uncertainty quantification for hyperelastic soft tissue models. Data-Centric Engineering, 2021, 2, .	2.3	11
10	A cut finite element method for spatially resolved energy metabolism models in complex neuro-cell morphologies with minimal remeshing. Advanced Modeling and Simulation in Engineering Sciences, 2021, 8, .	1.7	9
11	Uncertainty quantification of spatially uncorrelated loads with a reduced-order stochastic isogeometric method. Computational Mechanics, 2021, 67, 1255-1271.	4.0	24
12	Crack detection in Mindlin-Reissner plates under dynamic loads based on fusion of data and models. Computers and Structures, 2021, 246, 106475.	4.4	11
13	A unified algorithm for the selection of collocation stencils for convex, concave, and singular problems. International Journal for Numerical Methods in Engineering, 2021, 122, 4292-4312.	2.8	12
14	Error estimation for the polygonal finite element method for smooth and singular linear elasticity. Computers and Mathematics With Applications, 2021, 92, 109-119.	2.7	7
15	Circumferential crack modeling of thin cylindrical shells in modal deformation. European Journal of Mechanics, A/Solids, 2021, 90, 104360.	3.7	3
16	Treatment of multiple input uncertainties using the scaled boundary finite element method. Applied Mathematical Modelling, 2021, 99, 538-554.	4.2	5
17	A rigged model of the breast for preoperative surgical planning. Journal of Biomechanics, 2021, 128, 110645.	2.1	10
18	A Tutorial on Bayesian Inference to Identify Material Parameters in Solid Mechanics. Archives of Computational Methods in Engineering, 2020, 27, 361-385.	10.2	83

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19	Taylor-Series Expansion Based Numerical Methods: A Primer, Performance Benchmarking and New Approaches for Problems with Non-smooth Solutions. Archives of Computational Methods in Engineering, 2020, 27, 1465-1513.	10.2	20
20	A Stochastic Galerkin Cell-based Smoothed Finite Element Method (SGCS-FEM). International Journal of Computational Methods, 2020, 17, 1950054.	1.3	3
21	Resolving high frequency issues via proper orthogonal decomposition based dynamic isogeometric analysis for structures with dissimilar materials. Computer Methods in Applied Mechanics and Engineering, 2020, 359, 112753.	6.6	14
22	Phase-field modeling of fracture. Advances in Applied Mechanics, 2020, 53, 1-183.	2.3	241
23	Damage-Plastic Constitutive Model of Thin-Walled Circular Steel Tubes for Space Structures. Journal of Engineering Mechanics - ASCE, 2020, 146, 04020131.	2.9	3
24	An nth high order perturbation-based stochastic isogeometric method and implementation for quantifying geometric uncertainty in shell structures. Advances in Engineering Software, 2020, 148, 102866.	3.8	26
25	A Developed Damage Constitutive Model for Circular Steel Tubes of Reticulated Shells. International Journal of Structural Stability and Dynamics, 2020, 20, 2050106.	2.4	4
26	Parametrized reduced order modeling for cracked solids. International Journal for Numerical Methods in Engineering, 2020, 121, 4537-4565.	2.8	15
27	Isogeometric analysis of thin Reissner-Mindlin shells: locking phenomena and B-bar method. Computational Mechanics, 2020, 65, 1323-1341.	4.0	23
28	A MINI element over star convex polytopes. Finite Elements in Analysis and Design, 2020, 172, 103368.	3.2	1
29	Acoustic topology optimization of sound absorbing materials directly from subdivision surfaces with isogeometric boundary element methods. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112806.	6.6	83
30	Generalized quasicontinuum modeling of metallic lattices with geometrical and material nonlinearity and variability. Computer Methods in Applied Mechanics and Engineering, 2020, 366, 112878.	6.6	7
31	<p>Robotically Steered Needles: A Survey of Neurosurgical Applications and Technical Innovations</p><p>Robotic Surgery (Auckland), 2020, Volume 7, 1-23.	1.3	12
32	Autonomous model-based assessment of mechanical failures of reconfigurable modular robots with a Conjugate Gradient solver. , 2020, , .		2
33	Fracture mechanism simulation of inhomogeneous anisotropic rocks by extended finite element method. Theoretical and Applied Fracture Mechanics, 2019, 104, 102359.	4.7	24
34	Weak and strong form meshless methods for linear elastic problem under fretting contact conditions. Tribology International, 2019, 138, 392-402.	5.9	21
35	A new locking-free polygonal plate element for thin and thick plates based on Reissner-Mindlin plate theory and assumed shear strain fields. Computers and Structures, 2019, 220, 32-42.	4.4	18
36	Multiscale modeling of material failure: Theory and computational methods. Advances in Applied Mechanics, 2019, 52, 1-103.	2.3	41

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37	A gradient weighted extended finite element method (GW-XFEM) for fracture mechanics. Acta Mechanica, 2019, 230, 2385-2398.	2.1	20
38	A unified polygonal locking-free thin/thick smoothed plate element. Composite Structures, 2019, 219, 147-157.	5.8	26
39	A unified enrichment approach addressing blending and conditioning issues in enriched finite elements. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 673-700.	6.6	32
40	Model I cohesive zone models of different rank coals. International Journal of Rock Mechanics and Minings Sciences, 2019, 115, 145-156.	5.8	32
41	Model order reduction accelerated Monte Carlo stochastic isogeometric method for the analysis of structures with high-dimensional and independent material uncertainties. Computer Methods in Applied Mechanics and Engineering, 2019, 349, 266-284.	6.6	32
42	A one point integration rule over star convex polytopes. Computers and Structures, 2019, 215, 43-64.	4.4	11
43	Improving the conditioning of XFEM/GFEM for fracture mechanics problems through enrichment quasi-orthogonalization. Computer Methods in Applied Mechanics and Engineering, 2019, 346, 1051-1073.	6.6	68
44	B-Spline FEM for Time-Harmonic Acoustic Scattering and Propagation. Journal of Theoretical and Computational Acoustics, 2019, 27, 1850059.	1.1	18
45	Corotational cut finite element method for real-time surgical simulation: Application to needle insertion simulation. Computer Methods in Applied Mechanics and Engineering, 2019, 345, 183-211.	6.6	35
46	$\int_{\Omega} \mathbf{h} \cdot \mathbf{p} \, d\Omega$ and $\int_{\Omega} \mathbf{h} \cdot \mathbf{p} \, d\Omega$ - adaptivity driven by recovery and residual-based error estimators for PHT-splines applied to time-harmonic acoustics. Computers and Mathematics With Applications, 2019, 77, 2369-2395.	2.7	44
47	Linear smoothed extended finite element method for fatigue crack growth simulations. Engineering Fracture Mechanics, 2019, 206, 551-564.	4.3	49
48	Controlling the error on target motion through real-time mesh adaptation: Applications to deep brain stimulation. International Journal for Numerical Methods in Biomedical Engineering, 2018, 34, e2958.	2.1	29
49	Multiple crack detection in 3D using a stable XFEM and global optimization. Computational Mechanics, 2018, 62, 835-852.	4.0	54
50	Weakening the tight coupling between geometry and simulation in isogeometric analysis: From sub- and super-geometric analysis to Geometry-Independent Field approximation (GIFT). International Journal for Numerical Methods in Engineering, 2018, 114, 1131-1159.	2.8	95
51	Real-Time Error Control for Surgical Simulation. IEEE Transactions on Biomedical Engineering, 2018, 65, 596-607.	4.2	52
52	Stable 3D XFEM/vector level sets for non-planar 3D crack propagation and comparison of enrichment schemes. International Journal for Numerical Methods in Engineering, 2018, 113, 252-276.	2.8	61
53	Minimum energy multiple crack propagation. Part-II: Discrete solution with XFEM. Engineering Fracture Mechanics, 2018, 191, 225-256.	4.3	58
54	Minimum energy multiple crack propagation. Part I: Theory and state of the art review. Engineering Fracture Mechanics, 2018, 191, 205-224.	4.3	69

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55	Constructing IGA-suitable planar parameterization from complex CAD boundary by domain partition and global/local optimization. Computer Methods in Applied Mechanics and Engineering, 2018, 328, 175-200.	6.6	86
56	On the effect of grains interface parameters on the macroscopic properties of polycrystalline materials. Computers and Structures, 2018, 196, 355-368.	4.4	4
57	XFEM modeling of multistage hydraulic fracturing in anisotropic shale formations. Journal of Petroleum Science and Engineering, 2018, 162, 801-812.	4.2	51
58	Minimum energy multiple crack propagation. Part III: XFEM computer implementation and applications. Engineering Fracture Mechanics, 2018, 191, 257-276.	4.3	72
59	Bayesian inference to identify parameters in viscoelasticity. Mechanics of Time-Dependent Materials, 2018, 22, 221-258.	4.4	65
60	Simple and extensible plate and shell finite element models through automatic code generation tools. Computers and Structures, 2018, 209, 163-181.	4.4	40
61	3D meso-scale modelling of foamed concrete based on X-ray Computed Tomography. Construction and Building Materials, 2018, 188, 583-598.	7.2	83
62	Skew-symmetric Nitsche's formulation in isogeometric analysis: Dirichlet and symmetry conditions, patch coupling and frictionless contact. Computer Methods in Applied Mechanics and Engineering, 2018, 341, 188-220.	6.6	49
63	What makes Data Science different? A discussion involving Statistics2.0 and Computational Sciences. International Journal of Data Science and Analytics, 2018, 6, 167-175.	4.1	33
64	Quantifying the uncertainty in a hyperelastic soft tissue model with stochastic parameters. Applied Mathematical Modelling, 2018, 62, 86-102.	4.2	67
65	Isogeometric boundary element methods for three dimensional static fracture and fatigue crack growth. Computer Methods in Applied Mechanics and Engineering, 2017, 316, 151-185.	6.6	181
66	Numerical evaluation of buckling behaviour induced by compression on patch-repaired composites. Composite Structures, 2017, 168, 582-596.	5.8	16
67	Programming the material point method in Julia. Advances in Engineering Software, 2017, 105, 17-29.	3.8	20
68	Error-controlled adaptive extended finite element method for 3D linear elastic crack propagation. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 319-348.	6.6	57
69	Strain smoothing for compressible and nearly-incompressible finite elasticity. Computers and Structures, 2017, 182, 540-555.	4.4	31
70	An implicit potential method along with a meshless technique for incompressible fluid flows for regular and irregular geometries in 2D and 3D. Engineering Analysis With Boundary Elements, 2017, 77, 97-111.	3.7	11
71	Accelerating Monte Carlo estimation with derivatives of high-level finite element models. Computer Methods in Applied Mechanics and Engineering, 2017, 318, 917-936.	6.6	53
72	Gradient plasticity crack tip characterization by means of the extended finite element method. Computational Mechanics, 2017, 59, 831-842.	4.0	32

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73	Modelling hydraulic fractures in porous media using flow cohesive interface elements. Engineering Geology, 2017, 225, 68-82.	6.3	105
74	Linear smoothed extended finite element method. International Journal for Numerical Methods in Engineering, 2017, 112, 1733-1749.	2.8	26
75	Guaranteed error bounds in homogenisation: an optimum stochastic approach to preserve the numerical separation of scales. International Journal for Numerical Methods in Engineering, 2017, 110, 103-132.	2.8	18
76	Micro-structured materials: Inhomogeneities and imperfect interfaces in plane micropolar elasticity, a boundary element approach. Engineering Analysis With Boundary Elements, 2017, 83, 195-203.	3.7	15
77	A linear smoothed quadratic finite element for the analysis of laminated composite Reissner-Mindlin plates. Composite Structures, 2017, 180, 395-411.	5.8	26
78	A linear smoothed higher-order CS-FEM for the analysis of notched laminated composites. Engineering Analysis With Boundary Elements, 2017, 85, 127-135.	3.7	10
79	Linear elastic fracture simulation directly from CAD: 2D NURBS-based implementation and role of tip enrichment. International Journal of Fracture, 2017, 204, 55-78.	2.2	76
80	A fully smoothed XFEM for analysis of axisymmetric problems with weak discontinuities. International Journal for Numerical Methods in Engineering, 2017, 110, 203-226.	2.8	23
81	Linear smoothed polygonal and polyhedral finite elements. International Journal for Numerical Methods in Engineering, 2017, 109, 1263-1288.	2.8	83
82	An extended finite element method (XFEM) for linear elastic fracture with smooth nodal stress. Computers and Structures, 2017, 179, 48-63.	4.4	30
83	Shape optimization directly from CAD: An isogeometric boundary element approach using T-splines. Computer Methods in Applied Mechanics and Engineering, 2017, 317, 1-41.	6.6	112
84	Well Conditioned Extended Finite Elements and Vector Level Sets for Three-Dimensional Crack Propagation. Lecture Notes in Computational Science and Engineering, 2017, , 307-329.	0.3	7
85	Calculating the Malliavin derivative of some stochastic mechanics problems. PLoS ONE, 2017, 12, e0189994.	2.5	12
86	On the Convergence of Stresses in Fretting Fatigue. Materials, 2016, 9, 639.	2.9	44
87	Implementation of regularized isogeometric boundary element methods for gradient-based shape optimization in two-dimensional linear elasticity. International Journal for Numerical Methods in Engineering, 2016, 106, 972-1017.	2.8	100
88	Stable 3D extended finite elements with higher order enrichment for accurate non planar fracture. Computer Methods in Applied Mechanics and Engineering, 2016, 306, 19-46.	6.6	69
89	Modelling interfacial cracking with non-matching cohesive interface elements. Computational Mechanics, 2016, 58, 731-746.	4.0	23
90	Automatised selection of load paths to construct reduced-order models in computational damage micromechanics: from dissipation-driven random selection to Bayesian optimization. Computational Mechanics, 2016, 58, 213-234.	4.0	55

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91	A well- $\epsilon$ -conditioned and optimally convergent XFEM for 3D linear elastic fracture. International Journal for Numerical Methods in Engineering, 2016, 105, 643-677.	2.8	72
92	A fast, certified and $\epsilon$ -tuning free $\epsilon$ -two-field reduced basis method for the metamodeling of affinely-parametrised elasticity problems. Computer Methods in Applied Mechanics and Engineering, 2016, 298, 121-158.	6.6	18
93	An efficient goal-oriented sampling strategy using reduced basis method for parametrized elastodynamic problems. Numerical Methods for Partial Differential Equations, 2015, 31, 575-608.	3.6	16
94	Virtual and smoothed finite elements: A connection and its application to polygonal/polyhedral finite element methods. International Journal for Numerical Methods in Engineering, 2015, 104, 1173-1199.	2.8	58
95	Equilibrium morphology of misfit particles in elastically stressed solids under chemo-mechanical equilibrium conditions. Journal of the Mechanics and Physics of Solids, 2015, 81, 1-21.	4.8	22
96	Locally equilibrated stress recovery for goal oriented error estimation in the extended finite element method. Computers and Structures, 2015, 152, 1-10.	4.4	30
97	Isogeometric Analysis of Laminated Composite Plates Using the Higher-Order Shear Deformation Theory. Mechanics of Advanced Materials and Structures, 2015, 22, 451-469.	2.6	117
98	Isogeometric analysis: An overview and computer implementation aspects. Mathematics and Computers in Simulation, 2015, 117, 89-116.	4.4	478
99	Scale selection in nonlinear fracture mechanics of heterogeneous materials. Philosophical Magazine, 2015, 95, 3328-3347.	1.6	21
100	Fundamental solutions and dual boundary element methods for fracture in plane Cosserat elasticity. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2015, 471, 20150216.	2.1	15
101	An efficient computational approach for control of nonlinear transient responses of smart piezoelectric composite plates. International Journal of Non-Linear Mechanics, 2015, 76, 190-202.	2.6	91
102	Probabilistic multiconstraints optimization of cooling channels in ceramic matrix composites. Composites Part B: Engineering, 2015, 81, 107-119.	12.0	23
103	Advances in finite element analysis for computational mechanics 2015. Advances in Mechanical Engineering, 2015, 7, 168781401559573.	1.6	1
104	A Staggered Cell-Centered Finite Element Method for Compressible and Nearly-Incompressible Linear Elasticity on General Meshes. SIAM Journal on Numerical Analysis, 2015, 53, 2051-2073.	2.3	5
105	Isogeometric analysis of functionally graded carbon nanotube-reinforced composite plates using higher-order shear deformation theory. Composite Structures, 2015, 123, 137-149.	5.8	191
106	Interfacial shear stress optimization in sandwich beams with polymeric core using non-uniform distribution of reinforcing ingredients. Composite Structures, 2015, 120, 221-230.	5.8	25
107	Enriched finite elements for branching cracks in deformable porous media. Engineering Analysis With Boundary Elements, 2015, 50, 435-446.	3.7	11
108	A meshless adaptive multiscale method for fracture. Computational Materials Science, 2015, 96, 382-395.	3.0	71



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109	Computational Methods for Fracture. Mathematical Problems in Engineering, 2014, 2014, 1-2.	1.1	2
110	Certification of projection-based reduced order modelling in computational homogenisation by the constitutive relation error. International Journal for Numerical Methods in Engineering, 2014, 97, 395-422.	2.8	33
111	XLME interpolants, a seamless bridge between XFEM and enriched meshless methods. Computational Mechanics, 2014, 53, 45-57.	4.0	168
112	An experimental/numerical investigation into the main driving force for crack propagation in uni-directional fibre-reinforced composite laminae. Composite Structures, 2014, 107, 119-130.	5.8	81
113	Nitsche's method for two and three dimensional NURBS patch coupling. Computational Mechanics, 2014, 53, 1163-1182.	4.0	179
114	An adaptive multiscale method for quasi-static crack growth. Computational Mechanics, 2014, 53, 1129-1148.	4.0	197
115	Two- and three-dimensional isogeometric cohesive elements for composite delamination analysis. Composites Part B: Engineering, 2014, 60, 193-212.	12.0	61
116	Real-time simulation of contact and cutting of heterogeneous soft-tissues. Medical Image Analysis, 2014, 18, 394-410.	11.6	131
117	Explicit finite deformation analysis of isogeometric membranes. Computer Methods in Applied Mechanics and Engineering, 2014, 277, 104-130.	6.6	51
118	A computational library for multiscale modeling of material failure. Computational Mechanics, 2014, 53, 1047-1071.	4.0	437
119	Numerical Analysis of the Inclusion-Crack Interaction by the Extended Finite Element Method. International Journal for Computational Methods in Engineering Science and Mechanics, 2014, 15, 26-32.	2.1	22
120	Stochastic modelling of clay/epoxy nanocomposites. Composite Structures, 2014, 118, 241-249.	5.8	59
121	Isogeometric locking-free plate element: A simple first order shear deformation theory for functionally graded plates. Composite Structures, 2014, 118, 121-138.	5.8	177
122	Mesh adaptivity driven by goal-oriented locally equilibrated superconvergent patch recovery. Computational Mechanics, 2014, 53, 957-976.	4.0	40
123	Analysis of composite plates through cell-based smoothed finite element and 4-noded mixed interpolation of tensorial components techniques. Computers and Structures, 2014, 135, 83-87.	4.4	13
124	Quasicontinuum-based multiscale approaches for plate-like beam lattices experiencing in-plane and out-of-plane deformation. Computer Methods in Applied Mechanics and Engineering, 2014, 279, 348-378.	6.6	27
125	Uncertainty quantification of dry woven fabrics: A sensitivity analysis on material properties. Composite Structures, 2014, 116, 1-17.	5.8	36
126	Isogeometric analysis suitable trivariate NURBS representation of composite panels with a new offset algorithm. CAD Computer Aided Design, 2014, 55, 49-63.	2.7	29



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127	Analysis using higher-order XFEM: implicit representation of geometrical features from a given parametric representation. <i>Mechanics and Industry</i> , 2014, 15, 443-448.	1.3	10
128	A hybrid smoothed extended finite element/level set method for modeling equilibrium shapes of nano-inhomogeneities. <i>Computational Mechanics</i> , 2013, 52, 1417-1428.	4.0	25
129	Efficient recovery-based error estimation for the smoothed finite element method for smooth and singular linear elasticity. <i>Computational Mechanics</i> , 2013, 52, 37-52.	4.0	24
130	The virtual node polygonal element method for nonlinear thermal analysis with application to hybrid laser welding. <i>International Journal of Heat and Mass Transfer</i> , 2013, 67, 1247-1254.	4.8	28
131	Isogeometric boundary element analysis using unstructured T-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 254, 197-221.	6.6	311
132	An isogeometric boundary element method for elastostatic analysis: 2D implementation aspects. <i>Computers and Structures</i> , 2013, 118, 2-12.	4.4	132
133	DEFECT ENGINEERING OF 2D MONATOMIC-LAYER MATERIALS. <i>Modern Physics Letters B</i> , 2013, 27, 1330017.	1.9	35
134	NURBS-based finite element analysis of functionally graded plates: Static bending, vibration, buckling and flutter. <i>Composite Structures</i> , 2013, 99, 309-326.	5.8	277
135	Effects of elastic strain energy and interfacial stress on the equilibrium morphology of misfit particles in heterogeneous solids. <i>Journal of the Mechanics and Physics of Solids</i> , 2013, 61, 1433-1445.	4.8	50
136	A partitioned model order reduction approach to rationalise computational expenses in nonlinear fracture mechanics. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 256, 169-188.	6.6	101
137	Analysis of composite plates by a unified formulation-cell based smoothed finite element method and field consistent elements. <i>Composite Structures</i> , 2013, 105, 75-81.	5.8	30
138	An adaptive singular ES-FEM for mechanics problems with singular field of arbitrary order. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013, 253, 252-273.	6.6	178
139	Optimization of elastic properties and weaving patterns of woven composites. <i>Composite Structures</i> , 2013, 100, 575-591.	5.8	46
140	Stress analysis without meshing: isogeometric boundary-element method. <i>Proceedings of the Institution of Civil Engineers: Engineering and Computational Mechanics</i> , 2013, 166, 88-99.	0.4	10
141	MOLECULAR DYNAMICS/XFEM COUPLING BY A THREE-DIMENSIONAL EXTENDED BRIDGING DOMAIN WITH APPLICATIONS TO DYNAMIC BRITTLE FRACTURE. <i>International Journal for Multiscale Computational Engineering</i> , 2013, 11, 527-541.	1.2	77
142	STATISTICAL EXTRACTION OF PROCESS ZONES AND REPRESENTATIVE SUBSPACES IN FRACTURE OF RANDOM COMPOSITES. <i>International Journal for Multiscale Computational Engineering</i> , 2013, 11, 253-287.	1.2	17
143	Cutting in Real Time in Corotational Elasticity and Perspectives on Simulating Cuts. , 2013, , 3-5.		0
144	A force-based large increment method for 2D continuum solids and the mesh convergence study. , 2012, , .		0

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145	Size-dependent free flexural vibration behavior of functionally graded nanoplates. Computational Materials Science, 2012, 65, 74-80.	3.0	186
146	Extended finite element method for dynamic fracture of piezo-electric materials. Engineering Fracture Mechanics, 2012, 92, 19-31.	4.3	59
147	A cell-based smoothed finite element method for three dimensional solid structures. KSCE Journal of Civil Engineering, 2012, 16, 1230-1242.	1.9	28
148	On the role of enrichment and statical admissibility of recovered fields in a posteriori error estimation for enriched finite element methods. Engineering Computations, 2012, 29, 814-841.	1.4	26
149	Enriched residual free bubbles for semiconductor device simulation. Computational Mechanics, 2012, 50, 119-133.	4.0	6
150	Local/global model order reduction strategy for the simulation of quasi-brittle fracture. International Journal for Numerical Methods in Engineering, 2012, 89, 154-179.	2.8	73
151	Lifetime prediction for solder joints with the extended finite element method. , 2011, , .		4
152	Crack growth calculations in solder joints based on microstructural phenomena with X-FEM. Computational Materials Science, 2011, 50, 1145-1156.	3.0	27
153	Linear buckling analysis of cracked plates by SFEM and XFEM. Journal of Mechanics of Materials and Structures, 2011, 6, 1213-1238.	0.6	56
154	A cell-based smoothed finite element method for free vibration and buckling analysis of shells. KSCE Journal of Civil Engineering, 2011, 15, 347-361.	1.9	31
155	An Algorithm to compute damage from load in composites. Frontiers of Architecture and Civil Engineering in China, 2011, 5, 180-193.	0.4	17
156	A robust preconditioning technique for the extended finite element method. International Journal for Numerical Methods in Engineering, 2011, 85, 1609-1632.	2.8	127
157	Accurate fracture modelling using meshless methods, the visibility criterion and level sets: Formulation and 2D modelling. International Journal for Numerical Methods in Engineering, 2011, 86, 249-268.	2.8	97
158	On the performance of strain smoothing for quadratic and enriched finite element approximations (XFEM/GFEM/PUFEM). International Journal for Numerical Methods in Engineering, 2011, 86, 637-666.	2.8	142
159	Finite element analysis on implicitly defined domains: An accurate representation based on arbitrary parametric surfaces. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 774-796.	6.6	80
160	Bridging proper orthogonal decomposition methods and augmented Newton-Krylov algorithms: An adaptive model order reduction for highly nonlinear mechanical problems. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 850-866.	6.6	118
161	Isogeometric analysis using polynomial splines over hierarchical T-meshes for two-dimensional elastic solids. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1892-1908.	6.6	221
162	Linear free flexural vibration of cracked functionally graded plates in thermal environment. Computers and Structures, 2011, 89, 1535-1546.	4.4	61

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163	Natural frequencies of cracked functionally graded material plates by the extended finite element method. Composite Structures, 2011, 93, 3082-3092.	5.8	128
164	An alternative alpha finite element method with discrete shear gap technique for analysis of isotropic Mindlin's Reissner plates. Finite Elements in Analysis and Design, 2011, 47, 519-535.	3.2	60
165	Isogeometric finite element analysis using polynomial splines over hierarchical T-meshes. IOP Conference Series: Materials Science and Engineering, 2010, 10, 012238.	0.6	2
166	An Element Nodal Force-based Large Increment Method for Elastoplasticity. , 2010, , .		1
167	Strain smoothing in FEM and XFEM. Computers and Structures, 2010, 88, 1419-1443.	4.4	255
168	A node-based smoothed finite element method with stabilized discrete shear gap technique for analysis of Reissner's Mindlin plates. Computational Mechanics, 2010, 46, 679-701.	4.0	128
169	On the approximation in the smoothed finite element method (SFEM). International Journal for Numerical Methods in Engineering, 2010, 81, 660-670.	2.8	71
170	Integrating strong and weak discontinuities without integration subcells and example applications in an XFEM/GFEM framework. International Journal for Numerical Methods in Engineering, 2010, 83, 269-294.	2.8	102
171	Numerically determined enrichment functions for the extended finite element method and applications to bi-material anisotropic fracture and polycrystals. International Journal for Numerical Methods in Engineering, 2010, 83, 805-828.	2.8	24
172	A cell-based smoothed finite element method for kinematic limit analysis. International Journal for Numerical Methods in Engineering, 2010, 83, 1651-1674.	2.8	86
173	A simple and robust three-dimensional cracking-particle method without enrichment. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2437-2455.	6.6	725
174	On three-dimensional modelling of crack growth using partition of unity methods. Computers and Structures, 2010, 88, 1391-1411.	4.4	311
175	An alternative alpha finite element method ( $\alpha$ -Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 272 Td (xmlns:mml="http://www.wiley.com/journal/0020-7179/onlineopen/doi/10.1002/eqm.1111") using triangular meshes. Journal of Computational and Applied Mathematics, 2010, 233, 2112-2135.	2.0	53
176	On the Structure of a New Superhard Hexagonal Carbon Phase. , 2010, , .		0
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