

Jon Trevelyan

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9226328/publications.pdf>

Version: 2024-02-01

89
papers

2,015
citations

257429

24
h-index

265191

42
g-index

90
all docs

90
docs citations

90
times ranked

870
citing authors

#	ARTICLE	IF	CITATIONS
1	A NURBS-discontinuous and enriched isogeometric boundary element formulation for two-dimensional fatigue crack growth. <i>Engineering Analysis With Boundary Elements</i> , 2022, 134, 259-281.	3.7	9
2	An isogeometric boundary element method for heat transfer problems of multiscale structures in electronic packaging with arbitrary heat sources. <i>Applied Mathematical Modelling</i> , 2022, 109, 161-185.	4.2	10
3	Analysis of 2D contact problems under cyclic loads using IGABEM with B�zier decomposition. <i>Engineering Analysis With Boundary Elements</i> , 2022, 139, 246-263.	3.7	5
4	The solution of the anomalous diffusion equation by a finite element method formulation based on the Caputo derivative. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2022, 44, .	1.6	1
5	A comparison of high-order and plane wave enriched boundary element basis functions for Helmholtz problems. <i>Engineering Analysis With Boundary Elements</i> , 2021, 122, 190-201.	3.7	3
6	Frequency domain Bernstein-B�zier finite element solver for modelling short waves in elastodynamics. <i>Applied Mathematical Modelling</i> , 2021, , .	4.2	3
7	Singular enrichment functions for Helmholtz scattering at corner locations using the boundary element method. <i>International Journal for Numerical Methods in Engineering</i> , 2020, 121, 519-533.	2.8	7
8	The Boundary Element Method applied to the solution of the diffusion-wave problem. <i>Engineering Analysis With Boundary Elements</i> , 2020, 117, 13-25.	3.7	2
9	Hybrid nearly singular integration for three-dimensional isogeometric boundary element analysis of coatings and other thin structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 367, 113099.	6.6	18
10	Enhanced conformal perfectly matched layers for Bernstein-B�zier finite element modelling of short wave scattering. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 355, 614-638.	6.6	9
11	The boundary element method applied to the solution of the anomalous diffusion problem. <i>Engineering Analysis With Boundary Elements</i> , 2019, 109, 129-142.	3.7	4
12	Discontinuous isogeometric boundary element (IGABEM) formulations in 3D automotive acoustics. <i>Engineering Analysis With Boundary Elements</i> , 2019, 105, 303-311.	3.7	21
13	An adaptive SVD-Krylov reduced order model for surrogate based structural shape optimization through isogeometric boundary element method. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 349, 312-338.	6.6	27
14	A solution approach for contact problems based on the dual interpolation boundary face method. <i>Applied Mathematical Modelling</i> , 2019, 70, 643-658.	4.2	6
15	Bernstein-B�zier based finite elements for efficient solution of short wave problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 343, 166-185.	6.6	19
16	Hybrid nearly singular integration for isogeometric boundary element analysis of coatings and other thin 2D structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 346, 642-673.	6.6	26
17	Accelerating isogeometric boundary element analysis for 3-dimensional elastostatics problems through black-box fast multipole method with proper generalized decomposition. <i>International Journal for Numerical Methods in Engineering</i> , 2018, 114, 975-998.	2.8	20
18	A non-ordinary state-based peridynamics framework for anisotropic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 339, 416-442.	6.6	47

#	ARTICLE	IF	CITATIONS
19	Numerical Simulation of Fracking in Shale Rocks: Current State and Future Approaches. Archives of Computational Methods in Engineering, 2017, 24, 281-317.	10.2	35
20	An extended boundary element method formulation for the direct calculation of the stress intensity factors in fully anisotropic materials. International Journal for Numerical Methods in Engineering, 2017, 109, 965-981.	2.8	18
21	Enriched finite elements for initial-value problem of transverse electromagnetic waves in time domain. Computers and Structures, 2017, 182, 354-367.	4.4	10
22	Implementation and computational aspects of a 3D elastic wave modelling by PUFEM. Applied Mathematical Modelling, 2017, 49, 568-586.	4.2	16
23	A boundary element and level set based bi-directional evolutionary structural optimisation with a volume constraint. Engineering Analysis With Boundary Elements, 2017, 80, 152-161.	3.7	11
24	Numerical simulation of MZF design with non-planar hydraulic fracturing from multi-lateral horizontal wells. Journal of Natural Gas Science and Engineering, 2017, 46, 93-107.	4.4	25
25	High-order finite elements for the solution of Helmholtz problems. Computers and Structures, 2017, 191, 129-139.	4.4	34
26	An isogeometric boundary element reanalysis framework based on proper generalized decomposition. , 2017, , .		1
27	Backward waves with double zero-group-velocity points in a liquid-filled pipe. Journal of the Acoustical Society of America, 2016, 139, 1179-1194.	1.1	9
28	A boundary element and level set based topology optimisation using sensitivity analysis. Engineering Analysis With Boundary Elements, 2016, 70, 80-98.	3.7	18
29	A three-dimensional implementation of the boundary element and level set based structural optimisation. Engineering Analysis With Boundary Elements, 2015, 58, 176-194.	3.7	16
30	Interactive three-dimensional boundary element stress analysis of components in aircraft structures. Engineering Analysis With Boundary Elements, 2015, 56, 190-200.	3.7	3
31	A direct evaluation of stress intensity factors using the Extended Dual Boundary Element Method. Engineering Analysis With Boundary Elements, 2015, 52, 56-63.	3.7	26
32	Extended isogeometric boundary element method (XIBEM) for three-dimensional medium-wave acoustic scattering problems. Computer Methods in Applied Mechanics and Engineering, 2015, 284, 762-780.	6.6	73
33	Mixed enrichment for the finite element method in heterogeneous media. International Journal for Numerical Methods in Engineering, 2015, 101, 54-78.	2.8	19
34	The equal spacing of N points on a sphere with application to partition-of-unity wave diffraction problems. Engineering Analysis With Boundary Elements, 2014, 40, 114-122.	3.7	11
35	Structural optimisation based on the boundary element and level set methods. Computers and Structures, 2014, 137, 14-30.	4.4	21
36	Boundary element simulation of fatigue crack growth in multi-site damage. Engineering Analysis With Boundary Elements, 2014, 43, 67-75.	3.7	32

#	ARTICLE	IF	CITATIONS
37	Improving wind turbine drivetrain bearing reliability through pre-misalignment. Wind Energy, 2014, 17, 1217-1230.	4.2	11
38	An enriched finite element model with q-refinement for radiative boundary layers in glass cooling. Journal of Computational Physics, 2014, 258, 718-737.	3.8	18
39	Characteristics of group velocities of backward waves in a hollow cylinder. Journal of the Acoustical Society of America, 2014, 135, 3398-3408.	1.1	10
40	A partition of unity FEM for time-dependent diffusion problems using multiple enrichment functions. International Journal for Numerical Methods in Engineering, 2013, 93, 245-265.	2.8	28
41	A hyper-heuristic approach to aircraft structural design optimization. Structural and Multidisciplinary Optimization, 2013, 48, 807-819.	3.5	6
42	Correlation between hole insertion criteria in a boundary element and level set based topology optimisation method. Engineering Analysis With Boundary Elements, 2013, 37, 1457-1470.	3.7	9
43	An isogeometric boundary element method for elastostatic analysis: 2D implementation aspects. Computers and Structures, 2013, 118, 2-12.	4.4	132
44	A comparison of techniques for overcoming non-uniqueness of boundary integral equations for the collocation partition of unity method in two-dimensional acoustic scattering. International Journal for Numerical Methods in Engineering, 2013, 96, 645-664.	2.8	11
45	Novel basis functions for the partition of unity boundary element method for Helmholtz problems. International Journal for Numerical Methods in Engineering, 2013, 93, 905-918.	2.8	12
46	Time-independent hybrid enrichment for finite element solution of transient conduction-radiation in diffusive grey media. Journal of Computational Physics, 2013, 251, 81-101.	3.8	20
47	Extended isogeometric boundary element method (XIBEM) for two-dimensional Helmholtz problems. Computer Methods in Applied Mechanics and Engineering, 2013, 259, 93-102.	6.6	113
48	Influence of flow speed on guided waves in a liquid filled pipe. , 2013, , .		0
49	Excitation mechanisms and dispersion characteristics of guided waves in multilayered cylindrical solid media. Journal of the Acoustical Society of America, 2012, 131, 2048-2062.	1.1	8
50	Coupling between flexural and Stoneley modes in cylindrical three-layered media. , 2012, , .		0
51	Temperature influence on guided waves in a liquid-filled pipe. , 2012, , .		0
52	EXTENSION OF THE PUFEM TO ELASTIC WAVE PROPAGATION IN LAYERED MEDIA. Journal of Computational Acoustics, 2012, 20, 1240006.	1.0	4
53	A two-dimensional Isogeometric Boundary Element Method for elastostatic analysis. Computer Methods in Applied Mechanics and Engineering, 2012, 209-212, 87-100.	6.6	295
54	Rapid re-meshing and re-resolution of three-dimensional boundary element problems for interactive stress analysis. Engineering Analysis With Boundary Elements, 2012, 36, 1331-1343.	3.7	5

#	ARTICLE	IF	CITATIONS
55	Anomalous dispersion of flexural guided waves in clad rods. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 1525-1528.	3.0	3
56	Stoneley waves in three-layered cylindrical solid media. Journal of the Acoustical Society of America, 2011, 130, EL44-EL49.	1.1	6
57	Evaluation of J1 and J2 integrals for curved cracks using an enriched boundary element method. Engineering Fracture Mechanics, 2011, 78, 623-637.	4.3	24
58	A partition of unity enriched dual boundary element method for accurate computations in fracture mechanics. Computer Methods in Applied Mechanics and Engineering, 2011, 200, 1-10.	6.6	54
59	A coupled BEM/scaled boundary FEM formulation for accurate computations in linear elastic fracture mechanics. Engineering Analysis With Boundary Elements, 2010, 34, 599-610.	3.7	35
60	Numerical evaluation of the two-dimensional partition of unity boundary integrals for Helmholtz problems. Journal of Computational and Applied Mathematics, 2010, 234, 1656-1662.	2.0	9
61	A comparison of NRBCs for PUFEM in 2D Helmholtz problems at high wave numbers. Journal of Computational and Applied Mathematics, 2010, 234, 1670-1677.	2.0	5
62	Anomalous dispersion of guided wave in cylindrical multi-layered solid media. , 2010, , .		2
63	Coupling of the boundary element method and the scaled boundary finite element method for computations in fracture mechanics. Computers and Structures, 2008, 86, 1198-1203.	4.4	24
64	Development of an instrumented pole test for use as a gait laboratory quality check. Gait and Posture, 2007, 26, 317-322.	1.4	15
65	Techniques to accelerate BEM computation to provide virtual reality update of stress solutions. Engineering Analysis With Boundary Elements, 2007, 31, 875-889.	3.7	3
66	Wave interpolation finite elements for Helmholtz problems with jumps in the wave speed. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 367-381.	6.6	57
67	Evolutionary structural optimisation based on boundary representation of NURBS. Part II: 3D algorithms. Computers and Structures, 2005, 83, 1917-1929.	4.4	27
68	Evolutionary structural optimisation based on boundary representation of NURBS. Part I: 2D algorithms. Computers and Structures, 2005, 83, 1902-1916.	4.4	53
69	On wave boundary elements for radiation and scattering problems with piecewise constant impedance. IEEE Transactions on Antennas and Propagation, 2005, 53, 876-879.	5.1	10
70	Wave boundary elements: a theoretical overview presenting applications in scattering of short waves. Engineering Analysis With Boundary Elements, 2004, 28, 131-141.	3.7	47
71	Plane-wave basis finite elements and boundary elements for three-dimensional wave scattering. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2004, 362, 561-577.	3.4	76
72	Plane wave basis finite-elements for wave scattering in three dimensions. Communications in Numerical Methods in Engineering, 2003, 19, 715-723.	1.3	30

#	ARTICLE	IF	CITATIONS
73	P-wave and S-wave decomposition in boundary integral equation for plane elastodynamic problems. Communications in Numerical Methods in Engineering, 2003, 19, 945-958.	1.3	18
74	A numerical integration scheme for special finite elements for the Helmholtz equation. International Journal for Numerical Methods in Engineering, 2003, 56, 531-552.	2.8	48
75	Plane wave interpolation in direct collocation boundary element method for radiation and wave scattering: numerical aspects and applications. Journal of Sound and Vibration, 2003, 261, 839-858.	3.9	65
76	Use of Wave Boundary Elements for Acoustic Computations. Journal of Computational Acoustics, 2003, 11, 305-321.	1.0	20
77	Plane Wave Basis in Integral Equation for 3D Scattering. , 2003, , 292-297.		1
78	New special wave boundary elements for short wave problems. Communications in Numerical Methods in Engineering, 2002, 18, 259-268.	1.3	25
79	A numerical integration scheme for special quadrilateral finite elements for the Helmholtz equation. Communications in Numerical Methods in Engineering, 2002, 19, 233-245.	1.3	11
80	A scheme for engineer-driven mechanical design improvement. Engineering Analysis With Boundary Elements, 2002, 26, 425-433.	3.7	3
81	Interactive re-analysis in mechanical design evolution. Part I. Background and implementation. Computers and Structures, 2001, 79, 929-938.	4.4	7
82	Interactive re-analysis in mechanical design evolution. Part II. Rapid evaluation of boundary element integrals. Computers and Structures, 2001, 79, 939-951.	4.4	3
83	On the use of partial re-analysis in conceptual mechanical design. Communications in Numerical Methods in Engineering, 1998, 14, 1047-1053.	1.3	2
84	A comparison of techniques for the elastic stress analysis of a cathode ray tube. Engineering Analysis With Boundary Elements, 1994, 13, 35-43.	3.7	1
85	A guidebook to FORTRAN on supercomputers. Engineering Analysis With Boundary Elements, 1992, 9, 107-108.	3.7	0
86	Use of discontinuous boundary elements for fracture mechanics analysis. Engineering Analysis With Boundary Elements, 1992, 10, 353-358.	3.7	6
87	The price of unity. Nursing Times, 1990, 86, 16-7.	0.2	22
88	On the accuracy and convergence of boundary element results for the floyd pressure vessel problem. Computers and Structures, 1986, 24, 513-516.	4.4	5
89	A boundary element method formulation based on the Caputo derivative for the solution of the diffusion-wave equation. Engineering With Computers, 0, , 1.	6.1	1