Ean Tat Ooi

List of Publications by Year
in descending order

56 papers	1,523 citations	304602 22 h-index	315616 38 g-index
56 all docs	56 docs citations	56 times ranked	680 citing authors

#	Article	IF	Citations
1	Saline-Infused Radiofrequency Ablation: A Review on the Key Factors for a Safe and Reliable Tumour Treatment. IEEE Reviews in Biomedical Engineering, 2024, 17, 310-321.	13.1	1
2	Development of the scaled boundary finite element method for image-based slope stability analysis. Computers and Geotechnics, 2022, 143, 104586.	2.3	12
3	Fracture analysis of cracked magneto-electro-elastic functionally graded materials using scaled boundary finite element method. Theoretical and Applied Fracture Mechanics, 2022, 118, 103228.	2.1	12
4	A computational framework to simulate the thermochemical process during thermochemical ablation of biological tissues. Computers in Biology and Medicine, 2022, 145, 105494.	3.9	2
5	Adaptive modelling of dynamic brittle fracture - a combined phase field regularized cohesive zone model and scaled boundary finite element approach. International Journal of Fracture, 2022, 236, 87-108.	1.1	12
6	An adaptive scaled boundary finite element method for contact analysis. European Journal of Mechanics, A/Solids, 2021, 86, 104180.	2.1	8
7	Role of saline concentration during saline-infused radiofrequency ablation: Observation of secondary Joule heating along the saline-tissue interface. Computers in Biology and Medicine, 2021, 128, 104112.	3.9	7
8	Robust modelling of implicit interfaces by the scaled boundary finite element method. Engineering Analysis With Boundary Elements, 2021, 124, 266-286.	2.0	1
9	Bipolar radiofrequency ablation treatment of liver cancer employing monopolar needles: A comprehensive investigation on the efficacy of time-based switching. Computers in Biology and Medicine, 2021, 131, 104273.	3.9	9
10	Comparisons between impedance-based and time-based switching bipolar radiofrequency ablation for the treatment of liver cancer. Computers in Biology and Medicine, 2021, 134, 104488.	3.9	3
11	A direct time-domain procedure for the seismic analysis of dam–foundation–reservoir systems using the scaled boundary finite element method. Computers and Geotechnics, 2021, 138, 104364.	2.3	12
12	Unidirectional ablation minimizes unwanted thermal damage and promotes better thermal ablation efficacy in time-based switching bipolar radiofrequency ablation. Computers in Biology and Medicine, 2021, 137, 104832.	3.9	1
13	How does saline backflow affect the treatment of saline-infused radiofrequency ablation?. Computer Methods and Programs in Biomedicine, 2021, 211, 106436.	2.6	3
14	Treatment of multiple input uncertainties using the scaled boundary finite element method. Applied Mathematical Modelling, 2021, 99, 538-554.	2.2	5
15	Development of the scaled boundary finite element method for crack propagation modeling of elastic solids subjected to coupled thermo-mechanical loads. Computer Methods in Applied Mechanics and Engineering, 2021, 387, 114106.	3.4	15
16	The effects of the no-touch gap on the no-touch bipolar radiofrequency ablation treatment of liver cancer: A numerical study using a two compartment model. Applied Mathematical Modelling, 2020, 78, 134-147.	2.2	7
17	A combined virtual element method and the scaled boundary finite element method for linear elastic fracture mechanics. Engineering Analysis With Boundary Elements, 2020, 113, 9-16.	2.0	17
18	Shape-shifting thermal coagulation zone during saline-infused radiofrequency ablation: A computational study on the effects of different infusion location. Computer Methods and Programs in Biomedicine, 2020, 184, 105289.	2.6	13

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19	Extension of the scaled boundary finite element method to treat implicitly defined interfaces without enrichment. Computers and Structures, 2020, 229, 106159.	2.4	7
20	Thermal and thermal damage responses during switching bipolar radiofrequency ablation employing bipolar needles: A computational study on the effects of different electrode configuration, input voltage and ablation duration. International Journal for Numerical Methods in Biomedical Engineering, 2020, 36, e3374.	1.0	3
21	A dual scaled boundary finite element formulation over arbitrary faceted star convex polyhedra. Computational Mechanics, 2020, 66, 27-47.	2.2	11
22	Modelling strong and weak discontinuities with the scaled boundary finite element method through enrichment. Engineering Fracture Mechanics, 2019, 222, 106734.	2.0	15
23	Scaled boundary finite element method for compressible and nearly incompressible elasticity over arbitrary polytopes. International Journal for Numerical Methods in Engineering, 2019, 119, 1379-1394.	1.5	2
24	A computational model to investigate the influence of electrode lengths on the single probe bipolar radiofrequency ablation of the liver. Computer Methods and Programs in Biomedicine, 2019, 176, 17-32.	2.6	11
25	A quadtree-polygon-based scaled boundary finite element method for image-based mesoscale fracture modelling in concrete. Engineering Fracture Mechanics, 2019, 211, 420-441.	2.0	53
26	The effects of electrical and thermal boundary condition on the simulation of radiofrequency ablation of liver cancer for tumours located near to the liver boundary. Computers in Biology and Medicine, 2019, 106, 12-23.	3.9	24
27	Comparison between single- and dual-porosity models for fluid transport in predicting lesion volume following saline-infused radiofrequency ablation. International Journal of Hyperthermia, 2018, 34, 1142-1156.	1.1	14
28	A scaled boundary finite element formulation for poroelasticity. International Journal for Numerical Methods in Engineering, 2018, 114, 905-929.	1.5	21
29	Hydraulic fracture at the dam-foundation interface using the scaled boundary finite element method coupled with the cohesive crack model. Engineering Analysis With Boundary Elements, 2018, 88, 41-53.	2.0	32
30	A review of the scaled boundary finite element method for two-dimensional linear elastic fracture mechanics. Engineering Fracture Mechanics, 2018, 187, 45-73.	2.0	120
31	A novel error indicator and an adaptive refinement technique using the scaled boundary finite element method. Engineering Analysis With Boundary Elements, 2018, 94, 10-24.	2.0	22
32	A novel scaled boundary finite element formulation with stabilization and its application to image-based elastoplastic analysis. International Journal for Numerical Methods in Engineering, 2018, 115, 956-985.	1.5	20
33	Numerical estimation of stress intensity factors in cracked functionally graded piezoelectric materials – A scaled boundary finite element approach. Composite Structures, 2018, 206, 301-312.	3.1	21
34	A scaled boundary finite element formulation over arbitrary faceted star convex polyhedra. Engineering Analysis With Boundary Elements, 2017, 80, 218-229.	2.0	30
35	A scaled boundary finite element formulation with bubble functions for elasto-static analyses of functionally graded materials. Computational Mechanics, 2017, 60, 943-967.	2.2	13
36	Mass transport in biological tissues: Comparisons between single- and dual-porosity models in the context of saline-infused Radiofrequency Ablation. Applied Mathematical Modelling, 2017, 41, 271-284.	2.2	20

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37	Construction of high‐order complete scaled boundary shape functions over arbitrary polygons with bubble functions. International Journal for Numerical Methods in Engineering, 2016, 108, 1086-1120.	1.5	25
38	Dynamic fracture simulations using the scaled boundary finite element method on hybrid polygon‐quadtree meshes. International Journal of Impact Engineering, 2016, 90, 154-164.	2.4	51
39	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.	1.5	58
40	Finite fracture mechanics analysis using the scaled boundary finite element method. Engineering Fracture Mechanics, 2015, 134, 330-353.	2.0	23
41	Numerical investigation of the meshless radial basis integral equation method for solving 2D anisotropic potential problems. Engineering Analysis With Boundary Elements, 2015, 53, 27-39.	2.0	11
42	Crack propagation modelling in functionally graded materials using scaled boundary polygons. International Journal of Fracture, 2015, 192, 87-105.	1.1	36
43	Finite element computations over quadtree meshes: strain smoothing and semi-analytical formulation. International Journal of Advances in Engineering Sciences and Applied Mathematics, 2015, 7, 124-133.	0.7	14
44	SBFEM for fracture analysis of piezoelectric composites under thermal load. International Journal of Solids and Structures, 2015, 52, 114-129.	1.3	36
45	Computation of dynamic stress intensity factors in cracked functionally graded materials using scaled boundary polygons. Engineering Fracture Mechanics, 2014, 131, 210-231.	2.0	29
46	Scaled boundary polygons with application to fracture analysis of functionally graded materials. International Journal for Numerical Methods in Engineering, 2014, 98, 562-589.	1.5	74
47	Crack Propagation Modeling with Scaled Boundary Polygons. Applied Mechanics and Materials, 2014, 553, 719-724.	0.2	0
48	Experimental and numerical study of the dependency of interface fracture in concrete‐rock specimens on mode mixity. Engineering Fracture Mechanics, 2014, 124-125, 287-309.	2.0	62
49	2D dynamic analysis of cracks and interface cracks in piezoelectric composites using the SBFEM. International Journal of Solids and Structures, 2014, 51, 2096-2108.	1.3	33
50	A scaled boundary polygon formulation for elasto-plastic analyses. Computer Methods in Applied Mechanics and Engineering, 2014, 268, 905-937.	3.4	100
51	Convergence and accuracy of displacement based finite element formulations over arbitrary polygons: Laplace interpolants, strain smoothing and scaled boundary polygon formulation. Finite Elements in Analysis and Design, 2014, 85, 101-122.	1.7	72
52	Modelling of crack propagation of gravity dams by scaled boundary polygons and cohesive crack model. International Journal of Fracture, 2013, 183, 29-48.	1.1	46
53	Polygon scaled boundary finite elements for crack propagation modelling. International Journal for Numerical Methods in Engineering, 2012, 91, 319-342.	1.5	190
54	Modelling crack propagation in reinforced concrete using a hybrid finite element‐scaled boundary finite element method. Engineering Fracture Mechanics, 2011, 78, 252-273.	2.0	58

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55	Extension of unsymmetric finite elements USâ€QUAD8 and USâ€HEXA20 for geometric nonlinear analyses. Engineering Computations, 2007, 24, 407-431.	0.7	24
56	Noninvasive blood glucose monitoring with laser diode. , 2006, , .		2