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2023

Meshless finite block method with infinite elements for axisymmetric cracked solid made of functionally graded materials.
Huang W, Yang JJ, Sladek J, Sladek V and Wen PH. *European Journal of Mechanics, a/Solids vol. 97,.*

2022

Effect of nanoscale amorphization in nanocrystalline bimaterials on dislocation emission from the tip of colinear linear cracks.
Jiang F, Yu M, Peng X and Wen PH. *Acta Mechanica vol. 233, (5) 2061-2075.*

Effect of nanoscale amorphization on dislocation emission from a semi-elliptical surface crack tip in nanocrystalline materials.
Jiang F, Yu M, Peng X and Wen PH. *Mathematics and Mechanics of Solids vol. 27, (5) 844-857.*

Influence of taper design and loading on taper micromotion.
Diaz-Lopez RA, Wen PH and Shelton JC. *Journal of The Mechanical Behavior of Biomedical Materials vol. 128,. Elsevier.*

Dual interpolation boundary face method for 3-D potential problem based on binary tree grids.
Zhang J, Xiao R, Wen P, Ju C, Lin WC and He R. *Computer Methods in Applied Mechanics and Engineering vol. 390,.Elsevier.*

Semi-Infinite Structure Analysis with Bimodular Materials with Infinite Element.
Huang W, Yang J, Sladek J, Sladek V and Wen P. *Materials vol. 15, (2).*

2021

Stress intensity factors and T-stresses for periodic array cracks: 3D static and dynamic.
Wen PH, Wen JC, Sladek J and Sladek V. *Theoretical and Applied Fracture Mechanics vol. 117,.Elsevier.*

Stress intensity factors and T-stresses by boundary integral equations: 3D statics.
Yang JJ, Liu JZ, Sladek J, Sladek V and Wen PH. *Engineering Fracture Mechanics vol. 256,.Elsevier.*

Nonlinear elastic-plastic analysis of reinforced concrete column-steel beam connection by RBF-FD method.
Jiang P, Zheng H, Xiong J and Wen P. *Engineering Analysis With Boundary Elements vol. 128, 188-194.*

Meshless analysis for cracked shallow shell.
Huang W, Tang YD, Sladek J, Sladek V and Wen PH. *Engineering Analysis With Boundary Elements vol. 130, 145-160.Elsevier.*

BEM analysis for curved cracks.
Wen PH, Tang YD, Sladek J and Sladek V. *Engineering Analysis With Boundary Elements vol. 127, 91-101.*

Fracture analysis of functionally graded material by hybrid meshless displacement discontinuity method.
Zheng H, Sladek J, Sladek V, Wang SK and Wen PH. *Engineering Fracture Mechanics vol. 247, 107591-107591. Elsevier.*

Field measurement of strain response for typical asphalt pavement.
Pan QX, Zheng CC, L ST, Qian GP, Zhang JH, Wen PH, Milkos BC and Zhou HD. *Journal of Central South University vol. 28, (2) 618-632.Springer Verlag.*

2020

Hybrid meshless/displacement discontinuity method for FGM Reissner's plate with cracks.
Zheng H, Sladek J, Sladek V, Wang SK and Wen PH. *Applied Mathematical Modelling: Simulation and Computation For Engineering and Environmental Systems.Elsevier.*

A dual interpolation boundary face method for 3D elasticity.
Zhang J, Ju C, Wen P, Shu X, Lin W and Chi B. *Engineering Analysis With Boundary Elements vol. 122, 102-116. Elsevier.*

Enhanced ductility of nanomaterials through cooperative dislocation emission from cracks and grain boundaries.
Feng H, Pang J, Fang Q, Chen C and Wen P. *International Journal of Mechanical Sciences vol. 179,.*

A theoretical analysis of dislocation emission from an elliptical blunt crack tip in nanocrystalline solid.
Yu M, Jiang F, Peng X and Wen PH. *Engineering Fracture Mechanics vol. 236,.Elsevier.*

Special issue on: Computational methods in fracture mechanics.
Wen P and Aliabadi F. *Engineering Analysis With Boundary Elements vol. 118, 156-156.*

The meshless analysis of scale-dependent problems for coupled fields.
Sladek J, Sladek V and Wen PH. *Materials vol. 13, (11).*

Hybrid meshless displacement discontinuity method (MDDM) in fracture mechanics: Static and dynamic.
Li J, Sladek J, Sladek V and Wen PH. *European Journal of Mechanics a: Solids vol. 83,.Elsevier.*

Editorial Numerical fracture.
Aliabad FMH and Wen P. *Theoretical and Applied Fracture Mechanics vol. 108,.*

Dynamic large deformation analysis of a cantilever beam.
Wei H, Pan QX, Adetoro OB, Avital E, Yuan Y and Wen PH. *Mathematics and Computers in Simulation vol. 174, 183-204.Elsevier.*

Numerical investigation on the repeated low-velocity impact behavior of composite laminates.
Zhou J, Wen P and Wang S. *Composites Part B: Engineering vol. 185,.Elsevier.*

2019

Bi-modular material fracture analysis by finite element method.
Pan QX, Zheng JL and Wen PH. *Theoretical and Applied Fracture Mechanics vol. 105,.Elsevier.*

Efficient algorithm for 3D bimodulus structures.
Pan Q, Zheng J and Wen P. *Acta Mechanica Sinica.Springer (Part of Springer Nature).*

Fracture analysis for bi-modular materials.
Pan QX, Zheng JL, Li Q and Wen PH. *European Journal of Mechanics a: Solids.Elsevier.*

Large deformations of tapered beam with finite integration method.
Huang T, Yuan Y, Zheng JL, Avital E and Wen PH. *Engineering Analysis With Boundary Elements vol. 107, 115-123.*

Generalized screw dislocations interacting with interfacial secondary crack in magneto-electro-elastic solid.
Zeng X, Li J, Liu F and Wen P. *Zamm Zeitschrift Fur Angewandte Mathematik Und Mechanik vol. 99, (8).Wiley.*

Finite element analysis of a modified progressive damage model for composite laminates under low-velocity impact.
Zhou J, Wen P and Wang S. *Composite Structures vol. 225,.*

Mixed-mode dynamic stress intensity factors by variation technique with finite block method.
Zheng H, Xiong JG, Yuan Y and Wen PH. *Engineering Analysis With Boundary Elements vol. 106, 27-33.*

Grinding temperature field prediction by meshless finite block method with double infinite element.
Wang Z, Yu T, Wang X, Zhang T, Zhao J and Wen PH. *International Journal of Mechanical Sciences vol. 153-154, 131-142.*

Theoretical Study on Generalized Elastic Laws of Elastic Theory with Different Modulus.
Pan Q, Zheng J and Wen P. *Hunan Daxue Xuebao/Journal of Hunan University Natural Sciences vol. 46, (1) 93-100.*

The modified matrix splitting iteration method for computing pagerank problem.
Tian Z, Liu X, Wang Y and Wen PH. *Filomat vol. 33, (3) 725-740.University of Nis.*

2018

Dimension reduction analysis with mapping and direct integration algorithm.
WEN P, Jin J, Huang T and Zheng JL. *Engineering Analysis With Boundary Elements.Elsevier.*

Finite and infinite block Petrov-Galerkin method for cracks in functionally graded materials.
WEN P, Li Y and Li J. *Applied Mathematical Modelling.Elsevier.*

New explicit iteration algorithms for solving coupled continuous Markovian jump Lyapunov matrix equations.
Tian Z, Fan CM, Deng Y and Wen PH. *Journal of The Franklin Institute vol. 355, (17) 8346-8372.*

Prediction of 3D grinding temperature field based on meshless method considering infinite element.
Wang Z, Li Y, Yu T, Zhao J and Wen PH. *International Journal of Advanced Manufacturing Technology.*

Effect of nanotwin and dislocation pileup at twin boundary on dislocation emission from a semi-elliptical blunt crack tip in nanocrystalline materials.
Yu M, Yang Y, Peng X and Wen PH. *Engineering Fracture Mechanics vol. 202, 288-296.*

Continuous constitutive model for bimodulus materials with meshless approach.
Huang T, Pan QX, Jin J, Zheng JL and Wen PH. *Applied Mathematical Modelling vol. 66, 41-58.*

Effect of cooperative grain boundary sliding and migration on dislocation emission from interface collinear crack tip in nanocrystalline bi-materials.
Yu M, Peng XH and Wen PH. *Acta Mechanica vol. 229, (9) 3901-3913.*

Generalized method of fundamental solutions (GMFS) for boundary value problems.
Yang JJ, Zheng JL and Wen PH. *Engineering Analysis With Boundary Elements vol. 94, 25-33.*

Infinite element in meshless approaches.
WEN P, Yang JJ, Huang T, Zheng JL and Deng YJ. *European Journal of Mechanics / a Solids.*

Failure criterion of an asphalt mixture under three-dimensional stress state.
Huang T, Zheng JL, Lv ST, Zhang JH, Wen PH and Bailey CG. *Construction and Building Materials vol. 170, 708-715.*

The thermal analysis of cutting/grinding processes by meshless finite block method.
Yang JJ, Wang ZX, Adetoro OB, Wen PH and Bailey CG. *Engineering Analysis With Boundary Elements.*

Singular boundary method for wave propagation analysis in periodic structures.
Fu Z, Chen W, Wen P and Zhang C. *Journal of Sound and Vibration vol. 425, 170-188.*

Moving boundary analysis in heat conduction with multilayer composites by finite block method.
WEN P, BAILEY CG, Lei M and Li M. *Engineering Analysis With Boundary Elements.Elsevier.*

A systematic investigation of cycle number, temperature and electric field strength effects on Si anode.
Fang Q, Wang Q, Li J, Chen E, Liu B and Wen P. *Materials and Design vol. 144, 1-13.*

An iteration method for solving the linear system Ax=b.
Tian Z, Tian M, Zhang Y and Wen P. *Computers and Mathematics With Applications.*

Inverse heat conduction in anisotropic and functionally graded media by finite integration method.
Jin J, Zheng JL, Huang T, Yang JJ, Wang HS, Wen PH and Li JM. *International Journal of Computational Methods and Experimental Measurements vol. 6, (6) 1149-1160.International Information and Engineering Technology Association.*

2017

Grain size effects on indentation-induced plastic deformation and amorphization process of polycrystalline silicon.
Fan J, Li J, Huang Z, Wen PH and Bailey CG. *Computational Materials Science vol. 144, 113-119.*

Preparation and thermal properties of mineral-supported polyethylene glycol as form-stable composite phase change materials (CPCMs) used in asphalt pavements.
Jin J, Lin F, Liu R, Xiao T, Zheng J, Qian G, Liu H and Wen P. *Sci Rep vol. 7, (1) 16998-16998.Macmillan Publishers Limited, Part of Springer Nature.*

Evaluation of stress intensity factors and T-stress by finite block method: Static and dynamic.
Huang T, Yang JJ, Jin J, Wen PH and Aliabadi MH. *Theoretical and Applied Fracture Mechanics.*

Anti-plane fundamental solutions of functionally graded materials and applications to fracture mechanics.
Li J, Huang T, Yue JH, Shi C and Wen PH. *Journal of Strain Analysis For Engineering Design vol. 52, (7) 422-433.*

Integral equation analysis for cracked strip of orthotropic functionally graded material.
Yue JH, Huang T, Jin J, Yang JJ, Korakianitis T and Wen PH. *Engineering Fracture Mechanics vol. 182, 114-126.*

Effect of nanoscale twin and dislocation pileup at twin boundary on crack blunting in nanocrystalline materials.

Zhao HB, Feng H, Liu F, Liu YW and Wen PH. *Acta Mechanica 1-13.*

Finite block method in fracture analysis with functionally graded materials.
Li J, Liu JZ, Korakianitis T and Wen PH. *Engineering Analysis With Boundary Elements vol. 82, 1339-1351.*

Nucleation and growth mechanisms of nanoscale deformation twins in hexagonal-close-packed metal magnesium.
Feng H, Fang QH, Liu B, Liu Y, Liu YW and Wen PH. *Mechanics of Materials vol. 109, 26-33.*

Stress dependence of the dislocation core structure and loop nucleation for face-centered-cubic metals.
Pi ZP, Fang QH, Jiang C, Liu B, Liu Y, Wen PH and Liu YW. *Acta Materialia vol. 131, 380-390.*

Effect of a generalized shape Peierls potential and an external stress field on kink mechanism in a continuum model.
Pi ZP, Fang QH, Liu B, Liu Y and Wen PH. *International Journal of Plasticity vol. 90, 267-285.*

The Effect of Geometry on the Efficiency and Hemolysis of Centrifugal Implantable Blood Pumps.
Mozafari S, Rezaienia MA, Paul GM, Rothman MT, Wen P and Korakianitis T. *Asaio Journal vol. 63, (1) 53-59.*

2016

Post buckling analysis for composite plate by finite block Petrov-Galerkin method.
WEN P, Li M, Meng L and Shi C. *European Journal of Mechanics - a/Solids vol. 61, 443-455.*

Investigation of subsurface damage considering the abrasive particle rotation in brittle material grinding.
Quan J, Fang Q, Chen J, Xie C, Liu Y and Wen P. *International Journal of Advanced Manufacturing Technology vol. 90, (9-12) 2461-2476.*

Experimental Study of Surface Curvature Effects on Aerodynamic Performance of a Low Reynolds Number Airfoil for Use in Small Wind Turbines.
Shen X, AVITAL E, Paul G, Rezaienia MA, Wen P and Alexander T. *Journal of Renewable and Sustainable Energy vol. 8, (5) 053303-053303.Aip Publishing.*

Misfit dislocations induced by lithium-ion diffusion in a thin film anode.
Li X, Fang Q, Wu H, Li J, Liu Y and Wen P. *Journal of Solid State Electrochemistry vol. 21, (2) 419-427.*

Influence of nanoscale amorphization on emission of dislocations from a finite length crack tip in nanocrystalline materials.
Peng J, Fang QH, Liu YW, Liu B and Wen PH. *Engineering Fracture Mechanics vol. 163, 487-498.*

Anti-plane interfacial crack with functionally graded coating: static and dynamic.
Li M, Tian YL, Wen PH and Aliabadi MH. *Theoretical and Applied Fracture Mechanics vol. 86, 250-259.*

Boundary node PetrovGalerkin method in solid structures.
Li M, Dou FF, Korakianitis T, Shi C and Wen PH. *Computational and Applied Mathematics vol. 37, (1) 135-159.*

Finite block method for interface cracks.
Li M, Meng LX, Hinneh P and Wen PH. *Engineering Fracture Mechanics vol. 156, 25-40.*

Effect of wedge disclination dipole on dislocation emission from a surface crack tip in nanocrystalline materials.
Wang ZP, Feng H, Liu F, Fang QH, Liu YW and Wen PH. *Theoretical and Applied Fracture Mechanics vol. 81, 25-31.*

Improved finite integration method for partial differential equations.
Li M, Tian ZL, Hon YC, Chen CS and Wen PH. *Engineering Analysis With Boundary Elements vol. 64, 230-236.*

Analytical model for sandwich-lithiation in hollow amorphous silicon nano-anodes coated on carbon nanofibers.

Li X, Fang Q, Li J, Wu H, Liu Y and Wen P. *Journal of The Electrochemical Society vol. 163, (2) A163-A170.*

2015

Diffusion-induced stress and strain energy affected by dislocation mechanisms in a cylindrical nanoanode.
Li X, Fang Q, Li J, Wu H, Liu Y and Wen P. *Solid State Ionics vol. 281, 21-28.*

Finite block Petrov-Galerkin method in transient heat conduction.
Li M, Monjiza A, Xu YG and Wen PH. *Engineering Analysis With Boundary Elements vol. 60, 106-114.*

Non-linear analysis of FGM composites by finite block method in cylindrical coordinates.
Li M, Lei M and Wen PH. *Engineering Structures vol. 101, 150-162.*

Investigation into diffusion induced plastic deformation behavior in hollow lithium ion battery electrode revealed by analytical model and atomistic simulation.
Li J, Fang Q, Wu H, Liu Y and Wen P. *Electrochimica Acta vol. 178, 597-607.*

The local Kansa's method for solving Berger equation.
Yang J, Liu X and Wen PH. *Engineering Analysis With Boundary Elements vol. 57, 16-22.*

Finite integration method for solving multi-dimensional partial differential equations.
Li M, Chen CS, Hon YC and Wen PH. *Applied Mathematical Modelling vol. 39, (17) 4979-4994.*

Micromechanical Continuum Damage Analysis of Plain Woven Composites.
Li L, Aliabadi F and Wen PH. *Journal of Multiscale Modelling vol. 06, (03).*

A phase field study focuses on the transverse propagation of deformation twinning for hexagonal-closed packed crystals.
Pi ZP, Fang QH, Liu B, Feng H, Liu Y, Liu YW and Wen PH. *International Journal of Plasticity vol. 76, 130-146.*

Frictional contact analysis of functionally graded materials with Lagrange finite block method.
Li M, Lei M, Munjiza A and Wen PH. *International Journal For Numerical Methods in Engineering vol. 103, (6) 391-412.*

Mechanism of crack healing at room temperature revealed by atomistic simulations.
Li J, Fang QH, Liu B, Liu Y, Liu YW and Wen PH. *Acta Materialia vol. 95, 291-301.*

Discussions to the paper closed form solution for a nonlocal elastic bar in tension by A.A. Pisano and P. Fuschi [Int. J. Solids Struct. 40 (2003) 13-23].
Ming L, Korakianitis T and Wen PH. *International Journal of Solids and Structures vol. 62,.*

Stress intensity factor of a mode I crack inside a nanoscale cylindrical inhomogeneity.
Tao Y, Fang Q, Liu Y, Liu F and Wen P. *Engineering Fracture Mechanics vol. 141, 44-56.*

Aerodynamics of Wind Turbine Technology.
Korakianitis T, Rezaienia MA, AVITAL E, Shen X, Munjiza A, Wen P and Williams JJR. *Handbook of Clean Energy Systems. Wiley-Blackwel.*

Creep behavior as dislocation climb over NiAl nanoprecipitates in ferritic alloy: The effects of interface stresses and temperature.
Zhao Y, Fang Q, Liu Y, Wen P and Liu Y. *International Journal of Plasticity vol. 69, 89-101.*

Discussions to the paper Closed form solution for a nonlocal elastic bar in tension by A.A. Pisano and P. Fuschi [Int. J. Solids Struct. 40 (2003) 13-23].
Ming L, Korakianitis T and Wen PH. *International Journal of Solids and Structures.Elsevier Ltd.*

Cooperative surface effect and dislocation effect in lithium ion battery electrode.
Li J, Lu D, Fang Q, Liu Y and Wen P. *Solid State Ionics vol. 274, 46-54.*

Micromechanical modelling of textile composites.
Bacarreza O, Wen P and Aliabadi MH. *Computational and Experimental Methods in Structures vol. 6, 1-74.*

2014

Failure Characteristics of Rock-Like Material with Multi-Fissures under Uniaxial Compression.
Cao RH, Cao P, Wen PH and Chen RW. *Applied Mechanics and Materials vol. 711, 129-132.*

The local Kansa's method for solving Berger equation.
Yang J, Liu X and Wen PH. *Engineering Analysis With Boundary Elements.Elsevier Ltd.*

Finite block Petrov-Galerkin method in transient heat conduction.
Li M, Monjiza A, Xu YG and Wen PH. *Engineering Analysis With Boundary Elements.*

Finite block method for transient heat conduction analysis in functionally graded media.
Li M and Wen PH. *International Journal For Numerical Methods in Engineering vol. 99, (5) 372-390.*

Meshless inverse method to determine temperature and heat flux at boundaries for 2D steady-state heat conduction problems.
Yu GX, Sun J, Wang HS, Wen PH and Rose JW. *Experimental Thermal and Fluid Science vol. 52, 156-163. Elsevier/Scince Direct.*

High accurate solutions of nonlocal elasticity for sphere.
Wen PH, Huang XJ and Aliabadi F. *Key Engineering Materials vol. 577-578, 509-512.*

Integrated identification method of rheological model of sandstone in Sanmenxia bauxite.
Zhang CY, Cao P, Pu CZ, Liu J and Wen PH. *Transactions of Nonferrous Metals Society of China (English Edition) vol. 24, (6) 1859-1865.*

An edge dislocation interacting with an elastic thin-layered semi-infinite matrix.
Li J, Liu Y and Wen P. *Mathematics and Mechanics of Solids vol. 19, (6) 626-639.*

Finite Block Method in elasticity.
Wen PH, Cao P and Korakianitis T. *Engineering Analysis With Boundary Elements vol. 46, 116-125.*

2013

Finite integration method for partial differential equations.
Wen PH, Hon YC, Li M and Korakianitis T. *Applied Mathematical Modelling vol. 37, (24) 10092-10106.*

Finite integration method for solving multi-dimensional partial differential equations.
Li M, Chen CS, Hon YC and Wen PH. *Applied Mathematical Modelling.Elsevier Inc.*

Finite integration method for nonlocal elastic bar under static and dynamic loads.
Li M, Hon YC, Korakianitis T and Wen PH. *Engineering Analysis With Boundary Elements vol. 37, (5) 842-849.*

Elastodynamic problems by meshless local integral method: Analytical formulation.
Wen PH and Aliabadi MH. *Engineering Analysis With Boundary Elements vol. 37, (5) 805-811.*

Analytical formulation of meshless local integral equation method.
Wen PH and Aliabadi MH. *Applied Mathematical Modelling vol. 37, (4) 2115-2126.*

Screw dislocations interacting with two asymmetrical interfacial cracks emanating from an elliptical hole.
Zeng X, Fang QH, Liu YW and Wen PH. *Chinese Physics B vol. 22, (1).*

Finite integration method for partial differential equations.
Wen PH, Hon YC, Li M and Korakianitis T. *Applied Mathematical Modelling.*

2012

Elastic behavior of an edge dislocation inside the nanoscale coating layer.
Liu YW, Zhao YX, Wen PH and Lin S. *Acta Mechanica vol. 223, (9) 1917-1935.*

Inverse heat conduction problems in three-dimensional anisotropic functionally graded solids.
Sladek J, Sladek V, Wen PH and Hon B. *Journal of Engineering Mathematics vol. 75, (1) 157-171.*

Damage mechanics analysis of plain woven fabric composite micromechanical model for mesh-free simulations.
Wen PH and Aliabadi MH. *Journal of Composite Materials vol. 46, (18) 2239-2253.*

Dislocation emission from nanovoid with surface effects.
Zeng X, Liu YW and Wen PH. *International Journal of Mechanical Sciences vol. 61, (1) 65-70.*

The analytical solutions of incompressible saturated poroelastic circular Mindlin's plate.
Wen PH. *Journal of Applied Mechanics, Transactions Asme vol. 79, (5).*

Dual Boundary Element Method for Modelling Curved Crack Paths.
Wen PH and Aliabadi MH. *International Journal of Fracture vol. 176, (1) 127-133.*

Effective shear modulus approach for two dimensional solids and plate bending problems by meshless point collocation method.
Tu W, Gu YT and Wen PH. *Engineering Analysis With Boundary Elements vol. 36, (5) 675-684.*

Analysis of functionally graded plates by meshless method: A purely analytical formulation.
Wen PH and Aliabadi MH. *Engineering Analysis With Boundary Elements vol. 36, (5) 639-650.*

A hybrid finite difference and moving least square method for elasticity problems.
Wen PH and Aliabadi MH. *Engineering Analysis With Boundary Elements vol. 36, (4) 600-605.*

The method of approximate particular solutions for solving certain partial differential equations.
Chen CS, Fan CM and Wen PH. *Numerical Methods For Partial Differential Equations vol. 28, (2) 506-522.*

Analytical formulation of meshless local integral equation method.
Wen PH and Aliabadi MH. *Applied Mathematical Modelling.*

Meshfree continuum damage mechanics modelling for 3D orthogonal woven composites.
Li LY, Aliabadi MH and Wen PH. *Key Engineering Materials vol. 488-489, 759-762.*

Crack growth by dimensional reduction methods.
Wen PH and Aliabadi MH. *Key Engineering Materials vol. 525-526, 17-20.*

Dynamic crack problems using meshless method.
Wen PH and Aliabadi MH. *Key Engineering Materials vol. 525-526, 601-604.*

2011

Meshfree modeling and homogenization of 3D orthogonal woven composites.
Li LY, Wen PH and Aliabadi MH. *Composites Science and Technology vol. 71, (15) 1777-1788.*

Three-dimensional analysis of functionally graded plates.
Wen PH, Sladek J and Sladek V. *International Journal For Numerical Methods in Engineering vol. 87, (10) 923-942.*

The method of approximate particular solutions for solving elliptic problems with variable coefficients.
Chen CS, Fan CM and Wen PH. *International Journal of Computational Methods vol. 8, (3) 545-559.*

Meshless Local Integral Equation Method with Analytical Formulation and its Application to Computational Fracture Mechanics.
Wen PH and M.H.Aliabadi F.

Optimisation of the protrusion geometry in Comeld joints.
Tu W, Wen PH, Hogg PJ and Guild FJ. *Composites Science and Technology vol. 71, (6) 868-876.*

A variational approach for evaluation of stress intensity factors using the element free Galerkin method.
Wen PH and Aliabadi MH. *International Journal of Solids and Structures vol. 48, (7-8) 1171-1179.*

Inverse heat conduction problems by using particular solutions.
Wen PH, Hon YC and Xu YG. *Heat Transfer - Asian Research vol. 40, (2) 171-186.*

A variational technique for element free analysis of static and dynamic fracture mechanics.
Wen PH and Aliabadi MH. *Key Engineering Materials vol. 454, 31-46.*

2010

The method of particular solutions for solving scalar wave equations.
Wen PH and Chen CS. *Int J Numer Meth Bio vol. 26, (12) 1878-1889.*

Boundary Element Methods in Engineering and Sciences.
Aliabadi MH and Wen PH.

A new damping modelling approach and its application in thin wall machining.
Adetoro OB, Wen PH and Sim WM. *International Journal of Advanced Manufacturing Technology vol. 51, (5-8) 453-466.*

Laplace domain boundary element method for Winkler and Pasternak foundation thick plates.
Wen PH and Aliabadi MH. *Recent Developments in Boundary Element Methods 323-333.*

On the Numerical Prediction of Stability in Thin Wall Machining.
Adetoro OB, Vepa R, Sim W-M and Wen PH. *Electronic Engineering and Computing Technology 681-690.* Editors: Ao S-I and Gelman L. *Springer Verlag.*

The fundamental solution of poroelastic plate saturated by fluid and its applications.
Wen PH and Liu YW. *International Journal For Numerical and Analytical Methods in Geomechanics vol. 34, (7) 689-709.*

Multi-region mesh free method for Comeld joints.
Tu W, Wen PH and Guild FJ. *Computational Materials Science vol. 48, (3) 481-489.*

Meshless local Petrov-Galerkin (MLPG) method for wave propagation in 3D poroelastic solids.
Wen PH. *Engineering Analysis With Boundary Elements vol. 34, (4) 315-323.*

An improved prediction of stability lobes using nonlinear thin wall dynamics.
Adetoro OB, Sim WM and Wen PH. *Journal of Materials Processing Technology vol. 210, (6-7) 969-979.*

Critical shear stress produced by interaction of edge dislocation with nanoscale inhomogeneity.
Fang QH, Chen JM, Liu YW and Wen PH. *Bulletin of Materials Science vol. 33, (2) 123-127.*

On the Numerical Prediction of Stability in Thin Wall Machining.
Adetoro OB, Vepa R, Sim W-M and Wen PH. *Electronic Engineering and Computing Technology 681-690. Springer Nature.*

Prediction of mechanistic cutting force coefficients using ALE formulation.
Adetoro OB and Wen PH. *International Journal of Advanced Manufacturing Technology vol. 46, (1-4) 79-90.*

Simple method to predict balloon shape.
Wen PH and Dorrington GE. *P I Mech Eng G-J Aer vol. 224, (G8) 897-904.*

2009

Boundary element formulations for Mindlin plate on an elastic foundation with dynamic load.
Wen PH and Aliabadi MH. *Engineering Analysis With Boundary Elements vol. 33, (10) 1161-1170.*

Inverse fracture problems in piezoelectric solids by local integral equation method.
Sladek J, Sladek V, Wen PH and Hon YC. *Engineering Analysis With Boundary Elements vol. 33, (8-9) 1089-1099.*

Evaluation of mixed-mode stress intensity factors by the mesh-free Galerkin method: static and dynamic.
Wen PH and Aliabadi MH. *J Strain Anal Eng vol. 44, (4) 273-286.*

Mesh-free micromechanical model for woven fabric composite elastic moduli.
Wen PH and Aliabadi MH. *Journal of Multiscale Modeling vol. 1, (2) 303-319.*

Effect of interface stresses on the image force and stability of an edge dislocation inside a nanoscale cylindrical inclusion.
Fang QH, Liu YW, Jin B and Wen PH. *International Journal of Solids and Structures vol. 46, (6) 1413-1422.*

Interaction between a dislocation and a core-shell nanowire with interface effects.
Fang QH, Liu YW, Jin B and Wen PH. *International Journal of Solids and Structures vol. 46, (6) 1539-1546.*

Misfit dislocations in an annular strained film grown on a cylindrical nanopore surface.
Fang QH, Chen JH, Wen PH and Liu YW. *Scripta Materialia vol. 60, (6) 395-398.*

Dynamic responses of shear flows over a deformable porous surface layer in a cylindrical tube.
Wen PH, Hon YC and Wang W. *Appl Math Model vol. 33, (1) 423-436.*

A piezoelectric screw dislocation in a three-phase composite cylinder model with an imperfect interface.
Fang QH, Liu YW, Jin B and Wen PH. *International Journal of Engineering Science vol. 47, (1) 39-49.*

Screw dislocations interacting with a coated inhomogeneity containing two imperfect interfaces.
Fang QH, Liu YW, Liu X and Wen PH. *Physica Status Solidi (B) Basic Research vol. 246, (1) 32-44.*

Dipole of edge misfit dislocations and critical radius conditions for buried strained cylindrical inhomogeneity.
Fang QH, Liu YW and Wen PH. *Philos Mag vol. 89, (20) 1585-1595.*

2008

An inverse method to determine boundary temperature and heat flux for a 2D steady state heat conduction problem.
Yu G, Wang H, Wen P and Rose JW. *Proceedings of The Asme Design Engineering Technical Conference vol. 3, (PARTS A AND B) 1087-1093.*

The fundamental solution of Mindlin plates with damping in the Laplace domain and its applications.
Wen PH, Adetoro M and Xu Y. *Eng Anal Bound Elem vol. 32, (10) 870-882.*

An improved meshless collocation method for elastostatic and elastodynamic problems.
Wen PH and Aliabadi MH. *Communications in Numerical Methods in Engineering vol. 24, (8) 635-651.*

Contribution to critical shear stress of nanocomposites produced by interaction of screw dislocation with nanoscale inclusion.
Fang QH, Liu Y, Huang BY, Liu YW and Wen PH. *Materials Letters vol. 62, (20) 3521-3523.*

Screw dislocations in a three-phase composite cylinder model with interface stress.
Fang QH, Liu YW and Wen PH. *Journal of Applied Mechanics, Transactions Asme vol. 75, (4) 0410191-0410198.*

Interaction between micro-particles in Oseen flows by the method of fundamental solutions.
Wang W and Wen PH. *Eng Anal Bound Elem vol. 32, (4) 318-327.*

A piezoelectric screw dislocation interacting with an elliptical inclusion containing electrically conductive interfacial rigid lines.
Fang QH, Liu YW and Wen PH. *International Journal of Mechanical Sciences vol. 50, (4) 683-693.*

The fundamental solution of Mindlin plates resting on an elastic foundation in the Laplace domain and its applications.
Wen PH. *International Journal of Solids and Structures vol. 45, (3-4) 1032-1050.*

Displacement discontinuity method for cracked orthotropic strip: Dynamic.
Wen PH, Aliabadi MH, Sladek J and Sladek V. *Wave Motion vol. 45, (3) 293-308.*

2007

Meshless local Petrov-Galerkin (MLPG) method for Reissner-Mindlin plates under dynamic load.
Sladek J, Sladek V, Krivacek J, Wen PH and Zhang C. *Computer Methods in Applied Mechanics and Engineering vol. 196, (25-28) 2681-2691.*

Movement of a spherical cell in capillaries using a boundary element method.
Wen PH, Aliabadi MH and Wang W. *J Biomech vol. 40, (8) 1786-1793.*

2006

Displacement discontinuity formulation for modeling cracks in orthotropic shear deformable plates.
Wen PH and Aliabadi MH. *International Journal of Fracture vol. 142, (1-2) 69-79.*

Analysis of orthotropic thick plates by meshless local Petrov-Galerkin (MLPG) method.
Sladek J, Sladek V, Zhang C, Krivacek J and Wen PH. *International Journal For Numerical Methods in Engineering vol. 67, (13) 1830-1850.*

Boundary element frequency domain formulation for dynamic analysis of Mindlin plates.
Wen PH and Aliabadi MH. *International Journal For Numerical Methods in Engineering vol. 67, (11) 1617-1640.*

Post buckling analysis of Reissner plates by the boundary element method.
Wen PH, Aliabadi MH and Young A. *J Strain Anal Eng vol. 41, (3) 239-252.*

2005

Displacement discontinuity method for fracture mechanics analysis of Reissner plates: static and dynamic.
Wen PH, Aliabadi MH and Zhang JZ. *Int J Fracture vol. 135, (1-4) 95-116.*

Large deflection analysis of Reissner plate by boundary element method.
Wen PH, Aliabadi MH and Young A. *Comput Struct vol. 83, (10-11) 870-879.*

2004

Cracked growth analysis for multi-layered airframe structures by boundary element method.
ALIABADI MH and Young A. *Engineering Fracture Mechanics vol. 71, 619-632.*

2003

Boundary element analysis of curved cracked panels with adhesively bonded patches.
Wen PH, Aliabadi MH and Young A. *Int J Numer Meth Eng vol. 58, (1) 43-61.*

Fracture mechanics analysis of curved stiffened panels using BEM.
Wen PH, Aliabadi MH and Young A. *Int J Solids Struct vol. 40, (1) 219-236.*

2002

Boundary element analysis of flat cracked panels with adhesively bonded patches.
Wen PH, Aliabadi MH and Young A. *Engineering Fracture Mechanics vol. 69, (18) 2129-2146.*

Boundary element analysis of reinforced shear deformable shells.
Wen PH, Aliabadi MH and Young A. *Int J Numer Meth Eng vol. 54, (6) 789-808.*

Boundary element analysis of shear deformable stiffened plates.
Wen PH, Aliabadi MH and Young A. *Engineering Analysis With Boundary Elements vol. 26, (6) 511-520.*

Boundary element analysis of cracked panels with mechanically fastened repair patches.
Wen PH, Aliabadi MH and Young A. *Journal of Strain Analysis For Engineering Design vol. 37, (3) 223-237.*

Boundary element analysis for damage tolerance assessment of aircraft panels.
Aliabadi MH, Wen PH and Salgado N. *International Journal of Computer Applications in Technology vol. 15, (4-5) 147-156.*

2000

Stiffened cracked plates analysis by dual boundary element method.
Wen PH, Aliabadi MH and Young A. *Int J Fracture vol. 106, (3) 245-258.*

A boundary element method for dynamic plate bending problems.
Wen PH, Aliabadi MH and Young A. *International Journal of Solids and Structures vol. 37, (37) 5177-5188.*

Application of dual reciprocity method to plates and shells.
Wen PH, Aliabadi MH and Young A. *Engineering Analysis With Boundary Elements vol. 24, (7-8) 583-590.*

Plane stress and plate bending coupling in BEM analysis of shallow shells.
Wen PH, Aliabadi MH and Young A. *International Journal For Numerical Methods in Engineering vol. 48, (8) 1107-1125.*

1999

A time-dependent formulation of dual boundary element method for 3D dynamic crack problems.
Wen PH, Aliabadi MH and Young A. *International Journal For Numerical Methods in Engineering vol. 45, (12) 1887-1905.*

Dual boundary element methods for three-dimensional dynamic crack problems.
Wen PH, Aliabadi MH and Young A. *The Journal of Strain Analysis For Engineering Design vol. 34, (6) 373-394.*

Transformation of domain integrals to boundary integrals in BEM analysis of shear deformable plate bending problems.
Wen PH, Aliabadi MH and Young A. *Computational Mechanics vol. 24, (4) 304-309.*

Dual boundary element methods for three-dimensional dynamic crack problems.
Wen PH, Aliabadi MH and Young A. *Journal of Strain Analysis For Engineering Design vol. 34, (6) 373-394.*

Approximate dynamic crack frictional contact analysis for 3D structure.
Wen PH, Aliabadi MH and Young A. *Journal of The Chinese Institute of Engineers, Transactions of The Chinese Institute of Engineers,Series a/Chung-Kuo Kung Ch'Eng vol. 22, (6) 785-793.*