Wing Kam Liu

List of Publications by Year in Descending Order

172 papers	10,477 citations	52 h-index	99 g-index
181 ext. papers	11,876 ext. citations	4 avg, IF	6.47 L-index

#	Paper	IF	Citations
172	Mechanistic artificial intelligence (mechanistic-AI) for modeling, design, and control of advanced manufacturing processes: Current state and perspectives. *Journal of Materials Processing Technology*, **2022**, 302, 117485	5.3	6
171	HiDeNN-TD: Reduced-order hierarchical deep learning neural networks. *Computer Methods in Applied Mechanics and Engineering*, **2022**, 389, 114414	5.7	0
170	System and Design **2021**, 215-266		0
169	Double Averaging Analysis Applied to a Large Eddy Simulation of Coupled Turbulent Overlying and Porewater Flow. *Water Resources Research*, **2021**, 57, e2021WR029918	5.4	
168	Multiresolution clustering analysis for efficient modeling of hierarchical material systems. *Computational Mechanics*, **2021**, 67, 1293-1306	4	5
167	Universal scaling laws of keyhole stability and porosity in 3D printing of metals. *Nature Communications*, **2021**, 12, 2379	17.4	33
166	Image-based multiscale modeling with spatially varying microstructures from experiments: Demonstration with additively manufactured metal in fatigue and fracture. *Journal of the Mechanics and Physics of Solids*, **2021**, 150, 104350	5	8
165	Microscale Structure to Property Prediction for Additively Manufactured IN625 through Advanced Material Model Parameter Identification. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 142-156	2.9	2
164	Benchmark Study of Melted Track Geometries in Laser Powder Bed Fusion of Inconel 625. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 177-195	2.9	0
163	Mechanistic data-driven prediction of as-built mechanical properties in metal additive manufacturing. *Npj Computational Materials*, **2021**, 7,	10.9	8
162	Macroscale Property Prediction for Additively Manufactured IN625 from Microstructure Through Advanced Homogenization. *Integrating Materials and Manufacturing Innovation*, **2021**, 10, 360-372	2.9	1
161	Hierarchical deep-learning neural networks: finite elements and beyond. *Computational Mechanics*, **2021**, 67, 207-230	4	14
160	Image-based modelling for Adolescent Idiopathic Scoliosis: Mechanistic machine learning analysis and prediction. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 374, 113590	5.7	8
159	Hierarchical Deep Learning Neural Network (HiDeNN): An artificial intelligence (AI) framework for computational science and engineering. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 373, 113452	5.7	25
158	Self-consistent clustering analysis for modeling of theromelastic heterogeneous materials **2021**,		2
157	From microscale to mesoscale: The non-linear behavior prediction of 3D braided composites based on the SCA2 concurrent multiscale simulation. *Composites Science and Technology*, **2021**, 213, 108947	8.6	2
156	Data-driven characterization of thermal models for powder-bed-fusion additive manufacturing. *Additive Manufacturing*, **2020**, 36,	6.1	3

155	Efficient multiscale modeling for woven composites based on self-consistent clustering analysis. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 364, 112929	5.7	18
154	Predictive multiscale modeling for Unidirectional Carbon Fiber Reinforced Polymers. *Composites Science and Technology*, **2020**, 186, 107922	8.6	20
153	Adaptive hyper reduction for additive manufacturing thermal fluid analysis. *Computer Methods in Applied Mechanics and Engineering*, **2020**, 372, 113312	5.7	4
152	Analytical expression of RKPM shape functions. *Computational Mechanics*, **2020**, 66, 1343-1352	4	2
151	Fast calculation of interaction tensors in clustering-based homogenization. *Computational Mechanics*, **2019**, 64, 351-364	4	10
150	Derivation of heterogeneous material laws via data-driven principal component expansions. *Computational Mechanics*, **2019**, 64, 365-379	4	30
149	Clustering discretization methods for generation of material performance databases in machine learning and design optimization. *Computational Mechanics*, **2019**, 64, 281-305	4	41
148	A sequential homogenization of multi-coated micromechanical model for functionally graded interphase composites. *Computational Mechanics*, **2019**, 64, 1321-1337	4	4
147	A cellular automaton finite volume method for microstructure evolution during additive manufacturing. *Materials and Design*, **2019**, 169, 107672	8.1	62
146	Self-consistent clustering analysis for multiscale modeling at finite strains. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 349, 339-359	5.7	30
145	Benchmark Study of Thermal Behavior, Surface Topography, and Dendritic Microstructure in Selective Laser Melting of Inconel 625. *Integrating Materials and Manufacturing Innovation*, **2019**, 8, 178-193	2.9	52
144	Powder-scale multi-physics modeling of multi-layer multi-track selective laser melting with sharp interface capturing method. *Computational Mechanics*, **2019**, 63, 649-661	4	39
143	An inverse modeling approach for predicting filled rubber performance. *Computer Methods in Applied Mechanics and Engineering*, **2019**, 357, 112567	5.7	8
142	Data-Driven Microstructure and Microhardness Design in Additive Manufacturing Using a Self-Organizing Map. *Engineering*, **2019**, 5, 730-735	9.7	17
141	Finite element simulation of saw-tooth chip in high-speed machining based on multiresolution continuum theory. *International Journal of Advanced Manufacturing Technology*, **2019**, 101, 1759-1772	3.2	3
140	Data science for finite strain mechanical science of ductile materials. *Computational Mechanics*, **2019**, 64, 33-45	4	17
139	Special issue on Additive manufacturing: progress in modeling and simulation with experimental validations in additive manufacturing. *Computational Mechanics*, **2018**, 61, 519-520	4	4
138	Modeling process-structure-property relationships for additive manufacturing. *Frontiers of Mechanical Engineering*, **2018**, 13, 482-492	3.3	43

137	Enriched reproducing kernel particle method for fractional advection–diffusion equation. *Acta Mechanica Sinica/Lixue Xuebao*, **2018**, 34, 515-527	2	14
136	Data-driven multi-scale multi-physics models to derive process–structure–property relationships for additive manufacturing. *Computational Mechanics*, **2018**, 61, 521-541	4	96
135	A parallelized three-dimensional cellular automaton model for grain growth during additive manufacturing. *Computational Mechanics*, **2018**, 61, 543-558	4	52
134	Data-Driven Mechanistic Modeling of Influence of Microstructure on High-Cycle Fatigue Life of Nickel Titanium. *Jom*, **2018**, 70, 1154-1158	2.1	15
133	From virtual clustering analysis to self-consistent clustering analysis: a mathematical study. *Computational Mechanics*, **2018**, 62, 1443-1460	4	30
132	Variational boundary integral approach for asymmetric impinging jets of arbitrary two-dimensional nozzle. *International Journal for Numerical Methods in Fluids*, **2018**, 88, 193-216	1.9	
131	An integrated process–structure–property modeling framework for additive manufacturing. *Computer Methods in Applied Mechanics and Engineering*, **2018**, 339, 184-204	5.7	57
130	An enriched finite element method to fractional advection–diffusion equation. *Computational Mechanics*, **2017**, 60, 181-201	4	11
129	Modular-based multiscale modeling on viscoelasticity of polymer nanocomposites. *Computational Mechanics*, **2017**, 59, 187-201	4	7
128	An energetically consistent concurrent multiscale method for heterogeneous heat transfer and phase transition applications. *Computer Methods in Applied Mechanics and Engineering*, **2017**, 315, 100-120	5.7	5
127	Design of mechanical metamaterials for simultaneous vibration isolation and energy harvesting. *Applied Physics Letters*, **2017**, 111, 251903	3.4	53
126	Reproducing Kernel Particle Method for Solving Partial Differential Equations **2017**, 1-44		6
125	A Petrov–Galerkin finite element method for the fractional advection–diffusion equation. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 309, 388-410	5.7	27
124	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	42
123	Molecular simulation guided constitutive modeling on finite strain viscoelasticity of elastomers. *Journal of the Mechanics and Physics of Solids*, **2016**, 88, 204-226	5	67
122	Cell and nanoparticle transport in tumour microvasculature: the role of size, shape and surface functionality of nanoparticles. *Interface Focus*, **2016**, 6, 20150086	3.9	64
121	Linking process, structure, property, and performance for metal-based additive manufacturing: computational approaches with experimental support. *Computational Mechanics*, **2016**, 57, 583-610	4	130
120	Thermodynamically consistent microstructure prediction of additively manufactured materials. *Computational Mechanics*, **2016**, 57, 359-370	4	40

119	Preface: special issue of computational mechanics on Connecting Multiscale Mechanics to Complex Material Design *Computational Mechanics*, **2016**, 57, 355-357	4	
118	Self-consistent clustering analysis: An efficient multi-scale scheme for inelastic heterogeneous materials. *Computer Methods in Applied Mechanics and Engineering*, **2016**, 306, 319-341	5.7	176
117	An extended micromechanics method for probing interphase properties in polymer nanocomposites. *Journal of the Mechanics and Physics of Solids*, **2016**, 95, 663-680	5	26
116	Differential operator multiplication method for fractional differential equations. *Computational Mechanics*, **2016**, 58, 879-888	4	16
115	Predicting band structure of 3D mechanical metamaterials with complex geometry via XFEM. *Computational Mechanics*, **2015**, 55, 659-672	4	19
114	Multiscale modeling of electron beam and substrate interaction: a new heat source model. *Computational Mechanics*, **2015**, 56, 265-276	4	62
113	Shape effect in cellular uptake of PEGylated nanoparticles: comparison between sphere, rod, cube and disk. *Nanoscale*, **2015**, 7, 16631-46	7.7	204
112	Variable Chain Confinement in Polymers With Nanosized Pores and Its Impact on Instability. *Journal of Applied Mechanics, Transactions ASME*, **2015**, 82,	2.7	2
111	A statistical descriptor based volume-integral micromechanics model of heterogeneous material with arbitrary inclusion shape. *Computational Mechanics*, **2015**, 55, 963-981	4	14
110	Implicit finite element formulation of multiresolution continuum theory. *Computer Methods in Applied Mechanics and Engineering*, **2015**, 293, 114-130	5.7	1
109	A Multiscale Model for the Quasi-Static Thermo-Plastic Behavior of Highly Cross-Linked Glassy Polymers. *Macromolecules*, **2015**, 48, 6713-6723	5.5	50
108	Multiscale ductile fracture integrating tomographic characterization and 3-D simulation. *Acta Materialia*, **2015**, 82, 503-510	8.4	21
107	Advancements in multiresolution analysis. *International Journal for Numerical Methods in Engineering*, **2015**, 102, 784-807	2.4	3
106	A semi-numerical algorithm for instability of compressible multilayered structures. *Computational Mechanics*, **2015**, 56, 63-75	4	13
105	Enhancement of Endothelial Cell Retention on ePTFE Vascular Constructs by siRNA-Mediated SHP-1 or SHP-2 Gene Silencing. *Cellular and Molecular Bioengineering*, **2015**, 8, 507-516	3.9	1
104	Tensile Stress-Driven Surface Wrinkles on Cylindrical Core–Shell Soft Solids. *Journal of Applied Mechanics, Transactions ASME*, **2015**, 82,	2.7	10
103	The archetype-genome exemplar in molecular dynamics and continuum mechanics. *Computational Mechanics*, **2014**, 53, 687-737	4	15
102	Dynamic structure of unentangled polymer chains in the vicinity of non-attractive nanoparticles. *Soft Matter*, **2014**, 10, 1723-37	3.6	67

101	Multiscale modeling and uncertainty quantification in nanoparticle-mediated drug/gene delivery. *Computational Mechanics*, **2014**, 53, 511-537	4	43
100	Efficient prediction of protein conformational pathways based on the hybrid elastic network model. *Journal of Molecular Graphics and Modelling*, **2014**, 47, 25-36	2.8	9
99	Endocytosis of PEGylated nanoparticles accompanied by structural and free energy changes of the grafted polyethylene glycol. *Biomaterials*, **2014**, 35, 8467-78	15.6	142
98	USNCTAM perspectives on mechanics in medicine. *Journal of the Royal Society Interface*, **2014**, 11, 20140201	4.1	28
97	BIOMIMETIC CILIA. *World Scientific Series in Nanoscience and Nanotechnology*, **2014**, 509-532	0.1	
96	Quantifying uncertainties in the microvascular transport of nanoparticles. *Biomechanics and Modeling in Mechanobiology*, **2014**, 13, 515-26	3.8	21
95	Synthesis of nanodiamond-daunorubicin conjugates to overcome multidrug chemoresistance in leukemia. *Nanomedicine: Nanotechnology, Biology, and Medicine*, **2014**, 10, 359-69	6	63
94	A meshfree unification: reproducing kernel peridynamics. *Computational Mechanics*, **2014**, 53, 1251-1264	4	111
93	Challenges in Multiscale Modeling of Polymer Dynamics. *Polymers*, **2013**, 5, 751-832	4.5	143
92	Experimental and computational validation of Hele-Shaw stagnation flow with varying shear stress. *Computational Mechanics*, **2013**, 52, 1463-1473	4	5
91	Concurrent multiresolution finite element: formulation and algorithmic aspects. *Computational Mechanics*, **2013**, 52, 1265-1279	4	16
90	A generalized uncertainty propagation criterion from benchmark studies of microstructured material systems. *Computer Methods in Applied Mechanics and Engineering*, **2013**, 254, 271-291	5.7	19
89	Stochastic Reassembly Strategy for Managing Information Complexity in Heterogeneous Materials Analysis and Design. *Journal of Mechanical Design, Transactions of the ASME*, **2013**, 135,	3	22
88	Intersection-free tetrahedral meshing from volumetric images. *Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization*, **2013**, 1, 100-110	0.9	1
87	Two-scale mechanism-based theory of nonlinear viscoelasticity. *Journal of the Mechanics and Physics of Solids*, **2012**, 60, 199-226	5	58
86	Nanoparticle effect on the dynamics of polymer chains and their entanglement network. *Physical Review Letters*, **2012**, 109, 118001	7.4	141
85	A modal analysis of carbon nanotube using elastic network model. *Journal of Mechanical Science and Technology*, **2012**, 26, 3433-3438	1.6	6
84	Multiscale Modeling for the Vascular Transport of Nanoparticles **2012**, 437-459		2

83	A renormalization approach to model interaction in microstructured solids: Application to porous elastomer. *Computer Methods in Applied Mechanics and Engineering*, **2012**, 217-220, 213-225	5.7	11
82	A domain-reduction approach to bridging-scale simulation of one-dimensional nanostructures. *Computational Mechanics*, **2011**, 47, 31-47	4	7
81	Conforming local meshfree method. *International Journal for Numerical Methods in Engineering*, **2011**, 86, 335-357	2.4	12
80	A variable constraint tube model for size effects of polymer nano-structures. *Applied Physics Letters* , **2011**, 99, 191910	3.4	9
79	An Efficient Elastic Displacement Analysis Procedure for Simulating Transient Conformal-Contact Elastohydrodynamic Lubrication Systems. *Journal of Tribology*, **2010**, 132,	1.8	8
78	Mechano-kinetic coupling approach for materials with dynamic internal structure. *Philosophical Magazine Letters*, **2010**, 90, 471-480	1	6
77	Precise spring constant assignment in elastic network model for identification of vibration frequency and modeshape. *Journal of Mechanical Science and Technology*, **2010**, 24, 1771-1780	1.6	4
76	Multiscale methods for mechanical science of complex materials: Bridging from quantum to stochastic multiresolution continuum. *International Journal for Numerical Methods in Engineering*, **2010**, 83, 1039-1080	2.4	42
75	Multiresolution continuum modeling of micro-void assisted dynamic adiabatic shear band propagation. *Journal of the Mechanics and Physics of Solids*, **2010**, 58, 187-205	5	38
74	A multiresolution continuum simulation of the ductile fracture process. *Journal of the Mechanics and Physics of Solids*, **2010**, 58, 1681-1700	5	52
73	Complexity science of multiscale materials via stochastic computations. *International Journal for Numerical Methods in Engineering*, **2009**, 80, 932-978	2.4	35
72	Multi-length scale micromorphic process zone model. *Computational Mechanics*, **2009**, 44, 433-445	4	20
71	Multi-scale solid oxide fuel cell materials modeling. *Computational Mechanics*, **2009**, 44, 683-703	4	27
70	Multiresolution modeling of ductile reinforced brittle composites. *Journal of the Mechanics and Physics of Solids*, **2009**, 57, 244-267	5	28
69	Predictive multiscale theory for design of heterogeneous materials. *Computational Mechanics*, **2008** , 42, 147-170	4	43
68	Multiple time scale method for atomistic simulations. *Computational Mechanics*, **2008**, 42, 569-577	4	7
67	A finite temperature continuum theory based on interatomic potential in crystalline solids. *Computational Mechanics*, **2008**, 42, 531-541	4	14
66	Materials integrity in microsystems: a framework for a petascale predictive-science-based multiscale modeling and simulation system. *Computational Mechanics*, **2008**, 42, 485-510	4	20

65	Meshfree simulation of failure modes in thin cylinders subjected to combined loads of internal pressure and localized heat. *International Journal for Numerical Methods in Engineering*, **2008**, 76, 1159-1184	2.4	14
64	A micromorphic model for the multiple scale failure of heterogeneous materials. *Journal of the Mechanics and Physics of Solids*, **2008**, 56, 1320-1347	5	82
63	Linking microstructure and properties through a predictive multiresolution continuum. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 3268-3290	5.7	58
62	Simulation and prediction of endothelial cell adhesion modulated by molecular engineering. *Computer Methods in Applied Mechanics and Engineering*, **2008**, 197, 2340-2352	5.7	12
61	A phonon heat bath approach for the atomistic and multiscale simulation of solids. *International Journal for Numerical Methods in Engineering*, **2007**, 70, 351-378	2.4	55
60	Immersed electrokinetic finite element method. *International Journal for Numerical Methods in Engineering*, **2007**, 71, 379-405	2.4	51
59	Implementation aspects of the bridging scale method and application to intersonic crack propagation. *International Journal for Numerical Methods in Engineering*, **2007**, 71, 583-605	2.4	24
58	On criteria for dynamic adiabatic shear band propagation. *Journal of the Mechanics and Physics of Solids*, **2007**, 55, 1439-1461	5	93
57	Meshfree point collocation method with intrinsic enrichment for interface problems. *Computational Mechanics*, **2007**, 40, 1037-1052	4	34
56	Characterization of Point Defect Generation, Migration and Coalescence in Irradiated SiC by Atomistic Simulation. *Materials Research Society Symposia Proceedings*, **2007**, 1043, 1		
55	The 3-D computational modeling of shear-dominated ductile failure in steel. *Jom*, **2006**, 58, 45-51	2.1	49
54	A mathematical framework of the bridging scale method. *International Journal for Numerical Methods in Engineering*, **2006**, 65, 1688-1713	2.4	57
53	Approaching Mixed Elastohydrodynamic Lubrication of Smooth Journal-Bearing Systems with Low Rotating Speed. *Tribology Transactions*, **2006**, 49, 598-610	1.8	9
52	Moving particle finite element method with superconvergence: Nodal integration formulation and applications. *Computer Methods in Applied Mechanics and Engineering*, **2006**, 195, 6059-6072	5.7	33
51	Bridging scale methods for nanomechanics and materials. *Computer Methods in Applied Mechanics and Engineering*, **2006**, 195, 1407-1421	5.7	113
50	Immersed finite element method and its applications to biological systems. *Computer Methods in Applied Mechanics and Engineering*, **2006**, 195, 1722-1749	5.7	204
49	Rheology of red blood cell aggregation by computer simulation. *Journal of Computational Physics*, **2006**, 220, 139-154	4.1	207
48	Mathematical foundations of the immersed finite element method. *Computational Mechanics*, **2006** , 39, 211-222	4	67

47	Three-dimensional bridging scale analysis of dynamic fracture. *Journal of Computational Physics*, **2005**, 207, 588-609	4.1	84
46	Adaptive enrichment meshfree simulation and experiment on buckling and post-buckling analysis in sheet metal forming. *Computer Methods in Applied Mechanics and Engineering*, **2005**, 194, 2569-2590	5.7	26
45	A Green's function approach to deriving non-reflecting boundary conditions in molecular dynamics simulations. *International Journal for Numerical Methods in Engineering*, **2005**, 62, 1250-1262	2.4	89
44	Treatment of discontinuity in the reproducing kernel element method. *International Journal for Numerical Methods in Engineering*, **2005**, 63, 241-255	2.4	10
43	Non-reflecting boundary conditions for atomistic, continuum and coupled atomistic/continuum simulations. *International Journal for Numerical Methods in Engineering*, **2005**, 64, 237-259	2.4	40
42	Flexible piecewise approximations based on partition of unity. *Advances in Computational Mathematics*, **2005**, 23, 191-199	1.6	7
41	Cohesive solutions of intersonic moving dislocations. *Philosophical Magazine*, **2004**, 84, 1067-1104	1.6	9
40	Coupling of Navier-Stokes equations with protein molecular dynamics and its application to hemodynamics. *International Journal for Numerical Methods in Fluids*, **2004**, 46, 1237-1252	1.9	108
39	Finite element method for mixed elastohydrodynamic lubrication of journal-bearing systems. *International Journal for Numerical Methods in Engineering*, **2004**, 60, 1759-1790	2.4	16
38	Moving particle finite element method with global smoothness. *International Journal for Numerical Methods in Engineering*, **2004**, 59, 1007-1020	2.4	25
37	Bridging multi-scale method for localization problems. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 3267-3302	5.7	69
36	Reproducing kernel element method. Part I: Theoretical formulation. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 933-951	5.7	127
35	A multiscale projection method for the analysis of carbon nanotubes. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 1603-1632	5.7	130
34	Extended immersed boundary method using FEM and RKPM. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 1305-1321	5.7	148
33	Multi-scale constitutive model and computational framework for the design of ultra-high strength, high toughness steels. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 1865-1908	5.7	96
32	Immersed finite element method. *Computer Methods in Applied Mechanics and Engineering*, **2004**, 193, 2051-2067	5.7	354
31	Coupling of atomistic and continuum simulations using a bridging scale decomposition. *Journal of Computational Physics*, **2003**, 190, 249-274	4.1	501
30	Convergence analysis of a hierarchical enrichment of Dirichlet boundary conditions in a mesh-free method. *International Journal for Numerical Methods in Engineering*, **2002**, 53, 1323-1336	2.4	20

29	Moving particle finite element method. *International Journal for Numerical Methods in Engineering*, **2002**, 53, 1937-1958	2.4	29
28	Mesh-free Galerkin simulations of dynamic shear band propagation and failure mode transition. *International Journal of Solids and Structures*, **2002**, 39, 1213-1240	3.1	127
27	Hierarchical enrichment for bridging scales and mesh-free boundary conditions. *International Journal for Numerical Methods in Engineering*, **2001**, 50, 507-524	2.4	75
26	Effective Models for Prediction of Springback In Flanging. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **2001**, 123, 456-461	1.8	30
25	Mechanics of C60in Nanotubes. *Journal of Physical Chemistry B*, **2001**, 105, 10753-10758	3.4	137
24	Parallel computation of meshless methods for explicit dynamic analysis. *International Journal for Numerical Methods in Engineering*, **2000**, 47, 1323-1341	2.4	23
23	Multi-scale methods. *International Journal for Numerical Methods in Engineering*, **2000**, 47, 1343-1361	2.4	45
22	Application of essential boundary conditions in mesh-free methods: a corrected collocation method. *International Journal for Numerical Methods in Engineering*, **2000**, 47, 1367-1379	2.4	95
21	Numerical simulations of strain localization in inelastic solids using mesh-free methods. *International Journal for Numerical Methods in Engineering*, **2000**, 48, 1285-1309	2.4	66
20	A unified stability analysis of meshless particle methods. *International Journal for Numerical Methods in Engineering*, **2000**, 48, 1359-1400	2.4	288
19	Numerical simulations of strain localization in inelastic solids using mesh-free methods **2000**, 48, 1285		2
18	Bimaterial Interfacial Crack Growth With Strain Gradient Theory. *Journal of Engineering Materials and Technology, Transactions of the ASME*, **1999**, 121, 413-421	1.8	10
17	Reproducing kernel hierarchical partition of unity, Part IFormulation and theory. *International Journal for Numerical Methods in Engineering*, **1999**, 45, 251-288	2.4	133
16	Reproducing kernel hierarchical partition of unity, Part IIApplications. *International Journal for Numerical Methods in Engineering*, **1999**, 45, 289-317	2.4	85
15	Reproducing kernel hierarchical partition of unity, Part IFormulation and theory **1999**, 45, 251		4
14	Enrichment of the Finite Element Method With the Reproducing Kernel Particle Method. *Journal of Applied Mechanics, Transactions ASME*, **1997**, 64, 861-870	2.7	91
13	Multiresolution reproducing kernel particle method for computational fluid dynamics. *International Journal for Numerical Methods in Fluids*, **1997**, 24, 1391-1415	1.9	95
12	Reproducing kernel particle methods for structural dynamics. *International Journal for Numerical Methods in Engineering*, **1995**, 38, 1655-1679	2.4	583

11	Reproducing kernel particle methods. *International Journal for Numerical Methods in Fluids*, **1995**, 20, 1081-1106	1.9	1984
10	Wavelet and multiple scale reproducing kernel methods. *International Journal for Numerical Methods in Fluids*, **1995**, 21, 901-931	1.9	189
9	Multiple quadrature underintegrated finite elements. *International Journal for Numerical Methods in Engineering*, **1994**, 37, 3263-3289	2.4	58
8	Finite element hydrodynamic friction model for metal forming. *International Journal for Numerical Methods in Engineering*, **1994**, 37, 4015-4037	2.4	7
7	An ALE hydrodynamic lubrication finite element method with application to strip rolling. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 855-880	2.4	33
6	Elastic interactions of a fatigue crack with a micro-defect by the mixed boundary integral equation method. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 2743-2759	2.4	7
5	Curvilinear fatigue crack reliability analysis by stochastic boundary element method. *International Journal for Numerical Methods in Engineering*, **1993**, 36, 3841-3858	2.4	5
4	ALE finite element formulation for ring rolling analysis. *International Journal for Numerical Methods in Engineering*, **1992**, 33, 1217-1236	2.4	30
3	Multiple scale finite element methods. *International Journal for Numerical Methods in Engineering*, **1991**, 32, 969-990	2.4	45
2	Dynamic stability characteristics of liquid-filled shells. *Earthquake Engineering and Structural Dynamics*, **1989**, 18, 1219-1231	4	5
1	Numerical Modelling in Science and Engineering. *Journal of Applied Mechanics, Transactions ASME*, **1988**, 55, 996-997	2.7	11