

CITATION REPORT

List of articles citing

Elastic crack growth in finite elements with minimal remeshing

DOI: 10.1002/(sici)1097-0207(19990620)45:53.O.co;2-s
International Journal for Numerical Methods in
Engineering, 1999, 45, 601-620.

Source: <https://exaly.com/paper-pdf/30624858/citation-report.pdf>

Version: 2024-04-27

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
2286	A finite element method for crack growth without remeshing. <i>International Journal for Numerical Methods in Engineering</i> , 1999 , 46, 131-150	2.4	4108
2285	Extended finite element method for three-dimensional crack modelling. <i>International Journal for Numerical Methods in Engineering</i> , 2000 , 48, 1549-1570	2.4	856
2284	Arbitrary branched and intersecting cracks with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2000 , 48, 1741-1760	2.4	679
2283	Modeling fracture in Mindlin-Reissner plates with the extended finite element method. 2000 , 37, 7161-7183		184
2282	Discontinuous enrichment in finite elements with a partition of unity method. 2000 , 36, 235-260		287
2281	A generalized finite element method for the simulation of three-dimensional dynamic crack propagation. 2001 , 190, 2227-2262		269
2280	The generalized finite element method. 2001 , 190, 4081-4193		459
2279	An extended finite element method for modeling crack growth with frictional contact. 2001 , 190, 6825-6846		367
2278	Hierarchical enrichment for bridging scales and mesh-free boundary conditions. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 507-524	2.4	75
2277	Arbitrary discontinuities in finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 993-1013	2.4	807
2276	A new method for modelling cohesive cracks using finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 50, 2667-2682	2.4	669
2275	The extended finite element method for rigid particles in Stokes flow. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 51, 293-313	2.4	111
2274	Modelling crack growth by level sets in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 51, 943-960	2.4	555
2273	Some recent issues in computational failure mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2001 , 52, 63-95	2.4	143
2272	X-FEM, de nouvelles frontières pour les éléments finis. 2002 , 11, 305-318		5
2271	An Introduction to the Composite Element Method Applied to the Vibration Analysis of Trusses. 2002 , 9, 155-164		2
2270	Moving particle finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 1937-1958	2.4	29

2269	Simulating the propagation of displacement discontinuities in a regularized strain-softening medium. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 1235-1256	2.4	87
2268	The extended finite element method (XFEM) for solidification problems. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 1959-1977	2.4	221
2267	An adaptive finite element framework for fatigue crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 111-135	2.4	4
2266	Non-planar 3D crack growth by the extended finite element and level sets Part I: Mechanical model. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 2549-2568	2.4	473
2265	Non-planar 3D crack growth by the extended finite element and level sets Part II: Level set update. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 53, 2569-2586	2.4	380
2264	A consistent geometrically non-linear approach for delamination. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 1333-1355	2.4	122
2263	A hybrid extended finite element/level set method for modeling phase transformations. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 1209-1233	2.4	120
2262	Adaptive hierarchical enrichment for delamination fracture using a decohesive zone model. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 1369-1390	2.4	35
2261	A vector level set method and new discontinuity approximations for crack growth by EFG. <i>International Journal for Numerical Methods in Engineering</i> , 2002 , 54, 923-944	2.4	233
2260	Numerical methods in rock mechanics. 2002 , 39, 409-427		344
2259	Loss of constraint on fracture in thin film structures due to creep. 2002 , 50, 4137-4148		38
2258	Extended finite element method for cohesive crack growth. 2002 , 69, 813-833		1033
2257	A hierarchical multi-physics model for design of high toughness steels. 2003 , 10, 99-142		53
2256	Thin film cracking modulated by underlayer creep. 2003 , 43, 269-279		22
2255	Adaptive crack propagation analysis with the element-free Galerkin method. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 331-350	2.4	32
2254	Mesh independent modelling of cracks by using higher order shape functions. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 869-882	2.4	82
2253	Stress intensity factor analysis of interface cracks using X-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 1151-1173	2.4	106
2252	An improved crack analysis technique by element-free Galerkin method with auxiliary supports. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 1291-1314	2.4	11

2251	Arbitrary placement of local meshes in a global mesh by the interface-element method (IEM). <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 2279-2312	2.4	14
2250	Brittle fracture in polycrystalline microstructures with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 2015-2037	2.4	111
2249	Structured extended finite element methods for solids defined by implicit surfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 609-635	2.4	208
2248	Symmetric-Galerkin BEM simulation of fracture with frictional contact. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 835-851	2.4	30
2247	Development of the DYNA3D simulation code with automated fracture procedure for brick elements. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 1979-2006	2.4	35
2246	On the construction of blending elements for local partition of unity enriched finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 1015-1038	2.4	252
2245	Parallel computing of high-speed compressible flows using a node-based finite-element method. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 481-511	2.4	28
2244	Solution strategies for the delamination analysis based on a combination of local-control arc-length and line searches. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 999-1048	2.4	68
2243	Topology optimization with implicit functions and regularization. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 1177-1196	2.4	198
2242	Vector level sets for description of propagating cracks in finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 1571-1592	2.4	157
2241	New crack-tip elements for XFEM and applications to cohesive cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 57, 2221-2240	2.4	386
2240	A solid-like shell element allowing for arbitrary delaminations. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 2013-2040	2.4	73
2239	Dynamic crack propagation based on loss of hyperbolicity and a new discontinuous enrichment. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 1873-1905	2.4	392
2238	An enriched finite element method and level sets for axisymmetric two-phase flow with surface tension. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 58, 2041-2064	2.4	90
2237	Modeling quasi-static crack growth with the extended finite element method Part II: Numerical applications. 2003 , 40, 7539-7552		114
2236	Modeling quasi-static crack growth with the extended finite element method Part I: Computer implementation. 2003 , 40, 7513-7537		296
2235	Extended finite element method and fast marching method for three-dimensional fatigue crack propagation. 2003 , 70, 29-48		199
2234	Channel-cracking of thin films with the extended finite element method. 2003 , 70, 2513-2526		90

2233	Numerical aspects of cohesive-zone models. 2003 , 70, 1743-1757	217
2232	Modeling thermal fatigue cracking in integrated circuits by level sets and the extended finite element method. 2003 , 41, 2381-2410	32
2231	Evolving crack patterns in thin films with the extended finite element method. 2003 , 40, 2343-2354	58
2230	A computational approach to handle complex microstructure geometries. 2003 , 192, 3163-3177	465
2229	Numerical modelling of crack propagation: automatic remeshing and comparison of different criteria. 2003 , 192, 3887-3908	232
2228	Modelling of stationary and growing cracks in FE framework without remeshing: a state-of-the-art review. 2003 , 81, 119-129	145
2227	A review of techniques, advances and outstanding issues in numerical modelling for rock mechanics and rock engineering. 2003 , 40, 283-353	652
2226	Direct evaluation of accurate coefficients of the linear elastic crack tip asymptotic field. 2003 , 26, 719-729	46
2225	Fatigue crack propagation of multiple coplanar cracks with the coupled extended finite element/fast marching method. 2003 , 41, 845-869	95
2224	New Methods for Discontinuity and Crack Modeling in EFG. 2003 , 37-50	9
2223	Process zone resolution by extended finite elements. 2003 , 70, 957-977	68
2222	On solving singular interface problems using the enriched partition-of-unity finite element methods. 2003 , 20, 998-1022	1
2221	An Extended Finite Element Method for Two-Phase Fluids. 2003 , 70, 10-17	201
2220	The Extended Finite Element and Level Set Methods for Non-Planar 3D Crack Growth. 2003 , 343-354	2
2219	Volume CAD. 2003 ,	5
2218	Novel Discretization Concepts. 2003 , 377-425	6
2217	A FEM-BASED MESHFREE METHOD WITH A PROBABILISTIC NODE GENERATION TECHNIQUE. 2004 , 01, 241-265	2
2216	SINGULAR ENRICHMENT FINITE ELEMENT METHOD FOR ELASTODYNAMIC CRACK PROPAGATION. 2004 , 01, 1-15	41

2215	Modélisation << macro >> de phénomènes dissipatifs localisés à l'échelle << micro >>. 2004 , 13, 461-473		2
2214	Direct determination of SIF and higher order terms of mixed mode cracks by a hybrid crack element. 2004 , 125, 207-225		86
2213	FEM for evaluation of weight functions for SIF, COD and higher-order coefficients with application to a typical wedge splitting specimen. 2004 , 127, 201-237		3
2212	On the modeling of highly localized deformations induced by material failure: The strong discontinuity approach. 2004 , 11, 389-446		19
2211	Numerical calculation of energy release rates by virtual crack closure technique. 2004 , 18, 1996-2008		5
2210	Enriched partition-of-unity finite element method for stress intensity factors at crack tips. 2004 , 82, 445-461	2.2	22
2209	Numerical prediction of crack propagation by an enhanced element-free Galerkin method. 2004 , 227, 257-271		16
2208	Meshless formulation using NURBS basis functions for eigenfrequency changes of beam having multiple open-cracks. 2004 , 269, 781-793		6
2207	Simulation of crack propagation using embedded discontinuities. 2004 , 4, 366-367		1
2206	Discrete vs smeared crack models for concrete fracture: bridging the gap. 2004 , 28, 583-607		144
2205	On error estimator and p-adaptivity in the generalized finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 60, 2373-2398	2.4	38
2204	A method for multiple crack growth in brittle materials without remeshing. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 1741-1770	2.4	167
2203	Cracking particles: a simplified meshfree method for arbitrary evolving cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 2316-2343	2.4	964
2202	On strategies for enforcing interfacial constraints and evaluating jump conditions with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 61, 2508-2535	2.4	129
2201	Enrichment of enhanced assumed strain approximations for representing strong discontinuities: addressing volumetric incompressibility and the discontinuous patch test. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 59, 47-67	2.4	55
2200	Partition of unity enrichment for bimaterial interface cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 59, 1075-1102	2.4	191
2199	XFEM for direct evaluation of mixed mode SIFs in homogeneous and bi-materials. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 59, 1103-1118	2.4	157
2198	Node-by-node parallel finite elements: a virtually meshless method. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 60, 69-102	2.4	26

2197	Cohesive-zone models, higher-order continuum theories and reliability methods for computational failure analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 60, 289-315	2.4	81
2196	Moving particle finite element method with global smoothness. <i>International Journal for Numerical Methods in Engineering</i> , 2004 , 59, 1007-1020	2.4	25
2195	Evaluation of the amount of crack growth in 2D LEFM problems. 2004 , 71, 1403-1419		6
2194	Three-dimensional numerical simulations of dynamic fracture in silicon carbide reinforced aluminum. 2004 , 71, 1357-1378		23
2193	Strain localization due to crack-microcrack interactions: X-FEM for a multifield approach. 2004 , 193, 5035-5062		18
2192	A method for growing multiple cracks without remeshing and its application to fatigue crack growth. 2004 , 12, 901-915		82
2191	Computational Fracture Mechanics. 2004 ,		10
2190	Meshfree Methods. 2004 ,		10
2189	Damage, Material Instabilities, and Failure. 2004 ,		16
2188	On Fracture Modelling Based on Inverse Strong Discontinuities. 2005 , 269-277		
2187	Modeling of pressure-sensitive materials using a cap plasticity theory in extended finite element method. 2005 , 164-165, 1248-1257		4
2186	On fracture analysis using an element overlay technique. 2005 , 72, 773-789		40
2185	A rate-dependent cohesive model for simulating dynamic crack propagation in brittle materials. 2005 , 72, 1383-1410		149
2184	A numerical model for reinforced concrete structures. 2005 , 42, 1327-1354		110
2183	Adaptive enrichment meshfree simulation and experiment on buckling and post-buckling analysis in sheet metal forming. 2005 , 194, 2569-2590		26
2182	A novel algorithmic framework for the numerical implementation of locally embedded strong discontinuities. 2005 , 194, 4731-4757		14
2181	A numerical strategy for investigating the kinetic response of stimulus-responsive hydrogels. 2005 , 194, 4447-4480		53
2180	Non-linear analysis of shells with arbitrary evolving cracks using XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 62, 384-415	2.4	124

2179	The Arlequin method as a flexible engineering design tool. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 62, 1442-1462	2.4	266
2178	Multiscale enrichment based on partition of unity. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 62, 1341-1359	2.4	103
2177	A framework for fracture modelling based on the material forces concept with XFEM kinematics. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 62, 1763-1788	2.4	31
2176	Continuum-discontinuum modelling of shear bands. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 62, 1857-1872	2.4	70
2175	An energy-conserving scheme for dynamic crack growth using the eXtended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 631-659	2.4	163
2174	A finite element method for the computational modelling of cohesive cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 276-289	2.4	188
2173	Stress analysis around crack tips in finite strain problems using the eXtended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 290-314	2.4	72
2172	An integrated procedure for three-dimensional structural analysis with the finite cover method. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 63, 2102-2123	2.4	25
2171	A combined space-time extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 64, 260-284	2.4	56
2170	High-order extended finite element method for cracked domains. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 64, 354-381	2.4	324
2169	Improved implementation and robustness study of the X-FEM for stress analysis around cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 64, 1033-1056	2.4	317
2168	Strong and weak arbitrary discontinuities in spectral finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2005 , 64, 991-1008	2.4	60
2167	Efficient finite element simulation of crack propagation using adaptive iterative solvers. 2005 , 22, 93-108		10
2166	Finite cover method with mortar elements for elastoplasticity problems. 2005 , 36, 45-61		17
2165	A geometric nonlinear triangular finite element with an embedded discontinuity for the simulation of quasi-brittle fracture. 2005 , 36, 139-157		4
2164	Computational aspects of the mechanics of complex materials. 2005 , 12, 391-478		32
2163	APPROXIMATION PROPERTIES OF GENERALIZED ELEMENTS IN HIGHER-ORDER FINITE COVER APPROXIMATION. 2005 , 2005, 794_131-794_142		
2162	DEVELOPMENT OF FRACTURE SIMULATION BY THE FINITE COVER METHOD USING INTERFACE ELEMENT. 2005 , 2005, 794_213-794_225		4

2161	The Extended Finite Element Method for Dynamic Fractures. 2005 , 12, 9-23	48
2160	Extended finite element method for numerical simulation of 3D fatigue crack growth. 2005 , 48, 323-328	5
2159	Meshfree Methods for Partial Differential Equations II. 2005 ,	14
2158	Computational Mechanics of Failure in Composites at Multiple Scales. 2005 , 63-101	1
2157	Discontinuous Radial Basis Function Approximations for Meshfree Methods. 2005 , 231-253	5
2156	Advances in Fracture Research. 2006 ,	
2155	III European Conference on Computational Mechanics. 2006 ,	1
2154	Statistical models of fracture. 2006 , 55, 349-476	438
2153	Multiple cohesive crack growth in brittle materials by the extended Voronoi cell finite element model. 2006 , 141, 373-393	36
2152	Moving particle finite element method with superconvergence: Nodal integration formulation and applications. 2006 , 195, 6059-6072	33
2151	Analysis of Finite Strain Anisotropic Elastoplastic Fracture in Thin Plates and Shells. 2006 , 19, 259-270	32
2150	A comparison of the extended finite element method with the immersed interface method for elliptic equations with discontinuous coefficients and singular sources. 2006 , 1, 207-228	25
2149	FAILURE ANALYSIS INVOLVING FRICTIONAL CONTACT ON CRACK INTERFACES. 2006 , 62, 371-383	1
2148	Crack propagation modelled by T-elements. 2006 , 23, 100-123	1
2147	Numerical simulation of crack propagation in shells. 2006 , 6, 219-220	0
2146	The perturbation method and the extended finite element method. An application to fracture mechanics problems. 2006 , 29, 581-587	8
2145	Kinetics of thermally induced swelling of hydrogels. 2006 , 43, 1878-1907	51
2144	Extended finite element method in plasticity forming of powder compaction with contact friction. 2006 , 43, 5421-5448	47

2143	Fatigue crack propagation: In situ visualization using X-ray microtomography and 3D simulation using the extended finite element method. 2006 , 54, 1111-1122	104
2142	Estimation of model parameters in nonlocal damage theories by inverse analysis techniques. 2006 , 195, 7211-7222	21
2141	An embedded strong discontinuity model for cracking of plain concrete. 2006 , 195, 7115-7138	43
2140	Appropriate extended functions for X-FEM simulation of plastic fracture mechanics. 2006 , 195, 501-515	168
2139	A comment on the article A finite element method for simulation of strong and weak discontinuities in solid mechanics by A. Hansbo and P. Hansbo [Comput. Methods Appl. Mech. Engrg. 193 (2004) 3523-3540]. 2006 , 195, 1275-1276	69
2138	A local space-time discontinuous finite element method. 2006 , 195, 1325-1343	29
2137	A coupled discrete-continuum approach to simulate moisture effects on damage processes in porous materials. 2006 , 195, 7139-7153	20
2136	A geometrically nonlinear FE approach for the simulation of strong and weak discontinuities. 2006 , 195, 5037-5052	33
2135	Interface material failure modeled by the extended finite-element method and level sets. 2006 , 195, 4753-4767	33
2134	Analysis of fracture in thin shells by overlapping paired elements. 2006 , 195, 5343-5360	95
2133	Benchmarks for the evolution of shear localisation with large relative sliding in frictional materials. 2006 , 195, 4991-5010	21
2132	Arbitrarily smooth generalized finite element approximations. 2006 , 196, 33-56	28
2131	Computational modelling of delamination. 2006 , 66, 713-722	74
2130	Mesh-independent discrete numerical representations of cohesive-zone models. 2006 , 73, 160-177	124
2129	Numerical simulation of strength test on graphite moderator bricks using a continuum damage mechanics model. 2006 , 73, 318-330	17
2128	An integrated continuous-discontinuous approach towards damage engineering in sheet metal forming processes. 2006 , 73, 895-916	51
2127	Enriched finite elements and level sets for damage tolerance assessment of complex structures. 2006 , 73, 1176-1201	125
2126	Numerical modeling of crack propagation and shielding effects in a striping network. 2006 , 236, 954-964	15

2125	Image-based extended finite element modeling of thermal barrier coatings. 2006 , 201, 2369-2380		44
2124	Application of Particle Methods to Static Fracture of Reinforced Concrete Structures. 2006 , 137, 19-49		171
2123	Modern Domain-based Discretization Methods for Damage and Fracture. 2006 , 138, 241-262		12
2122	A mortared finite element method for frictional contact on arbitrary interfaces. 2006 , 39, 223-235		55
2121	A Numerical Approach for Arbitrary Cracks in a Fluid-Saturated Medium. 2006 , 75, 595-606		93
2120	Crack analysis in orthotropic media using the extended finite element method. 2006 , 44, 1031-1038		95
2119	A robust and consistent remeshing-transfer operator for ductile fracture simulations. 2006 , 84, 604-623		57
2118	Modeling crack in orthotropic media using a coupled finite element and partition of unity methods. 2006 , 42, 1165-1175		73
2117	Predictive modelling of structure evolution in sandbox experiments. 2006 , 28, 729-744		73
2116	MLS-based variable-node elements compatible with quadratic interpolation. Part II: application for finite crack element. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 65, 517-547	2.4	23
2115	Extended Voronoi cell finite element model for multiple cohesive crack propagation in brittle materials. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 65, 1028-1067	2.4	61
2114	A moving superimposed finite element method for structural topology optimization. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 65, 1892-1922	2.4	57
2113	On inter-element forces in the FEM-displacement formulation, and implications for stress recovery. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 502-528	2.4	19
2112	On the elimination of quadrature subcells for discontinuous functions in the eXtended Finite-Element Method. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 761-795	2.4	146
2111	Theory and numerics for finite deformation fracture modelling using strong discontinuities. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 66, 911-948	2.4	57
2110	A method for dynamic crack and shear band propagation with phantom nodes. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 868-893	2.4	519
2109	Imposing Dirichlet boundary conditions in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 67, 1641-1669	2.4	165
2108	The intrinsic XFEM: a method for arbitrary discontinuities without additional unknowns. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 68, 1358-1385	2.4	129

2107	A two-scale approach for fluid flow in fractured porous media. <i>International Journal for Numerical Methods in Engineering</i> , 2006 , 71, 780-800	2.4	143
2106	Towards the algorithmic treatment of 3D strong discontinuities. 2006 , 23, 97-108		35
2105	An Effective Numerical Approach for Multiple Void-Crack Interaction. 2006 , 73, 525-535		18
2104	Partly Cracked XFEM Interface for Intersecting Cracks. 2006 , 397-398		
2103	Multiple Crack Growth failure in Cortical Bone under Tension by the eXtended Finite Element Method. 2006 , 394-394		
2102	Multi-Scale Modeling of Human Cortical Bone: Aging and Failure Studies. 2006 , 975, 1		7
2101	Global-local approaches: the Arlequin framework. 2006 , 15, 67-80		21
2100	On the Advantages of Using a Strong Coupling Variational Formulation to Model Electro-Mechanical Problem.		
2099	Fluid-Structure Interaction. 2006 ,		71
2098	Large Deformation Fluid-Structure Interaction [Advances in ALE Methods and New Fixed Grid Approaches. 2006 , 195-232		27
2097	Architecture tradeoffs of integrating a mesh generator to partition of unity enriched object-oriented finite element software. 2007 , 16, 237-258		26
2096	On the Application of Hansbo's Method for Interface Problems. 2007 , 255-265		1
2095	Partition of unity-based discontinuous finite elements: GFEM, PUFEM, XFEM. 2007 , 11, 1045-1068		7
2094	Multiple scale modeling for cortical bone fracture in tension using X-FEM. 2007 , 16, 213-236		32
2093	X-Ray Micro-Tomography Coupled to the Extended Finite Element Method to Investigate Microstructurally Short Fatigue Cracks. 2007 , 567-568, 301-304		3
2092	A Probabilistic Extended Finite Element Approach: Application to the Prediction of Bone Crack Propagation. 2007 , 348-349, 77-80		2
2091	Advances in Meshfree Techniques. 2007 ,		3
2090	Minimizing the quadratic mean temperature gradient for the heat-conduction problem using the level-set method. 2007 , 221, 235-248		1

2089	Application of s-Version Finite Element Method to Two-Dimensional Fracture Mechanics Problems. 2007 , 1, 699-710		9
2088	Computational Fracture Mechanics. 2007 ,		2
2087	On Applications of XFEM to Dynamic Fracture and Dislocations. 2007 , 155-170		
2086	Recent Developments in the Formulation of Finite Elements with Embedded Strong Discontinuities. 2007 , 105-122		
2085	Extended Finite Element for Electromechanical Coupling. 2007 ,		2
2084	IUTAM Symposium on Discretization Methods for Evolving Discontinuities. 2007 ,		1
2083	Three-dimensional non-linear fracture mechanics by enriched meshfree methods without asymptotic enrichment. 2007 , 21-36		3
2082	A Global-Local Approach for the Construction of Enrichment Functions for the Generalized FEM and Its Application to Three-Dimensional Cracks. 2007 , 1-26		8
2081	Numerical propagation of dynamic cracks using X-FEM. 2007 , 16, 183-198		
2080	CURVED-CRACK MODELING BY X-FEM AND ITS APPLICATION FOR SIMULATION OF CRACK GROWTH. 2007 , 63, 108-121		5
2079	ON ANALYSIS MODELS OF REINFORCED CORROSION AND THEIR CRACK BEHAVIOR OF CONCRETE. 2007 , 63, 167-178		3
2078	FRACTURE MECHANICS PARAMETER COMPUTATION USING GENERALIZED FINITE ELEMENT WITH DRILLING DEGREES OF FREEDOM. 2007 , 63, 464-474		
2077	Three-dimensional fracture simulations based on the SDA. 2007 , 31, 189-212		35
2076	A discrete model for the dynamic propagation of shear bands in a fluid-saturated medium. 2007 , 31, 347-370		35
2075	A bubble-stabilized finite element method for Dirichlet constraints on embedded interfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 69, 772-793	2.4	75
2074	Level set X-FEM non-matching meshes: application to dynamic crack propagation in elastic-plastic media. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 69, 1553-1569	2.4	83
2073	A computational model for fracturing porous media. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 70, 423-444	2.4	15
2072	A new fast finite element method for dislocations based on interior discontinuities. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 69, 423-441	2.4	60

2071	A study of the representation of cracks with level sets. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 70, 1261-1302	2.4	137
2070	An extended finite element library. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 703-732	2.4	200
2069	XFEM-based crack detection scheme using a genetic algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 1051-1080	2.4	71
2068	A robust algorithm for configurational-force-driven brittle crack propagation with R-adaptive mesh alignment. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 72, 127-155	2.4	108
2067	A multiscale projection method for macro/microcrack simulations. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 1466-1482	2.4	136
2066	A mixed augmented Lagrangian-extended finite element method for modelling elastic-plastic fatigue crack growth with unilateral contact. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 71, 1569-1597	2.4	71
2065	A consistent partly cracked XFEM element for cohesive crack growth. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 72, 464-485	2.4	51
2064	Finite elements with embedded strong discontinuities for the modeling of failure in solids. <i>International Journal for Numerical Methods in Engineering</i> , 2007 , 72, 1391-1433	2.4	170
2063	A simple error estimator for extended finite elements. 2007 , 24, 961-971		71
2062	A three-dimensional large deformation meshfree method for arbitrary evolving cracks. 2007 , 196, 2777-2799		731
2061	Adaptive FEM analysis of selected elastic-visco-plastic problems. 2007 , 196, 3859-3870		9
2060	Energy-based modeling of cohesive and cohesionless cracks via X-FEM. 2007 , 196, 2338-2357		128
2059	A higher order scheme for two-dimensional quasi-static crack growth simulations. 2007 , 196, 2527-2538		8
2058	A new fatigue frictional contact crack propagation model with the coupled X-FEM/LATIN method. 2007 , 196, 3230-3247		55
2057	Derivative recovery and a posteriori error estimate for extended finite elements. 2007 , 196, 3381-3399		107
2056	Modelling of cohesive crack growth in concrete structures with the extended finite element method. 2007 , 196, 4087-4100		162
2055	Numerical modelling of tectonic plates subduction using X-FEM. 2007 , 196, 4283-4293		17
2054	Crack opening conditions at corner nodes in FE analysis with cracking along mesh lines. 2007 , 74, 1963-1982		27

2053	An extended level set method for shape and topology optimization. 2007 , 221, 395-421	142
2052	A simulation-based design paradigm for complex cast components. 2007 , 23, 25-37	40
2051	Crack shielding and amplification due to multiple microcracks interacting with a macrocrack. 2007 , 145, 1-8	53
2050	A Meshfree Method based on the Local Partition of Unity for Cohesive Cracks. 2007 , 39, 743-760	239
2049	Multiscale enrichment based on partition of unity for nonperiodic fields and nonlinear problems. 2007 , 40, 249-259	30
2048	Extended meshfree methods without branch enrichment for cohesive cracks. 2007 , 40, 367-382	144
2047	Search algorithm, and simulation of elastodynamic crack propagation by modified smoothed particle hydrodynamics (MSPH) method. 2007 , 40, 531-546	41
2046	p-Adaptive Ck generalized finite element method for arbitrary polygonal clouds. 2007 , 41, 175-187	14
2045	On XFEM applications to dislocations and interfaces. 2007 , 23, 1721-1738	76
2044	Meshless methods: A review and computer implementation aspects. 2008 , 79, 763-813	778
2043	Numerical implementation of the eXtended Finite Element Method for dynamic crack analysis. 2008 , 39, 573-587	36
2042	A survey of the extended finite element. 2008 , 86, 1141-1151	143
2041	Domain and boundary quadrature for enrichment functions in the extended finite element method. 2008 , 1, 1135-1138	0
2040	Thermo-mechanical modelling of materials containing micro/nano inclusions with imperfect interfaces. 2008 , 1, 1139-1142	7
2039	A two-scale model for fluid flow in an unsaturated porous medium with cohesive cracks. 2008 , 42, 227-238	111
2038	A comparative study on finite element methods for dynamic fracture. 2008 , 42, 239-250	252
2037	An XFEM/level set approach to modelling surface/interface effects and to computing the size-dependent effective properties of nanocomposites. 2008 , 42, 119-131	139
2036	Fracture strength assessment and aging signs detection in human cortical bone using an X-FEM multiple scale approach. 2008 , 42, 579-591	56

2035	Extended digital image correlation with crack shape optimization. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 248-272	2.4	164
2034	Efficient finite element formulation for the analysis of localized failure in beam structures. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 1217-1250	2.4	5
2033	The rs-method for material failure simulations. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 1607-1623	2.4	28
2032	Fracture and fragmentation of simplicial finite element meshes using graphs. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 1547-1570	2.4	28
2031	Parametric enrichment adaptivity by the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 73, 1671-1692	2.4	44
2030	Smooth finite element methods: Convergence, accuracy and properties. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 175-208	2.4	117
2029	Mass lumping strategies for X-FEM explicit dynamics: Application to crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 447-474	2.4	72
2028	Quasi-static crack propagation in plane and plate structures using set-valued traction-separation laws. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 475-505	2.4	36
2027	A regularized XFEM model for the transition from continuous to discontinuous displacements. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 911-944	2.4	42
2026	The extended finite element method in thermoelastic fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 827-847	2.4	130
2025	Blending in the extended finite element method by discontinuous Galerkin and assumed strain methods. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 74, 1645-1669	2.4	99
2024	Crack growth analysis using mesh superposition technique and X-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 75, 291-304	2.4	11
2023	A corrected XFEM approximation without problems in blending elements. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 75, 503-532	2.4	352
2022	A new crack tip element for the phantom-node method with arbitrary cohesive cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 75, 577-599	2.4	176
2021	New development in extended finite element modeling of large elasto-plastic deformations. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 75, 1133-1171	2.4	26
2020	A recovery-type error estimator for the extended finite element method based on singular+smooth stress field splitting. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 545-571	2.4	72
2019	A posteriori error estimation for extended finite elements by an extended global recovery. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 1123-1138	2.4	101
2018	Three-dimensional non-planar crack growth by a coupled extended finite element and fast marching method. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 727-748	2.4	76

2017	Contact with friction in multi-material arbitrary Lagrangian-Eulerian formulations using X-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 893-921	2.4	22
2016	Singularity enrichment for complete sliding contact using the partition of unity finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 1402-1418	2.4	9
2015	Robust and direct evaluation of J2 in linear elastic fracture mechanics with the X-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 1471-1488	2.4	8
2014	A contact algorithm for frictional crack propagation with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 1489-1512	2.4	107
2013	Locally enhanced Voronoi cell finite element model (LE-VCFEM) for simulating evolving fracture in ductile microstructures containing inclusions. <i>International Journal for Numerical Methods in Engineering</i> , 2008 , 76, 1955-1992	2.4	18
2012	Enhancement of fixed-grid methods towards complex fluid-structure interaction applications. 2008 , 57, 1227-1248		26
2011	Approaches to dynamic fracture modelling at finite deformations. 2008 , 56, 613-639		24
2010	On a new extended finite element method for dislocations: Core enrichment and nonlinear formulation. 2008 , 56, 200-214		41
2009	The simulation of dynamic crack propagation using the cohesive segments method. 2008 , 56, 70-92		162
2008	A thermo-mechanical cohesive zone formulation for ductile fracture. 2008 , 56, 3037-3058		48
2007	X-FEM a good candidate for energy conservation in simulation of brittle dynamic crack propagation. 2008 , 197, 309-318		48
2006	An eXtended Finite Element Method/Lagrange multiplier based approach for fluid-structure interaction. 2008 , 197, 1699-1714		193
2005	A multiscale extended finite element method for crack propagation. 2008 , 197, 381-399		81
2004	Extended finite element method on polygonal and quadtree meshes. 2008 , 197, 425-438		101
2003	Analysis and applications of a generalized finite element method with global/local enrichment functions. 2008 , 197, 487-504		142
2002	Discontinuous modelling of shear bands using adaptive meshfree methods. 2008 , 197, 641-658		126
2001	Stability of incompressible formulations enriched with X-FEM. 2008 , 197, 1835-1849		44
2000	Extended finite element method for three-dimensional large plasticity deformations on arbitrary interfaces. 2008 , 197, 1100-1114		35

1999	A smoothed finite element method for plate analysis. 2008 , 197, 1184-1203	247
1998	Assumed enhanced strain and the extended finite element methods: A unification of concepts. 2008 , 197, 2789-2803	70
1997	New finite elements with embedded strong discontinuities in the finite deformation range. 2008 , 197, 3138-3170	64
1996	A heterogeneous cohesive model for quasi-brittle materials considering spatially varying random fracture properties. 2008 , 197, 4027-4039	76
1995	Generalized finite element method for modeling nearly incompressible bimaterial hyperelastic solids. 2008 , 197, 4882-4893	29
1994	Numerical modelling of the effective conductivities of composites with arbitrarily shaped inclusions and highly conducting interface. 2008 , 68, 2818-2825	88
1993	Discrete modeling of crack bridging by a discontinuous platelet with a controlled interface. 2008 , 45, 5059-5073	6
1992	A new discontinuous FE formulation for crack path prediction in brittle solids. 2008 , 45, 6501-6517	4
1991	Modified generalized beam lattice model associated with fracture of reinforced fiber/particle composites. 2008 , 50, 132-141	11
1990	Three-dimensional crack initiation, propagation, branching and junction in non-linear materials by an extended meshfree method without asymptotic enrichment. 2008 , 75, 943-960	276
1989	Modeling of crack propagation via an automatic adaptive mesh refinement based on modified superconvergent patch recovery technique. 2008 , 75, 2921-2945	61
1988	Using the X-FEM method to model the dynamic propagation and arrest of cleavage cracks in ferritic steel. 2008 , 75, 2984-3009	32
1987	Mesh scalability in direct finite element simulation of brittle fracture. 2008 , 75, 4066-4084	3
1986	A geometrically non-linear three-dimensional cohesive crack method for reinforced concrete structures. 2008 , 75, 4740-4758	235
1985	An extended arbitrary Lagrangian-Eulerian finite element method for large deformation of solid mechanics. 2008 , 44, 401-416	33
1984	Advances in Delamination Modeling. 2008 , 61-91	2
1983	X-FEM Toolkit for Automated Crack Onset and Growth Prediction. 2008 ,	14
1982	Curvilinear Crack Growth and Remaining Life Prediction of Aluminum Weldment Using X-FEM. 2008 ,	3

1981	Fluid-structure interaction approaches on fixed grids based on two different domain decomposition ideas. 2008 , 22, 411-427	36
1980	Numerical simulation of cracking in reinforced concrete members by an embedded model. 2008 , 25, 739-763	6
1979	Pre-processing Toolkit for Three-dimensional X-FEM. 2008 ,	3
1978	Challenges in computational materials science: Multiple scales, multi-physics and evolving discontinuities. 2008 , 43, 1-15	75
1977	An enriched-FEM model for simulation of localization phenomenon in Cosserat continuum theory. 2008 , 44, 733-749	38
1976	Modelling the electromechanical coupling of RF switch using Extended Finite Element. 2008 ,	1
1975	Mixed-Mode Dynamic Crack Growth in a Functionally Graded Particulate Composite: Experimental Measurements and Finite Element Simulations. 2008 , 75,	27
1974	A continuous-discontinuous approach to simulate fracture processes in quasi-brittle materials. 2008 , 88, 3281-3298	21
1973	GENERALIZED FINITE ELEMENT METHOD FOR NONLINEAR THREE-DIMENSIONAL ANALYSIS OF SOLIDS. 2008 , 05, 37-62	5
1972	Fracture of piezoelectric materials with the X-FEM. 2008 , 17, 637-649	2
1971	Structures Under Crash and Impact. 2008 ,	3
1970	Extended finite-element analysis of fractures in concrete. 2008 , 161, 187-197	
1969	Dynamic Crack Propagation Analysis by Node-Based FEM. 2008 , 2, 212-221	0
1968	Framework for Flaw Detection: Application to Dynamic Crack Detection in Flat Membranes. 2008 ,	
1967	DEVELOPMENT OF GLOBAL-LOCAL FINITE COVER METHOD AND ITS APPLICATION TO THE ANALYSIS OF CRACK GROWTH IN CONCRETE DUE TO REINFORCEMENT CORROSION. 2008 , 64, 16-26	
1966	EVALUATION OF BLENDING ELEMENTS IN XFEM ON CRACK ANALYSIS AND PROPOSAL FOR IMPROVEMENT OF ANALYTICAL ACCURACY. 2008 , 64, 970-981	3
1965	PROPOSAL ON APPROXIMATION OF PATH-INDEPENDENT M-INTEGRAL BY MAPPING AND ANALYSES OF KINKED OR CURVED CRACK USING X-FEM. 2008 , 64, 303-316	4
1964	Automated Modelling of Evolving Discontinuities. 2009 , 2, 1008-1030	4

1963	FORMULATION OF XFEM BASED ON PUFEM FOR AVOIDING PROBLEM CAUSED BY BLENDING ELEMENTS. 2009 , 65, 228-242	2
1962	EXPERIMENTAL AND NUMERICAL STUDIES ON THE CRACK GROWTH UNDER THE QUASI-STATIC LOADING. 2009 , 65, 321-334	
1961	Numerical Analysis of Static Behavior in a Three-point Bending Test of Aluminum Foam Sandwich Beams using the Extended Finite Element Method. 2009 , 2, 176-180	
1960	Notice of Retraction: The Numerical Simulation of Crack Propagation without Re-Meshing. 2009 ,	1
1959	Design structures subjected to uncertainty using wide bezier curve. 2009 ,	2
1958	Evaluation of Interaction Effect of Two Surface Cracks by Fatigue. 2009 , 417-418, 97-100	
1957	Interaction Effect Analysis of Two Surface Cracks Using S-Version FEM. 2009 ,	6
1956	Growth Behavior of Two Interacting Surface Cracks of Dissimilar Size. 2009 ,	
1955	Numerical Simulation of Ice Action to a Lighthouse. 2009 ,	2
1954	MULTISCALE FINITE ELEMENT METHOD FOR HETEROGENEOUS MEDIA WITH MICROSTRUCTURES: CRACK PROPAGATION IN A POROUS MEDIUM. 2009 , 01, 157-176	2
1953	Preserving topology and elasticity for embedded deformable models. 2009 ,	22
1952	Preserving topology and elasticity for embedded deformable models. 2009 , 28, 1-9	79
1951	Enrichment textures for detailed cutting of shells. 2009 ,	8
1950	Enrichment textures for detailed cutting of shells. 2009 , 28, 1-10	43
1949	A Hermitian Type Triangular Element only with Corner Nodes and its Application to XFEM. 2009 , 417-418, 405-408	
1948	A Package for Fast Finite Element Method based Simulation of X-ray Diffraction From Nano-structures. 2009 , 1228, 10801	
1947	An extended finite element method for hydraulic fracture problems. 2009 , 25, 121-133	158
1946	Sloshing analysis of a liquid storage container using level set X-FEM. 2009 , 25, 357-379	10

1945	An extended finite element framework for slow-rate frictional faulting with bulk plasticity and variable friction. 2009 , 33, 1535-1560		30
1944	Fast integration and weight function blending in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 1-29	2.4	151
1943	Enhanced blending elements for XFEM applied to linear elastic fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 126-148	2.4	78
1942	The extended finite element method for fracture in composite materials. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 214-239	2.4	88
1941	Cracking node method for dynamic fracture with finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 360-385	2.4	94
1940	Crack identification by arrival time using XFEM and a genetic algorithm. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 337-359	2.4	47
1939	hp-Generalized FEM and crack surface representation for non-planar 3-D cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 601-633	2.4	92
1938	A local multigrid X-FEM strategy for 3-D crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 581-600	2.4	49
1937	A dissipation-based arc-length method for robust simulation of brittle and ductile failure. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 1290-1321	2.4	115
1936	Application of the X-FEM to the fracture of piezoelectric materials. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 1535-1565	2.4	83
1935	A moving Kriging interpolation-based meshless method for numerical simulation of Kirchhoff plate problems. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 77, 1371-1395	2.4	92
1934	An extended finite element method with analytical enrichment for cohesive crack modeling. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 48-83	2.4	51
1933	Concurrently coupled atomistic and XFEM models for dislocations and cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 354-378	2.4	68
1932	Error estimation and adaptivity for discontinuous failure. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 528-563	2.4	26
1931	A stable Lagrange multiplier space for stiff interface conditions within the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 931-954	2.4	109
1930	Integration of singular enrichment functions in the generalized/extended finite element method for three-dimensional problems. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 78, 1220-1257	2.4	66
1929	Finite cover method with multi-cover layers for the analysis of evolving discontinuities in heterogeneous media. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 79, 1-24	2.4	42
1928	On time integration in the XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 79, 69-93	2.4	35

1927	An enriched element-failure method (REFM) for delamination analysis of composite structures. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 79, 639-666	2.4	11
1926	Numerical integration over arbitrary polygonal domains based on Schwarz-Christoffel conformal mapping. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 103-134	2.4	135
1925	A variational multiscale method to model crack propagation at finite strains. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 269-289	2.4	25
1924	Generalized finite element method using proper orthogonal decomposition. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 79, 887-906	2.4	26
1923	A hybridizable discontinuous Galerkin method for linear elasticity. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 1058-1092	2.4	73
1922	An enriched cohesive zone model for delamination in brittle interfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 609-630	2.4	33
1921	Element-local level set method for three-dimensional dynamic crack growth. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 80, 1520-1543	2.4	50
1920	Immersed particle method for fluid-structure interaction. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 81, n/a-n/a	2.4	290
1919	Analysis of micro fracture in human Haversian cortical bone under transverse tension using extended physical imaging. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 82, 940-965	2.4	36
1918	The XFEM for high-gradient solutions in convection-dominated problems. <i>International Journal for Numerical Methods in Engineering</i> , 2009 , 82, 1044-1072	2.4	20
1917	Vibration analysis of cracked plates using the extended finite element method. 2009 , 79, 249-262		53
1916	Kinetic friction for multi-material arbitrary Lagrangian Eulerian extended finite element formulations. 2009 , 43, 847-857		8
1915	Generalized finite element method enrichment functions for curved singularities in 3D fracture mechanics problems. 2009 , 44, 73-92		26
1914	A Ck continuous generalized finite element formulation applied to laminated Kirchhoff plate model. 2009 , 44, 377-393		16
1913	Simulating the pervasive fracture of materials and structures using randomly close packed Voronoi tessellations. 2009 , 44, 455-471		56
1912	Developments in the application of the generalized finite element method to thick shell problems. 2009 , 44, 669-682		7
1911	Arbitrary bi-dimensional finite strain cohesive crack propagation. 2009 , 45, 61-75		37
1910	A novel virtual node method for polygonal elements. 2009 , 30, 1233-1246		47

1909	3D adaptive RKPM method for contact problems with elastic-plastic dynamic large deformation. 2009 , 33, 1211-1222	14
1908	A phantom node formulation with mixed mode cohesive law for splitting in laminates. 2009 , 158, 107-124	115
1907	An augmented finite element method for modeling arbitrary discontinuities in composite materials. 2009 , 156, 53-73	109
1906	Numerical simulation of dynamic fracture using finite elements with embedded discontinuities. 2009 , 160, 119-141	101
1905	Toward a virtual platform for materials processing. 2009 , 61, 19-23	29
1904	Numerical modeling of concrete hydraulic fracturing with extended finite element method. 2009 , 52, 559-565	57
1903	Simulation of failure processes with the variational multiscale method. 2009 , 2, 899-902	1
1902	A grid-doubling finite-element technique for calculating dynamic three-dimensional spontaneous rupture on an earthquake fault. 2009 , 178, 845-859	48
1901	Automated dynamic fracture procedure for modelling mixed-mode crack propagation using explicit time integration brick finite elements. 2009 , 32, 357-377	
1900	Prediction of slant ductile fracture using damage plasticity theory. 2009 , 86, 319-328	20
1899	Simulations of instability in dynamic fracture by the cracking particles method. 2009 , 76, 730-741	120
1898	An Abaqus implementation of the extended finite element method. 2009 , 76, 347-368	228
1897	3D adaptive finite element modeling of non-planar curved crack growth using the weighted superconvergent patch recovery method. 2009 , 76, 1703-1728	33
1896	Analytic stress intensity factors for finite elastic disk using symplectic expansion. 2009 , 76, 1866-1882	31
1895	Constitutive models for cohesive zones in mixed-mode fracture of plain concrete. 2009 , 76, 2281-2297	32
1894	Crack propagation toward a desired path by controlling the force direction. 2009 , 76, 2554-2559	6
1893	Homogenization of delamination growth in an ACA flip-chip joint based on micropolar theory. 2009 , 28, 433-444	2
1892	A hybrid element approach to three dimensional problems of cracked anisotropic multi-material. 2009 , 45, 377-385	4

1891	Modeling inclusion problems in viscoelastic materials with the extended finite element method. 2009 , 45, 721-729	30
1890	Development of discrete cracks in concrete loaded by shock waves. 2009 , 36, 700-710	30
1889	A Lagrangian-extended finite-element method in modeling large-plasticity deformations and contact problems. 2009 , 51, 384-401	35
1888	Algorithm for simulating fracture processes in concrete by lattice modeling. 2009 , 52, 26-39	12
1887	Numerical simulation of premixed combustion using an enriched finite element method. 2009 , 228, 3605-3624	14
1886	Thermomechanical modeling of regressing heterogeneous solid propellants. 2009 , 228, 7883-7901	8
1885	Identification of adhesive properties in GLARE assemblies using digital image correlation. 2009 , 57, 1003-1016	55
1884	An adaptive hp-version of the multilevel particle partition of unity method. 2009 , 198, 1260-1272	22
1883	A computational framework of three-dimensional configurational-force-driven brittle crack propagation. 2009 , 198, 1413-1428	71
1882	An explicit dynamics extended finite element method. Part 1: Mass lumping for arbitrary enrichment functions. 2009 , 198, 2297-2317	75
1881	Structural design optimization subjected to uncertainty using fat Bezier curve. 2009 , 199, 210-219	18
1880	Discrete element modelling of drying shrinkage and cracking of soils. 2009 , 36, 61-69	92
1879	Multiscale aggregating discontinuities method for micro-macro failure of composites. 2009 , 40, 417-426	32
1878	Strict bounds for computed stress intensity factors. 2009 , 87, 1015-1021	14
1877	Reformulation of XFEM based on PUFEM for solving problem caused by blending elements. 2009 , 45, 806-816	26
1876	A thermodynamic method for the construction of a cohesive law from a nonlocal damage model. 2009 , 46, 1476-1490	58
1875	Numerical modeling of discrete multi-crack growth applied to pattern formation in geological brittle media. 2009 , 46, 3383-3397	48
1874	New experimental and numerical techniques to study the arrest and the restart of a crack under impact in transparent materials. 2009 , 46, 3480-3491	36

1873	Investigation of mixed-mode stress intensity factors for nonhomogeneous materials using an interaction integral method. 2009 , 46, 3710-3724	93
1872	Using image-based computational modeling to study microstructure-field correlations in metals. 2009 , 57, 4233-4247	39
1871	A state-of-the-art review of the X-FEM for computational fracture mechanics. 2009 , 33, 4269-4282	97
1870	Modelling of thermal shocks in composite materials using a meshfree FEM. 2009 , 44, 1307-1311	40
1869	A non-local finite element based on volumetric strain gradient: Application to ductile fracture. 2009 , 45, 762-767	27
1868	A new continuum FE approach for fracture mechanics discontinuous problems. 2009 , 45, 367-377	8
1867	Digital image correlation and fracture: an advanced technique for estimating stress intensity factors of 2D and 3D cracks. 2009 , 42, 214004	159
1866	Dynamic Response of Cracked Plate Subjected to Impact Loading Using the Extended Finite Element Method (X-FEM). 2009 , 297-306	
1865	A review of extended/generalized finite element methods for material modeling. 2009 , 17, 043001	530
1864	Correction force for releasing crack tip element with XFEM and only discontinuous enrichment. 2009 , 18, 465-483	7
1863	Modeling Failure in Composite Materials with the Extended Finite Element and Level Set Methods. 2009 ,	4
1862	XFEM Toolkit for Delamination Failure Prediction of Composite Bonded Pi Joints. 2009 ,	4
1861	XFEM Toolkit for Crack Path and Life Prediction of Aluminum Structures. 2009 ,	1
1860	Dynamic Fracture of Shells Subjected to Impulsive Loads. 2009 , 76,	59
1859	Numerical Modelling of Nano Inclusions in Small and Large Deformations Using a Level-Set/Extended Finite Element Method. 2009 , 192-199	
1858	Mechanics of Microstructured Solids. 2009 ,	4
1857	Coupling of Peridynamic Theory and Finite Element Method. 2009 ,	2
1856	An Algebraic Treatment of Essential Boundary Conditions in the Particle Partition of Unity Method. 2009 , 31, 1581-1602	11

1855	Stable cutting of deformable objects in virtual environments using XFEM. 2009 , 29, 61-71	43
1854	On the Linear Dependencies of Interpolation Functions in s-Version Finite Element Method. 2009 , 3, 124-135	6
1853	A Virtual Crack Closure-Integral Method for Generalized Finite Element with Drilling and Strain Degrees of Freedoms. 2009 , 3, 303-314	2
1852	Fatigue Crack Growth Simulation Using S-Version FEM : 3rd Report, Fatigue of 3D. Surface Crack. 2009 , 75, 918-924	7
1851	A New Enriched Finite Element Method to Simulate Hydrocarbon Reservoirs Containing Subsurface Features. 2009 ,	2
1850	Coupling of peridynamic theory and the finite element method. 2010 , 5, 707-733	124
1849	Extended Finite Element Methods. 2010 ,	
1848	The optimal XFEM approximation for fracture analysis. 2010 , 10, 012067	
1847	Interaction Effect Analysis of Two Surface Cracks Using S-version FEM. 2010 ,	
1846	Development of Three-Dimensional ENRICHED FREE MESH METHOD and Its Application to Crack Analysis. 2010 , 76, 296-302	
1845	A GROUNDWATER FLOW ANALYSIS SYSTEM APPLYING AN EXTENDED FINITE ELEMENT METHOD. 2010 , 66, 684-694	
1844	Puncture fracture in an aluminum beverage can. 2010 , 37, 150-160	13
1843	On the use of XFEM within the Arlequin framework for the simulation of crack propagation. 2010 , 199, 1403-1414	19
1842	Strong discontinuities in partially saturated poroplastic solids. 2010 , 199, 1513-1535	48
1841	Studied X-FEM enrichment to handle material interfaces with higher order finite element. 2010 , 199, 1922-1936	74
1840	Strain smoothing in FEM and XFEM. 2010 , 88, 1419-1443	229
1839	Controls on initiation and propagation of pumping-induced earth fissures: insights from numerical simulations. 2010 , 18, 1773-1785	36
1838	Dynamic Fracturing Simulation of Brittle Material using the Distinct Lattice Spring Method with a Full Rate-Dependent Cohesive Law. 2010 , 43, 717-726	32

1837	A singular edge-based smoothed finite element method (ES-FEM) for bimaterial interface cracks. 2010 , 45, 109-125		62
1836	Generalized Duffy transformation for integrating vertex singularities. 2010 , 45, 127-140		45
1835	3D fluid-structure-contact interaction based on a combined XFEM FSI and dual mortar contact approach. 2010 , 46, 53-67		58
1834	Higher order tip enrichment of eXtended Finite Element Method in thermoelasticity. 2010 , 46, 851-866		46
1833	From local to global probabilistic modeling of concrete cracking. 2010 , 1, 103-115		29
1832	The influence of fluid flow on modeling quorum sensing in bacterial biofilms. 2010 , 72, 1143-65		24
1831	Concurrent fatigue crack growth simulation using extended finite element method. 2010 , 4, 339-347		4
1830	Meshfree cohesive cracking method for dynamic material failure. 2010 , 6, 103-111		1
1829	Time dependent crack tip enrichment for dynamic crack propagation. 2010 , 162, 33-49		39
1828	Dynamic crack propagation analysis of orthotropic media by the extended finite element method. 2010 , 161, 21-39		64
1827	A comparative study on the modelling of discontinuous fracture by means of enriched nodal and element techniques and interface elements. 2010 , 161, 97-119		54
1826	The evolution of a transverse intra-ply crack coupled to delamination cracks. 2010 , 165, 77-92		21
1825	Extended Finite Element Method for the Analysis of Discontinuities in Rock Masses. 2010 , 28, 643-659		36
1824	Volumetric modeling and interactive cutting of deformable bodies. 2010 , 103, 217-24		31
1823	A coupled molecular dynamics and extended finite element method for dynamic crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 72-88	2.4	20
1822	Analysis of three-dimensional fracture mechanics problems: A two-scale approach using coarse-generalized FEM meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 335-365	2.4	86
1821	Hybrid analytical and extended finite element method (HAX-FEM): A new enrichment procedure for cracked solids. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 269-285	2.4	30
1820	Coarse-graining of multiscale crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 537-563	2.4	104

1819	Strict and effective bounds in goal-oriented error estimation applied to fracture mechanics problems solved with XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 671-700	2.4	38
1818	A higher-order discontinuous enrichment method for the solution of high Péclet advection-diffusion problems on unstructured meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 604-636	2.4	21
1817	An adaptive spacetime discontinuous Galerkin method for cohesive models of elastodynamic fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 1207-1241	2.4	19
1816	Adaptive finite element computation of dielectric and mechanical intensity factors in piezoelectrics with impermeable cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 81, 1492-1513	2.4	18
1815	An embedded Dirichlet formulation for 3D continua. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 537-563	2.4	75
1814	Detection and quantification of flaws in structures by the extended finite element method and genetic algorithms. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 303-328	2.4	65
1813	Generalized finite element enrichment functions for discontinuous gradient fields. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 242-268	2.4	44
1812	An optimally convergent discontinuous Galerkin-based extended finite element method for fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 716-755	2.4	29
1811	Finite deformation formulation for embedded frictional crack with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 773-804	2.4	22
1810	Integrating strong and weak discontinuities without integration subcells and example applications in an XFEM/GFEM framework. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 83, 269-294	2.4	94
1809	Failure of heterogeneous materials: 3D meso-scale FE models with embedded discontinuities. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 82, 1671-1688	2.4	64
1808	Modelling of reinforced-concrete structures providing crack-spacing based on X-FEM, ED-FEM and novel operator split solution procedure. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 83, 452-481	2.4	40
1807	A generalized finite element formulation for arbitrary basis functions: From isogeometric analysis to XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 83, 765-785	2.4	175
1806	A novel singular node-based smoothed finite element method (NS-FEM) for upper bound solutions of fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 83, 1466-1497	2.4	82
1805	Smoothed nodal forces for improved dynamic crack propagation modeling in XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 84, 47-72	2.4	30
1804	The extended/generalized finite element method: An overview of the method and its applications. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 84, 253-304	2.4	826
1803	Multiscale methods for mechanical science of complex materials: Bridging from quantum to stochastic multiresolution continuum. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 83, 1039-1080	2.4	42
1802	Computational continua. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 84, 774-802	2.4	59

1801	Harmonic enrichment functions: A unified treatment of multiple, intersecting and branched cracks in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2010 , 85, n/a-n/a	2.4	8
1800	Interaction integral method for the interfacial fracture problems of two nonhomogeneous materials. 2010 , 42, 435-450		50
1799	Recent developments on damage modeling and finite element analysis for composite laminates: A review. 2010 , 31, 3825-3834		193
1798	An extended finite element method for the simulation of particulate viscoelastic flows. 2010 , 165, 607-624		49
1797	Coupled reliability and boundary element model for probabilistic fatigue life assessment in mixed mode crack propagation. 2010 , 32, 1823-1834		37
1796	A three-dimensional (3D) numerical study of fatigue crack growth using remeshing techniques. 2010 , 77, 94-111		64
1795	Isotropic continuum damage mechanics for concrete under cyclic loading: Stiffness recovery, inelastic strains and frictional sliding. 2010 , 77, 1203-1223		62
1794	An analytical stiffness derivative extended finite element technique for extraction of crack tip Strain Energy Release Rates. 2010 , 77, 3204-3215		19
1793	Modelling and experimental assessment of punching shear in flat slabs with shearheads. 2010 , 32, 3911-3924	28	
1792	A cohesive zone model which is energetically equivalent to a gradient-enhanced coupled damage-plasticity model. 2010 , 29, 976-989		29
1791	Stability and convergence proofs for a discontinuous-Galerkin-based extended finite element method for fracture mechanics. 2010 , 199, 2360-2382		8
1790	Stabilized low-order finite elements for frictional contact with the extended finite element method. 2010 , 199, 2456-2471		72
1789	A simple and robust three-dimensional cracking-particle method without enrichment. 2010 , 199, 2437-2455		547
1788	Accurate recovery-based upper error bounds for the extended finite element framework. 2010 , 199, 2607-2621		40
1787	Generalized Gaussian quadrature rules for discontinuities and crack singularities in the extended finite element method. 2010 , 199, 3237-3249		81
1786	On three-dimensional modelling of crack growth using partition of unity methods. 2010 , 88, 1391-1411		270
1785	Variable-node finite elements with smoothed integration techniques and their applications for multiscale mechanics problems. 2010 , 88, 413-425		24
1784	X-FEM analyses of a thin-walled composite shell structure with a delamination. 2010 , 88, 549-557		32

1783	A study on X-FEM in continuum structural optimization using a level set model. 2010 , 42, 708-719	110
1782	An alternative alpha finite element method (A. 2010 , 233, 2112-2135	45
1781	Numerical study on deformations in a cracked viscoelastic body with the extended finite element method. 2010 , 34, 619-624	26
1780	Crack observation methods, their application and simulation of curved fatigue crack growth. 2010 , 77, 2077-2090	21
1779	Abaqus implementation of extended finite element method using a level set representation for three-dimensional fatigue crack growth and life predictions. 2010 , 77, 2840-2863	133
1778	Implementation of the extended finite element method for dynamic thermoelastic fracture initiation. 2010 , 47, 1392-1404	78
1777	Algorithms for the calculation of X-ray diffraction patterns from finite element data. 2010 , 43, 1287-1299	3
1776	The crack growth prediction in homogeneous materials and bimaterial systems. 2010 , 90, 721-744	5
1775	Extended finite element method and its application in heterogeneous materials with inclusions. 2010 , 10, 012083	6
1774	A unified enrichment scheme for fracture problems. 2010 , 10, 012045	1
1773	Crack Growth Analysis in Weld-Heat Affected Zone Using S-Version FEM. 2010 ,	4
1772	A Variational Technique for Element Free Analysis of Static and Dynamic Fracture Mechanics. 2010 , 454, 31-46	
1771	Damage mechanics applied to the seismic behavior of concrete structures. 2010 , 14, 839-854	1
1770	A Multiscale Molecular Dynamics / Extended Finite Element Method for Dynamic Fracture. 2010 , 211-237	
1769	Propagation of an Air Finger Into a Fluid Filled Bifurcation. 2010 ,	
1768	Modeling of Cohesive Zone and Crack Growth in Ni-Al Thin-Film Using MD-XFEM Based Approach. 2010 ,	
1767	Advances in Computational Fluid-Thin-Walled-Structure Interaction [Formulations and Solvers. 2010 , 175-203	1
1766	Analysis of periodic dislocation networks using x-ray diffraction and extended finite element modeling. 2010 , 96, 131905	15

1765	Life Prediction of Aerospace Structures by Combined XFEM and Advanced Fatigue Models. 2010,	
1764	MULTISCALE SIMULATION OF MICROCRACK BASED ON A NEW ADAPTIVE FINITE ELEMENT METHOD. 2010, 24, 2719-2724	
1763	On the potential of computational methods and numerical simulation in ice mechanics. 2010, 10, 012102	9
1762	Modeling of Powder Forming Processes; Application of a Three-Invariant Cap Plasticity and an Enriched Arbitrary Lagrangian-Eulerian FE Method. 2010, 257-299	
1761	Modeling delamination in composite laminates using XFEM by new orthotropic enrichment functions. 2010, 10, 012240	9
1760	Hierarchical Partition of Unity Field Compositions (HPFC) for Optimal Design in the Presence of Cracks. 2010, 17, 467-480	5
1759	Finite Element Coupled Deformation and Fluid Flow in Fractured Porous Media. 2010,	10
1758	Characteristics of windshield cracking upon low-speed impact: Numerical simulation based on the extended finite element method. 2010, 48, 582-588	70
1757	Improvement of algorithm for numerical crack modelling. 2010, 10, 19-35	26
1756	Impact of fracture development on the effective permeability of porous rocks as determined by 2-D discrete fracture growth modeling. 2010, 115,	34
1755	Treatment of discontinuous interface in liquid-solid forming with extended finite element method. 2010, 20, s911-s915	8
1754	Computer Methods in Mechanics. 2010,	0
1753	Development of a finite element enriched method adapted for the case of multiple cracked structure. 2010, 19, 217-228	
1752	Reanalysis of the Extended Finite Element Method for Crack Initiation and Propagation. 2010,	4
1751	Comparison of XFEM, CZM and PD for Predicting Crack Initiation and Propagation. 2010,	1
1750	Level Set-Based Topology Optimization for Mechanical Structures with Large Deformation Using a Particle Method. 2010,	
1749	Enhanced XFA3D for Fatigue Crack Growth and Life Prediction in Aluminum Structures. 2010,	0
1748	A Coupled Cohesive and XFEM for 3-D Delamination Onset and Growth Prediction. 2010,	1

1747	Fluid Structure Interaction II. 2010 ,	35
1746	Digital-image correlation and XFEM based shock-reliability models for leadfree and advanced interconnects. 2010 ,	6
1745	Predicting crack initiation and propagation using XFEM, CZM and peridynamics: A comparative study. 2010 ,	5
1744	Shape Sensitivity Analysis for 2D Mixed Mode Fractures Using Extended FEM (XFEM) and Level Set Method (LSM)#. 2010 , 38, 328-347	14
1743	Simulation for Cutting Deformable Model Based on X-FEM. 2010 ,	
1742	Lifetime prediction for solder joints with the extended finite element method. 2011 ,	3
1741	Three-Dimensional Magnetostatic Analysis Using Structured Mesh and Nodal Elements. 2011 , 47, 198-206	8
1740	Extended Finite Element Modeling: Basic Review and Programming. 2011 , 03, 713-718	4
1739	Crack models based on the extended finite element method. 2011 , 221-264	1
1738	The extended finite element method (XFEM) for discontinuous rock masses. 2011 , 28, 340-369	14
1737	Free Mesh Method: fundamental conception, algorithms and accuracy study. 2011 , 87, 115-34	3
1736	MULTISCALE CONTINUOUS AND DISCONTINUOUS MODELING OF HETEROGENEOUS MATERIALS: A REVIEW ON RECENT DEVELOPMENTS. 2011 , 03, 229-270	118
1735	Multiscale and Multiphysics Processes in Geomechanics. 2011 ,	2
1734	Investigation of Fracture Behavior of Heterogeneous Infrastructure Materials with Extended-Finite-Element Method and Image Analysis. 2011 , 23, 1662-1671	27
1733	Numerical simulation of the mechanical behaviour of porous concrete. 2011 , 28, 984-1002	12
1732	Numerical Modeling of Concrete Cracking. 2011 ,	12
1731	The surface cracking behavior in air plasma sprayed thermal barrier coating system incorporating interface roughness effect. 2011 , 258, 811-817	60
1730	A general and efficient computational procedure for modelling the Kapitza thermal resistance based on XFEM. 2011 , 50, 1220-1224	62

1729	Crack growth calculations in solder joints based on microstructural phenomena with X-FEM. 2011 , 50, 1145-1156	25
1728	A study of finite size effects on cracked 2-D piezoelectric media using extended finite element method. 2011 , 50, 1834-1845	26
1727	XFEM fracture analysis of shells: The effect of crack tip enrichments. 2011 , 50, 2793-2813	43
1726	3D Composite Finite Elements for Elliptic Boundary Value Problems with Discontinuous Coefficients. 2011 , 33, 2115-2143	19
1725	Improved implementation of the extended finite element method for stress analysis around cracks. 2011 , 11, 787-805	10
1724	Physically based simulation of heterogeneous deformable models using XFEM. 2011 ,	
1723	STUDY ON WAVE PROPAGATION ANALYSES IN HETEROGENEOUS MATERIALS USING X-FEM. 2011 , 67, 69-81	
1722	BE-FE?????????????????????????????????????. 2011 , 67, I_153-I_159	
1721	Crack Growth Prediction of the Steam Turbine Generator Shaft. 2011 , 305, 012023	0
1720	Multi-Scale Analysis of Heterogeneous Materials: Hierarchical Concurrent Multi-Level Models. 2011 , 537-584	
1719	Linear buckling analysis of cracked plates by SFEM and XFEM. 2011 , 6, 1213-1238	52
1718	Application of Xfem with Shifted-Basis Approximation to Computation of Stress Intensity Factors. 2011 , 58,	5
1717	Topology Optimization Incorporating Level Set Boundary Expressions Using a Particle Method. 2011 , 77, 2054-2066	1
1716	3D crack network analysis during a scratch test of a polymer: A combined experimental and multigrid X-FEM based numerical approach. 2011 , 44, 1320-1328	11
1715	A Hexahedral Multigrid Approach for Simulating Cuts in Deformable Objects. 2011 , 17, 1663-75	43
1714	Modeling the transition of microcracks into macrocracks in heterogeneous viscoelastic media using a two-way coupled multiscale model. 2011 , 48, 3160-3175	23
1713	A singular ES-FEM for plastic fracture mechanics. 2011 , 200, 2943-2955	26
1712	Shell Finite Cell Method: A high order fictitious domain approach for thin-walled structures. 2011 , 200, 3200-3209	48

1711	A new way to treat material discontinuities in the numerical manifold method. 2011 , 200, 3296-3308	45
1710	A three-dimensional self-adaptive cohesive zone model for interfacial delamination. 2011 , 200, 3540-3553	19
1709	Surface Lagrangian Remeshing: A new tool for studying long term evolution of continental lithosphere from 2D numerical modelling. 2011 , 37, 1067-1074	10
1708	An XFEM Based Fixed-Grid Approach for 3D Fluid-Structure Interaction. 2011 , 327-349	0
1707	Analysis and computations of oscillating crack propagation in a heated strip. 2011 , 167, 57-70	19
1706	Simulation of fracture in heterogeneous elastic materials with cohesive zone models. 2011 , 168, 15-29	28
1705	An XFEM/Spectral element method for dynamic crack propagation. 2011 , 169, 183-198	48
1704	Equilibrium state of mode-I sub-interfacial crack growth in bi-materials. 2011 , 170, 27-36	18
1703	Predicting crack propagation with peridynamics: a comparative study. 2011 , 171, 65-78	137
1702	On the use of enriched finite element method to model subsurface features in porous media flow problems. 2011 , 15, 721-736	28
1701	Parallel simulations of three-dimensional cracks using the generalized finite element method. 2011 , 47, 265-282	28
1700	A discrete element model to describe failure of strong rock in uniaxial compression. 2011 , 13, 341-364	60
1699	Development of X-FEM methodology and study on mixed-mode crack propagation. 2011 , 27, 406-415	22
1698	A Meshless Cohesive Segments Method for Crack Initiation and Propagation in Composites. 2011 , 18, 45-63	17
1697	Shape optimization for 2-D mixed-mode fracture using Extended FEM (XFEM) and Level Set Method (LSM). 2011 , 44, 165-181	9
1696	Stable enrichment and local preconditioning in the particle-partition of unity method. 2011 , 118, 137-170	50
1695	Multilevel particle-partition of unity method. 2011 , 118, 307-328	3
1694	Evaluation on reproduction of priori knowledge in XFEM. 2011 , 47, 424-433	8

1693	Application of a mesh-free continuum method for simulation of rock caving processes. 2011 , 48, 703-711	35
1692	Physically-based Dirac δ delta functions in the static analysis of multi-cracked Euler-Bernoulli and Timoshenko beams. 2011 , 48, 2184-2195	51
1691	Extended finite element modeling of deformable porous media with arbitrary interfaces. 2011 , 35, 5426-5441	33
1690	Coordinate-free derivation and weak formulation of a general imperfect interface model for thermal conduction in composites. 2011 , 71, 1209-1216	34
1689	Finite element simulation of tensile bond strength of atmospheric plasma spraying thermal barrier coatings. 2011 , 205, 2964-2969	18
1688	A cell based smoothed finite element method for free vibration and buckling analysis of shells. 2011 , 15, 347-361	24
1687	Continuous-discontinuous formulation for ductile fracture. 2011 , 4, 271-281	20
1686	Modeling crack in viscoelastic media using the extended finite element method. 2011 , 54, 1599-1606	7
1685	The numerical simulation of interface crack propagation without re-meshing. 2011 , 54, 1923-1929	3
1684	Arch-dam crack deformation monitoring hybrid model based on XFEM. 2011 , 54, 2611-2617	14
1683	A novel enriched CB shell element method for simulating arbitrary crack growth in pipes. 2011 , 54, 1520-1531	18
1682	An Algorithm to compute damage from load in composites. 2011 , 5, 180-193	16
1681	Multiscale Modeling of Concrete. 2011 , 18, 341-393	154
1680	Frictional slip plane growth by localization detection and the extended finite element method (XFEM). 2011 , 35, 1278-1298	43
1679	Electrostatic simulation using XFEM for conductor and dielectric interfaces. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, n/a-n/a	2.4 2
1678	A higher-order extended finite element method for dislocation energetics in strained layers and epitaxial islands. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 920-938	2.4 9
1677	A coupled two-scale computational scheme for the failure of periodic quasi-brittle thin planar shells and its application to masonry. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 1177-1206	2.4 59
1676	Hanging nodes and XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 404-430	2.4 63

1675	A multiple level set approach to prevent numerical artefacts in complex microstructures with nearby inclusions within XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 1436-1459 ^{2.4} 40	2.4	40
1674	Combination of the material force concept and the extended finite element method for mixed mode crack growth simulations. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 1522-1542	2.4	9
1673	A partly and fully cracked triangular XFEM element for modeling cohesive fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 85, 1667-1686	2.4	5
1672	3D corrected XFEM approach and extension to finite deformation theory. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 431-452	2.4	66
1671	A discontinuous enrichment method for variable-coefficient advection-diffusion at high Péclet number. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 87, 309-335	2.4	24
1670	Accurate fracture modelling using meshless methods, the visibility criterion and level sets: Formulation and 2D modelling. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 249-268 ^{2.4} 89	2.4	89
1669	An X-FEM and level set computational approach for image-based modelling: Application to homogenization. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 915-934	2.4	74
1668	Higher-order extended finite elements with harmonic enrichment functions for complex crack problems. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 560-574	2.4	19
1667	Delamination analysis of composites by new orthotropic bimaterial extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 1507-1543	2.4	72
1666	Development of a quadratic finite element formulation based on the XFEM and NURBS. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 598-617	2.4	40
1665	X-FEM in isogeometric analysis for linear fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 87, 541-565	2.4	189
1664	X-FEM analysis of the effects of holes or other cracks on dynamic crack propagations. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 618-636	2.4	24
1663	A level set-based topology optimization method targeting metallic waveguide design problems. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 87, 844-868	2.4	51
1662	On the performance of strain smoothing for quadratic and enriched finite element approximations (XFEM/GFEM/PUFEM). <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 86, 637-666	2.4	120
1661	Uncertainty quantification in homogenization of heterogeneous microstructures modeled by XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 257-278	2.4	68
1660	Three-dimensional numerical modelling by XFEM of spring-layer imperfect curved interfaces with applications to linearly elastic composite materials. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 307-328	2.4	23
1659	A quasi-static crack growth simulation based on the singular ES-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 473-492	2.4	26
1658	Embedded interfaces by polytope FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 715-748	2.4	15

1657	An augmented cohesive zone element for arbitrary crack coalescence and bifurcation in heterogeneous materials. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 841-861	2.4	53
1656	An XFEM method for modeling geometrically elaborate crack propagation in brittle materials. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 1042-1065	2.4	60
1655	Fracture in magnetoelastic materials using the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2011 , 88, 1238-1259	2.4	32
1654	An XFEM-based embedding mesh technique for incompressible viscous flows. 2011 , 65, 166-190		20
1653	Multiple random crack propagation using a boundary element formulation. 2011 , 78, 1077-1090		54
1652	Towards optimization of crack resistance of composite materials by adjustment of fiber shapes. 2011 , 78, 944-960		29
1651	Effective 3D failure simulations by combining the advantages of embedded Strong Discontinuity Approaches and classical interface elements. 2011 , 78, 2470-2485		33
1650	Analysis of anisotropic Mindlin plate model by continuous and non-continuous GFEM. 2011 , 47, 698-717		9
1649	A variational approach for evaluation of stress intensity factors using the element free Galerkin method. 2011 , 48, 1171-1179		24
1648	New finite elements with embedded strong discontinuities for the modeling of failure in electromechanical coupled solids. 2011 , 200, 141-161		35
1647	Evaluation and verification of an HSDT-Layerwise generalized finite element formulation for adaptive piezoelectric laminated plates. 2011 , 200, 675-691		16
1646	A moving Kriging interpolation-based element-free Galerkin method for structural dynamic analysis. 2011 , 200, 1354-1366		84
1645	Fast and robust level set update for 3D non-planar X-FEM crack propagation modelling. 2011 , 200, 2160-2180		39
1644	A Nitsche-extended finite element method for earthquake rupture on complex fault systems. 2011 , 200, 2859-2870		16
1643	Experimental application and enhancement of the XFEM/EA algorithm for the detection of flaws in structures. 2011 , 89, 556-570		66
1642	A singular cell-based smoothed radial point interpolation method for fracture problems. 2011 , 89, 1378-1396		40
1641	Natural frequencies of cracked functionally graded material plates by the extended finite element method. 2011 , 93, 3082-3092		106
1640	Adaptive multiple scale meshless simulation on springback analysis in sheet metal forming. 2011 , 35, 436-451		8

1639	A novel variable power singular element in G space with strain smoothing for bi-material fracture analyses. 2011 , 35, 1303-1317	13
1638	A singular edge-based smoothed finite element method (ES-FEM) for crack analyses in anisotropic media. 2011 , 78, 85-109	46
1637	Calculation of KII in crack face contacts using X-FEM. Application to fretting fatigue. 2011 , 78, 428-445	9
1636	Orthotropic enriched element free Galerkin method for fracture analysis of composites. 2011 , 78, 1906-1927	47
1635	A self-adaptive finite element approach for simulation of mixed-mode delamination using cohesive zone models. 2011 , 78, 2202-2219	15
1634	Fretting fatigue life prediction using the extended finite element method. 2011 , 53, 217-225	33
1633	Investigation on periodic cracking of elastic film/substrate system by the extended finite element method. 2011 , 257, 6718-6724	28
1632	The extended finite element method for two-phase and free-surface flows: A systematic study. 2011 , 230, 3369-3390	61
1631	Finite element analysis of quasistatic crack propagation in brittle media with voids or inclusions. 2011 , 230, 6866-6899	13
1630	Numerical simulation of crack growth through particulate clusters in brittle matrix using the XFEM technique. 2011 , 10, 786-791	7
1629	A comparative study of the different procedures for seismic cracking analysis of concrete dams. 2011 , 31, 1594-1606	57
1628	A Novel Methodology for Fatigue Delamination Growth Analysis of Composites. 2011 , 488-489, 763-766	8
1627	Crack Propagation Analysis of Concrete Beam Subjected to Three-Point Bending Using XFEM. 2011 , 94-96, 1655-1658	3
1626	Role of geomechanically grown fractures on dispersive transport in heterogeneous geological formations. 2011 , 84, 056301	41
1625	Second Sound in a Cracked Layer Based on Lord-Shulman Theory. 2011 , 34, 181-200	24
1624	Stress Corrosion Cracking Analysis under Thermal Residual Stress Field Using S-FEM. 2011 , 462-463, 431-436	4
1623	ARBITRARY DISCONTINUITIES IN THE NUMERICAL MANIFOLD METHOD. 2011 , 08, 315-347	13
1622	Failure Load Prediction of Bolted Single-Lap Composite Joint Based on XFEM. 2011 , 250-253, 742-745	

1621 IT-Infrastructure for an Integrated Visual Analysis of Distributed Heterogeneous Simulations. **2011**, 328-330, 1940-1946

1620 Failure Analysis of Bolted Composite Joint Based on Extended Finite Element. **2011**, 488-489, 771-774

1619 EIGENVALUE ANALYSIS OF THIN PLATE WITH COMPLICATED SHAPES BY A NOVEL MESH-FREE METHOD. **2011**, 03, 21-46 13

1618 Numerical Solution of an Edge Cracked 2-D Piezoelectric Media Using Extended Finite Element Method. **2011**, 110-116, 91-98 1

1617 Numerical Test of Crack Propagation Path in Asphalt Beam Using Coupled Extended Finite Element with Field Variable Method. **2011**, 250-253, 2754-2759 3

1616 Multiscale Modeling and Simulation of Composite Materials and Structures. **2011**, 215-231 10

1615 Virtual Testing for Advanced Aerospace Composites: Advances and Future Needs. **2011**, 133, 17

1614 A review of numerical modeling of three-dimensional braided textile composites. **2011**, 45, 2415-2436 62

1613 Nonlinear Fracture Analysis of Delamination Crack Jumps in Laminated Composites. **2011**, 24, 181-188 19

1612 Investigation of Stress Intensity Factors for an Interface Crack in Multi-Interface Materials Using an Interaction Integral Method. **2011**, 78, 10

1611 Study of Crack Growth Based on Extended Finite Element Method. **2012**, 446-449, 3639-3642

1610 A Novel Approach for Evaluation of Stress Intensity Factors Using X-FEM. **2012**, 446-449, 816-823

1609 An Efficient Computational Procedure of Fatigue Crack Growth under Variable Amplitude Loading via XFEM. **2012**, 538-541, 3012-3020

1608 Study of Numerical Problem Based on the Extended Finite Element Method. **2012**, 472-475, 1623-1626

1607 Shape optimization approach based on the extended finite element method. **2012**, 31, 477-497 1

1606 An Edge-Based Smoothed Point Interpolation Method for Material Discontinuity. **2012**, 19, 3-17 9

1605 X-FEM Applied to Three-Dimensional Curvilinear Crack Front. **2012**, 472-475, 1418-1425 1

1604 Numerical Study of Stress Intensity Factor in Notched Specimens Using Extended Finite Element Method. **2012**, 166-169, 2995-2998

1603	AN IMPROVED FINITE ELEMENT METHOD FOR CRACKS WITH MULTIPLE BRANCHES. 2012 , 09, 1250043	1
1602	Nanotechnology for cartilage and bone regeneration. 2012 , 571-598	2
1601	Determination of sharp V-notch stress intensity factors using the extended finite element method. 2012 , 47, 95-103	18
1600	RKPM MESHLESS ANALYSIS OF BRITTLE-TO-DUCTILE FAILURE. 2012 , 09, 1250044	
1599	Thermal Interfaces by Higher-Order Polytope FEM. 2012 , 35, 103-117	0
1598	A Comparison of Cohesive Crack Model and Crack Band Model in Concrete Fracture. 2012 , 170-173, 3375-3380	
1597	Elastic micro-strain energy of austenite \bar{h} artensite interface in NiTi. 2012 , 20, 035001	10
1596	Analysis of Multi-Crack Growth in Asphalt Pavement Based on Extended Finite Element Method. 2012 , 588-589, 1926-1929	1
1595	Fracture Characterization of Adhesive Joints in Carbon/Epoxy Wind Turbine Blades. 2012 ,	
1594	A Discrete Element Approach to Model Breakable Railway Ballast. 2012 , 7,	16
1593	Level set propagation for mixed-mode crack advance. 2012 , 21, 219-230	
1592	RECENT ADVANCES IN COMPUTATIONAL MECHANICS FOR CIVIL ENGINEERING. 2012 , 68, 31-50	
1591	A comparative study on PU-based finite element methods for approximating strong/weak discontinuities. 2012 , 68, I_129-I_138	
1590	Prediction of Potential Cracking Failure Modes in Three-Dimensional Airfield Rigid Pavements with Existing Cracks and Flaws. 2012 , 2266, 11-19	4
1589	Application of Extended Finite Element Method to Cracked Concrete Elements [Numerical Aspects. 2012 , 58, 409-431	3
1588	Crack growth simulation of bulk and ultrafine grained 7075 Al alloy by XFEM. 2012 , 44, 252	10
1587	Modal Stress Intensity Factor Using Extended Finite Element Method. 2012 , 232, 686-690	1
1586	Modelling dynamic crack propagation by distinct lattice spring model. 2012 , 321-326	3

- 1585 Large-Scale Fracture Mechanics Analysis Using Partitioned Iterative Coupling Algorithm. **2012**, 78, 966-975 2
- 1584 Propagation and arrest of cleavage cracks in a nuclear pressure vessel steel. **2012**, 64, 17-21 14
- 1583 Shape sensitivity analysis in the extended finite element method. **2012**, 12, 693-694
- 1582 Levelset based fluid topology optimization using the extended finite element method. **2012**, 46, 311-326 98
- 1581 A consistent projection-based SUPG/PSPG XFEM for incompressible two-phase flows. **2012**, 28, 1309-1322 8
- 1580 Strong discontinuities in antiplane/torsional problems of computational failure mechanics. **2012**, 178, 3-32 9
- 1579 Simulation of the shear-tensile mode transition on dynamic crack propagations. **2012**, 178, 195-213 10
- 1578 Crack propagation criteria in three dimensions using the XFEM and an explicit-implicit crack description. **2012**, 178, 51-70 41
- 1577 Error controlled adaptive multiscale XFEM simulation of cracks. **2012**, 178, 147-156 17
- 1576 Multiscale numerical modeling of propagation and coalescence of multiple cracks in rock masses. **2012**, 55, 15-27 71
- 1575 A domain-independent interaction integral for fracture analysis of nonhomogeneous piezoelectric materials. **2012**, 49, 3301-3315 23
- 1574 Numerical Simulation to Evaluate Fatigue Fracture Behavior of Concrete Beam with Initial Crack. **2012**,
- 1573 Cohesive Cracking Simulation of Asphalt Mixture with Reflective Crack through XFEM. **2012**, 204-208, 1721-1729 3
- 1572 Some numerical issues on the use of XFEM for ductile fracture. **2012**, 50, 611-629 12
- 1571 A cohesive crack propagation model: Mathematical theory and numerical solution. **2012**, 12, 1705-1729 11
- 1570 Feasibility of the Extended Finite Element Method for the Simulation of Composite Bonded Joints. **2012**, 730-732, 513-518 1
- 1569 Mesolevel Modeling of Failure in Composite Laminates: Constitutive, Kinematic and Algorithmic Aspects. **2012**, 19, 381-425 33
- 1568 Improvement of the extended finite element method for ductile crack growth. **2012**, 551, 255-271 18

1567	A joined finite element based method to simulate 3D crack network initiation and propagation in mechanical and thermal fatigue. 2012 , 44, 279-291	5
1566	An eXtended Finite Element Method (XFEM) study on the effect of reinforcing particles on the crack propagation behavior in a metal matrix composite. 2012 , 44, 151-156	44
1565	Implementation of a high order lattice spring model for elasticity. 2012 , 49, 2568-2581	24
1564	Application of X-FEM to study two-unequal-collinear cracks in 2-D finite magnetoelctroelastic specimen. 2012 , 60, 75-98	14
1563	Extended finite element simulation of stationary dynamic cracks in piezoelectric solids under impact loading. 2012 , 62, 243-257	83
1562	On the experimental and numerical investigation of clay/epoxy nanocomposites. 2012 , 94, 3142-3148	34
1561	A micromechanical damage simulation of dual phase steels using XFEM. 2012 , 54, 271-279	106
1560	Crack initiation and path selection in brittle specimens: A novel experimental method and computations. 2012 , 89, 65-74	6
1559	Analysis of three-dimensional fracture mechanics problems: A non-intrusive approach using a generalized finite element method. 2012 , 90, 41-64	30
1558	Adaptive mesh refinement and coarsening for cohesive zone modeling of dynamic fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 92, 1-35	2.4 54
1557	Tailored Extended Finite-Element Model for Predicting Crack Propagation and Fracture Properties within Idealized and Digital Cementitious Material Samples. 2012 , 138, 89-100	9
1556	Fracture analysis of FRP-reinforced beams by orthotropic XFEM. 2012 , 46, 1367-1389	14
1555	A generalized finite element method with global-local enrichment functions for confined plasticity problems. 2012 , 50, 563-578	37
1554	Recent research progress in computational solid mechanics. 2012 , 57, 4683-4688	4
1553	A COMPARISON BETWEEN THE NMM AND THE XFEM IN DISCONTINUITY MODELING. 2012 , 09, 1240030	16
1552	Enriched goal-oriented error estimation applied to fracture mechanics problems solved by XFEM. 2012 , 25, 393-403	7
1551	Analysis and improvements of global local enrichments for the Generalized Finite Element Method. 2012 , 245-246, 47-62	41
1550	A coupling approach of discretized peridynamics with finite element method. 2012 , 245-246, 163-175	114

1549	Quadratically consistent one-point (QC1) quadrature for meshfree Galerkin methods. 2012 , 245-246, 256-272	15
1548	Extended finite element method for dynamic fracture of piezo-electric materials. 2012 , 92, 19-31	51
1547	Thermo-hydro-mechanical modeling of impermeable discontinuity in saturated porous media with X-FEM technique. 2012 , 96, 701-723	40
1546	Forensic numerical analysis of gas venting in Southwestern Ontario. 2012 , 151, 47-55	4
1545	The effect of thermally grown oxide on multiple surface cracking in air plasma sprayed thermal barrier coating system. 2012 , 208, 7-13	42
1544	Mechanical Assistance to DIC. 2012 , 4, 159-168	15
1543	Extended finite element method for computation of mixed-mode stress intensity factors in three dimensions. 2012 , 31, 373-380	2
1542	XFEM schemes for level set based structural optimization. 2012 , 7, 335-356	22
1541	A Lagrange-multiplier-based XFEM to solve pressure Poisson equations in problems with quasi-static interfaces. 2012 , 55, 693-705	3
1540	Finite Element Analysis of Plastic Collapse and Crack Behavior of Steel Pressure Vessels and Piping Using XFEM. 2012 , 12, 707-718	18
1539	Fracture properties of epoxy asphalt mixture based on extended finite element method. 2012 , 19, 3335-3341	14
1538	Discretized peridynamics for linear elastic solids. 2012 , 50, 579-590	56
1537	New anisotropic crack-tip enrichment functions for the extended finite element method. 2012 , 50, 591-601	32
1536	Crack Growth and Residual Strength Prediction of Thin-Walled Aluminum Structures Using XSHELL. 2012 ,	2
1535	On the role of enrichment and statical admissibility of recovered fields in a posteriori error estimation for enriched finite element methods. 2012 , 29, 814-841	23
1534	Dynamic Stress Intensity Factor Computation by Using Xfem Formulation. 2012 , 232, 716-720	
1533	A NEW CRACK TIP ENRICHMENT FUNCTION IN THE EXTENDED FINITE ELEMENT METHOD FOR GENERAL INELASTIC MATERIALS. 2012 , 10, 343-360	8
1532	A New Interaction Integral Method for Nonhomogeneous Materials. 2012 , 450-451, 605-609	

1531	Generalizations of the Finite Element Method. 2012 , 10, 3-24		21
1530	T-stress evaluations of an interface crack in the materials with complex interfaces. 2012 , 177, 25-37		11
1529	A new weight-function enrichment in meshless methods for multiple cracks in linear elasticity. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 177-195	2.4	37
1528	Inexact Schwarz-algebraic multigrid preconditioners for crack problems modeled by extended finite element methods. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 311-328	2.4	32
1527	Lower-dimensional interface elements with local enrichment: application to coupled hydro-mechanical problems in discretely fractured porous media. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, n/a-n/a	2.4	20
1526	An explicit residual-type error estimator for -quadrilateral extended finite element method in two-dimensional linear elastic fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 1118-1155	2.4	20
1525	Application of an elastoplastic spectral-element method to 3D slope stability analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 1-26	2.4	27
1524	T-stress evaluations for nonhomogeneous materials using an interaction integral method. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 1393-1413	2.4	27
1523	On enrichment functions in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 186-217	2.4	15
1522	Three-dimensional finite elements with embedded strong discontinuities to model material failure in the infinitesimal range. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 1291-1330	2.4	39
1521	Enriched space-time finite element method: a new paradigm for multiscaling from elastodynamics to molecular dynamics. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 92, 115-140	2.4	13
1520	Error estimation for crack simulations using the XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 91, 1459-1474	2.4	41
1519	Adaptive atomistic-to-continuum modeling of propagating defects. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 92, 835-856	2.4	18
1518	Three-dimensional integration strategies of singular functions introduced by the XFEM in the LEFM. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 92, 1117-1138	2.4	22
1517	Cahn-Hilliard modeling of particles suspended in two-phase flows. 2012 , 69, 995-1015		16
1516	Extended finite element method for viscous flow inside complex three-dimensional geometries with moving internal boundaries. 2012 , 70, 775-792		10
1515	Toward application of conformal decomposition finite elements to non-colloidal particle suspensions. 2012 , 68, 1409-1421		4
1514	A two-dimensional co-rotational Timoshenko beam element with XFEM formulation. 2012 , 49, 667-683		8

1513	Numerical investigation of dynamic crack branching under biaxial loading. 2012 , 176, 151-161	6
1512	X-FEM simulation for two-unequal-collinear cracks in 2-D finite piezoelectric specimen. 2012 , 8, 129-148	18
1511	An Experimental Evaluation of Material Properties and Fracture Simulation of Cryorolled 7075 Al Alloy. 2012 , 21, 1167-1181	8
1510	Application of the expanded distinct element method for the study of crack growth in rock-like materials under uniaxial compression. 2012 , 6, 121	8
1509	Impact simulation of different mode failure. 2012 , 16, 610-617	
1508	A polygonal finite element method for modeling arbitrary interfaces in large deformation problems. 2012 , 50, 19-33	40
1507	Modeling the cracking process of rocks from continuity to discontinuity using a cellular automaton. 2012 , 42, 87-99	33
1506	Explicit dynamics X-FEM simulation of heterogeneous materials. 2012 , 56, 52-79	4
1505	Three-dimensional modeling of carbon/epoxy to titanium single-lap joints with variable adhesive recess length. 2012 , 38, 25-30	16
1504	The numerical simulation of fatigue crack growth using extended finite element method. 2012 , 36, 109-119	150
1503	On the influence of steel microstructure on short crack growth under cyclic loading. 2012 , 41, 83-89	11
1502	Mathematical and numerical model of solidification process of pure metals. 2012 , 55, 4276-4284	15
1501	Extended finite element method with edge-based strain smoothing (ESm-XFEM) for linear elastic crack growth. 2012 , 209-212, 250-265	168
1500	Stable Generalized Finite Element Method (SGFEM). 2012 , 201-204, 91-111	172
1499	Gradient-enhanced damage modeling of cracked bodies by reproducing kernel element method. 2012 , 213-216, 266-288	0
1498	A 3D interface-enriched generalized finite element method for weakly discontinuous problems with complex internal geometries. 2012 , 217-220, 46-57	55
1497	The singular edge-based smoothed finite element method for stationary dynamic crack problems in 2D elastic solids. 2012 , 233-236, 68-80	49
1496	Investigation of linear dependence problem of three-dimensional partition of unity-based finite element methods. 2012 , 233-236, 137-151	20

1495	A finite element approach coupling a continuous gradient damage model and a cohesive zone model within the framework of quasi-brittle failure. 2012 , 237-240, 244-259	35
1494	Simulation of the flow of a viscoelastic fluid around a stationary cylinder using an extended finite element method. 2012 , 57, 183-194	26
1493	Frictional crack initiation and propagation analysis using the numerical manifold method. 2012 , 39, 38-53	221
1492	Delamination modelling of GLARE using the extended finite element method. 2012 , 72, 788-791	71
1491	Simulation of multistage excavation based on a 3D spectral-element method. 2012 , 100-101, 54-69	13
1490	Fracture analysis of composites by time independent moving-crack orthotropic XFEM. 2012 , 54, 20-37	43
1489	Crack growth analysis in a weld-heat-affected zone using S-version FEM. 2012 , 90-91, 2-8	22
1488	Modelling a squat form crack on a rail laid on an elastic foundation. 2012 , 85, 47-58	19
1487	Numerical simulation of crack growth in brittle matrix of particle reinforced composites using the xfem technique. 2012 , 25, 9-21	30
1486	Numerical modelling of the fracture behaviour of brittle materials reinforced with unidirectional or randomly distributed fibres. 2012 , 52, 12-27	18
1485	Different crack sizes analyzed for surrounding rock mass around underground caverns in Jinping I hydropower station. 2012 , 57, 19-30	19
1484	Bridging Scales with a Generalized Finite Element Method. 2012 , 3, 172-191	1
1483	Effect of electric displacement saturation on the hysteretic behavior of ferroelectric ceramics and the initiation and propagation of cracks in piezoelectric ceramics. 2012 , 60, 882-903	34
1482	The effect of compression stresses, stress level and stress order on fatigue crack growth of multiple site damage. 2012 , 35, 903-917	5
1481	Adaptive non-conformal mesh refinement and extended finite element method for viscous flow inside complex moving geometries. 2012 , 68, 1031-1052	26
1480	Simulating fracture propagation in rock and concrete by an augmented virtual internal bond method. 2012 , 36, 459-482	23
1479	Extended FEM modeling of crack paths near inclusions. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 786-804	2.4 11
1478	An interface-enriched generalized FEM for problems with discontinuous gradient fields. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 991-1008	2.4 88

1477	On the numerical stability and mass-lumping schemes for explicit enriched meshfree methods. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 1009-1027	2.4	52
1476	Extended isogeometric analysis for simulation of stationary and propagating cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 1069-1101	2.4	153
1475	Discretized peridynamics for brittle and ductile solids. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 1028-1046	2.4	32
1474	hp-adaptive extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 1392-1418	2.4	20
1473	Crack propagation with the extended finite element method and a hybrid explicit/implicit crack description. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 89, 1527-1558	2.4	88
1472	Cohesive and non-cohesive fracture by higher-order enrichment of XFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 452-483	2.4	36
1471	Directly resolving particles in an electric field: local charge, force, torque, and applications. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 537-568	2.4	11
1470	A two-scale approach for the analysis of propagating three-dimensional fractures. 2012 , 49, 99-121		31
1469	Hydro-mechanical modeling of cohesive crack propagation in multiphase porous media using the extended finite element method. 2013 , 37, 1247-1279		122
1468	Modeling three-dimensional hydraulic fracture propagation using virtual multidimensional internal bonds. 2013 , 37, 2021-2038		38
1467	An adaptive multiscale method for crack propagation and crack coalescence. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 93, 23-51	2.4	38
1466	An embedded formulation with conforming finite elements to capture strong discontinuities. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 93, 224-244	2.4	37
1465	Extended FEM modelling of crack propagation using the semi-circular bending test. 2013 , 48, 270-277		55
1464	Plasticity. 2013 ,		66
1463	Laboratory Testing of Fatigue Crack Growth in Geosynthetically Reinforced Large Scale Asphalt Pavement Samples. 2013 , 57, 922-928		2
1462	A continuous/discontinuous cellular automaton method for regular frictional contact problems. 2013 , 83, 1239-1255		12
1461	Thermally induced fracture for core-veneered dental ceramic structures. 2013 , 9, 8394-402		53
1460	Electromechanical simulations of dislocations. 2013 , 21, 035003		4

1459	Continuum damage mechanics based model for quasi brittle materials subjected to cyclic loadings: Formulation, numerical implementation and applications. 2013 , 98, 383-406	38
1458	Finite element simulation of dynamic crack propagation process using an arbitrary Lagrangian Eulerian formulation. 2013 , 36, 533-547	5
1457	Macroscopical Modeling and Numerical Simulation for the Characterization of Crack and Durability Properties of Particle-Reinforced Elastomers. 2013 , 167-226	6
1456	Dynamic analysis of a viscoelastic orthotropic cracked body using the extended finite element method. 2013 , 109, 17-32	17
1455	Subdomain-based error techniques for generalized finite element approximations of problems with singular stress fields. 2013 , 52, 1395-1415	7
1454	Strong tangential discontinuity modeling of shear bands using the extended finite element method. 2013 , 52, 1023-1038	10
1453	Initially rigid cohesive laws and fracture based on edge rotations. 2013 , 52, 931-947	74
1452	Enhanced error estimator based on a nearly equilibrated moving least squares recovery technique for FEM and XFEM. 2013 , 52, 321-344	11
1451	Goal-oriented explicit residual-type error estimates in XFEM. 2013 , 52, 361-376	16
1450	A two-field modified Lagrangian formulation for robust simulations of extrinsic cohesive zone models. 2013 , 51, 865-884	9
1449	Stress intensity factor analyses of three-dimensional interface cracks using tetrahedral finite elements. 2013 , 51, 603-615	10
1448	Application of reproducing kernel particle method and element-free Galerkin method on the simulation of the membrane of capacitive micromachined microphone in viscothermal air. 2013 , 51, 295-308	6
1447	An extended finite element method for fluid flow in partially saturated porous media with weak discontinuities; the convergence analysis of local enrichment strategies. 2013 , 51, 327-345	33
1446	Modeling Damage Growth in Oxidized High-Temperature Polymeric Composites. 2013 , 65, 246-255	4
1445	Modelling of crack propagation of gravity dams by scaled boundary polygons and cohesive crack model. 2013 , 183, 29-48	41
1444	Strength of Elastomers. 2013 , 473-516	20
1443	Three-dimensional J-integral evaluation for cracks with arbitrary curvatures and kinks based on domain integral method for quadratic tetrahedral finite element. 2013 , 109, 58-77	23
1442	Fracture Mechanics and Statistical Mechanics of Reinforced Elastomeric Blends. 2013 ,	10

1441	Damage driven crack initiation and propagation in ductile metals using XFEM. 2013 , 52, 161-179		46
1440	Numerical Estimation of Fretting Fatigue Lifetime Using Damage and Fracture Mechanics. 2013 , 52, 11-25		39
1439	Triangular element partition method with consideration of crack tip. 2013 , 56, 2081-2088		6
1438	Embedded discontinuity finite element modeling of fluid flow in fractured porous media. 2013 , 8, 49-57		19
1437	Scalable FEA on non-conforming assembly mesh. 2013 , 266, 98-111		1
1436	Partitioned Simulation of Fluid-Structure Interaction. 2013 , 20, 185-238		68
1435	Modeling of caprock discontinuous fracturing during CO2 injection into a deep brine aquifer. 2013 , 19, 559-575		31
1434	An algebraic multigrid approach to solve extended finite element method based fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 94, 248-272	2.4	12
1433	Fatigue crack growth simulations of 3-D problems using XFEM. 2013 , 76, 112-131		58
1432	A phase-field model for cohesive fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 43-62	2.4	234
1431	Computational modeling of fracture in concrete using a meshfree meso-macro-multiscale method. 2013 , 69, 204-215		24
1430	Multi-dimensional moving least squares method applied to 3D elasticity problems. 2013 , 47, 45-53		5
1429	Comparison of intralaminar and interlaminar mode I fracture toughnesses of a unidirectional IM7/8552 carbon/epoxy composite. 2013 , 89, 15-23		62
1428	An XFEM plate element for high gradient zones resulted from yield lines. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 93, 1314-1344	2.4	6
1427	An XFEM frame for plate elements in yield line analyses. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 150-175	2.4	4
1426	An extended finite element method for hydraulic fracture propagation in deformable porous media with the cohesive crack model. 2013 , 73, 77-95		227
1425	A Comparative Study of the Different Procedures for Seismic Cracking Analysis of Concrete Dams. 2013 , 283-310		
1424	Fatigue crack growth simulations of bi-material interfacial cracks under thermo-elastic loading by extended finite element method. 2013 , 22, 79-104		23

1423	Extended finite element modeling of crack propagation in ceramic tool materials by considering the microstructural features. 2013 , 77, 236-244		27
1422	The extended finite element method for large deformation ductile fracture problems with a non-local damage-plasticity model. 2013 , 112-113, 97-125		33
1421	Multi-scale modeling of fracture in concrete composites. 2013 , 47, 162-172		16
1420	Methods for the prediction of fatigue delamination growth in composites and adhesive bonds [A critical review]. 2013 , 112-113, 72-96		158
1419	Nonlinear Simulation of an Embedded Crack in the Presence of Holes and Inclusions by XFEM. 2013 , 64, 642-651		22
1418	An estimation of the high-pressure pipe residual life. 2013 , 13, 36-44		5
1417	Analysis of generalized dynamic intensity factors of cracked magnetoelastic solids by X-FEM. 2013 , 69, 19-36		87
1416	Finite element simulation of crack propagation based on phase field theory. 2013 , 27, 3073-3085		7
1415	A robust shell element in meshfree SPH method. 2013 , 29, 241-255		15
1414	A combined finite-discrete element model for RC structures under dynamic loading. 2013 , 30, 982-1010		18
1413	An enriched 6-node MITC plate element for yield line analysis. 2013 , 128, 64-76		3
1412	Dynamic crack propagation in elastoplastic thin-walled structures: Modelling and validation. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 63-86	2.4	14
1411	Two-dimensional discrete element simulations of the fracture behaviour of slate. 2013 , 61, 161-170		36
1410	Modeling cracking behavior of rock mass containing inclusions using the enriched numerical manifold method. 2013 , 162, 1-13		64
1409	Anisotropic hierarchic finite elements for the simulation of piezoelectric smart structures. 2013 , 30, 682-706		6
1408	A PDE-Constrained Optimization Formulation for Discrete Fracture Network Flows. 2013 , 35, B487-B510		68
1407	The XFEM with an Implicit-Explicit Crack Description for a Plane-Strain Hydraulic Fracture Problem. 2013 , 13, 83-84		4
1406	An elastic-plastic cohesive zone model for metal-ceramic interfaces at finite deformations. 2013 , 41, 147-164		31

1405	Partition of unity and drilling rotations in the boundary element method (BEM). 2013 , 50, 379-395	
1404	Application of Reproducing the Kernel Particle Method on the Simulation of the Membrane of a Capacitive Micromachined Microphone in Viscothermal Air. 2013 , 63, 120-143	
1403	The stable XFEM for two-phase flows. 2013 , 87, 41-49	57
1402	The finite element method enriched by interpolation covers. 2013 , 116, 35-49	36
1401	Modelling porous structures by penalty approach in the extended finite element method. 2013 , 16, 347-57	5
1400	An edge-based smoothed XFEM for fracture in composite materials. 2013 , 179, 179-199	20
1399	Modeling dynamic fracture in Kirchhoff plates and shells using the extended finite element method. 2013 , 20, 120-120	5
1398	A novel enrichment criterion for modeling kinked cracks using element free Galerkin method. 2013 , 68, 140-149	25
1397	An embedded crack in a constant strain triangle utilizing extended finite element concepts. 2013 , 117, 1-9	2
1396	Numerical Simulation of Plane Crack Problems Using Extended Isogeometric Analysis. 2013 , 64, 661-670	14
1395	A three-dimensional ES-FEM for fracture mechanics problems in elastic solids. 2013 , 114, 127-150	36
1394	Numerical simulation of the fracture process in concrete resulting from deflagration phenomena. 2013 , 180, 163-175	7
1393	Model for localized failure with thermo-plastic coupling: Theoretical formulation and ED-FEM implementation. 2013 , 127, 2-18	14
1392	Refined fatigue assessment of joints with welded in-plane attachments by LEFM. 2013 , 56, 25-32	11
1391	A stable and optimally convergent generalized FEM (SGFEM) for linear elastic fracture mechanics. 2013 , 266, 23-39	90
1390	Two-scale approach to predict multi-site cracking potential in 3-D structures using the generalized finite element method. 2013 , 50, 1991-2002	10
1389	Dynamic fracture research based on XFEM and its application on discharge valve guard of hydrogen compressor. 2013 , 34, 59-68	4
1388	Element-wise fracture algorithm based on rotation of edges. 2013 , 110, 113-137	186

1387	Modeling bimaterial interface cracks using the numerical manifold method. 2013 , 37, 464-474	33
1386	Extra-dof-free and linearly independent enrichments in GFEM. 2013 , 266, 1-22	22
1385	Heterogeneous mixtures of elliptical particles: Directly resolving local and global properties and responses. 2013 , 235, 161-181	5
1384	Identification of a cohesive zone model from digital images at the micron-scale. 2013 , 61, 1407-1420	38
1383	Three-dimensional cohesive zone model for fracture of cementitious materials based on the thermodynamics of irreversible processes. 2013 , 97, 261-280	20
1382	Finite element analysis of circumferential crack behavior in cement femoral prosthesis interface. 2013 , 49, 96-102	20
1381	Numerical simulation of temperature field in heterogeneous material with the XFEM. 2013 , 13, 199-208	11
1380	Dynamic Study on Fracture Problems in Viscoelastic Sedimentary Rocks Using the Numerical Manifold Method. 2013 , 46, 1415-1427	48
1379	Fatigue crack growth simulations of interfacial cracks in bi-layered FGMs using XFEM. 2013 , 52, 799-814	90
1378	Nano-scale Investigation of Microstructural Phenomenon Contributing to Toughening of Nanoparticulate Reinforced Polymers. 2013 , 215-221	
1377	Bibliography. 2013 , 235-252	
1376	Image-based computational homogenization and localization: comparison between X-FEM/levelset and voxel-based approaches. 2013 , 51, 279-293	43
1375	Fatigue and Fracture Analysis. 2013 , 205-273	2
1374	Intensity of singularity in three-material joints under shear loading: Two-real singularities and power-logarithmic singularities. 2013 , 40, 60-68	8
1373	XRPIM versus XFEM. 2013 , 10, 1340006	1
1372	An object-oriented approach to the Generalized Finite Element Method. 2013 , 59, 1-18	28
1371	Analysis of a subinterface crack in piezoelectric bimaterials with the extended finite element method. 2013 , 104, 114-139	70
1370	Considering brittleness of tungsten in failure analysis of helium-cooled divertor components with functionally graded tungsten/EUROFER97 joints. 2013 , 100, 63-75	9

1369	Cracking behaviour of fibre-reinforced cementitious composites: A comparison between a continuous and a discrete computational approach. 2013 , 103, 103-114		17
1368	Complete Tangent Stiffness for eXtended Finite Element Method by including crack growth parameters. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 95, 33-45	2.4	0
1367	A spline-based enrichment function for arbitrary inclusions in extended finite element method with applications to finite deformations. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 95, 361-386	2.4	16
1366	The cohesive band model: a cohesive surface formulation with stress triaxiality. 2013 , 181, 177-188		26
1365	A simple and efficient XFEM approach for 3-D cracks simulations. 2013 , 181, 189-208		37
1364	Enriched finite elements for the efficient prediction of impact-induced damage in composite laminates. 2013 , 79, 87-96		8
1363	Modeling the Macroscopic Behavior of Concrete. 2013 , 63-120		
1362	Damage evolution in nanoclay-reinforced polymers: A three-dimensional computational study. 2013 , 74, 67-77		47
1361	Study on the rubber-modified asphalt mixtures tracking propagation using the extended finite element method. 2013 , 47, 223-230		41
1360	Modelling of failure in long fibres reinforced composites by X-FEM and cohesive zone model. 2013 , 55, 352-361		48
1359	The XFEM with an Explicit-Implicit Crack Description for Hydraulic Fracture Problems. 2013 ,		7
1358	Discontinuous Approach to Concrete. 2013 , 95-107		
1357	Seismic cracking analysis of concrete gravity dams with initial cracks using the extended finite element method. 2013 , 56, 528-543		65
1356	Transient thermomechanical analysis of thin layers using a hybrid MAX-FEM model. 2013 , 69, 73-87		5
1355	Implementation of the extended finite element method for coupled dynamic thermoelastic fracture of a functionally graded cracked layer. 2013 , 35, 69-81		14
1354	Transient dynamic crack analysis in non-homogeneous functionally graded piezoelectric materials by the X-FEM. 2013 , 69, 542-558		59
1353	Assessment of slope stability in cohesive soils due to a rainfall. 2013 , 37, 3278-3292		1
1352	Elastic-plastic analysis and strength evaluation of adhesive joints in wind turbine blades. 2013 , 44, 650-656		23

1351	XFEM fracture analysis of orthotropic functionally graded materials. 2013 , 44, 8-25	85
1350	Numerical modeling of composite solids using an immersed meshfree Galerkin method. 2013 , 45, 1397-1413	29
1349	A two-scale failure analysis of composite materials in presence of fiber/matrix crack initiation and propagation. 2013 , 95, 582-597	43
1348	Robust Ck/C0 generalized FEM approximations for higher-order conformity requirements: Application to Reddy's HSDT model for anisotropic laminated plates. 2013 , 96, 332-345	7
1347	A strong discontinuity approach on multiple levels to model solids at failure. 2013 , 253, 558-583	49
1346	Coupling schemes for modeling hydraulic fracture propagation using the XFEM. 2013 , 253, 305-322	162
1345	Modeling ductile fracture using a simplified meshfree method. 2013 , 67, 296-302	2
1344	Thermo-mechanical XFEM crack propagation analysis of functionally graded materials. 2013 , 561, 285-302	63
1343	Evaluation of mixed-mode stress intensity factors by extended finite element method. 2013 , 20, 1420-1425	6
1342	Elastic-plastic cracking analysis for brittle-ductile rocks using manifold method. 2013 , 180, 71-91	39
1341	A fracture mapping and extended finite element scheme for coupled deformation and fluid flow in fractured porous media. 2013 , 37, 2916-2936	26
1340	Microstructurally induced fracture nucleation and propagation in martensitic steels. 2013 , 61, 1091-1105	34
1339	Phase-field modeling of defect nucleation and propagation in domains with material inhomogeneities. 2013 , 21, 025009	9
1338	Interface Delamination of Diamond-Coated Carbide Tools Considering Coating Fractures by XFEM. 2013 ,	
1337	A Probabilistic Strength Distribution Model in Predicting Damage Evolution due to Thermo-Oxidation of Polymeric Matrix Composites. 2013 ,	1
1336	A SIMPLIFIED MESHLESS METHODS FOR BRITTLE FRACTURE OF CONCRETE. 2013 , 10, 1350007	1
1335	Singular CS-RPIM for Fracture Mechanics Problems. 2013 , 559-598	
1334	Discontinuous Galerkin discretization coupled with sharp interface method for ablative materials. 2013 ,	0

1333	Numerical Modeling of Hydraulic Fracture Propagation Using Extended Finite Element Method. 2013,	
1332	Effect of random microstructure on crack propagation in cortical bone tissue under dynamic loading. 2013, 451, 012033	4
1331	XFEM-Based Analysis for Crack Growth Characteristics of Diffusion Bonded Laminates of Titanium Alloy with Localized Nonwelded Zone. 2013, 2013, 1-8	1
1330	XFEM for Thermal Crack of Massive Concrete. 2013, 2013, 1-9	3
1329	New Finite Element Modeling Approach of a Propagating Shaft Crack. 2013, 80,	10
1328	A Phantom-Node Method with Edge-Based Strain Smoothing for Linear Elastic Fracture Mechanics. 2013, 2013, 1-12	77
1327	Numerical Simulation of Pre-Crack Propagation in ZrB ₂ -SiC-AlN Ceramics Subjected to Thermal Shock. 2013, 833, 154-158	
1326	Dual BEM Formulation Applied to Analysis of Multiple Crack Propagation. 2013, 560, 99-106	11
1325	Numerical Study of Dynamic Load Concrete Failure Process Using Extended Finite Element Method. 2013, 336-338, 1379-1382	1
1324	An extended finite element model for CO ₂ sequestration. 2013, 23, 1421-1448	3
1323	The Numerical Simulation of the Crack Elastoplastic Extension Based on the Extended Finite Element Method. 2013, 2013, 1-13	
1322	Two-Dimensional Mode I Crack Propagation in Saturated Ionized Porous Media Using Partition of Unity Finite Elements. 2013, 80,	16
1321	Numerical Study of Koyna Dam Failure Process Using Extended Finite Element Method. 2013, 734-737, 2851-2854	
1320	Study on Three-Point Bending Numerical Tests of CFRP Reinforced Concrete Beam with Initial Crack. 2013, 838-841, 639-643	
1319	The Effect of Inhomogeneities on an Edge Crack: A Numerical Study using XFEM. 2013, 14, 505-523	12
1318	A NOVEL TRIANGULAR FINITE ELEMENT PARTITION METHOD FOR FRACTURE SIMULATION WITHOUT ENRICHMENT OF INTERPOLATION. 2013, 10, 1350015	8
1317	Multiple Crack Growth and Coalescence in Meshfree Methods with A distance Function-Based Enriched Kernel. 2013, 560, 37-60	1
1316	Simulation of Primary Fracture Propagation around Compressive Cavity with the Extended Finite Element Method. 2013, 477-478, 425-430	

1315	Explicit Dynamic Finite Element Method for Failure with Smooth Fracture Energy Dissipations. 2013 , 2013, 1-12			1
1314	The Partitioned Mixed Model of Finite Element Method and Interface Stress Element Method with Arbitrary Shape of Discrete Block Element. 2013 , 2013, 1-6			2
1313	Explicit Dynamic Finite Element Method for Predicting Implosion/Explosion Induced Failure of Shell Structures. 2013 , 2013, 1-11			2
1312	Study on Tensile Properties of Nanoreinforced Epoxy Polymer: Macroscopic Experiments and Nanoscale FEM Simulation Prediction. 2013 , 2013, 1-8			8
1311	Computational Methods for Fracture in Brittle and Quasi-Brittle Solids: State-of-the-Art Review and Future Perspectives. 2013 , 2013, 1-38			105
1310	On Simulations of Discrete Fracture Network Flows with an Optimization-Based Extended Finite Element Method. 2013 , 35, A908-A935			50
1309	Ductile Failure Modelling: Stress Dependence, Nonlocality, and Damage to Fracture Transition. 2013 , 1-53			
1308	Evaluating Damage with Digital Image Correlation: C. Applications to Composite Materials. 2013 , 1-21			
1307	A direct analytical method to extract mixed-mode components of strain energy release rates from Irwin's integral using extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 95, 1033-1052	2.4		17
1306	A Review of the Extended Finite Element for Fracture Analysis of Structures. 2013 , 444-445, 96-102			1
1305	Fracture mechanics analysis using the wavelet Galerkin method and extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 93, 1082-1108	2.4		39
1304	A High-order extended finite element method for extraction of mixed-mode strain energy release rates in arbitrary crack settings based on Irwin's integral. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 787-812	2.4		19
1303	A marching cubes based failure surface propagation concept for three-dimensional finite elements with non-planar embedded strong discontinuities of higher-order kinematics. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 339-372	2.4		34
1302	Finite strain fracture of plates and shells with configurational forces and edge rotations. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 94, 1099-1122	2.4		213
1301	The strength experimental design and data analysis of the nose landing gear. 2013 ,			
1300	Representation of singular fields without asymptotic enrichment in the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 96, 813-841	2.4		48
1299	A Coupled Approach for Modeling Damage within a Reduced-OrderModel Framework. 2013 ,			3
1298	An enhanced numerical procedure for modelling fully grouted bolts intersected by rock joint. 2013 , 16, 37-46			4

1297	A Topology Optimization Method for Geometrically Nonlinear Problems Incorporating Level Set Boundary Expressions and a Particle Method. 2013 , 7, 630-643		5
1296	Mechanical Behavior of Brittle Gypsum Samples containing Contact Flaws under Uniaxial Compression. 2013 , 69, I_217-I_224		
1295	Stress distribution and fracture propagation in a fractured medium due to fluid pressure changes. 2013 ,		
1294	Anomalous behavior of bilinear quadrilateral finite elements for modeling cohesive cracks with XFEM/GFEM. <i>International Journal for Numerical Methods in Engineering</i> , 2013 , 94, 454-472	2.4	5
1293	An ABAQUS Implementation of the XFEM for Hydraulic Fracture Problems. 2013 ,		18
1292	A study for numerical techniques for fatigue crack propagation analysis of surface crack in welded joints. 2013 , 17, 93-106		0
1291	AN ADAPTIVE DOMAIN DECOMPOSITION PRECONDITIONER FOR CRACK PROPAGATION PROBLEMS MODELED BY XFEM. 2013 , 11, 633-654		23
1290	Modeling and Experimental Studies of Crack Propagation in Laminated Glass Sheets. 2014 , 7, 328-336		3
1289	Extended Finite Element Method for Predicting Productivity of Multifractured Horizontal Wells. 2014 , 2014, 1-9		4
1288	Numerical simulation on zonal disintegration in deep surrounding rock mass. 2014 , 2014, 379326		3
1287	Dynamic stress intensity factors for homogeneous and non-homogeneous materials using the interaction integral method. 2014 , 128, 8-21		17
1286	Sensitivity Analysis of Linear Elastic Cracked Structures Using Generalized Finite Element Method. 2014 , 15, 422-437		2
1285	Extended finite-element modelling of asphalt mixtures fracture properties using the semi-circular bending test. 2014 , 15, 153-166		42
1284	Numerical optimization of an electrostatic device based on the 3D XFEM and genetic algorithm. 2014 ,		1
1283	Finite Element Simulations of Crack Propagation in Al ₂ O ₃ /6061Al Composites. 2014 , 27, 853-861		5
1282	A floating node method for the modelling of discontinuities in composites. 2014 , 127, 104-134		111
1281	Evolutionary topology optimization using the extended finite element method and isolines. 2014 , 46, 628-647		18
1280	Dynamic Simulation of Multiple Offset-Edge Crack of a Finite Plate. 2014 , 51, 849-860		6

- 1279 Process Simulation and Formation Mechanism of Shear Band in Soil. **2014**, 580-583, 175-179
- 1278 Hydro-Mechanical Coupled Model of Hydraulic Fractures Using the eXtended Finite Element Method. **2014**, 2
- 1277 A Modified Interaction Integral for 3D Extended Finite Element based Crack Growth Prediction. **2014**,
- 1276 Numerical investigation of the spall opening angle of surface initiated rolling contact fatigue. **2014**, 131, 538-556 8
- 1275 XFEM for Crack Propagation in Fiber-Reinforced Materials. **2014**, 997, 450-453
- 1274 Numerical Analysis of Multiscale Progressive Damage for Solid Rocket Motor Composite Shell. **2014**, 574, 219-223
- 1273 Stable Cracking Particles Method Based on Stabilized Nodal Integration and Updated Lagrangian Kernel. **2014**, 2014, 1-10
- 1272 Overview and comparison of different variants of the XFEM. **2014**, 14, 27-30 8
- 1271 Efficient methods for implicit geometrical representation of complex material microstructures. *International Journal for Numerical Methods in Engineering*, **2014**, 98, 79-91 2.4 5
- 1270 Underground rockfall stability analysis using the numerical manifold method. **2014**, 76, 69-85 11
- 1269 Characterization and Modeling of Failure Initiation in Bainite-Aided DP Steel. **2014**, 16, 1370-1380 16
- 1268 A finite element method with mesh-separation-based approximation technique and its application in modeling crack propagation with adaptive mesh refinement. *International Journal for Numerical Methods in Engineering*, **2014**, 99, 487-521 2.4 14
- 1267 Bridging scale simulation of lattice fracture using enriched space-time Finite Element Method. *International Journal for Numerical Methods in Engineering*, **2014**, 97, 819-850 2.4 12
- 1266 A singular element for reissner plate bending problem with V-shaped notches. **2014**, 74, 143-156 9
- 1265 Interface delamination study of diamond-coated carbide tools considering coating fractures. **2014**, 260, 239-245 11
- 1264 Numerical study of quasi-static crack growth problems based on extended finite element method. **2014**, 19, 736-746 3
- 1263 Extension of numerical manifold method for coupled fluid flow and fracturing problems. **2014**, 38, 1990-2008 34
- 1262 References. **2014**, 533-555

1261	Numerical Analysis of Mesostructure Damage for Composite Solid Propellant Using a Combined XFEM-Cohesive Zone Model. 2014 , 551, 71-76		1
1260	Failure Simulation of Single-Edge Notched Concrete Beam under Dynamic Tensile Loading. 2014 , 638-640, 333-337		
1259	Calculation on Crack Parameter by Extended Finite Element Method. 2014 , 716-717, 751-754		
1258	S-FEM FOR FRACTURE PROBLEMS, THEORY, FORMULATION AND APPLICATION. 2014 , 11, 1343003		14
1257	Numerical Modelling of Crack Propagation in Friction Stir Welded Joint Made of Aluminium Alloy. 2014 , 3, 1330-1335		7
1256	An X-FEM Based Approach for Topology Optimization of Continuum Structures. 2014 , 277-289		2
1255	Comparison of SGBEM-FEM Alternating Method and XFEM Method for Determining Stress Intensity Factor for 2D Crack Problems. 2014 , 891-892, 345-350		1
1254	Dynamic Crack Analysis in Isotropic/Orthotropic Media via Extended Isogeometric Analysis. 2014 , 2014, 1-11		1
1253	Crack Extension Calculation under Tensile and Shear Load by XFEM. 2014 , 580-583, 3046-3050		0
1252	Investigation of the injury threshold of knee ligaments by the parametric study of carpedestrian impact conditions. 2014 , 62, 58-67		24
1251	Improvements of explicit crack surface representation and update within the generalized finite element method with application to three-dimensional crack coalescence. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 97, 231-273	2.4	30
1250	A multigrid coupled (FE-EFG) approach to simulate fatigue crack growth in heterogeneous materials. 2014 , 72, 121-135		25
1249	A coupled finite element and element-free Galerkin approach for the simulation of stable crack growth in ductile materials. 2014 , 70, 49-58		27
1248	Evolving Discontinuities and Cohesive Fracture. 2014 , 10, 125-137		5
1247	Fatigue crack growth rates and paths in two planar specimens under mixed mode loading. 2014 , 58, 12-19		16
1246	An experimental/numerical investigation into the main driving force for crack propagation in uni-directional fibre-reinforced composite laminae. 2014 , 107, 119-130		50
1245	3D multiscale crack propagation using the XFEM applied to a gas turbine blade. 2014 , 53, 173-188		40
1244	Higher order stable generalized finite element method. 2014 , 128, 1-29		42

1243	XFEM simulation of stable crack growth using JB curve under finite strain plasticity. 2014 , 10, 165-177		33
1242	Enriched goal-oriented error estimation for fracture problems solved by continuum-based shell extended finite element method. 2014 , 35, 33-48		5
1241	A meshless Cracking Particles Approach for ductile fracture. 2014 , 18, 238-248		5
1240	Simulation of the Steady-State Flow in Discrete Fracture Networks with Non-Conforming Meshes and Extended Finite Elements. 2014 , 47, 2171-2182		18
1239	Analysis of thermo-mechanical behaviour of a crack using XFEM for Leak-before-Break assessments. 2014 , 51, 2062-2072		6
1238	Fatigue life simulation of functionally graded materials under cyclic thermal load using XFEM. 2014 , 82, 41-59		25
1237	Sensitivity analysis based crack propagation criterion for compressible and (near) incompressible hyperelastic materials. 2014 , 82, 1-15		3
1236	A Discontinuous Cellular Automaton Method for Modeling Rock Fracture Propagation and Coalescence Under Fluid Pressurization Without Remeshing. 2014 , 47, 2183-2198		8
1235	A continuous-discontinuous cellular automaton method for cracks growth and coalescence in brittle material. 2014 , 30, 73-83		11
1234	Modeling crack propagation in wood by extended finite element method. 2014 , 72, 273-283		27
1233	A meshless method using local exponential basis functions with weak continuity up to a desired order. 2014 , 53, 1355-1374		16
1232	Three-dimensional finite elements with embedded strong discontinuities to model failure in electromechanical coupled materials. 2014 , 273, 143-160		20
1231	A semi-Lagrangian time-integration approach for extended finite element methods. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 98, 174-202	2.4	9
1230	A thermomechanical finite element tool for Leak-before-Break analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 98, 678-702	2.4	2
1229	XFEM analysis of the effects of voids, inclusions and other cracks on the dynamic stress intensity factor of a major crack. 2014 , 37, 866-882		10
1228	Prediction of fretting fatigue crack initiation and propagation lifetime for cylindrical contact configuration. 2014 , 76, 73-91		96
1227	An XFEM-based methodology for fatigue delamination and permeability of composites. 2014 , 107, 205-218		37
1226	Comparison of different fracture modelling approaches to gravity dam failure. 2014 , 31, 18-32		11

1225	A quasi-static crack propagation simulation based on shape-free hybrid stress-function finite elements with simple remeshing. 2014 , 275, 159-188	13
1224	Fatigue of hybrid glass/carbon composites: 3D computational studies. 2014 , 94, 71-79	48
1223	A new doubly enriched finite element for modelling grouted bolt crossed by rock joint. 2014 , 70, 47-58	22
1222	Three-dimensional fatigue crack growth modelling in a helical gear using extended finite element method. 2014 , 37, 581-591	29
1221	A new continuous/discontinuous damage model: Cohesive cracks via an accurate energy-transfer process. 2014 , 69, 90-101	13
1220	Polygonal finite element methods for contact-impact problems on non-conformal meshes. 2014 , 269, 198-221	56
1219	Fatigue crack growth simulation in heterogeneous material using s-version FEM. 2014 , 58, 47-55	27
1218	Free vibration analysis of cracked Mindlin plate using an extended cell-based smoothed discrete shear gap method (XCS-DSG3). 2014 , 72, 150-163	53
1217	Numerical modeling tensile failure behavior of concrete at mesoscale using extended finite element method. 2014 , 23, 872-898	43
1216	An accurate semi-analytical method for an arbitrarily oriented edge or interior crack in an anisotropic homogeneous elastic solid. 2014 , 45, 133-142	3
1215	A computational library for multiscale modeling of material failure. 2014 , 53, 1047-1071	307
1214	Material damage evaluation with measured microdefects and multiresolution numerical analysis. 2014 , 23, 537-566	18
1213	Determination of stress intensity factors by the finite element discretized symplectic method. 2014 , 51, 1115-1122	17
1212	An explicit application of partition of unity approach to XFEM approximation for precise reproduction of a priori knowledge of solution. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 97, 551-581	2.4 5
1211	A domain-independent interaction integral for magneto-electro-elastic materials. 2014 , 51, 336-351	28
1210	Discontinuous cellular automaton method for crack growth analysis without remeshing. 2014 , 38, 291-307	12
1209	Mixed-mode stress intensity factor evaluation by interaction integral method for quadratic tetrahedral finite element with correction terms. 2014 , 115, 22-42	27
1208	Strength prediction in CFRP woven laminate bolted double-lap joints under quasi-static loading using XFEM. 2014 , 56, 192-202	25

1207	Numerical Analysis of the Inclusion-Crack Interaction by the Extended Finite Element Method. 2014 , 15, 26-32		17
1206	Finite element analysis of failure mechanisms in HDPE/CaCo ₃ particulate composite. 2014 , 43, 271-277		3
1205	Computational aspects of the combined finite-discrete element method in modelling of plane reinforced concrete structures. 2014 , 131, 669-686		19
1204	Mesoscopic characterization and modeling of microcracking in cementitious materials by the extended finite element method. 2014 , 4, 041001		0
1203	Micromechanical analysis of asphalt mixture fracture with adhesive and cohesive failure. 2014 , 132, 104-119		80
1202	Dynamic high order numerical manifold method based on weighted residual method. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 100, 596-619	2.4	23
1201	Higher order model for soft and hard elastic interfaces. 2014 , 51, 4137-4148		42
1200	Thermal Fracture Analysis Of Nonhomogeneous Plate with Interfaces Under Uniform Heat Flow. 2014 , 37, 771-793		3
1199	The strong and weak forms of a general imperfect interface model for linear coupled multifield phenomena. 2014 , 85, 31-46		16
1198	A new 2D discrete model applied to dynamic crack propagation in brittle materials. 2014 , 51, 3787-3797		22
1197	Modeling vibratory damage with reduced-order models and the generalized finite element method. 2014 , 333, 6637-6650		18
1196	A background decomposition method for domain integration in weak-form meshfree methods. 2014 , 142, 64-78		31
1195	A partition of unity formulation referring to the NMM for multiple intersecting crack analysis. 2014 , 72, 28-36		12
1194	Multi-scale constitutive modeling of Ceramic Matrix Composites by Continuum Damage Mechanics. 2014 , 51, 4068-4081		40
1193	An isogeometric analysis Bzier interface element for mechanical and poromechanical fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 97, 608-628	2.4	35
1192	Study on crack propagation simulation of surface crack in welded joint structure. 2014 , 39, 315-334		25
1191	Virtual topography: A fictitious domain approach for analyzing free-surface irregularities in large-scale earthquake ground motion simulation. <i>International Journal for Numerical Methods in Engineering</i> , 2014 , 100, 504-533	2.4	6
1190	Investigating the effects of micro-defects on the dynamic properties of rock using Numerical Manifold method. 2014 , 72, 72-82		34

1189	Numerical Calculation of Crack Parameters for Propagation Assessment in a Complex Component with Residual Stresses. 2014 , 74, 360-367	1
1188	XFEM Modeling of Fracture Mechanics in Transversely Isotropic FGMs via Interaction Integral Method. 2014 , 3, 1257-1262	9
1187	Fracture Behavior of Weld Lines in Injection Molded Components Loaded under Real Operating Conditions. 2014 , 3, 2048-2053	2
1186	Crack Propagation in Cortical Bone: A Numerical Study. 2014 , 3, 1524-1529	20
1185	A Mathematical Approach to Research Problems of Science and Technology. 2014 ,	0
1184	Modeling 3-D desiccation soil crack networks using a mesh fragmentation technique. 2014 , 62, 27-39	88
1183	Mixed mode fracture analysis of adiabatic cracks in homogeneous and non-homogeneous materials in the framework of partition of unity and the path-independent interaction integral. 2014 , 131, 100-127	26
1182	Unstructured polygonal meshes with adaptive refinement for the numerical simulation of dynamic cohesive fracture. 2014 , 189, 33-57	40
1181	Double crack growth analysis in the presence of a bi-material interface using XFEM and FEM modelling. 2014 , 132, 189-199	21
1180	Fracture behavior of epoxy asphalt pavement on steel bridges based on optical fiber sensing technology and numerical simulation. 2014 , 29, 858-862	10
1179	Establishing use of asphalt binder cracking tests for prevention of pavement cracking. 2014 , 15, 279-299	6
1178	Graphene reinforced nanocomposites: 3D simulation of damage and fracture. 2014 , 95, 684-692	92
1177	Modeling of dynamic crack branching by enhanced extended finite element method. 2014 , 54, 489-502	50
1176	A stabilization technique for the regularization of nearly singular extended finite elements. 2014 , 54, 523-533	44
1175	Numerical modeling of corrosion pit propagation using the combined extended finite element and level set method. 2014 , 54, 613-627	47
1174	Density and level set-XFEM schemes for topology optimization of 3-D structures. 2014 , 54, 133-150	47
1173	Extended particle difference method for moving boundary problems. 2014 , 54, 723-743	32
1172	A numerical contact algorithm in saturated porous media with the extended finite element method. 2014 , 54, 1089-1110	18

1171	Modeling microdamage behavior of cortical bone. 2014 , 13, 1227-42	18
1170	A mesh-independent finite element formulation for modeling crack growth in saturated porous media based on an enriched-FEM technique. 2014 , 188, 79-108	67
1169	Progressive Failure Analysis of an Open-Hole Composite Laminate by Using the S-Version Finite-Element Method. 2014 , 50, 279-294	8
1168	Characterization of mode-I and mode-II fracture properties of fine aggregate matrix using a semicircular specimen geometry. 2014 , 52, 413-421	52
1167	Transient thermal shock fracture analysis of functionally graded piezoelectric materials by the extended finite element method. 2014 , 51, 2167-2182	93
1166	Specimen-specific modeling of hip fracture pattern and repair. 2014 , 47, 536-43	43
1165	An optimization approach for large scale simulations of discrete fracture network flows. 2014 , 256, 838-853	58
1164	Numerical evaluation of stress intensity factors and T-stress for interfacial cracks and cracks terminating at the interface without asymptotic enrichment. 2014 , 279, 86-112	24
1163	Numerical Analysis of Crack Propagation Path Using an Advanced Element Cracking Method. 2014 , 46, 241-249	1
1162	Effect of crack on the impact response of plates by the extended finite element method (X-FEM). 2014 , 28, 2243-2252	3
1161	References. 2014 , 259-267	
1160	Singular Phenomena and Scaling in Mathematical Models. 2014 ,	6
1159	Simulation of non-planar three-dimensional hydraulic fracture propagation. 2014 , 38, 1397-1430	100
1158	Extended finite element method for power-law creep crack growth. 2014 , 127, 148-160	20
1157	Experimental and computational investigation of the dynamic behavior of AlCuTi alloys. 2014 , 604, 67-77	18
1156	Some Issues in Cohesive Surface Modeling. 2014 , 10, 221-246	86
1155	The MITC3 shell finite element enriched by interpolation covers. 2014 , 134, 128-142	43
1154	Particles-bridging the Gap between Solids and Fluids. 2014 , 10, 161-179	3

1153	Numerical simulation of continuous damage and fracture in metal-forming processes with 2D mesh adaptive methodology. 2014 , 82, 46-61	12
1152	Curve and boundaries measurement using B-splines and virtual images. 2014 , 52, 145-155	19
1151	Crack growth modeling in elastic solids by the extended meshfree Galerkin radial point interpolation method. 2014 , 44, 87-97	88
1150	RETRACTED: An alternative BEM formulation, based on dipoles of stresses and tangent operator technique, applied to cohesive crack growth modelling. 2014 , 41, 74-82	8
1149	Multiscale failure analysis with coarse-grained micro cracks and damage. 2014 , 72, 100-109	17
1148	Discrete element modeling for the study of the effect of soft inclusions on the behavior of soil mix material. 2014 , 55, 342-351	10
1147	A mass matrix formulation for cohesive surface elements. 2014 , 69, 110-117	5
1146	An XFEM-based numerical procedure for the analysis of poroelastic composites with coherent imperfect interface. 2014 , 94, 173-181	11
1145	Non-ordinary state-based peridynamic analysis of stationary crack problems. 2014 , 272, 233-250	174
1144	Analysis of a three-dimensional dissimilar material joint with one real singularity using a conservative integral. 2014 , 51, 2908-2919	13
1143	Cover refinement of numerical manifold method for crack propagation simulation. 2014 , 43, 37-49	32
1142	Numerical simulation of reinforced concrete beam/column failure considering normal-shear stress interaction. 2014 , 74, 32-43	5
1141	Upper bound limit analysis of support pressures of shallow tunnels in layered jointed rock strata. 2014 , 43, 171-183	19
1140	Application of the distinct element method and the extended finite element method in modelling cracks and coalescence in brittle materials. 2014 , 91, 102-121	33
1139	Modeling and identification of an arbitrarily shaped scatterer using dynamic XFEM with cubic splines. 2014 , 278, 101-118	33
1138	A comparative study on unfilled and filled crack propagation for rock-like brittle material. 2014 , 72, 110-120	128
1137	An overlapping domain technique coupling spectral and finite elements for fluid flow. 2014 , 100, 336-346	6
1136	A parametric study on the buckling of functionally graded material plates with internal discontinuities using the partition of unity method. 2014 , 44, 136-147	47

1135	3-D simulation of arbitrary crack growth using an energy-based formulation [Part I: Planar growth. 2014 , 115, 204-220	25
1134	Application of the numerical manifold method to model progressive failure in rock slopes. 2014 , 119, 1-20	57
1133	Elastic-plastic fracture mechanics analysis using wavelet Galerkin method. 2014 , 80, CM0333-CM0333	
1132	A Numerical Simulation of Effects of Softening and Heterogeneity on the Stress Intensity Factor of Quasi-Brittle Material. 2014 , 6, 586472	4
1131	Limited Height Growth and Reduced Opening of Hydraulic Fractures due to Fracture Offsets: An XFEM Application. 2014 ,	14
1130	Effect of head wear and lateral forces on underhead radius crack propagation. 2014 , 228, 620-630	2
1129	The bone screw fracture in torsion test with an extended finite element method. 2015 , 19, S8-599-S8-604	
1128	- Introduction to Braiding. 2015 , 18-35	
1127	Micromechanical Damage Simulation to Obtain Effect of Coarse Grains Distribution on Mechanical Properties of Bimodal AL Using 2D XFEM. 2015 , 784, 233-240	1
1126	A New Enriched Finite Element Method with Application to Static Fracture Problems with Internal Fluid Pressure. 2015 , 07, 1550037	4
1125	Numerical Study on Uniaxial Compression Failure of Brittle Material with a Single Flaw. 2015 , 1119, 683-687	
1124	Effect of micromorphology of cortical bone tissue on crack propagation under dynamic loading. 2015 , 94, 03005	2
1123	Fracture Analysis in Orthotropic Thermoelasticity Using Extended Finite Element Method. 2015 , 7, 780-795	3
1122	A Fluid-Structure Coupled Computational Framework for Fluid-Induced Failure and Fracture. 2015 ,	1
1121	Crack Initiation and Growth Simulation for CRDM Nozzles by eXtended Finite Element Method. 2015 ,	2
1120	Analysis of Limit Loads for CT Specimens with Cracks Based on Extended Finite Element Method. 2015 , 130, 763-774	2
1119	Mechanism of fracture in macro- and micro-scales in hollow centre cracked disc specimen. 2015 , 22, 4426-44336	
1118	The extended finite element method with new crack-tip enrichment functions for an interface crack between two dissimilar piezoelectric materials. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 103, 94-113	2.4 10

1117	An enriched FEM technique for modeling hydraulically driven cohesive fracture propagation in impermeable media with frictional natural faults: Numerical and experimental investigations. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 439-468	2.4	61
1116	The stable extrinsic extended finite element method for second order elliptic equation with interfaces. 2015 , 2015,		
1115	On modeling of discrete propagation of localized damage in cohesive-frictional materials. 2015 , 39, 1774-1790	26	
1114	A face-oriented stabilized Nitsche-type extended variational multiscale method for incompressible two-phase flow. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 721-748	2.4	36
1113	A new formulation for imposing Dirichlet boundary conditions on non-matching meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 103, 430-444	2.4	18
1112	A Survey of Physically Based Simulation of Cuts in Deformable Bodies. 2015 , 34, 161-187		46
1111	Generalized finite element approaches for analysis of localized thermo-structural effects. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 408-438	2.4	4
1110	Analysis of Advective-Diffusive Transport in Complex Mixing Devices by the Diffusive Mapping Method. 2015 , 24, 322-334		4
1109	A level set enhanced natural kernel contact algorithm for impact and penetration modeling. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 839-866	2.4	27
1108	A high-order immersed boundary discontinuous-Galerkin method for Poisson's equation with discontinuous coefficients and singular sources. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 847-869	2.4	10
1107	On the application of the method of difference potentials to linear elastic fracture mechanics. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 103, 703-736	2.4	4
1106	A modified extended finite element method approach for design sensitivity analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 209-234	2.4	4
1105	GFEM for modal analysis of 2D wave equation. 2015 , 32, 1779-1801		9
1104	Model order reduction for meshfree solution of Poisson singularity problems. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 1211-1237	2.4	5
1103	A medial-axis-based model for propagating cracks in a regularised bulk. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 489-520	2.4	16
1102	The simulation of crack opening-closing and aggregate interlock behaviour in finite element concrete models. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 48-78	2.4	15
1101	A new generalized finite element method for two-scale simulations of propagating cohesive fractures in 3-D. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 1139-1172	2.4	29
1100	Fracture Analysis of Welded Steel Connections in Pre-Crack Condition. 2015 , 744-746, 152-156		

1099	Impact Resistance of Concrete Structures. 2015 , 2015, 1-8	1
1098	Application of Damp Newton Algorithm on FEPG Platform. 2015 , 744-746, 437-441	
1097	Numerical Simulation of Fluid-Solid Coupling in Fractured Porous Media with Discrete Fracture Model and Extended Finite Element Method. 2015 , 3, 541-557	3
1096	Deterministic and Probabilistic Investigation on Multiple Crack Interactions in a Semi-Infinite Domain. 2015 , 2015, 1-9	4
1095	Recent Developments in Multiscale and Multiphase Modelling of the Hydraulic Fracturing Process. 2015 , 2015, 1-15	7
1094	INTERACTIONS BETWEEN MULTIPLE ENRICHMENTS IN EXTENDED FINITE ELEMENT ANALYSIS OF SHORT FIBER REINFORCED COMPOSITES. 2015 , 13, 507-531	4
1093	Hybrid Analytical and MLS-Based NMM for the Determination of Generalized Stress Intensity Factors. 2015 , 2015, 1-9	2
1092	Fracture propagation stimulated by hydraulic injection under stress field. 2015 ,	
1091	Finite Element Analysis of the Influence of Crack Tip Stress Distribution on Fatigue Crack Propagation Rate of 5XXX Aluminum Alloy. 2015 , 817, 698-705	1
1090	Analysis of dynamic stress concentration problems employing spline-based wavelet Galerkin method. 2015 , 58, 129-139	19
1089	Extended Finite-Element Method for Electric Field Analysis of Insulating Plate With Crack. 2015 , 51, 1-4	3
1088	Numerical Modelling of Hydraulic Fracturing in Rock Mass by Xfem. 2015 , 52, 74-83	25
1087	A Generalized Finite Element Method for hydro-mechanically coupled analysis of hydraulic fracturing problems using space-time variant enrichment functions. 2015 , 290, 438-465	37
1086	A three-phase XFEM model for hydraulic fracturing with cohesive crack propagation. 2015 , 69, 82-92	85
1085	On the pore-scale mechanisms leading to brittle and ductile deformation behavior of crystalline rocks. 2015 , 39, 1165-1187	34
1084	Numerical simulation of functionally graded cracked plates using NURBS based XIGA under different loads and boundary conditions. 2015 , 126, 347-359	119
1083	Fatigue life prediction of cracked attachment lugs using XFEM. 2015 , 77, 186-193	23
1082	Methods of Computational Determination of Growth Rates of Fatigue, Creep, and Thermal Fatigue Cracks in Poly- and Monocrystalline Blades of Gas Turbine Units. 2015 , 47, 268-290	4

1081	Generalized domain-independent interaction integral for solving the stress intensity factors of nonhomogeneous materials. 2015 , 67-68, 151-168	18
1080	Fracture mechanics investigation on crack propagation in the nano-multilayered materials. 2015 , 64-65, 208-220	26
1079	Simulations of Shear Zones and Cracks in Engineering Materials Using eXtended Finite Element Method. 2015 , 1-6	1
1078	The XFEM for nonlinear thermal and phase change problems. 2015 , 25, 400-421	6
1077	An a-posteriori error estimator for linear elastic fracture mechanics using the stable generalized/extended finite element method. 2015 , 56, 947-965	16
1076	Fatigue crack growth simulations of 3-D linear elastic cracks under thermal load by XFEM. 2015 , 9, 359-382	33
1075	A multi-dimensional space method for dynamic cracks problems using implicit time scheme in the framework of the extended finite element method. 2015 , 24, 859-890	22
1074	Elasto-plastic fatigue crack growth analysis of plane problems in the presence of flaws using XFEM. 2015 , 9, 420-440	22
1073	Extended finite element method in computational fracture mechanics: a retrospective examination. 2015 , 196, 189-206	79
1072	Encyclopedia of Applied and Computational Mathematics. 2015 , 472-477	
1071	Numerical modeling of non-planar hydraulic fracture propagation in brittle and ductile rocks using XFEM with cohesive zone method. 2015 , 135, 127-140	128
1070	Hydro-mechanical modeling of impermeable discontinuity in rock by extended finite element method. 2015 , 22, 4337-4346	6
1069	3D Analysis of Crack Behavior Using XFEM. 2015 , 789-790, 278-281	
1068	Thermo-elastic extended meshfree method for fracture without crack tip enrichment. 2015 , 9, 441-447	1
1067	3-D cohesive finite element model for application in structural analysis of heavy duty composite pavements. 2015 , 101, 417-431	5
1066	What triggers a microcrack in printed engineering parts produced by selective laser sintering on the first place?. 2015 , 88, 588-597	13
1065	Improved XFEM: An extra-dof free, well-conditioning, and interpolating XFEM. 2015 , 285, 639-658	39
1064	Comparative study of the impact resistance of thin structures. 2015 , 99, 67-72	

1063	The enhanced local pressure model for the accurate analysis of fluid pressure driven fracture in porous materials. 2015 , 286, 293-312		53
1062	About the use of standard integration schemes for X-FEM in solid mechanics plasticity. 2015 , 283, 551-572		10
1061	Multiscale modeling of polymer-matrix composites. 2015 , 99, 62-66		11
1060	Simulating curvilinear crack propagation in two dimensions with universal meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 632-670	2.4	35
1059	Cracking behavior of tungsten armor under ELM-like thermal shock loads: A computational study. 2015 , 2, 1-11		21
1058	Bridging the gap between small scale phenomena and large scale beams strengthened with FRP \square 1D XFEM high order approach. 2015 , 94-95, 49-62		2
1057	Multi-scale computational homogenization/localization for propagating discontinuities using X-FEM. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 496-527	2.4	45
1056	A statistical meso-damage mechanical method for modeling trans-scale progressive failure process of rock. 2015 , 74, 133-150		76
1055	SPH procedures for modeling multiple intersecting discontinuities in geomaterial. 2015 , 39, 343-367		23
1054	Three-dimensional J-integral evaluation for finite strain elastic/plastic solid using the quadratic tetrahedral finite element and automatic meshing methodology. 2015 , 135, 34-63		13
1053	Effects of the smoothness of partitions of unity on the quality of representation of singular enrichments for GFEM/XFEM stress approximations around brittle cracks. 2015 , 283, 243-279		7
1052	Modelling of coupled fluid-mechanical problems in fractured geological media using enriched finite elements. 2015 , 39, 1104-1140		10
1051	A NURBS-based interface-enriched generalized finite element method for problems with complex discontinuous gradient fields. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 950-964	2.4	19
1050	A homogenized XFEM approach to simulate fatigue crack growth problems. 2015 , 150, 1-22		57
1049	An extended Layerwise method for composite laminated beams with multiple delaminations and matrix cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 407-434	2.4	47
1048	A meshfree variational multiscale methods for thermo-mechanical material failure. 2015 , 75, 1-7		12
1047	The Orthonormalized Generalized Finite Element Method \square GFEM: Efficient and stable reduction of approximation errors through multiple orthonormalized enriched basis functions. 2015 , 287, 112-149		30
1046	Mechanical examination of crack length dependency and material dependency on threshold stress intensity factor range with Dugdale model. 2015 , 135, 168-186		19

1045	XFEM analysis of fiber bridging in mixed-mode crack propagation in composites. 2015 , 125, 314-327		48
1044	An enriched shell element formulation for efficient modeling of multiple delamination propagation in laminates. 2015 , 126, 196-206		14
1043	Numerical modeling and investigation of fracture propagation with arbitrary orientation through fluid injection in tight gas reservoirs with combined XFEM and FVM. 2015 , 73, 5801-5813		23
1042	A Partition of Unity-Based Model for Crack Nucleation and Propagation in Porous Media, Including Orthotropic Materials. 2015 , 106, 505-522		10
1041	An extended finite element model for modelling localised fracture of reinforced concrete beams in fire. 2015 , 152, 11-26		19
1040	A numerical assessment of phase-field models for brittle and cohesive fracture: \mathbb{E} Convergence and stress oscillations. 2015 , 52, 72-84		89
1039	Extended finite element method coupled with face-based strain smoothing technique for three-dimensional fracture problems. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 1894-1916	2.4	14
1038	An extended wavelet Galerkin method with a high-order B-spline for 2D crack problems. 2015 , 226, 2159-2175		27
1037	Three-dimensional simulation of crack with curved front with direct estimation of stress intensity factors. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 635-652	2.4	4
1036	A micropolar peridynamic theory in linear elasticity. 2015 , 59, 171-182		26
1035	Curvilinear Fatigue Crack Growth Simulation and Validation under Constant Amplitude and Overload Loadings. 2015 , 28, 04014054		3
1034	A concurrent multiscale method for simulation of crack propagation. 2015 , 28, 235-251		13
1033	A fictitious crack XFEM with two new solution algorithms for cohesive crack growth modeling in concrete structures. 2015 , 32, 473-497		69
1032	Failure mechanisms of clear wood identified at wood cell level by an approach based on the extended finite element method. 2015 , 144, 158-175		32
1031	Thermo-mechanically coupled fracture analysis of shape memory alloys using the extended finite element method. 2015 , 24, 045031		14
1030	Analytical solutions for flexural design of hybrid steel fiber reinforced concrete beams. 2015 , 100, 164-177		38
1029	Mechanical buckling of curvilinear fibre composite laminate with material discontinuities and environmental effects. 2015 , 131, 790-798		19
1028	The Influence of Initial Cracks on the Crack Propagation Process of Concrete Gravity Dam-Reservoir-Foundation Systems. 2015 , 19, 991-1011		8

1027	3D hierarchical interface-enriched finite element method: Implementation and applications. 2015 , 299, 45-55		21
1026	Complementarity problem arising from static growth of multiple cracks and MLS-based numerical manifold method. 2015 , 295, 150-171		113
1025	Homogenization of transverse elastic properties of Cf/Mg composites at an elevated temperature and containing a small fraction of liquid phase. 2015 , 117, 234-243		5
1024	Three-dimensional variable-node elements based upon CS-FEM for elastic-plastic analysis. 2015 , 158, 308-332		14
1023	Analysis of hydraulic fracturing in concrete dam considering fluid-structure interaction using XFEM-FVM model. 2015 , 57, 399-412		26
1022	Simulation of micromechanical damage to obtain mechanical properties of bimodal Al using XFEM. 2015 , 89, 229-240		14
1021	Extending the method of exponential basis functions to problems with singularities. 2015 , 32, 406-423		17
1020	A computational framework for the simulation of high-speed multi-material fluid-structure interaction problems with dynamic fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 585-623	2.4	34
1019	A generalized XFEM procedure for analyzing intersecting joints in rock masses with excavation. 2015 , 32, 806-833		4
1018	Notch effects and crack propagation analysis on kenaf/polypropylene nonwoven composites. 2015 , 73, 11-19		11
1017	Modeling of deformation and localized failure in anisotropic rocks. 2015 , 67-68, 93-101		19
1016	Fracture characterization of pristine/post-consumer HDPE blends using the essential work of fracture (EWF) concept and extended finite element method (XFEM). 2015 , 139, 1-17		8
1015	X-FEM modeling of dynamic ductile fracture problems with a nonlocal damage-viscoplasticity model. 2015 , 99, 49-67		12
1014	Numerical evaluation of the effective conductivities of composites with interfacial weak and strong discontinuities. 2015 , 93, 1-20		14
1013	Oxidation-induced damage evolution in a unidirectional polymer matrix composite. 2015 , 49, 1393-1406		11
1012	A methodology for the estimation of transverse failure strength of an oxidized lamina from isothermal aging studies. 2015 , 73, 101-108		6
1011	Driving force profile design in comb drive electrostatic actuators using a level set-based shape optimization method. 2015 , 51, 369-383		4
1010	A new criterion for modeling multiple discontinuities passing through an element using XIGA. 2015 , 29, 1131-1143		26

1009	Crack influence on load-bearing capacity of glued laminated timber using extended finite element modelling. 2015 , 10, 335-343		12
1008	Extended finite element method for analysis of multi-scale flow in fractured shale gas reservoirs. 2015 , 73, 6035-6045		7
1007	Fracture propagation in a cracked semicircular bend specimen under mixed mode loading using extended finite element method. 2015 , 8, 9635-9646		13
1006	A stable X-FEM in cohesive transition from closed to open crack. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 540-570	2.4	12
1005	An extended finite element model for structural analysis of cracked beam-columns with arbitrary cross-section. 2015 , 99, 1-9		5
1004	Interfacial dynamic impermeable cracks analysis in dissimilar piezoelectric materials under coupled electromechanical loading with the extended finite element method. 2015 , 67-68, 205-218		63
1003	XFEM-dislocation dynamics multi-scale modeling of plasticity and fracture. 2015 , 104, 98-107		16
1002	Adaptive delamination analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 1008-1037	2.4	15
1001	XFEM based seismic potential failure mode analysis of concrete gravity dam-water foundation systems through incremental dynamic analysis. 2015 , 98, 81-94		47
1000	Control vectors for splines. 2015 , 58, 173-178		7
999	Fatigue and Fracture Analysis. 2015 , 463-521		0
998	Stable GFEM (SGFEM): Improved conditioning and accuracy of GFEM/XFEM for three-dimensional fracture mechanics. 2015 , 289, 355-386		84
997	Vibration analysis of cracked FGM plates using higher-order shear deformation theory and extended isogeometric approach. 2015 , 96-97, 65-78		68
996	A new finite element approach for solving three-dimensional problems using trimmed hexahedral elements. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 1527-1553	2.4	14
995	A phase field method to simulate crack nucleation and propagation in strongly heterogeneous materials from direct imaging of their microstructure. 2015 , 139, 18-39		134
994	Effect of cracks on concrete diffusivity: A meso-scale numerical study. 2015 , 108, 539-551		34
993	Numerical simulation of fatigue crack propagation in friction stir welded joint made of Al 2024-T351 alloy. 2015 , 58, 477-484		23
992	Ultra-large scale fracture mechanics analysis using a parallel finite element method with submodel technique. 2015 , 105, 44-55		9

991	Use of composite voxels in FFT-based homogenization. 2015 , 294, 168-188		55
990	Tension stiffening in textile-reinforced concrete under high speed tensile loads. 2015 , 64, 49-61		41
989	An enhanced finite element technique for diffuse phase transition. 2015 , 56, 691-708		7
988	Evaluation of primary water stress corrosion cracking growth rates by using the extended finite element method. 2015 , 47, 895-906		6
987	Fatigue crack growth in presence of material discontinuities by EFGM. 2015 , 81, 105-116		30
986	Extended finite element method for plastic limit load computation of cracked structures. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 104, 2-17	2.4	9
985	X-FEM modeling of large plasticity deformation; a convergence study on various blending strategies for weak discontinuities. 2015 , 24, 79-106		12
984	A polygonal finite element method for modeling crack propagation with minimum remeshing. 2015 , 194, 123-148		37
983	Elasto-Plastic Finite Deformation Simulations using 3-D Parallel XFEM. 2015 , 2, 2030-2036		1
982	Uncertainty quantification of the fracture properties of polymeric nanocomposites based on phase field modeling. 2015 , 133, 1177-1190		77
981	Crack analysis in media with orthotropic Functionally Graded Materials using extended Isogeometric analysis. 2015 , 147, 203-227		27
980	XFEM modeling of short microfiber reinforced composites with cohesive interfaces. 2015 , 106, 16-31		33
979	An augmented Lagrangian contact formulation for frictional discontinuities with the extended finite element method. 2015 , 107, 28-43		45
978	Numerical simulation of hydraulic fracture propagation in shale gas reservoir. 2015 , 26, 847-856		46
977	Augmented Numerical Manifold Method with implementation of flat-top partition of unity. 2015 , 61, 153-171		15
976	Fatigue crack growth in functionally graded material using homogenized XIGA. 2015 , 134, 269-284		28
975	Numerical simulations of propagation, bifurcation and coalescence of cracks in rocks. 2015 , 80, 241-254		53
974	Comparative Studies of Residual Stress Effects on Fatigue Crack Growth of Welded Aluminum Structures under Block Spectrum Loading. 2015 ,		

973	An extended cell-based smoothed discrete shear gap method (XCS-FEM-DSG3) for free vibration analysis of cracked Reissner-Mindlin shells. 2015 , 9, 341-358		11
972	Uncertainty quantification in Discrete Fracture Network models: Stochastic fracture transmissivity. 2015 , 70, 603-623		24
971	Thermo-mechanical fracture study of inhomogeneous cracked solids by the extended isogeometric analysis method. 2015 , 51, 123-139		33
970	Combined continuum damage-embedded discontinuity model for explicit dynamic fracture analyses of quasi-brittle materials. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 101, 230-250	2.4	30
969	A coupled Eulerian-Lagrangian extended finite element formulation for simulating large deformations in hyperelastic media with moving free boundaries. 2015 , 283, 280-302		14
968	Bridging multiple structural scales with a generalized finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 180-201	2.4	25
967	Fatigue crack growth analysis of a homogeneous plate in the presence of multiple defects using extended isogeometric analysis. 2015 , 37, 1065-1082		17
966	Propagation of delamination in composite materials with isogeometric continuum shell elements. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 159-179	2.4	28
965	Isogeometric analysis of stress intensity factors for curved crack problems. 2015 , 75, 89-103		9
964	Influence of heat flux loading patterns on the surface cracking features of tungsten armor under ELM-like thermal shocks. 2015 , 457, 256-265		25
963	An extended element-free Galerkin method for thermo-mechanical dynamic fracture in linear and nonlinear materials. 2015 , 98, 366-371		3
962	Non-linear dynamic fragmentation using Cracking Particles Method. 2015 , 98, 117-122		5
961	A non-local approach to crack process modeling in ceramic materials subjected to thermal shock. 2015 , 133, 85-98		25
960	Optimization of multiphase structures considering damage. 2015 , 51, 1083-1096		13
959	Multi-scale identification of concrete material parameters. 2015 , 75, 8-15		11
958	Extended isogeometric analysis for material interface problems. 2015 , 80, 608-633		22
957	Extraction of stress intensity factors from Irwin's integral using high-order XFEM on triangular meshes. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 528-550	2.4	18
956	A local mesh replacement method for modeling near-interfacial crack growth in 2D composite structures. 2015 , 75, 70-77		10

955	Effect of crack and determination of fracture energy of carbon nanotube reinforced polymer composites. 2015 , 229, 110-116		
954	A combined XFEM damage mechanics approach for concrete crack propagation. 2015 , 283, 923-955		59
953	Enrichment strategies and convergence properties of the XFEM for hydraulic fracture problems. 2015 , 283, 474-502		54
952	A meshfree interface-finite element method for modelling isothermal solutal melting and solidification in binary systems. 2015 , 95, 20-41		3
951	Concurrent multiscale modeling of three dimensional crack and dislocation propagation. 2015 , 80, 82-92		155
950	T-spline based XIGA for fracture analysis of orthotropic media. 2015 , 147, 138-146		157
949	Modeling and simulation of kinked cracks by virtual node XFEM. 2015 , 283, 1425-1466		60
948	Computational continua revisited. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 102, 332-378	2.4	22
947	Crack propagation in a chopped glass-reinforced composite under biaxial testing by means of XFEM. 2015 , 119, 264-271		22
946	Analysis of cohesive cracking in saturated porous media using an extrinsically enriched EFG method. 2015 , 63, 183-198		15
945	Cracking in autoclaved aerated concrete: Experimental investigation and XFEM modeling. 2015 , 67, 156-167		26
944	Stochastic fatigue crack growth simulation of interfacial crack in bi-layered FGMs using XIGA. 2015 , 284, 186-229		70
943	Simulation of cracks in a Cosserat medium using the extended finite element method. 2016 , 21, 621-635		6
942	An Object-Oriented Class Organization for Global-Local Generalized Finite Element Method. 2016 , 13, 2529-2551		10
941	Propagation of cohesive crack in unsaturated porous media by use of XFEM method. 2016 , 9, 08010		
940	The Application of Nonordinary, State-Based Peridynamic Theory on the Damage Process of the Rock-Like Materials. 2016 , 2016, 1-9		7
939	Investigation on Dynamic Propagation Characteristics of In-Plane Cracks in PVB Laminated Glass Plates. 2016 , 2016, 1-13		5
938	Analysis of Interaction Between Hydraulic and Natural Fractures. 2016 ,		3

937	Crack Growth Simulation Under Complicated Stress Field Using S-Version FEM. 2016,		
936	Three-dimensional investigation of multiple stage hydraulic fracturing in unconventional reservoirs. 2016, 146, 1063-1078		38
935	Coupled formulation and algorithms for the simulation of non-planar three-dimensional hydraulic fractures using the generalized finite element method. 2016, 40, 1402-1437		44
934	Numerical modeling of hydraulic fracture propagation, closure and reopening using XFEM with application to in-situ stress estimation. 2016, 40, 2033-2060		49
933	Higher-order accurate integration of implicit geometries. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 106, 323-371	2.4	88
932	Implementation of regularized isogeometric boundary element methods for gradient-based shape optimization in two-dimensional linear elasticity. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 106, 972-1017	2.4	80
931	Hydrodynamic meshfree method for high-rate solid dynamics using a Rankine-Hugoniot enhancement in a Riemann-SCNI framework. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 108, 1525-1549	2.4	10
930	A new technique for numerical simulation of dendritic solidification using a meshfree interface finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 107, 813-852	2.4	3
929	A two-dimensional simulation of solidification processes in materials with thermo-dependent properties using XFEM. 2016, 26, 1661-1683		9
928	Modeling 3D thermal fracture propagation by transient cooling using virtual multidimensional internal bonds. 2016, 40, 2293-2311		10
927	Determination of the intensity of singularity at the vertex of interface in three-dimensional joints using a conservative integral (Effect of radius of integral domain and size of element). 2016, 82, 15-00372-15-00372		
926	WITHDRAWN: Multiscale modeling of fracture in rock. 2016,		
925	Selection of finite-element mesh parameters in modeling the growth of hydraulic fracturing cracks. 2016, 57, 1198-1207		2
924	An Extended Finite Element Method Based Approach for Modeling Crevice and Pitting Corrosion. 2016, 83,		21
923	Dynamic Fracture of Aluminum-Bonded Composites. 2016, 138,		
922	Lattice Approach in Continuum and Fracture Mechanics. 2016, 83,		12
921	Numerical Simulation of Ice Shedding From a Spinning Cone by Using Coupled CZM and XFEM. 2016		
920	Three-dimensional finite element modeling of ductile crack initiation and propagation. 2016, 3,		6

919	WITHDRAWN: Computational modeling of fracture in rock using an improved cracking particles method. 2016,		
918	Study on Crack Propagation of a Bearing Inner-Ring under Cyclic Loading. 2016, 851, 317-321		1
917	Geomechanical modeling of CO2 geological storage: A review. 2016, 8, 936-947		21
916	Analysis of elliptical hole edge-cracks in piezoelectric materials with the extended finite element method. 2016,		
915	Fracture simulations of particulate piezoelectric composites using the XFEM. 2016,		
914	Analysis of thin plates with holes by using exact geometrical representation within XFEM. 2016, 7, 445-52		5
913	2D coupled HM-XFEM modeling with cohesive zone model and applications to fluid-driven fracture network. 2016, 159, 115-143		40
912	A peridynamic theory for linear elastic shells. 2016, 84, 110-132		45
911	A domain decomposition based method for two-dimensional linear elastic fractures. 2016, 66, 34-48		16
910	On computational homogenization of microscale crack propagation. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 108, 76-90	2.4	18
909	A variational framework to model diffusion induced large plastic deformation and phase field fracture during initial two-phase lithiation of silicon electrodes. 2016, 312, 51-77		62
908	Fatigue crack growth analysis in layered heterogeneous material systems using peridynamic approach. 2016, 152, 403-407		15
907	Crack propagation in rock specimen under compressive loading using extended finite element method. 2016, 9, 1		14
906	A Discussion on Gradient Damage and Phase-Field Models for Brittle Fracture. 2016, 263-277		0
905	A plastic-damage-contact constitutive model for concrete with smoothed evolution functions. 2016, 169, 40-56		9
904	Crack tip enrichment functions for extended finite element analysis of two-dimensional interface cracks in anisotropic magneto-electroelastic bimetals. 2016, 161, 21-39		14
903	Determination of fracture parameters in center cracked circular discs of concrete under diametral loading: A numerical analysis and experimental results. 2016, 85, 355-366		24
902	Simulation of failure of air plasma sprayed thermal barrier coating due to interfacial and bulk cracks using surface-based cohesive interaction and extended finite element method. 2016, 51, 132-143		21

901	Validation of a peridynamic model for fatigue cracking. 2016 , 162, 76-94		66
900	Numerical simulation of hydraulic fracturing in orthotropic formation based on the extended finite element method. 2016 , 33, 56-69		40
899	Isogeometric analysis of fluid-saturated porous media including flow in the cracks. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 108, 990-1006	2.4	22
898	Micromechanical Analyses of Debonding and Matrix Cracking in Dual-Phase Materials. 2016 , 83,		5
897	Quasi-Static Crack Propagation Modeling Using Shape-Free Hybrid Stress-Function Elements with Drilling Degrees of Freedom. 2016 , 13, 1650014		2
896	A novel hybrid approach for level set characterization and tracking of non-planar 3D cracks in the extended finite element method. 2016 , 160, 1-14		30
895	3D finite element modeling of sand particle fracture based on in situ X-Ray synchrotron imaging. 2016 , 40, 105-116		33
894	Fully Coupled XFEM Model for Flow and Deformation in Fractured Porous Media with Explicit Fracture Flow. 2016 , 16, 04015091		38
893	Peridynamics for unguided crack growth prediction under mixed-mode loading. 2016 , 167, 34-44		17
892	Enabling fast, stable and accurate peridynamic computations using multi-time-step integration. 2016 , 306, 382-405		13
891	J-integral evaluation for 2D mixed-mode crack problems employing a meshfree stabilized conforming nodal integration method. 2016 , 58, 185-198		51
890	Loadings in Thermal Barrier Coatings of Jet Engine Turbine Blades. 2016 ,		10
889	A new finite element method for modeling delamination propagation without additional degrees of freedom. 2016 , 147, 82-98		7
888	A new approach to wall modeling in LES of incompressible flow via function enrichment. 2016 , 316, 94-116		15
887	Numerical modeling of two-phase fluid flow in deformable fractured porous media using the extended finite element method and an equivalent continuum model. 2016 , 94, 510-528		39
886	Stable 3D extended finite elements with higher order enrichment for accurate non planar fracture. 2016 , 306, 19-46		54
885	Phase field modeling of ductile fracture at finite strains: A variational gradient-extended plasticity-damage theory. 2016 , 84, 1-32		178
884	Investigation on the competitive fracture behavior in nano-multilayered structures. 2016 , 92-93, 45-53		9

883	Analysis of shape memory alloy sensory particles for damage detection via substructure and continuum damage modeling. 2016 ,	2
882	Modelling of Dynamic Rock Fracture Process with a Rate-Dependent Combined Continuum Damage-Embedded Discontinuity Model Incorporating Microstructure. 2016 , 49, 3947-3962	21
881	Accelerated multiscale space-time finite element simulation and application to high cycle fatigue life prediction. 2016 , 58, 329-349	10
880	Modelling localised fracture of reinforced concrete structures. 2016 , 169, 53-69	0
879	Numerical simulation of propagation and coalescence of flaws in rock materials under compressive loads using the extended non-ordinary state-based peridynamics. 2016 , 163, 248-273	163
878	Steam generator tube rupture simulation using extended finite element method. 2016 , 305, 697-705	3
877	Robustness in stable generalized finite element methods (SGFEM) applied to Poisson problems with crack singularities. 2016 , 311, 476-502	34
876	Fatigue Crack Growth Under Variable Amplitude Loading Through XFEM. 2016 , 2, 3073-3080	16
875	A Peridynamic Model for Ductile Fracture of Moderately Thick Plates. 2016 , 2, 3713-3720	11
874	Mesh refinement schemes for the concurrent atomistic-continuum method. 2016 , 90, 144-152	29
873	Numerical Simulation of Fatigue Crack Growth in Hip Implants. 2016 , 149, 229-235	8
872	Extended layerwise method for laminated composite plates with multiple delaminations and transverse cracks. 2016 , 58, 657-679	22
871	Thermoelastic analysis of multiple defects with the extended finite element method. 2016 , 32, 1123-1137	6
870	A four-node quadrilateral element fitted to numerical manifold method with continuous nodal stress for crack analysis. 2016 , 177, 69-82	57
869	Numerical simulation of crack curving and branching in brittle materials under dynamic loads using the extended non-ordinary state-based peridynamics. 2016 , 60, 277-299	69
868	Hybrid fluid-structure interaction modelling of dynamic brittle fracture in steel pipelines transporting CO ₂ streams. 2016 , 54, 702-715	12
867	Phase field modeling of fracture in porous plasticity: A variational gradient-extended Eulerian framework for the macroscopic analysis of ductile failure. 2016 , 312, 3-50	51
866	On a PDE-Constrained Optimization Approach for Flow Simulations in Fractured Media. 2016 , 27-45	2

865	Stress Intensity Factors Through Crack Opening Displacements in the XFEM. 2016 , 143-164	
864	Spherical indentation cracking in brittle materials: An XFEM study. 2016 ,	1
863	Well-conditioning global/local analysis using stable generalized/extended finite element method for linear elastic fracture mechanics. 2016 , 58, 819-831	17
862	XFEM-Based CZM for the Simulation of 3D Multiple-Cluster Hydraulic Fracturing in Quasi-Brittle Shale Formations. 2016 , 49, 4731-4748	63
861	A two-scale generalized finite element method for interaction and coalescence of multiple crack surfaces. 2016 , 163, 274-302	20
860	Effect of unbonded areas around hole on the fatigue crack growth life of diffusion bonded titanium alloy laminates. 2016 , 163, 176-188	5
859	Modeling and Numerical Simulation of Fatigue Crack Growth in Cracked Specimens Containing Material Discontinuities. 2016 , 48, 294-307	25
858	Fatigue crack growth analysis of an interfacial crack in heterogeneous materials using homogenized XIGA. 2016 , 85, 294-319	47
857	Analyzing the impact of microstructural defects on the failure response of ceramic fiber reinforced aluminum composites. 2016 , 97-98, 43-55	4
856	Tensile failure of unidirectional composites from a local fracture plane. 2016 , 133, 119-127	18
855	Three-Dimensional Modeling of Short Fiber-Reinforced Composites with Extended Finite-Element Method. 2016 , 142, 04016087	10
854	Voronoi Based Discrete Least Squares Meshless Method for Assessment of Stress Field in Elastic Cracked Domains. 2016 , 32, 267-276	1
853	On the enrichment zone size for optimal convergence rate of the Generalized/Extended Finite Element Method. 2016 , 72, 481-493	16
852	Crack growth propagation using standard FEM. 2016 , 165, 1-18	11
851	Higher-Order Accurate Integration for Cut Elements with Chen-Babuřa Nodes. 2016 , 245-269	2
850	XFEM with Smoothing Technique for Static Fracture Mechanics in Three-Dimension. 2016 , 13, 1640004	9
849	Stress intensity factors for inclined external surface cracks in pressurised pipes. 2016 , 165, 72-86	30
848	Stress analysis of 3D complex geometries using the scaled boundary polyhedral finite elements. 2016 , 58, 697-715	22

847	Advances in Discretization Methods. 2016,	3
846	Modeling of Fracture in Polycrystalline Materials. 2016, 79-102	5
845	Crack propagation in non-homogenous materials: Evaluation of mixed-mode SIFs, T-stress and kinking angle using a variant of EFG Method. 2016, 72, 11-26	28
844	A Simple and Efficient X-FEM Approach for Non-planar Fatigue Crack Propagation. 2016, 2, 2550-2557	7
843	Fracture behaviors of ceramic tissue scaffolds for load bearing applications. 2016, 6, 28816	29
842	Analysis of Loess Slope Stability Considering Cracking and Shear Failures. 2016, 16, 982-989	5
841	WITHDRAWN: Meshfree approach for hydraulic fracture. 2016,	4
840	A multiscale finite element method with embedded strong discontinuity model for the simulation of cohesive cracks in solids. 2016, 311, 576-598	15
839	Numerical integration over implicitly defined domains for higher order unfitted finite element methods. 2016, 37, 582-596	17
838	Numerical simulation of the dynamic response in pulse-loaded fibre/metal-laminated plates. 2016, 7, 469-494	1
837	Numerical modelling of mechanical behaviour of engineered cementitious composites under axial tension. 2016, 173, 95-108	10
836	Numerical simulation of initiation, propagation and coalescence of cracks using the non-ordinary state-based peridynamics. 2016, 201, 213-234	50
835	Numerical modeling of 3-D inclusions and voids by a novel adaptive XFEM. 2016, 102, 105-122	53
834	A coupled meshless finite point/Peridynamic method for 2D dynamic fracture analysis. 2016, 119, 419-431	85
833	Evaluating Fracture Toughness of Rolled Zircaloy-2 at Different Temperatures Using XFEM. 2016, 25, 4046-4058	9
832	WITHDRAWN: A finite element/generalized finite element code-coupling approach for linear elastic fracture mechanics problems. 2016, 73, 200-207	
831	Numerical Fracture Analysis of Foamed Concrete Beam Using XFEM Method. 2016, 837, 183-186	19
830	Incompatible extended layerwise method for laminated composite shells. 2016, 119, 243-252	17

829	Extended Finite-Element Method for Weak Discontinuities in Electric Fields. 2016 , 26, 1-5	5
828	GraFEA: a graph-based finite element approach for the study of damage and fracture in brittle materials. 2016 , 51, 3129-3147	15
827	CRACK PROPAGATION IN SOIL EMBANKMENT BASED ON X-FEM CONSIDERING TENSILE FAILURE MODE. 2016 , 72, I_227-I_235	
826	Experimental and Numerical Study on the Crack Growth under Uniaxial Compression. 2016 , 72, I_357-I_365	
825	Comparing Computational and Experimental Failure of Composites Using XFEM. 2016 ,	2
824	Numerical modeling of dynamic rock fracture with a combined 3D continuum viscodamage-embedded discontinuity model. 2016 , 40, 1339-1357	14
823	A two-scale generalized finite element approach for modeling localized thermoplasticity. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 108, 1123-1158	2.4 15
822	A coupled FEM-FG approach for modelling crack growth in ductile materials. 2016 , 39, 1204-1225	23
821	An XFEM based uncertainty study on crack growth in welded joints with defects. 2016 , 86, 125-142	18
820	Edge-based smoothed extended finite element method for dynamic fracture analysis. 2016 , 40, 8564-8579	31
819	Improved XFEM: Accurate and robust dynamic crack growth simulation. 2016 , 308, 256-285	28
818	Gradient damage vs phase-field approaches for fracture: Similarities and differences. 2016 , 312, 78-94	150
817	A phase-field approach to model fracture of arterial walls: Theory and finite element analysis. 2016 , 312, 542-566	64
816	Crack growth simulation in heterogeneous material by S-FEM and comparison with experiments. 2016 , 167, 239-247	7
815	Powell-Babin B-splines for smeared and discrete approaches to fracture in quasi-brittle materials. 2016 , 307, 193-214	16
814	An enriched shell element formulation for modeling of inter- and intralaminar crack propagation in laminates. 2016 , 136, 616-625	12
813	Analysis on the dynamic extension for transverse surface cracks in the as-cast steel slab at high temperatures. 2016 , 66, 341-353	5
812	Adaptive coupling between damage mechanics and peridynamics: A route for objective simulation of material degradation up to complete failure. 2016 , 94, 453-472	71

811	3D stress intensity factors for weld toe semi-elliptical surface cracks using XFEM. 2016 , 48, 1-14		16
810	Micro-crack propagation on a biomimetic bone like composite material studied with the extended finite element method. 2016 , 1, 18-25		5
809	Modelling the tensile failure of composites with the floating node method. 2016 , 308, 414-442		59
808	Numerical investigation of mixed-mode crack growth in ductile material using elastic-plastic XFEM. 2016 , 38, 1689-1699		10
807	A well-conditioned and optimally convergent XFEM for 3D linear elastic fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 105, 643-677	2.4	56
806	Delamination growth in composite laminates of variable stiffness. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 108, 1406-1424	2.4	11
805	Three-Dimensional Element Partition Method for Fracture Simulation. 2016 , 16, 04015074		10
804	Finite Element Analysis on the Effect of the Texture to the Crack Tip Plasticity in Aluminum Alloy. 2016 , 850, 328-333		
803	Extended Isogeometric Analysis (XIGA) of Fatigue Life in Attachment Lug. 2016 , 16, 601-611		1
802	XFEM Modeling of Interface Failure in Adhesively Bonded Fiber-Reinforced Polymers . 2016 , 18, 417-426		8
801	Deforming Fluid Domains Within the Finite Element Method: Five Mesh-Based Tracking Methods in Comparison. 2016 , 23, 323-361		22
800	Modelling the dynamic failure of brittle rocks using a hybrid continuum-discrete element method with a mixed-mode cohesive fracture model. 2016 , 87, 146-155		70
799	An immersed particle modeling technique for the three-dimensional large strain simulation of particulate-reinforced metal-matrix composites. 2016 , 40, 2500-2513		8
798	Meshfree simulation of concrete structures and impact loading. 2016 , 91, 194-199		4
797	Influence of crack surface friction on crack initiation and propagation: A numerical investigation based on extended finite element method. 2016 , 74, 1-14		50
796	Optimal spacing of sequential and simultaneous fracturing in horizontal well. 2016 , 29, 329-336		28
795	Numerical Investigation of Scale Factor in Composites Applying Extended Finite Element Method. 2016 ,		2
794	Combination of a non-local damage model for quasi-brittle materials with a mesh-adaptive finite element technique. 2016 , 112, 26-39		14

793	A Comparative Study of Local and Nonlocal Domain Integration for XFEM Based Stress Intensity Factor Extraction for Fatigue Life Prediction. 2016,		
792	Development of a Combined Cohesive and Extended Finite Element Method to Predict Delamination in Composite Structures. 2016,		2
791	A Discontinuous Shell Element for the Delamination Analysis of Composite Laminates. 2016,		1
790	A strategy to interface isogeometric analysis with Lagrangian finite elementsApplication to incompressible flow problems. 2016, 127, 182-193		7
789	Effects of design parameters on fracture resistance of glass simulated dental crowns. 2016, 32, 373-84		10
788	A 2D discrete model with a bilinear softening constitutive law applied to dynamic crack propagation problems. 2016, 197, 81-97		8
787	A selective enhanced FE-method for phase field modeling of ferroelectric materials. 2016, 57, 105-122		6
786	Mesoscale damage modelling of concrete by using image-based scaled boundary finite element method. 105678952199841		1
785	Modeling of crack propagation with the quasi-static material point method. 2021, 245, 107602		1
784	Extended material point method for the three-dimensional crack problems. <i>International Journal for Numerical Methods in Engineering,</i> 2021, 122, 3044-3069	2.4	4
783	An enriched finite element method for efficient solutions of transient heat diffusion problems with multiple heat sources. 1		1
782	Cone-complementary manifold method for stability and failure analysis of jointed/fractured rock masses. 2021, 131, 103955		2
781	Coupled continuous-discrete formulation based on microplane and strong discontinuity models for representing non-orthogonal intersecting cracks. 2021, 245, 107565		2
780	Experimental and numerical investigations on dynamic mechanical responses and failure process of gas-bearing coal under impact load. 2021, 142, 106579		37
779	Modelling delaminations using adaptive cohesive segments with rotations in dynamic explicit analysis. 2021, 245, 107571		4
778	Investigation of Microcrack Propagation and Energy Evolution in Brittle Rocks Based on the Voronoi Model. 2021, 14,		2
777	Validation of the ductile fracture modeling of CGI at quasi-static loading conditions. 2021, 30, 1400-1422		
776	Crack detection in Mindlin-Reissner plates under dynamic loads based on fusion of data and models. 2021, 246, 106475		2

775	Coupling of non-ordinary state-based peridynamics and finite element method with reduced boundary effect. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 4033-4054	2.4	1
774	A fully coupled hydromechanical XFEM model for the simulation of 3D non-planar fluid-driven fracture propagation. 2021 , 132, 103971		6
773	Fatigue crack propagation behavior of high-strength steel under variable amplitude loading. 2021 , 247, 107642		8
772	Study on predicting the mechanical properties and fracturing behaviors of particle reinforced metal matrix composites by non-local approach. 2021 , 155, 103790		2
771	Locally Conservative Immersed Finite Element Method for Elliptic Interface Problems. 2021 , 87, 1		2
770	Modeling the Effect of Elastic Modulus of the Second Phase Particle on Crack Propagation Using FECEM.		
769	Residual load-carrying capacity of stiffened panels with cracks under uniaxial tension loading considering crack propagation. 1-10		
768	Effects of delamination in drilling glass/polyester composite. 2021 , 15, 552		1
767	Effect of Defects Part II: Multiscale Effect of Microvoids, Orientation of Rivet Holes on the Damage Propagation, and Ultimate Failure Strength of Composites. 2021 , 5, 112		1
766	Interfacial crack growth in piezoelectric-piezomagnetic bi-layered structures with a modified mechanical energy release rate criterion. 2021 , 262, 113344		2
765	Crack Growth in Rocks with Preexisting Narrow Flaws under Uniaxial Compression. 2021 , 21, 04021032		5
764	Length scale control for high-resolution three-dimensional level setBased topology optimization. 2021 , 64, 1127-1139		2
763	Peridynamic analysis of dynamic fracture: influence of peridynamic horizon, dimensionality and specimen size. 2021 , 67, 1719-1745		7
762	Investigation of fatigue crack growth in engineering components containing different types of material irregularities by XFEM. 1-39		5
761	Modeling Quasi-Static Crack Using XFEM and FECEM.		
760	Grizzly and BlackBear: Structural Component Aging Simulation Codes. 2021 , 207, 981-1003		0
759	Acoustic scattering in nonhomogeneous media and the problem of discontinuous gradients: Analysis and inf-sup stability in the method of finite spheres. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 3141-3170	2.4	1
758	Investigation of mixed-mode fracture of aligned steel fibre reinforced cementitious composites. 2021 , 228, 159-178		0

757	Machine learning assisted stochastic-XFEM for stochastic crack propagation and reliability analysis. 2021 , 112, 102882		2
756	Arbitrary 3D crack propagation with Improved XFEM: Accurate and efficient crack geometries. 2021 , 377, 113659		3
755	A study for lens capsule tearing during capsulotomy by finite element simulation. 2021 , 203, 106025		4
754	Fatigue crack detection in welded structural components of steel bridges using artificial neural network. 2021 , 11, 931-947		1
753	Simulation of Mode I Interlaminar Damage of a GFRP Composite Using Cohesive Laws in the Framework of the Equivalent LEFM R-Curve and an Optimised Algorithm. 2021 , 13,		
752	Modeling hydraulic fracture propagation in a saturated porous rock media based on EPHF method. 2021 , 89, 103887		5
751	Modeling non-isothermal two-phase fluid flow with phase change in deformable fractured porous media using extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 4378-4426	2.4	2
750	Desiccation cracking of soils: A review of investigation approaches, underlying mechanisms, and influencing factors. 2021 , 216, 103586		22
749	Modeling pressurized fracture propagation with the isogeometric BEM. 2021 , 7, 1		8
748	A mesh-independent framework for crack tracking in elastodamaging materials through the regularized extended finite element method. 2021 , 68, 25-49		2
747	An XFEM-VCCT coupled approach for modeling mode I fatigue delamination in composite laminates under high cycle loading. 2021 , 249, 107760		2
746	Research on 3D Improved Extended Finite Element Method for Electric Field of Liquid Nitrogen with Bubbles. 2021 , 11, 4839		
745	An improved form of smoothed particle hydrodynamics method for crack propagation simulation applied in rock mechanics. 2021 , 31, 421-428		14
744	Finite element simulation for bending behavior of steel-ECC composite slab considering shrinkage, creep and cracking. 2021 , 282, 122643		2
743	Modeling of cracks in two-dimensional elastic bodies by coupling the boundary element method with peridynamics. 2021 , 217-218, 74-89		2
742	A cohesive XFEM model for simulating fatigue crack growth under various load conditions. 2021 , 248, 107688		4
741	An XFEM multilayered heaviside enrichment for fracture propagation with reduced enhanced degrees of freedom. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 3425-3447	2.4	4
740	A rate-dependent peridynamic model for predicting the dynamic response of particle reinforced metal matrix composites. 2021 , 263, 113673		4

739	An improved ordinary-state based peridynamic formulation for modeling FGMs with sharp interface transitions. 2021 , 197, 106322	4
738	Numerical Modeling of Temperature Effect on Tensile Strength of Granitic Rock. 2021 , 11, 4407	1
737	Composite coating effect on stress intensity factors of aluminum pressure vessels with inner circumferential crack by X-FEM. 2021 , 104445	3
736	An Optimal Multigrid Algorithm for the Combining (P ₁)-(Q ₁) Finite Element Approximations of Interface Problems Based on Local Anisotropic Fitting Meshes. 2021 , 88, 1	0
735	A Numerical Investigation of an Abnormal Phenomenon of Stress Intensity Factor (SIF) in a Cracked T-Butt Joint Accounting for Welding Effect. 2021 , 20, 343-353	0
734	A finite-element discretization of some boundary value problems for nonlinear strain-limiting elastic bodies. 108128652110207	2
733	XFEM-based numerical modeling of well performance considering proppant transport, embedment, crushing and rock creep in shale gas reservoirs. 2021 , 201, 108523	5
732	A new peridynamic mixed-mode bond failure model for interface delamination and homogeneous materials fracture analysis. 2021 , 379, 113728	6
731	A computational framework for crack propagation in spatially heterogeneous materials. 2021 , 379, 20200291	1
730	Microscale simulation method for prediction of mechanical properties and composition design of multilayer graphene-reinforced ceramic bearings. 2021 , 47, 17531-17539	0
729	Phase-field simulation of crack propagation in quasi-brittle materials: COMSOL implementation and parameter sensitivity analysis. 2021 , 29, 055020	0
728	Indentation behavior of metal matrix composites reinforced with arbitrary shape particle using a coupled FE-EFG approach. 1-18	0
727	Stress Distribution and Fracture Toughness of Underground Reinforced Plastic Pipe Composite. 2021 , 13,	1
726	Computational Simulation of 3D Fatigue Crack Growth under Mixed-Mode Loading. 2021 , 11, 5953	5
725	Evaluation of the geometrical discontinuity effect on mixed-mode I/II fracture load of FDM 3D-printed parts. 2021 , 113, 102953	11
724	Influence of Material Uncertainty on Vibration Characteristics of Higher-Order Cracked Functionally Gradient Plates Using XFEM. 2021 , 13,	2
723	Research on Extended Finite Element Method for Axisymmetric Electrostatic Field Based on Liquid Nitrogen with Bubbles. 2021 , 11, 5214	
722	Phase-field crack analysis using estimated transition zone of crack by molecular dynamics simulation. 2021 , 11, 065206	0

721	Experimental and numerical investigation on cracking mechanism of tunnel lining under bias pressure. 2021 , 163, 107693	2
720	On hydro-mechanical response of self-healing and self-sealing fractured geomaterials. 2021 , 134, 104030	1
719	Systematic literature review of the application of extended finite element method in failure prediction of pipelines. 2021 , 1, 241-251	1
718	Experimental and numerical study on progressive damage and failure in composite laminates during open-hole compression tests. 2021 , 145, 106300	8
717	Experimental and Numerical Investigation on Basic Law of Dense Linear Multihole Directional Hydraulic Fracturing. 2021 , 2021, 1-19	2
716	Enhancement effect of the aggregate particles on the low-temperature cracking resistance of the asphalt mortar. 2021 , 290, 123225	4
715	Experimental and extended finite element simulations for tensile fracture phenomenon of cryorolled aluminium alloy 5754. 095440622110282	1
714	Level Set function-based Functionally Graded Material for the reduction of maximum stresses around a pair of inclined unequal circular holes. 2021 , 1-17	1
713	Investigation of the Fracturing Effect Induced by the Disturbing Stress of Hydrofracturing Using the Bonded-Particle Model. 2021 , 2021, 1-24	2
712	An XFEM-Based Analysis of Concrete Face Cracking in Rockfill Dams. 2021 , 2021, 1-12	0
711	Experiment Study and Finite Element Analysis of the Coupling Effect of Steel Fiber Length and Coarse Aggregate Maximum Size on the Fracture Properties of Concrete. 2021 , 11, 850	0
710	Explicit edge-based smoothed numerical manifold method for transient dynamic modeling of two-dimensional stationary cracks. 2021 , 128, 310-325	4
709	Determination of the mixed mode I/II fracture characteristics of heat-treated granite specimens based on the extended finite element method. 2021 , 252, 107818	3
708	Crack identification with combined numerical simulation-intelligent optimization algorithms: a brief summary. 2021 , 825, 012029	
707	Multiscale extended finite element method for deformable fractured porous media. 2021 , 436, 110287	5
706	Review of Numerical Modelling and Experimental Analysis of Crack Propagation Properties in Alloy 5005. 2021 , 1964, 072008	
705	A field-enriched finite element method for simulating the failure process of rocks with different defects. 2021 , 250, 106539	13
704	Gradient-enhanced damage growth modeling of ductile fracture. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 5676-5691	2.4

703	A four-way enhanced numerical manifold method for crack propagation and failure analysis of rock slopes. 2021 , 95, 623-643		0
702	An In-depth Investigation of Bimaterial Interface Modeling Using Ordinary State-based Peridynamics. 1		1
701	Hydrogen gaseous effects on fracture resistance of API-X70 estimated by XFEM. 2021 , 35, 3829-3835		0
700	Numerical simulation of fatigue crack growth life of single side notched specimen. 2021 , 1965, 012122		
699	X-IGALME: Isogeometric analysis extended with local maximum entropy for fracture analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2021 , 122, 6103	2.4	1
698	A variational framework for the strain-smoothed element method. 2021 , 94, 76-93		4
697	Residual Capacity Evaluation of Masonry Arch Bridges by Extended Finite Element Method. 1-12		2
696	The Effect of Perforation Spacing on the Variation of Stress Shadow. 2021 , 14, 4040		0
695	Tensile and Flexural Behavior of Ultra-High Performance Concrete (UHPC) under Impact Loading. 2021 , 153, 103866		5
694	A finite-element-based approach to quantify the impact of bed joint reinforcement on the compressive strength of vertically perforated clay block masonry. 2021 , 239, 112277		2
693	Fault propagation and surface rupture in geologic materials with a meshfree continuum method. 2021 , 16, 2463-2486		6
692	Investigation of cracking behaviors in divertor armor-blocks under cyclic loading. 2021 , 169, 112464		0
691	Micromechanical investigation of cross-ply carbon composite laminates with glass microtubes using CZM and XFEM. 1-13		2
690	Virtual multi-dimensional internal bonds model with fracture energy conservation for three-dimensional numerical simulation of laboratory scale fluid pressurized fracturing. 2021 , 45, 2214-2234		1
689	Criteria for crack path deviation in adhesive layer of bi-material DCB specimen. 2021 , 147, 106408		0
688	A CA-XFEM for mixed-mode variable-amplitude fatigue crack growth. 2021 , 114, 102979		0
687	Buckling analysis of cracked orthotropic 3D plates and shells via an isogeometric-reproducing kernel particle method. 2021 , 114, 102993		3
686	Peridynamic modeling with energy-based surface correction for fracture simulation of random porous materials. 2021 , 114, 102987		2

685	An open-source ABAQUS implementation of the scaled boundary finite element method to study interfacial problems using polyhedral meshes. 2021 , 381, 113766	4
684	A new framework based on XFEM for cracked semipermeable piezoelectric material. 2021 , 253, 107874	6
683	Experimental and numerical investigations of fatigue and fracture performance of metal inert gas-welded Al-3.4 Mg aluminium alloy. 2021 , 43, 1	
682	Thermo-elastic analysis of cracked functionally graded materials using XIGA. 2021 , 114, 103016	3
681	Crack growth modeling and simulation of a peridynamic fatigue model based on numerical and analytical solution approaches. 2021 , 114, 103026	7
680	Overall equilibrium in the coupling of peridynamics and classical continuum mechanics. 2021 , 381, 113515	9
679	A Nitsche extended finite element method for the biharmonic interface problem. 2021 , 382, 113880	1
678	Irreversible phase field models for crack growth in industrial applications: thermal stress, viscoelasticity, hydrogen embrittlement. 2021 , 3, 1	0
677	Two- and Three-Dimensional Numerical Investigation of the Influence of Holes on the Fatigue Crack Growth Path. 2021 , 11, 7480	1
676	An improved unbond dual-parameter peridynamic model for fracture analysis of quasi-brittle materials. 2021 , 204, 106571	1
675	A field-enriched finite element method for brittle fracture in rocks subjected to mixed mode loading. 2021 , 129, 105-124	8
674	Application of equivalent circle and ellipse for pore shape modeling in crack growth problem: A numerical investigation in microscale. 2021 , 253, 107882	5
673	Julia Language in Computational Mechanics: A New Competitor. 1	0
672	Extended isogeometric analysis using B++ splines for strong discontinuous problems. 2021 , 381, 113779	2
671	Discontinuous bubble immersed finite element method for Poisson-Boltzmann-Nernst-Planck model. 2021 , 438, 110370	2
670	Numerical investigation of bimaterial interfacial crack with interaction of voids and inclusions using XFEM. 1-31	
669	Study on fracture transferability from compact type specimen to pipe for 316LN stainless steel. 2021 , 192, 104437	1
668	Dynamic fracture analysis of the linearly uncoupled and coupled physical phenomena by the variable-node multiscale XFEM. 2021 , 254, 107941	0

667	Modelling the wave-induced instantaneous liquefaction in a non-cohesive seabed as a nonlinear complementarity problem. 2021 , 137, 104275	3
666	A phase field and deep-learning based approach for accurate prediction of structural residual useful life. 2021 , 383, 113885	4
665	A three-dimensional beam formulation for large deformation and an accurate implementation of the free boundary. 2021 , 134, 103736	1
664	Phase-field modeling of interactions between double cracks on brittle fracture of Zircaloy-4 cladding. 2021 , 197, 110565	1
663	A discontinuous discrete fracture model for coupled flow and geomechanics based on FEM. 2021 , 204, 108677	3
662	Influence of cracks and voids on the responses of composites. 2021 , 272, 114172	0
661	An efficient automatic adaptive algorithm for cohesive crack propagation modeling of concrete structures using matrix-free unstructured Galerkin Finite Volume Method. 2021 , 97, 237-250	0
660	On the topological enrichment for crack modeling via the generalized/extended FEM: a novel discussion considering smooth partitions of unity. 2021 , 38, 3517-3547	
659	Cement mortar cracking under accelerated steel corrosion test: A mechanical and electrochemical model. 2021 , 896, 115222	2
658	A Review on Fracture Analysis of CNT/Graphene Reinforced Composites for Structural Applications. 1	2
657	Three-Dimensional Hydraulic Fracture Simulation with Hydromechanical Coupled-Element Partition Method. 2021 , 21, 04021162	0
656	Stabilization of the extended finite element method for stiff embedded interfaces and inclusions. <i>International Journal for Numerical Methods in Engineering</i> , 2.4	1
655	Phase evolution based thermomechanical crack closure mechanism of shape memory polymers. 2021 , 160, 103998	2
654	Bonding and bolting angle reinforcement for distortion-induced fatigue in steel girder bridges. 2021 , 166, 108027	0
653	Geometrically nonlinear extended isogeometric analysis for cohesive fracture with applications to delamination in composites. 2021 , 191, 103527	3
652	A Comparative Review of XFEM, Mixed FEM and Phase-Field Models for Quasi-brittle Cracking. 1	4
651	Effect of inherent microcrack populations on rock tensile fracture behaviour: numerical study based on embedded discontinuity finite elements. 1	0
650	A new 2D continuous-discontinuous heat conduction model for modeling heat transfer and thermal cracking in quasi-brittle materials. 2021 , 137, 104231	8

649	The shifted fracture method. <i>International Journal for Numerical Methods in Engineering</i> ,	2.4	0
648	Numerical integration in G/XFEM analysis of 2-D fracture mechanics problems for physically nonlinear material and cohesive crack propagation. 2021 , ahead-of-print,		1
647	A viscoelastic micropolar peridynamic model for quasi-brittle materials incorporating loading-rate effects. 2021 , 383, 113897		5
646	Phase field modeling scheme with mesostructure for crack propagation in concrete composite. 2021 , 111259		0
645	An EFGM approach for permeable, semi-permeable and impermeable crack interaction study in 2D piezoelectric domains. 1-12		
644	An investigation on prevalent strategies for XFEM-based numerical modeling of crack growth in porous media. 2021 , 15, 914		0
643	Analysis and simulation of fracture behavior in naturally occurring Bouligand structures. 2021 , 135, 473-482		2
642	Generation of realistic 3D concrete aggregate microstructures using multiscale multifractal evolutionary stochastic manifold and operator-split-genetic algorithm. 2021 , 66, 103164		1
641	An IGA based nonlocal gradient-enhanced damage model for failure analysis of cortical bone. 2021 , 255, 107976		4
640	A Parametric Study on Factors Influencing the Onset and Propagation of Aortic Dissection Using the Extended Finite Element Method. 2021 , 68, 2918-2929		0
639	Numerical investigation of complex hydraulic fracture network in naturally fractured reservoirs based on the XFEM. 2021 , 104272		5
638	Field-Enriched Finite-Element Method for Simulating Crack Propagation and Coalescence in Geomaterials. 2021 , 147, 04021063		1
637	A new insight into analysis of linear elastic fracture mechanics with spherical Hankel boundary elements. 2021 , 115, 103059		1
636	Mode dependent evaluation of fracture behaviour using cantilever bending. 2021 , 115, 103069		2
635	Phase field fracture models to predict crack initiation and propagation in anti-reflective coatings. 2021 , 736, 138920		1
634	Bridging the gap between local and nonlocal numerical methods: A unified variational framework for non-ordinary state-based peridynamics. 2021 , 384, 113962		4
633	A non-homogeneous multi-material topology optimization approach for functionally graded structures with cracks. 2021 , 273, 114230		5
632	A peridynamic approach for modeling of two dimensional functionally graded plates. 2021 , 279, 114743		3

631	A numerical approach for crack-induced damage in tungsten carbide cutting tools during machining. 2021 , 128, 105617	2
630	Stability and failure analysis of compressed thin-walled composite structures with central cut-out, using three advanced independent damage models. 2021 , 273, 114298	3
629	Non-intrusive coupling of a 3-D Generalized Finite Element Method and Abaqus for the multiscale analysis of localized defects and structural features. 2021 , 193, 103554	2
628	A discrete-continuum coupled numerical method for fracturing behavior in concrete dams considering material heterogeneity. 2021 , 305, 124741	3
627	A phase-field crack model based on a directional strain decomposition and a stress-driven Crack-Opening Indicator. 2021 , 384, 113928	2
626	Voronoi cell finite element model to simulate crack propagation in porous materials. 2021 , 115, 103045	2
625	Mapped phase field method for brittle fracture. 2021 , 385, 114046	3
624	Local refinement with arbitrary irregular meshes and implementation in numerical manifold method. 2021 , 132, 231-247	1
623	FEM/XFEM modeling of the 3D fracturing process in transversely isotropic geomaterials. 2021 , 276, 114502	2
622	Phase-field modelling of cohesive fracture. 2021 , 90, 104343	2
621	Investigating propagation path of interface crack by the field-enriched finite element method. 2021 , 99, 81-105	0
620	A cracked zone clustering method for discrete fracture with minimal enhanced degrees of freedom. 2021 , 387, 114133	1
619	A three-dimensional Generalized Finite Element Method for the simulation of wave propagation in fluid-filled fractures. 2021 , 386, 114136	0
618	Modelling of cracks with frictional contact based on peridynamics. 2021 , 116, 103082	2
617	Material point method for the propagation of multiple branched cracks based on classical fracture mechanics. 2021 , 386, 114116	1
616	A hybrid potential of mean force approach for simulation of fracture in heterogeneous media. 2021 , 386, 114084	1
615	An efficient mesh-free approach for the determination of stresses intensity factors. 2021 , 133, 49-60	1
614	An explicit representation of cracks in the variational phase field method for brittle fractures. 2021 , 387, 114127	6

613	CIPFAR: A 3D unified numerical framework for the modeling of ductile fracture based on the phase field model and adaptive remeshing. 2021 , 387, 114171		2
612	Development of the scaled boundary finite element method for crack propagation modeling of elastic solids subjected to coupled thermo-mechanical loads. 2021 , 387, 114106		2
611	Fracture Reactivation Modeling in a Depleted Reservoir. 2021 , 126, 217-239		
610	Theoretical Approach to Element Free Galerkin Method and Its Mathematical Implementation. 2021 , 147-164		
609	Simulating Fractures with Bonded Discrete Element Method. 2021 , PP,		0
608	Fracture analysis for materials by a stable generalized/extended finite element method. 2021 , 37, 513-521		0
607	Adaptive hierarchical refinement of NURBS in cohesive fracture analysis. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 112, 2151-2173	2.4	25
606	Simulating Bacterial Biofilms. 2007 , 1-31		2
605	An optimal explicit time stepping scheme for cracks modeled with X-FEM. 2007 , 267-281		1
604	Single Domain Quadrature Techniques for Discontinuous and Non-Linear Enrichments in Local Partition of Unity FEM. 2007 , 343-361		1
603	Modeling Evolving Discontinuities with Spacetime Discontinuous Galerkin Methods. 2007 , 59-87		2
602	Computational Methods for Debonding in Composites. 2008 , 1-25		6
601	A Precip Of Two-Scale Approaches For Fracture In Porous Media. 2009 , 149-171		1
600	Multiscale Methods for Fracturing Solids. 2008 , 79-87		5
599	Advances in Fixed-Grid Fluid Structure Interaction. 2009 , 235-249		3
598	Evaluating Damage with Digital Image Correlation: C. Applications to Composite Materials. 2015 , 1301-1322		1
597	Introduction. 2014 , 1-17		2
596	Computational Mechanical Modelling of Wood From Microstructural Characteristics Over Wood-Based Products to Advanced Timber Structures. 2019 , 639-673		2

595	Preconditioned Conjugate Gradient Solvers for the Generalized Finite Element Method. 2019 , 1-17	1
594	Advanced Numerical Models for Predicting the Load and Environmentally Dependent Behaviour of Adhesives and Adhesively Bonded Joints. 2019 , 211-244	2
593	A Moving Least Squares Approach to the Construction of Discontinuous Enrichment Functions. 2014 , 347-360	3
592	Universal Meshes for the Simulation of Brittle Fracture and Moving Boundary Problems. 2016 , 115-134	1
591	Rapid Enriched Simulation Application Development with PUMA. 2017 , 207-226	2
590	Well Conditioned Extended Finite Elements and Vector Level Sets for Three-Dimensional Crack Propagation. 2017 , 307-329	5
589	Analysis and Optimisation of Interfaces for Multi-material Structures. 2009 , 13-20	3
588	Goal-Oriented Residual Error Estimates for XFEM Approximations in LEFM. 2011 , 231-238	5
587	DYNAMIC FAULT RUPTURE AND PROPAGATION THROUGH A FIXED FINITE ELEMENT GRID. 2011 , 161-164	1
586	A Phase Field Approach to Mathematical Modeling of Crack Propagation. 2014 , 161-170	1
585	On Numerical Integration of Discontinuous Approximations in Partition of Unity Finite Elements. 2010 , 297-304	1
584	An Extended Finite Element Method for the Analysis of Submicron Heat Transfer Phenomena. 2011 , 195-212	3
583	Propagating Cracks in Saturated Ionized Porous Media. 2011 , 425-442	5
582	A Large Strain Discontinuous Finite Element Approach to Laminated Composites. 2003 , 355-364	4
581	Phase Field Crack Growth Model with Hydrogen Embrittlement. 2017 , 27-34	2
580	Crack Propagation Behavior in Spur Gear by XFEM and Its Influence on Dynamic Characteristics. 2020 , 285-293	2
579	Comparative Analysis of Nonlinear Seismic Response of Concrete Gravity Dams Using XFEM and CDP Model. 2021 , 11-51	2
578	Validation of a 3-D adaptive stable generalized/eXtended finite element method for mixed-mode brittle fracture propagation. 2020 , 225, 129-152	2

577	Enriched mixed numerical manifold formulation with continuous nodal gradients for dynamics of fractured poroelasticity. 2020 , 86, 225-258	21
576	A generalized finite element method for three-dimensional hydraulic fracture propagation: Comparison with experiments. 2020 , 235, 107098	7
575	Crack growth propagation modeling based on moving mesh method and interaction integral approach. 2020 , 28, 1981-1991	4
574	Statistical Volume Elements for the Characterization of Angle-Dependent Fracture Strengths in Anisotropic Microcracked Materials. 2020 , 6,	1
573	Stochastic Extended Finite Element Implementation for Natural Frequency of Cracked Functionally Gradient and Bi-Material Structures. 2021 , 21, 2150044	2
572	Numerical Investigation on Mixed Mode (I-II) Fracture Propagation of CCBD Specimens Under Confining Pressure. 2020 , 12, 2050111	5
571	Bøier guarding. 2020 , 39,	8
570	The Cohesive Zone Model for Fatigue Crack Growth. 2013 , 5, 737392	3
569	Thin film cracking modulated by underlayer creep. 2003 , 43, 269	1
568	Numerical Simulation of Non-Uniform Modified Zipper-Fracture Design. 2017 ,	1
567	Stress distribution in fractured medium and fracture propagation due to formation pressure changes. 2013 ,	1
566	Topological search of the crack path from a damage-type mechanical computation. 2010 , 271-279	1
565	A two-scale approach for fluid flow in fracturing porous media. 2010 , 451-460	1
564	Nanoindentation for Fracture Toughness of Coatings. 2015 , 123-178	21
563	A direct XFEM formulation for modeling of cohesive crack growth in concrete. 2007 , 4, 83-100	14
562	Anisotropic damage modelling of biaxial behaviour and rupture of concrete structures. 2008 , 5, 417-434	22
561	Study on fracture behavior of polypropylene fiber reinforced concrete with bending beam test and digital speckle method. 2014 , 14, 527-546	15
560	Analysis of punching shear in high strength RC panels-experiments, comparison with codes and FEM results. 2016 , 17, 739-760	3

559	Experimental and numerical analysis of corrosion-induced cover cracking in reinforced concrete sample. 2016 , 18, 421-439	4
558	Two-scale approaches for fracture in fluid-saturated porous media. 2008 , 1, 83-101	5
557	Fatigue life prediction of multiple site damage based on probabilistic equivalent initial flaw model. 2011 , 38, 443-457	14
556	Combination of isogeometric analysis and extended finite element in linear crack analysis. 2013 , 48, 125-150	8
555	An investigation into the effects of voids, inclusions and minor cracks on major crack propagation by using XFEM. 2014 , 49, 597-618	11
554	3-D fracture analysis of cracked aluminum plates repaired with single and double composite patches using XFEM. 2014 , 50, 525-539	11
553	XFEM for fatigue and fracture analysis of cracked stiffened panels. 2016 , 57, 65-89	1
552	New Extended Finite Element Method for Pinching Effect in Reinforced Concrete Columns. 2016 , 113,	11
551	Simulation of Mesofracture Process of Asphalt Mixture Using Digital Image Processing and Extended Finite-Element Method. 2017 , 45, 20160143	7
550	On the Mesoscale Fracture Initiation Criterion of Heterogeneous Steels During Quenching. 2017 , 6, 20160098	2
549	Effects of Ductility of Organic-Rich Shale on Hydraulic Fracturing: A Fully Coupled Extended-Finite-Element-Method Analysis Using a Modified Cohesive Zone Model. 2021 , 26, 591-609	0
548	NUMERICAL MODELLING OF THE AIRFRAME DAMAGE GROWTH FOR THE ADHESIVE REPAIR JOINT CALCULATION. 2018 , 21, 125-138	1
547	Phase Transformation in 316L Austenitic Steel Induced by Fracture at Cryogenic Temperatures: Experiment and Modelling. 2020 , 14,	5
546	3D Analysis of Crack Growth in Metal Using Tension Tests and XFEM. 2014 , 38, 409-417	2
545	A divide-alternate-and-conquer approach for localization and shape identification of multiple scatterers in heterogeneous media using dynamic XFEM. 2016 , 10, 165-193	11
544	Cohesive delamination and frictional contact on joining surface via XFEM. 2018 , 5, 127-144	11
543	Characterization of Face Sheet/Core Debonding Strength in Sandwiched Medium Density Fiberboard. 2017 , 08, 673-684	3
542	3D Nonlinear XFEM Simulation of Delamination in Unidirectional Composite Laminates: A Sensitivity Analysis of Modeling Parameters. 2013 , 03, 113-126	17

541	Using Extended Finite Element Method for Computation of the Stress Intensity Factor, Crack Growth Simulation and Predicting Fatigue Crack Growth in a Slant-Cracked Plate of 6061-T651 Aluminum. 2014 , 04, 24-30	9
540	Using Finite Element Software to Simulation Fracture Behavior of Three-point Bending Beam with Initial Crack. 2013 , 8,	13
539	Numerical Fracture analysis of prestressed concrete beams. 2008 , 2, 153-160	6
538	Static and dynamic analysis of elastic shell structures with smoothed particle method. 2013 , 62, 110203	4
537	Simulation of Multi-Cracking in a Reinforced Concrete Beam by Extended Finite Element Method. 2016 , 29, 201-208	2
536	Analysis of delamination of composite laminates via extended finite element method based on the layerwise displacement theory and cohesive zone method. 146442072110461	
535	A numerical model for optimizing injection parameters in tight oil reservoirs. 2021 , 14, 1	1
534	Automated finite element modeling and analysis of cracked reinforced concrete beams from three dimensional point cloud.	1
533	Multiple hydraulic fractures growth from a highly deviated well: A XFEM study. 2022 , 208, 109709	1
532	A continuum meshfree method for sandbox-style numerical modeling of accretionary and doubly vergent wedges. 2021 , 153, 104466	3
531	Numerical and Experimental Evaluation of Mechanical and Ring Stiffness Properties of Preconditioning Underground Glass Fiber Composite Pipes. 2021 , 5, 264	0
530	Temporally stabilized peridynamics methods for shocks in solids. 1	
529	Numerical Study of Thermal Shock Damage Mechanism of Polycrystalline Ceramics. 2021 , 8,	
528	A time-based arc-length like method to remove step size effects during fracture propagation. <i>International Journal for Numerical Methods in Engineering</i> ,	2.4 0
527	An auxiliary crack approach for efficient approximative crack tip loading analyses. 1	
526	A state-of-the-art review of crack branching. 2021 , 257, 108036	5
525	Simulation of the surface cracking behavior in Al ₂ O ₃ coating as tritium penetration barrier by extended finite element analysis. 2021 , 173, 112901	0
524	Accurate and efficient hydrodynamic analysis of structures with sharp edges by the Extended Finite Element Method (XFEM): 2D studies. 2021 , 117, 102893	0

- 523 A novel structural health monitoring approach in concrete structures using embedded magnetic shape memory alloy components. **2021**, 311, 125212 1
- 522 A displacement correlation method for stress intensity factor extraction from 3D fractures in anisotropic materials. **2021**, 258, 108040 1
- 521 Simulation of cryogenic fracturing of rock-like materials using material point method. **2021**, 96, 104300 0
- 520 Modeling quasi-static fracture of heterogeneous materials with the cohesive surface methodology. **2001**, 509-512 1
- 519 Analysis of Cohesive Cracks Under Quasi-Static and Dynamic Loading. **2002**, 293-302
- 518 Direct determination of SIF and coefficients of higher order terms of mixed mode cracks. **2003**, 378-380
- 517 Modern domain-based discretization methods for damage and fracture. **2006**, 241-262
- 516 NUMERICAL METHODS FOR DEBONDING IN COMPOSITE MATERIALSA Comparison of Approaches. **2006**, 13-22
- 515 A discrete model for the propagation of discontinuities in a fluid-saturated medium. **2007**, 323-342
- 514 An Evaluation of the Accuracy of Discontinuous Finite Elements in Explicit Dynamic Calculations. **2007**, 303-322
- 513 Modelling Gravitational Instabilities: Slab Break-off and Rayleigh-Taylor Diapirism. **2008**, 1491-1510
- 512 Current Status and Problems of Plastic Crash Simulation in Automotive CAE. **2008**, 20, 291-295
- 511 On Fracture Mechanics Analysis Using B-Spline Wavelet Galerkin Method. **2009**, 75, 296-303 1
- 510 Numerical methods for The Modelling Of Debonding In Composites. **2009**, 37-76
- 509 Flaw Identification in Structures via Computationally Assisted NDT. **2009**, 223-235
- 508 A STUDY ON REPRODUCIBILITY OF PRIORI KNOWLEDGE IN CRACK ANNALISIS BY THE XFEM. **2009**, 65, 955-960
- 507 Time dependent crack tip enrichment for dynamic crack propagation. **2009**, 33-49 0
- 506 Crack propagation analysis using wavelet finite element method. **2009**, 10, 167-175

505 Development of XFEM analysis code for simulation of fatigue crack propagation in steel structure. **2010**, 544-544

504 Crack Propagation Simulations in Piezoelectric Structures with an Efficient Adaptive Finite Element Tool. **2011**, 163-173

503 Multiscale Modeling of Metal Foams Using the XFEM. **2011**, 215-222

502 Multiple scale numerical modeling of growth process of multiple cracks in rock mass. **2011**, 569-574

501 Meshless and Partition-of-unity Methods. 441-472

500 Influence of Microstructural Features on the Propagation of Microstructurally Short Fatigue Cracks in Structural Steels. 243-250

499 A Framework For Adaptive Data Integration In Digital Production. **2013**, 1053-1066

498 IT-Infrastructure for an Integrated Visual Analysis of Distributed Heterogeneous Simulations. **2013**, 1091-1100.2

497 Influence of Microstructural Features on the Propagation of Microstructurally Short Fatigue Cracks in Structural Steels. **2013**, 243-250

496 Discontinuous Versus Continuous Chemical Potential Across a Crack in a Swelling Porous Medium. **2013**, 317-334

495 Concurrent Approach to Lattice Dynamics Based on Extended Space-Time Finite Element Method. **2013**,

494 Multiple flaws detection in structures using XFEM and topologically adapting enhanced ABC algorithm. **2014**, 4691-4698

493 History of the Finite Element Method [Mathematics Meets Mechanics] Part II: Mathematical Foundation of Primal FEM for Elastic Deformations, Error Analysis and Adaptivity. **2014**, 443-478

492 Encyclopedia of Thermal Stresses. **2014**, 5041-5052

491 Numerical Analysis of Crack Growth in Composite Material Using Superposed FEM. **2014**, 63, 822-829

490 History of the Finite Element Method [Mathematics Meets Mechanics] Part I: Engineering Developments. **2014**, 399-442


3

489 Symmetry and positive definiteness of the tensor-valued spring constant derived from P1-FEM for the equations of linear elasticity. **2014**, 9, 617-634

1

488 Analysis of Shrinkage Crack Propagation Considering Long-Term Behavior of Concrete. **2014**, 30, 35-42

- 487 Ductile Failure Modeling: Stress Dependence, Non-locality and Damage to Fracture Transition. **2015**, 877-937
- 486 Numerical modelling of hydraulic fracturing. **2014**, 1719-1723
- 485 An Immersed Meshfree Galerkin Approach for Particle-Reinforced Composite Analysis. **2015**, 293-315
- 484 Selective Activation of Cohesive Elements using MPC. **2014**, 42, 911-918
- 483 Improving fracture initiation and potential impact on fracture coverage by implementing optimal well-planning and drilling methods for typical stress conditions in the Cooper Basin, central Australia. **2015**, 55, 403 2
- 482 Modeling and Simulation of Mechanical Properties of Nano Particle Modified Polyamide 6. **2015**, 03, 80-87 1
- 481 Methods of Shearing Process Simulation for Understanding for Finite Element Analysis of Plastic Working. **2015**, 56, 8-12
- 480 Finite Element Modelling of 2D Brittle Fracture: The Phase-Field Approach. **2015**, 1-21
- 479 Application of Extended Finite Element Method (XFEM) to Simulate Hydraulic Fracture Propagation from Oriented Perforations. **2015**, 0
- 478 Drying Shrinkage Crack Analysis of Concrete Using Optimized Prony Series. **2015**, 31, 27-34 1
- 477 Structural Design Optimization of Dynamic Crack Propagation Problems Using Peridynamics. **2015**, 28, 425-431 1
- 476 Discrete crack analysis for concrete structures using the hybrid-type penalty method. **2015**, 16, 587-604
- 475 An XFEM Based Parametric Study on Crack Growth Rate in Welded Joints with Defects. **2016**,
- 474 Numerical Analysis of Cracks Propagation Process in Turbine Blades TBCs Systems Under Thermo-Mechanical Loading Based on Experimental Results. **2016**, 91-103
- 473 Ductile Fracture Criteria and Identification Method of Ductile Fracture Parameter. **2016**, 57, 940-944
- 472 Simulation on hydraulic fracturing propagation using extended finite element method: Simulation on hydraulic fracturing propagation using extended finite element method. **2016**, 455-458
- 471 Strategy for refinement of nodal densities and integration cells in EFG technique. **2016**, 59, 901-920
- 470 Numerical simulation of the femur fracture under static loading. **2016**, 60, 405-412 1

- 469 Assessment of the crack propagation in reinforced concrete. **2017**,
- 468 Simulating ductile crack growth in carbon steel using an extended finite element method (XFEM). **2017**,
- 467 X-FEM algorithm with closest point projection fracture representation. **2018**, 1-36 2
- 466 Peridynamic Modeling for Crack Propagation Analysis of Materials. **2018**, 31, 105-114
- 465 Introduction. **2019**, 1-57
- 464 The Effects of Local Cavities on the Cracking Performance of an Existing Tunnel Lining. **2019**, 92-101
- 463 Two-Dimensional Model Analysis for Extended Finite Element Method(XFEM) Verification of General Purpose Finite Element Analysis Program. **2018**, 31, 199-206
- 462 Application of Numerical Methods in Design and Analysis of Orthopedic Implant Integrity. **2019**, 96-111 2
- 461 Large deflection and initial instability analysis of anisotropic plates by the generalized finite element method. **2019**, 16,
- 460 -FEM. **2019**, 31, 18-42 1
- 459 Galerkin Methods. **2019**, 75-148 0
- 458 Introduction. **2019**, 1-14
- 457 Fatigue Crack Propagation Simulation of T-shaped Tubular Joint Structure. **2019**, 88, 106-111
- 456 Development of Efficient High-Fidelity Solutions for Virtual Fatigue Testing. **2020**, 187-200 1
- 455 3D Printing and Numerical Modelling of Conch-Inspired Lamellar Structures. **2020**, 83-90
- 454 P-FEM Based on Meshless Trial and Test Functions: Part I-MLS Approximation. **2020**, 421-437
- 453 Tool development for automating the structural integrity assessment of aircrafts components. **2019**, 5, 127-136
- 452 Computational and experimental analysis of timber beams with different types of flaws. **2020**,

- 451 Load sequence effects and mixed-mode fatigue crack growth in offshore structures.
- 450 Composite Material Damage Processes. **2020**, 3, 307-323 1
- 449 A new domain-independent interaction integral for three-dimensional non-homogeneous thermoelastic materials. **2020**, 233, 107084 0
- 448 A specialised finite element for simulating self-healing quasi-brittle materials. **2020**, 7, 3
- 447 Fretting fatigue total life assessment including wear and a varying critical distance. **2021**, 156, 106589 3
- 446 Interaction integral method for crack-tip intensity factor evaluations of magneto-electro-elastic materials with residual strain. **2021**, 108084 4
- 445 Research on two-dimensional hydraulic crack propagation path based on XFEM. **2021**, 861, 072063
- 444 Crack propagation with different radius local random damage based on peridynamic theory. **2021**, 15, 1238
- 443 XFEM Analyses Using Two-Dimensional Quadrilateral Elements Enriched with Only the Heaviside Step Function. 0
- 442 A fretting fatigue model based on self-steered cracks. **2021**, 117, 103144 1
- 441 Analysis of rockburst driving mechanism based on unbalanced force. **2021**, 861, 032047 1
- 440 Evaluation of the transient performance of magneto-electro-elastic based structures with the enriched finite element method. **2021**, 280, 114888 5
- 439 Mechanical Evaluation for a Fatigue Fracture Surface generated in Steel T-shaped Tubular Joints with Different Weld Toe Radius. **2020**, 32, 141-152 1
- 438 Encyclopedia of Continuum Mechanics. **2020**, 868-877
- 437 Encyclopedia of Continuum Mechanics. **2020**, 1914-1927
- 436 Treatment of Brittle Fracture in Solids with the Virtual Element Method. **2020**, 201-228 1
- 435 Assessing Model Form Uncertainty in Fracture Models Using Digital Image Correlation. **2020**, 119-129
- 434 Encyclopedia of Ocean Engineering. **2021**, 1-10

433	Evaluation Method for Cohesive Crack Propagation in Fragile Locations of RCC Dam Using XFEM. 2021 , 13, 58	2
432	A NURBS-discontinuous and enriched isogeometric boundary element formulation for two-dimensional fatigue crack growth. 2022 , 134, 259-281	0
431	Experimentally validated phase-field fracture modeling of epoxy resins. 2022 , 279, 114806	2
430	Numerical manifold computational homogenization for hydro-dynamic analysis of discontinuous heterogeneous porous media. 2022 , 388, 114254	4
429	Mechanistic fatigue in Ni-based superalloy single crystals: A study of crack paths and growth rates. 2022 , 158, 104663	2
428	Towards an extrinsic, CG-XFEM approach based on hierarchical enrichments for modeling progressive fracture. 2022 , 388, 114221	
427	Generalized beam theory-based advanced beam finite elements for linear buckling analyses of perforated thin-walled members. 2022 , 259, 106683	0
426	An XFEM-based numerical scheme to compute crack-induced electrical resistivity changes in cracked CNT-reinforced composites using ANSYS. 2020 ,	
425	Mechanical Modeling and Continuous Process Improvement. 2019 , 2019, 000188-000192	
424	Encyclopedia of Continuum Mechanics. 2020 , 1550-1563	
423	Study on Fracture Interference for Volume Fracturing. 2020 , 2894-2909	0
422	Numerical Studies on Asphalt Concretes. 2020 , 17-76	
421	Numerical Study of SIF for a Crack in P265GH Steel by XFEM. 2020 , 105-127	
420	MECHANISM OF VERTICAL CRACK GENERATION ON MESNAGER HINGE. 2020 , 76, I_363-I_376	
419	Fatigue Fracture Investigation of Engineered Cementitious Composites. 2021 , 49, 20190877	0
418	XFEM Simulation of Tensile and Fracture Behavior of Ultrafine-Grained Al 6061 Alloy. 2021 , 11, 1761	4
417	Comparative Study of Smearred Crack and Extended Finite Element Method for Predicting the Crack Propagation in Concrete Gravity Dams. 1-35	0
416	On the nonlocal computational modelling of damage in brittle and quasi-brittle materials. 2020 ,	

- 415 EQP - A 2D/3D library for integration of polynomials times step function. **2020**, 12, 100636 1
- 414 Seismic Potential Failure Mode Analysis of Concrete Gravity Dam Water Foundation Systems Through Incremental Dynamic Analysis. **2021**, 79-97
- 413 Biofilm Growth: Perspectives on Two-Phase Mixture Flow and Fingerings Formation. **2006**, 273-290
- 412 A Micro-Macro Partition of Unity Method for Crack Propagation. **2006**, 941-942
- 411 Finite deformation fracture modelling of a thermo-mechanical cohesive zone. **2006**, 257-257
- 410 Surgical Cutting on a Multimodal Object Representation. **2007**, 313-317
- 409 Cutting and Fracturing Models without Remeshing. **2008**, 107-118 1
- 408 A Particle-Partition of Unity Method Part VIII: Hierarchical Enrichment. **2008**, 277-299 1
- 407 Stiffness Degradation of Concrete Due to Alkali-Silica Reaction: A Computational Homogenization Approach. **2020**, 117,
- 406 Uncertainty Quantification of Random Heterogeneous Media Using XFEM. **2021**, 565-573
- 405 On a Computational Approach to Micro- and Macro-modelling of Damage in Brittle and Quasi-brittle Materials. **2020**, 14, 185-197
- 404 Causes of evolution and influence on failure strength of thermal crazing. **2021**, 87,
- 403 An adaptive phase-field model based on bilinear elements for tensile-compressive-shear fracture. **2022**, 105, 112-135 1
- 402 A cut finite-element method for fracture and contact problems in large-deformation solid mechanics. **2022**, 388, 114234 2
- 401 Extended finite element simulation on Tensile, fracture toughness and fatigue crack growth behaviour of additively manufactured Ti6Al4V alloy. **2022**, 117, 103163 2
- 400 External surface cracked offshore pipes reinforced with composite repair system: A numerical analysis. **2022**, 117, 103191 0
- 399 Effect of shape on void growth: A coupled Extended Finite Element Method (XFEM) and Discrete Dislocation Plasticity (DDP) study. **2022**, 92, 104471 0
- 398 Numerical modelling of the quasi-brittle behaviour of refractory ceramics by considering microcracks effect. **2022**, 42, 1149-1161 2

397	Nonlinear ABAQUS Simulations for Notched Concrete Beams. 2021 , 14,	2
396	3D modelling of fatigue crack growth and life predictions using ANSYS. 2021 , 13, 101636-101636	2
395	Mixed Graph-FEM phase field modeling of fracture in plates and shells with nonlinearly elastic solids. 2021 , 389, 114282	1
394	Fracture Modelling of a Cracked Pressurized Cylindrical Structure by Using Extended Iso-Geometric Analysis (X-IGA). 2021 , 9, 2990	2
393	Smoothed floating node method for modelling 2D arbitrary crack propagation problems. 2021 , 117, 103190	1
392	Analysis of Damage Tolerance of the Stiffened Structure Based on XFEM. 2021 , 2101, 012027	
391	Mesh independent modelling of tensile failure in laminates using mixed-time integration in explicit analysis. 2021 , 259, 108113	0
390	A computational framework for meso and macroscale analysis of structural masonry. 2021 , 236-237, 111342	
389	2D and 3D numerical simulation of fatigue crack growth path and life predictions of a linear elastic. 2021 ,	1
388	Numerical simulation of fracture propagation in freezing rocks using the extended finite element method (XFEM). 2021 , 148, 104963	3
387	Finite element modeling of deformation and fracture of advanced high strength steels dissimilar spot welds. 2021 , 258, 108092	4
386	Numerical analysis by XFEM of hybrid T-peel joints. 2021 , 33, 673-684	
385	Understanding fracture mechanisms via validated virtual tests of encapsulation-based self-healing concrete beams. 2022 , 213, 110299	2
384	Shear band evolution and post-failure simulation by the extended material point method (XMPM) with localization detection and frictional self-contact. 2022 , 390, 114530	3
383	A continuum consistent discrete particle method for continuum-discontinuum transitions and complex fracture problems. 2022 , 390, 114460	
382	Analysis of bimaterial interface cracks using the localized method of fundamental solutions. 2022 , 13, 100231	2
381	Peridynamic modeling of elastic bimaterial interface fracture. 2022 , 390, 114458	1
380	A continuous-discontinuous localizing gradient damage framework for failure analysis of quasi-brittle materials. 2022 , 390, 114434	1

- 379 Phase-field modeling of 3D fracture in elasto-plastic solids based on the modified GTN theory. **2022**, 260, 108196 0
- 378 A recycling preconditioning method with auxiliary tip subspace for elastic crack propagation simulation using XFEM. **2022**, 452, 110910 0
- 377 A Peridynamics-Based Finite Element Method (PeriFEM) for Quasi-Static Fracture Analysis. 1 0
- 376 Simulation of crack propagation based on eigenerosion in brittle and ductile materials subject to finite strains. 1 2
- 375 Fracture analysis employing equivalent domain integral method and nodal integration techniques based on reproducing kernel particle method. 1 0
- 374 Electro-Elastic Analysis of Edge Dislocation Dipole in GaN Using XFEM. **2022**, 141-151
- 373 A Review on Damage and Rupture Modelling for Soft Tissues.. **2022**, 9, 1
- 372 An interval-energy-based method for lifetime assessment of dissimilar lightweight metal welded joints. **2022**, 36, 317-324
- 371 Intrinsic damage characteristics for recycled crumb rubber concrete subjected to uniaxial pressure employing cohesive zone model. **2022**, 317, 125773 0
- 370 Convergence Investigation of XFEM Enrichment Schemes for Modeling Cohesive Cracks. **2022**, 10, 383
- 369 Prediction of Fatigue Crack Growth Rate and Stress Intensity Factors Using the Finite Element Method. **2022**, 2022, 1-17 1
- 368 An XFEM-Based Approach to Fatigue Crack Growth in Press-Fit Spur Gears. 095440892110727
- 367 Exploitation of Roller Compacted Concrete Based on Recycled Aggregates as a Solution for Degraded Pavements: Experimentation and Modeling. **2022**, 47, 5303
- 366 Extended isogeometric analysis of a progressively fracturing fluid-saturated porous medium. *International Journal for Numerical Methods in Engineering*, 2.4 0
- 365 Bond parameters for peeling and debonding in thin plated RC beams subjected to mixed mode loading IIFramework. **2022**, 25, 662-682 2
- 364 Modelling Of Crack Propagation in Flexible Pavement Using X-FEM Method. **2022**, 961, 012014 1
- 363 A Fragile Points Method, with an interface debonding model, to simulate damage and fracture of U-notched structures. *International Journal for Numerical Methods in Engineering*, 2.4 0
- 362 Analysis of Crack Formation and Growth in Tunnel Linings Using Double-K Fracture Criterion. **2022**, 12, 1064 0

361	Theoretical and numerical fracture analysis of bovine cortical bone under tensile loading in mode I and mixed-mode fracture. 1-15	1
360	Research on dynamic failure mechanism of three-point bending beam with joint. 1-24	0
359	A finite-discrete element based approach for modelling the hydraulic fracturing of rocks with irregular inclusions. 2022 , 261, 108209	1
358	An X-FEM based framework for 3D fatigue crack growth using a B-spline crack geometry description. 2022 , 261, 108238	2
357	Three-dimensional dynamic and quasi-static crack growth by a hybrid XFEM-peridynamics approach. 2022 , 261, 108205	2
356	A sharp-interface model for diffusional evolution of precipitates in visco-plastic materials. 2022 , 391, 114440	0
355	Continuous-discontinuous cellular automaton method for intersecting and branching crack problems. 2022 , 262, 108272	
354	XFEM crack growth virtual monitoring in self-sensing CNT reinforced polymer nanocomposite plates using ANSYS. 2022 , 284, 115137	1
353	Global/local analysis with Element Free Galerkin Method. 2022 , 136, 186-203	
352	Structural fatigue life prediction considering model uncertainties through a novel digital twin-driven approach. 2022 , 391, 114512	3
351	An XFEM-based numerical strategy to model three-dimensional fracture propagation regarding crack front segmentation. 2022 , 118, 103250	2
350	Osmotic pressure induced by extracellular matrix drives <i>Bacillus subtilis</i> biofilms' self-healing.. 2022 , 97, 107632	1
349	Investigation on the influence of multiple fracture interference on hydraulic fracture propagation in tight reservoirs. 2022 , 211, 110160	1
348	An eXtended Finite Element Method implementation in COMSOL Multiphysics: Solid Mechanics. 2022 , 202, 103707	5
347	Linear Viscoelastic Response of Asphalt Mixture Based on Semi-Circular Sample and Digital Image Correlation. 2022 , 110866	1
346	A damaging beam-lattice model for quasi-brittle fracture. 2022 , 239-240, 111404	0
345	Modelling equivalent elastic properties of imperfectly bonded soil-rock mixtures using an XFEM-based computational homogenization. 2022 , 144, 104638	0
344	Identification of Crack Parameters Using XFEM-QPSO. 2022 , 275-289	

- 343 Numerical analysis of crack initiation angles and propagation paths in adhesively bonded joints under mixed mode I/II loading using a novel test specimen. **2022**, 39, 393-402 1
- 342 Multiscale modeling of multiple-cracking fracture behavior of engineered cementitious composite (ECC). **2022**, 337-388
- 341 Linear elastic fracture mechanics comparison of stress intensity factor (Mode I) using FEM and XFEM. **2022**,
- 340 Modelling of the fatigue cracking resistance of grid reinforced asphalt concrete by coupling fast BEM and FEM. 1-22
- 339 Modeling of contact interfaces by penalty based enriched finite element method. 1-19 0
- 338 Integration of a peridynamic fatigue model with two-parameter crack driving force. 1
- 337 Optimization of a cruciform specimen for fatigue crack growth under in and out-of-phase in-plane biaxial loading conditions. 1-18 1
- 336 A thermodynamically consistent phase field model for mixed-mode fracture in rock-like materials. **2022**, 392, 114642 1
- 335 Seismic Performance of Welded Steel Beam-to-Column Connections with Initial Weld Defects. **2022**, 22, 566-584
- 334 A Numerical Study of Hydraulic Fracture Propagation Geometry in a Layered Shale Reservoir. **2022**, 2022, 1-16
- 333 A hydraulic-mechanical coupling model based on smoothed particle dynamics for simulating rock fracture. **2022**, 15, 1 2
- 332 Numerical Modeling of a 3D elliptical crack in gas metallic pipeline by coupling X-FEM and Volumetric approach. **2022**,
- 331 A linear smoothed meshfree method with intrinsic enrichment functions for 2D crack analysis. **2022**, ahead-of-print, 1
- 330 Adaptive stochastic morphology simulation and mesh generation of high-quality 3D particulate composite microstructures with complex surface texture. **2022**, 393, 114811
- 329 Dynamic fracture behaviors and fragment characteristics of pre-compressed flawed sandstones. **2022**, 220, 107162 2
- 328 A parallel scalable domain decomposition preconditioner for elastic crack simulation using XFEM. *International Journal for Numerical Methods in Engineering*, 2.4 0
- 327 A three-dimensional Generalized Finite Element Method for simultaneous propagation of multiple hydraulic fractures from a wellbore. **2022**, 265, 108360 0
- 326 A new path-independent interaction integral for dynamic stress intensity factors of cracked structures. **2022**, 243, 111559 1

325	Analysis of the hydraulic fracturing mechanism and fracture propagation law with a new extended finite element model for the silty hydrate reservoir in the South China Sea. 2022 , 101, 104535	0
324	A new framework based on XFEM to study the role of electrostatic tractions in semipermeable piezoelectric material. 2022 , 266, 108398	0
323	Well-conditioned and optimally convergent second-order Generalized/eXtended FEM formulations for linear elastic fracture mechanics. 2022 , 394, 114917	0
322	An extended mixed finite element method for elliptic interface problems. 2022 , 113, 148-159	0
321	Experimental and simulation study on rock-breaking efficiency of disc cutters on composite rocks. 2022 , 153, 105089	2
320	Topology optimization for enhanced dynamic fracture resistance of structures. 2022 , 394, 114846	0
319	Stable generalized finite element methods (SGFEM) for interfacial crack problems in bi-materials. 2022 , 138, 83-94	
318	An improved embedded discrete fracture model and domain connectivity algorithms on 3D unstructured grids. 2022 , 459, 111142	
317	Prediction of initiation and total life in fretting fatigue considering kinked cracks. 2022 , 119, 103345	0
316	Advanced numerical simulations considering crack orientation for fatigue damage quantification using nonlinear guided waves.. 2022 , 124, 106738	0
315	A novel SAM/X-FEM coupling approach for the simulation of 3D fatigue crack growth under rolling contact loading. 2022 , 206, 103752	0
314	Impact of geomechanical heterogeneity on multiple hydraulic fracture propagation. 2021 , 18, 954-969	1
313	On a Computational Smeared Damage Approach to the Analysis of Strength of Quasi-Brittle Materials. 2021 , 16, 283-292	0
312	The Impacts of Increased Ductility in Organic-Rich Shale on Fracture Network Growth by Hydraulic Fracturing. 2021 ,	
311	The Optimization of Infill Well Fracturing Using an Integrated Numerical Simulation Method of Fracturing and Production Processes. 2021 ,	2
310	Numerical simulation of cold and hot water injection into naturally fractured porous media using the extendedFEM and an equivalent continuum model. 2022 , 46, 617-655	0
309	3D Numerical Prediction of Thermal Weakening of Granite under Tension. 2022 , 12, 10	1
308	An extended finite element method with polygonal enrichment shape functions for crack propagation and stiff interfaceproblems. <i>International Journal for Numerical Methods in Engineering</i> , 2022 , 123, 1432-1455	2.4 0

- 307 Analyses of 3D non-planar fatigue crack propagation with smoothed particle hydrodynamics. **2022**, 45, 701-712
- 306 Modeling mixed mode cracking in concrete through a regularized extended finite element formulation considering aggregate interlock. **2021**, 258, 108102 1
- 305 An XFEM-based approach for 3D hydraulic fracturing simulation considering crack front segmentation. **2022**, 110518 1
- 304 Elucidating the effect of cohesive zone length in fracture simulations of particulate composites. **2022**, 108431
- 303 Influence of caves on hydraulic fracture propagation behavior based on extended finite element method. **2022**, 15, 1
- 302 Topology optimization of heat exchangers: A review. **2022**, 124053 2
- 301 An improved smoothed particle hydrodynamics method for simulating crack propagation and coalescence in brittle fracture of rock materials. **2022**, 103355 1
- 300 XFEM Method for Crack Propagation in Concrete Gravity Dams. 1
- 299 3D simulation of complex fractures with a simple mesh. *International Journal for Numerical Methods in Engineering*, 2.4 0
- 298 Nonlinear thermo-elastic analysis of edge dislocations with Internal Heat Generation in Semiconductor Materials. **2022**, 104322 1
- 297 A study on the optimal use of soundless cracking demolition agents in fragmentations of concrete based on the extended finite element method. 0
- 296 Numerical Analysis of Bi-material Plate of Various Material Distributions with Crack and Other Discontinuities Under Thermo-mechanical Loadings Using XFEM. 1
- 295 Influence of microstructural defects on free flexural vibration of cracked functionally graded plates in thermal medium using XFEM. 1-24 0
- 294 Numerical prediction based on XFEM for mixed-mode crack growth path and fatigue life under cyclic overload. **2022**, 106943 0
- 293 Seismic damage and life cycle cost assessment of unanchored brick masonry veneers. **2022**, 260, 114187
- 292 10.4028/0-87849-399-9.133.
- 291 A robust 3D crack growth method based on the eXtended Finite Element Method and the Fast Marching Method. 1
- 290 Simulation of crack propagation through voxel-based, heterogeneous structures based on eigenosion and finite cells. 1 2

- 289 The Morphing method to couple local and non-local thermomechanics. 1
- 288 Assessment of Woodcrete Using Destructive and Non-Destructive Test Methods.. **2022**, 15, 1
- 287 Interactive Physics-Based Virtual Sculpting with Haptic Feedback. **2022**, 5, 1-20 0
- 286 Optimisation Study on Crack Resistance of Tunnel Lining Concrete Under High Ground Temperature Environment. 1
- 285 Experimental and XFEM Simulation Research on HTPB Propellant Precracks Based on Microscopic Observation and DIC.
- 284 A combined phase-field and cohesive zone model approach for crack propagation in layered structures made of nonlinear rubber-like materials. **2022**, 395, 115007 1
- 283 Non-conventional Small-Scale Mechanical Testing of Materials. 1
- 282 Research on Crack Propagation of Deep Geologic Mass Disturbed by Excavation Based on Phase Field Method. **2022**, 2022, 1-13
- 281 Cohesive fracture evolution within virtual element method. **2022**, 269, 108464 0
- 280 Failure modeling of concrete: A peri-dynamical approach with bond-based correspondence to bi-scalar damage model. **2022**, 268, 108470
- 279 Extended finite element modeling of hot mix asphalt based on the semi-circular bending test. **2022**, 340, 127462 0
- 278 Assessment of the flat-top stable GFEM for free vibration analysis. **2022**, 117, 271-283 0
- 277 A pseudo-spring based SPH framework for studying fatigue crack propagation. **2022**, 106986 1
- 276 An anisotropic localizing gradient damage approach for failure analysis of fiber reinforced composites. **2022**, 115677 0
- 275 A Micropolar Peridynamic Differential Operator and Simulation of Crack Propagation. **2022**, 108532 0
- 274 A damage-driven integration scheme in physically non-linear transient analysis for quasi-brittle materials. **2022**, 108531 0
- 273 Classification of the loosening zones and estimation of the loosening pressures of tunnels in layered jointed rock strata.. **2022**, 105, 368504221098886 0
- 272 An extended finite element method for coupled Darcy-Stokes problems. *International Journal for Numerical Methods in Engineering*, 2.4

- 271 A novel kinematic-constraint-inspired non-ordinary state-based peridynamics. **2022**, 109, 709-740 ○
- 270 Analysis of IGBT Wire Bonds Failure Using Extended Finite Element Method.
- 269 Numerical evaluation of tensile-loaded tubular scarf adhesive joints. **2022**, 41, 36-47
- 268 Developments in remeshing-free fatigue crack growth simulation including a new adaptive virtual crack closure technique. ○
- 267 Singularity-free theory and adaptive finite element computations of arbitrarily-shaped dislocation loop dynamics in 3D heterogeneous material structures. **2022**, 104954 ○
- 266 Synergy of stochastics and inelasticity at multiple scales: novel Bayesian applications in stochastic upscaling and fracture size and scale effects. **2022**, 4,
- 265 Fracture mechanics investigation of crack coalescence in a steel tubular T-joint specimen. **2022**, 106504 ○
- 264 XFEM based thermo-elastic numerical analysis of FGMs with various discontinuities. 1-32 1
- 263 A novel strong-form random differential quadrature method to compute the stress intensity factor in fracture mechanics. **2022**, 103416
- 262 Unfitted finite element method for fully coupled poroelasticity with stabilization. **2022**, 397, 115132 ○
- 261 Fatigue crack propagation analysis in offshore mooring chains and the influence of manufacturing residual stresses. **2022**, 257, 111605 ○
- 260 Peridynamic analysis of materials interface fracture with thermal effect. **2022**, 120, 103420 ○
- 259 Frequency response analysis of edge-cracked magneto-electro-elastic functionally graded plates using extended finite element method. **2022**, 120, 103417 ○
- 258 A coupled smeared crack-plasticity model in incremental sequentially linear analysis for mixed failure modes. **2022**, 269, 106824 ○
- 257 Automatic Mesoscopic Fracture Modelling of Concrete Based on Enriched Sbfem Space and Quad-Tree Mesh.
- 256 Adaptive finite element method for hybrid phase-field modeling of three-dimensional cracks. **2022**, 108636 ○
- 255 Eighty Years of the Finite Element Method: Birth, Evolution, and Future. 1
- 254 Novel XFEM Variable Strain Damage Model for Predicting Fracture in Small-scale SENT and Full-scale Pipe Tests. **2022**, 108628 ○

- 253 Locally conservative discontinuous bubble scheme for Darcy flow and its application to Hele-Shaw equation based on structured grids. 2
- 252 Influence of crack location and crack number on the responses of 3D representative unit cell of unidirectional composites under tension in the fiber direction. 002199832211099
- 251 Elasto-plastic fracture modelling of 3-D metallic structure using XFEM. 1-26
- 250 Fracture mechanics: A two-experiment theory. **2022**, 271, 108618 0
- 249 A novel peridynamic approach for fracture analysis of quasi-brittle materials. **2022**, 227, 107445 1
- 248 A new enriched method for extended finite element modeling of fluid flow in fractured reservoirs. **2022**, 148, 104806 0
- 247 Simulation of the crack width in reinforced concrete beams based on concrete fracture. **2022**, 121, 103428 1
- 246 Crack initiation considering the possible stress acting on the crack surface under uniaxial tension or compression. **2022**, 121, 103433
- 245 Numerical Simulation Floe Ice Flopping Structure Interactions. **2022**, 1159-1168
- 244 The simulation of two-dimensional plane problems using ordinary state-based peridynamics. **2022**, 0
- 243 A Comparative Study to Evaluate the Essential Work of Fracture to Measure the Fracture Toughness of Quasi-Brittle Material. **2022**, 15, 4514 0
- 242 A new phase field model for mixed-mode brittle fractures in rocks modified from triple shear energy criterion. 0
- 241 Linear Elastic Fracture Mechanics Assessment of a Gas Turbine Vane. **2022**, 15, 4694 0
- 240 Design and analysis of the Extended Hybrid High-Order method for the Poisson problem. **2022**, 48, 0
- 239 The seismic resistance simulation for cracked clayey backfill. **2022**, 106616 0
- 238 An enriched improved complex variable element-free Galerkin method for efficient fracture analysis of orthotropic materials. **2022**, 103488 2
- 237 XIGA: An eXtended IsoGeometric analysis approach for multi-material problems. 0
- 236 Study on crack initiation of harmonic gears based on extended finite element method*. **2022**,

- 235 Influence of welding residual stress on subsurface fatigue crack propagation of rail. **2022**, 271, 108642 1
- 234 A phase field method with adaptive refinement strategy and virtual crack insertion technique. **2022**, 271, 108669 0
- 233 Investigation of different discrete modeling strategies to mimic microstructural aspects that influence the fracture energy of refractory materials. **2022**, 11, 100288
- 232 A fast simulation method for hydraulic-fracture-network generation in fractured rock based on fully coupled XFEM. **2022**, 150, 104892 0
- 231 A Nitsche mixed extended finite element method for the biharmonic interface problem. **2023**, 203, 112-130
- 230 A coarse-grained concurrent multiscale method for simulating brittle fracture. **2022**, 111898 0
- 229 3D numerical prediction of thermal weakening effects on granite.
- 228 Investigation of fracture in porous materials: a phase-field fracture study informed by ReaxFF.
- 227 Fracture Prediction of Third Generation Advanced High Strength Steels Using Hosford-Coulomb Damage Model. 926, 1986-1992
- 226 Flexural response of composite coated steel components using the extended finite element method. **2022**, 85, 103266
- 225 Modelling the near-wellbore rock fracture tortuosity: Role of casing-cement-rock well system, perforation and in-situ stress. **2022**, 157, 105182 0
- 224 The eXtended Finite Element Method (XFEM) Through State of the Art Applications. **2022**,
- 223 Numerical Investigation of the Influence of Fatigue Testing Frequency on the Fracture and Crack Propagation Rate of Additive-Manufactured AlSi10Mg and Ti-6Al-4V Alloys. **2022**, 3, 430-446
- 222 A Sharp-Interface Model of the Diffusive Phase Transformation in a Nickel-Based Superalloy. **2022**, 12, 1261
- 221 Propagation and geometry of multi-stage hydraulic fractures in anisotropic shales. **2022**, 8, 1
- 220 Domain decomposition methods for 3D crack propagation problems using XFEM. **2022**, 115390 1
- 219 Influence mechanisms of plasticity and horizontal stress difference on the fracture propagation in plastic reservoir rocks: a 3D XFEM-based plastic fracturing model. **2022**, 8, 0
- 218 Numerical Simulation of Fracture Propagation during Refracturing. **2022**, 14, 9422 3

217 Perforation cluster spacing optimization with hydraulic fracturing-reservoir simulation modeling in shale gas reservoir. **2022**, 8,

216 Significant effect of the rock parameters of Longmaxi formation in hydraulic fracturing. **2022**, 100384 0

215 Numerical Investigation of Slurry Fracturing during Shield Tunneling under a Reservoir. **2022**, 12, 7929 1

214 Eigenvalue Analysis of Timoshenko Beams and Mindlin Plates with Unfitted Finite Element Methods. 1-17

213 Modeling Tunable Fracture in Hydrogel Shell Structures for Biomedical Applications. **2022**, 8, 515

212 On stress concentration analysis of inverse distance weighted function based finite FGM panel with circular hole under biaxial loading. **2022**, 18, 708-733 1

211 A non-intrusive iterative generalized finite element method for multiscale coupling of 3-D solid and shell models. **2022**, 115408

210 NUMERICAL SIMULATION OF TRADITIONAL AND TECHNOLOGICAL ZINC-BASED COATINGS: PART II.

209 Crack analysis using a hybrid numerical manifold method with node-based strain smoothing and double-interpolation. **2022**, 273, 108685

208 Automatic mesoscopic fracture modelling of concrete based on enriched SBFEM space and quad-tree mesh. **2022**, 350, 128890 1

207 A study on the effect of residual stresses on hydride assisted crack in Zr-2.5Nb pressure tube material using XFEM. **2022**, 121, 103536 0

206 Numerical simulation of strain localization through an integrated Cosserat continuum theory and strong discontinuity approach. **2022**, 151, 104951

205 Local refinement strategy and implementation in the Numerical Manifold Method (NMM) for two-dimensional geotechnical problems. **2022**, 151, 104940 0

204 Flexural and fracture behaviors of functionally graded long fibrous polymeric composite beam-like specimens. **2022**, 300, 116140 1

203 Crack initiation and growth in 316LN stainless steel: Experiments and XFEM simulations. **2022**, 274, 108770 0

202 Extended PowellBabin finite element scheme for linear elastic fracture mechanics. **2022**, 274, 108719 0

201 Numerical investigation of load-induced fatigue cracking in curved ramp bridge deck pavement considering tire-bridge interaction. **2022**, 353, 129119 1

200 A combination of failures of interfacial delamination and layer cracking in REBCO multilayered conductors. **2022**, 274, 108785 0

- 199 Balanced stress fracturing theory and its application in platform well fracturing during unconventional oil and gas development. **2022**, 8, 10705-10727 1
- 198 Modelling of short crack growth in single crystal Ni γ microstructure. **2022**, 240, 118305 0
- 197 A network element method for heterogeneous and anisotropic diffusion-reaction problems. **2022**, 470, 111597 0
- 196 Weight function procedure for reduced order fracture analysis of arbitrary flaws in cylindrical pressure vessels. **2022**, 200, 104784 0
- 195 Uncovering the intrinsic deficiencies of phase-field modeling for dynamic fracture. **2022**, 256, 111961 0
- 194 Predicting mixed mode damage propagation in snowpack using the extended cohesive damage element method. **2022**, 122, 103567 0
- 193 A spectrum improved peridynamic model for shock wave problems. **2023**, 171, 104387 0
- 192 Performance evaluation of three-node triangular element based on generalized finite element method approximation for nearly incompressible materials. **2022**, 88, 22-00152-22-00152 0
- 191 Simulating hydrogen embrittlement fracture based on phase field method. **2022**, 40, 504-511 1
- 190 Plastic crack-tip fields under thermoplastic loads. **2023**, 97, 104805 0
- 189 Simulation research on macroscopic bond breakage on the rake face of cemented carbide inserts. **2022**, 595, 126-145 0
- 188 Investigation of Bioinspired Nacreous Structure on Strength and Toughness. **2022**, 7, 120 0
- 187 Stable generalized finite element method (SGFEM) for three-dimensional crack problems. **2022**, 152, 475-509 0
- 186 Effects of Residual Stresses on Fatigue Crack Propagation of T-Joint Using Extended Finite Element Method (XFEM). **2022**, 12, 1368 0
- 185 Numerical simulations of supercritical carbon dioxide fracturing: A review. **2022**, 0 0
- 184 A multi-point constraint unfitted finite element method. **2022**, 9, 0 0
- 183 A review of debonding behavior of soft material adhesive systems. **2022**, 4, 0 0
- 182 Theoretical and computational investigation of the fracturing behavior of anisotropic geomaterials. 1

181	Evaluating MTS criterion in predicting mixed-mode crack extension under different loading conditions.	0
180	Probabilistic dipole BEM model for cohesive crack propagation analysis. 2022 , 44,	1
179	Concrete Beams with External Reinforcement of Composite Materials. 2023 , 353-361	0
178	The Influence of Prefabricated Cracks at Different Angles on the Propagation Characteristics of Main Cracks in Slot Blasting.	1
177	A generalized model for dynamic mixed-mode fracture via state-based peridynamics.	0
176	A thermodynamically consistent J-integral formulation for fluid-driven fracture propagation in poroelastic continua. 2022 , 105082	0
175	Fracture loads of sharp and blunt asperities under normal and tangential loading. 2022 , 107949	0
174	A study by the lattice discrete element method for exploring the fractal nature of scale effects. 2022 , 12,	1
173	A numerical study of semipermeable cracks in Magneto-Electro-Elastic material using XFEM. 2022 , 275, 108817	1
172	A two-level nesting smoothed extended meshfree method for dynamic fracture analysis. 2022 , 275, 108823	1
171	Simulations of crack development in brittle materials under dynamic loading using the numerical manifold method. 2022 , 275, 108830	0
170	A new enrichment scheme for the interfacial crack modeling using the XFEM. 2022 , 122, 103595	0
169	Numerical evaluation of refracturing fracture deflection behavior under non-uniform pore pressure using XFEM. 2022 , 219, 111074	0
168	Prediction of fatigue crack growth using convolutional neural network (1st Report, Prediction for a single crack with angle). 2022 ,	0
167	Virtual Element Methods for Engineering Applications. 2022 , 557-605	0
166	Experimental and numerical study on DCB specimens bonded with similar and dissimilar materials. 2022 , 8, e11037	0
165	Advances in micro-mechanical modeling using a bonded-particle model and periodic homogenization within discrete element framework applied to heterogeneous ceramics. 2022 ,	0
164	Evaluation of Fracture Properties of Two Metallic Materials under Hydrogen Gas Conditions by Using XFEM. 2022 , 12, 1813	0

- 163 On Some Peculiarities of Numerical Modelling of Cement-Based Composites. 338, 135-140 1
- 162 Simulation of Four-Point Bending Fracture Test of Steel-Fiber-Reinforced Concrete. **2022**, 15, 7146 0
- 161 Phase-field modeling of crack growth and interaction in rock. **2022**, 8, 0
- 160 A two-dimensional non-ordinary state-based peridynamic model based on three-body potential for elastic brittle fracture analysis. 0
- 159 On the seismic behaviour of monolithic lunar arches subjected to moonquakes. 0
- 158 Fracture and damage in quasi-brittle materials: A comparison of approaches. **2022**, 103652 0
- 157 A Blended Shifted-Fracture/Phase-Field Framework for Sharp/Diffuse Crack Modeling. 0
- 156 Adaptive Finite Element Modeling of Linear Elastic Fatigue Crack Growth. **2022**, 15, 7632 1
- 155 Experimental and Numerical Investigation on the Interaction between Hydraulic Fractures and Vugs in Fracture-Cavity Carbonate Reservoirs. **2022**, 15, 7661 0
- 154 Stress concentration analysis of functionally graded material coated elliptical inclusion under uniaxial tension. **2022**, 0
- 153 Investigations into Gas-Pore Effects on Fatigue Strength with a Peridynamic Approach. **2022**, 9, 641 0
- 152 Warped Gaussian processes for predicting the degradation of aerospace structures. 147592172211272 0
- 151 Fracture behavior analysis of brittle graphite sphere using a special bond model. **2022**, 108888 0
- 150 Crack Extension Analysis of Atmospheric Stress Corrosion Based on Peridynamics. **2022**, 12, 10008 0
- 149 Fracture modeling by the eigenfracture approach for the implicit material point method framework. 0
- 148 An improved four-parameter conjugated bond-based peridynamic method for fiber-reinforced composites. **2022**, 275, 108863 0
- 147 Advantages of the Extended Finite Element Method for the Analysis of Crack Propagation in Power. **2022**, 100027 0
- 146 Mechanical simulation for the bending process of the AMOLED panel pad. 1-10 0

- 145 Design method for self-healing capability of resin mineral composites with microcapsule based on cohesive element. ○
- 144 Numerical simulation of crack propagation and coalescence in marine cast iron materials using ordinary state-based peridynamics. **2022**, 266, 112812 ○
- 143 Discontinuous deformation analysis (DDA) simulations of crack propagation, branching and coalescence in brittle materials under dynamic loading. **2022**, 122, 103648 ○
- 142 Potential of fixed-plane-perforation fracturing technique in enhanced geothermal system. **2023**, 219, 119468 ○
- 141 The peridynamics-based finite element method (PeriFEM) with adaptive continuous/discrete element implementation for fracture simulation. **2023**, 146, 56-65 ○
- 140 On the fracture behavior of cortical bone microstructure: The effects of morphology and material characteristics of bone structural components. **2023**, 137, 105530 ○
- 139 Hydraulic Fracture Modeling. **2019**, 75-142 ○
- 138 A generalized finite element interface method for mesh reduction of composite materials simulations. **2022**, 19, ○
- 137 Numerical Fatigue Simulation of Access Hole Detail in Orthotropic Steel Bridge Deck. **2022**, ○
- 136 Multisize Discrete Solid-Element Method for Continua. **2023**, 149, ○
- 135 A Study on the Initiation of Discontinuities in Hypoplastic Granular Materials for Some Simple Motion Fields in Classical Continua. **2023**, 149, ○
- 134 Efficient Analysis of Discontinuous Elements Using a Modified Selective Enrichment Technique. **2022**, 35, 267-275 ○
- 133 Fluid-Driven Fracturing of Rock Mass: A Review. ○
- 132 Role of topology in dictating the fracture toughness of mechanical metamaterials. **2022**, 107945 ○
- 131 Numerical modelling of desiccation shrinkage and cracking of soils. 1-21 ○
- 130 Effects of nonlinear hyper-viscoelasticity and matrix/fiber debonding on mechanical properties of short carbon fiber/SBR composites under cyclic uniaxial loads using an RVE-based multiscale finite element model. ○
- 129 Advances in Hydraulic Fracture Propagation Research in Shale Reservoirs. **2022**, 12, 1438 ○
- 128 A graded interphase enhanced phase-field approach for modeling fracture in polymer composites. **2022**, 100135 ○

- 127 Experimental and numerical study of fracturing in degraded and graded crystalline rocks at the laboratory scale. **2022**, 160, 105255 ○
- 126 State-Based peridynamics for thermomechanical modeling of fracture mechanisms in nuclear fuel pellets. **2022**, 276, 108917 ○
- 125 The influence of microstructure on short fatigue crack growth rates in Zircaloy-4: Crystal plasticity modelling and experiment. **2023**, 167, 107385 ○
- 124 Computational homogenization of fully coupled hydro-mechanical analysis of micro-fractured porous media. **2023**, 154, 105121 ○
- 123 Study on Crack Propagation Parameters of Tunnel Lining Structure Based on Peridynamics. **2023**, 135, 2449-2478 ○
- 122 Exploring the dynamic fracture performance of epoxy/cement based piezoelectric composites with complex interfaces. **2023**, 305, 116497 I
- 121 Simulation of ductile fracture propagation using the elastoplastic phase-field damage method calibrated by ultrasonic wave velocity measurement. **2023**, 161, 105296 ○
- 120 Strategy for accurately and efficiently modelling an internal traction-free boundary based on the s-version finite element method: Problem clarification and solutions verification. **2023**, 404, 115843 ○
- 119 An octree pattern-based massively parallel PCG solver for elasto-static and dynamic problems. **2023**, 404, 115779 ○
- 118 A novel hybrid model for hydraulic fracture simulation based on peridynamic theory and extended finite element method. **2023**, 123, 103731 ○
- 117 Failure analysis of a notched laminate through FE approach. **2023**, 306, 116558 ○
- 116 A Volume Averaging FEM-Based Fracture Model for Damage Process in Cohesive-Frictional Solids. **2023**, 23, ○
- 115 Study on Fatigue Behavior of Orthotropic Steel Bridge Deck that Considers Corrosion Effects. **2023**, 28, ○
- 114 A singular crack tip element based on sub-partition and XFEM for modeling crack growth in plates and shells. **2023**, 215, 103890 ○
- 113 An interaction energy integral method for an interface crack in nonhomogeneous materials containing complex interfaces under thermal loading. **2023**, 264, 112089 ○
- 112 An enhanced extended isogeometric analysis with strong imposition of essential boundary conditions for crack problems using B++ splines. **2023**, 116, 393-414 ○
- 111 An IGA based domain integral method for the evaluation of the J-integral using the singular patch method. **2022**, 9, 22-00308-22-00308 ○
- 110 Adaptive coupling peridynamic least-square minimization with finite element method for fracture analysis. ○

- 109 Forward and backward mixed-mode crack estimation using artificial neural network. ○
- 108 Effect of Heat Treatment on Elastic Properties and Fracture Toughness of Fused Filament Fabricated PEEK for Biomedical Applications. **2022**, 14, 5521 ○
- 107 Resolving turbulent boundary layer on coarse grid using function enrichment based on variational reconstructions. **2022**, 34, 125106 ○
- 106 XFEM level set-based topology optimization for turbulent conjugate heat transfer problems. **2023**, 66, ○
- 105 A unified fracture model for X65 pipeline material under various constraints using the eXtended finite element method (XFEM). ○
- 104 Analysis of Interaction of Multiple Cracks Based on Tip Stress Field Using Extended Finite Element Method. **2022**, 2022, 1-15 ○
- 103 A New Local Grid Reconstruction Algorithm for Cracking Simulation in Rock-Like Material. ○
- 102 Fatigue Life Prediction of Annular Thermoelectric Generators Under Thermal Cycling Load. ○
- 101 XFEM-based Fatigue Crack Propagation Analysis on Key Welded Connections of Orthotropic Steel Bridge Deck. ○
- 100 Fatigue Crack Propagation Study of Bridge Steel Q345qD Based on XFEM Considering the Influence of the Stress Ratio. **2022**, 12, 12782 ○
- 99 A review of in-plane biaxial fatigue behavior of metallic materials. **2022**, 103726 ○
- 98 Assessment of Fatigue Life in Presence of Different Hole Geometries by X-FEM. ○
- 97 Fracture analysis of interfacial crack in piezoelectric bimaterial by XIGA approach using B \bar{z} ier extraction of NURBS. 1-18 ○
- 96 Dynamic Crack Propagation under Thermal Impact. **2022**, 112090 ○
- 95 Numerical Simulation of Thermal Fracturing During Heat Extraction from a Closed-Loop Circulation Enhanced Geothermal System. **2022**, 207-223 ○
- 94 Numerical Investigation on the Mechanical Properties of Vault Void Lining and Steel Plate Strengthening. **2023**, 16, 789 ○
- 93 2D finite elements for the computational analysis of crack propagation in brittle materials and the handling of double discontinuities. **2022**, 42, 1291-1298 ○
- 92 Introduction. **2023**, 1-65 ○

- 91 Mode (I, II, III) Stress Intensity Factors of Composite-Coated Gas Turbine Blade Using Semi-Elliptical Crack. ○
- 90 General Finite Element Methods with Special Focus on XFEM. **2023**, 325-392 ○
- 89 A dynamic coupling model of peridynamics and finite elements for progressive damage analysis. ○
- 88 Competition growth of biwing hydraulic fractures in naturally fractured reservoirs. **2023**, 109, 204873 ○
- 87 Mesh-Free Methods with Special Focus on EFGM. **2023**, 593-654 ○
- 86 Hydraulic fracture development in conglomerate reservoirs simulated using combined finite-discrete element method. **2023**, 109063 ○
- 85 Mixed Mode Crack Initiation and Propagation in Functionally Graded Materials: Experimental and Numerical Investigations. ○
- 84 Analysis of fractures in linear viscoelastic media using a generalized finite element method and the elastic-viscoelastic correspondence principle. **2023**, 103759 ○
- 83 Evaluation and optimization of meshless methods to estimation of the 3D-stress intensity factors in mode III for fatigue life prediction cracked shaft under uni and multi-axial cyclic loading. 030932472211426 ○
- 82 A coupled XFEM fatigue modelling of crack growth, delamination and bridging in FRP strengthened metallic plates. **2023**, 279, 109017 ○
- 81 Improved XFEM (IXFEM): 3D dynamic crack propagation under impact loading. **2023**, 405, 115844 ○
- 80 An investigation of hydraulic fracture propagation in multi-layered formation via the phase field method. **2023**, 156, 105258 ○
- 79 Towards improving the computational efficiency of the phase field model. **2023**, 277-278, 106951 ○
- 78 Numerical analysis of frictional contact between crack lips in the framework of Linear Elastic Fracture Mechanics by a mesh-free approach. **2023**, 124, 103749 1
- 77 Crack growth in anisotropic brittle and polycrystalline materials by adaptive phase field model using variable-node elements. **2023**, 217, 103909 ○
- 76 Dynamic crack analysis in anisotropic media under wave-like thermal loading. **2023**, 99, 104913 ○
- 75 A Computational Framework for 2D Crack Growth Based on the Adaptive Finite Element Method. **2023**, 13, 284 ○
- 74 Structural health monitoring based on the cumulative function and cumulative circle of a defective beam under a moving load. 146134842211480 ○

- 73 Polyurethane foam behavior in mixed mode bending. **2019**, 4, 17-30 ○
- 72 Stress-dependent unstable dynamic propagation of multiple hydraulic fractures: a review of stress shadow effects and continuum-discontinuum methods. ○
- 71 Variable node higher-order XFEM for fracture modeling in orthotropic material. 095440622211488 ○
- 70 An ANN-assisted efficient enriched finite element method via the selective enrichment of moment fitting. ○
- 69 Adaptive Multiscale Extended Finite Element Method (Ms-Xfem) for the Simulation of Multiple Fractures Propagation in Geological Formations. ○
- 68 A Computational Framework for Crack Propagation Along Contact Interfaces and Surfaces Under Load. ○
- 67 Mechanical Energy Release Rate as Fracture Criterion of Cracked Piezoelectric Ceramic Using Extended Finite Element Method(XFEM). **2023**, ○
- 66 Vector-based damage-driven computational homogenization with localized gradient enhanced boundary conditions for multi-scale modelling of quasi-brittle materials. **2023**, 280, 106985 ○
- 65 Microscopic fatigue crack propagation model for polycrystalline alloys. **2023**, 170, 107526 ○
- 64 ALLDMD Dissipation Energy Analysis by the Method Extended Finite Elements of a 2D Cracked Structure of an Elastic Linear Isotropic Homogeneous Material. **2023**, 1-8 ○
- 63 Virtual modelling integrated phase field method for dynamic fracture analysis. **2023**, 108372 ○
- 62 A smeared-crack-based field-enriched finite element method for simulating cracking in quasi-brittle materials. **2023**, 124, 103817 ○
- 61 Simulation of crack propagation in solder layer of IGBT device under temperature shock by viscoplastic phase field method. **2023**, 109260 ○
- 60 Research status and development trend of key technologies for enhanced geothermal systems. **2023**, 10, 140-164 ○
- 59 Fatigue crack growth behavior of AA2024T3 under mixed mode loading within the framework of EPFM. ○
- 58 An improved SPH method for simulating crack propagation and coalescence in rocks with pre-existing cracks. **2023**, 282, 109148 ○
- 57 An adaptive mesh refinement strategy for 3D phase modeling of brittle fracture. **2023**, 284, 109241 ○
- 56 Retarding effect of submicron carbides on short fatigue crack propagation: Mechanistic modeling and Experimental validation. **2023**, 250, 118875 ○

- 55 Ductile fracture simulation using phase field method with various damage models based on different degradation and geometric crack functions. **2023**, 35, 105627 ○
- 54 Efficient XFEM approach for the analysis of thin-walled beams. **2023**, 285, 116068 ○
- 53 An adaptive finite element method for crack propagation based on a multifunctional super singular element. **2023**, 247, 108191 ○
- 52 A dissipation informed peridynamic model for dynamic brittle fracture. **2023**, 121, 107236 ○
- 51 A benchmark study of different numerical methods for predicting rock failure. **2023**, 166, 105381 ○
- 50 Numerical prediction of blast fragmentation of reinforced concrete slab using ALE-FEM-SPH coupling method. **2023**, 220, 103948 ○
- 49 Construction of discontinuous enrichment functions for enriched or generalized FEMs for interface elliptic problems in 1D. **2023**, 428, 115180 ○
- 48 Two aspects of high interfacial strength regarding the cracking behaviour of MCrAlY-coated superalloys. 1-10 ○
- 47 Adaptive multiscale extended finite element method (MS-XFEM) for the simulation of multiple fractures propagation in geological formations. **2023**, 486, 112114 ○
- 46 Modeling of rock multiple fractures system with a new contact algorithm and a novel approach for complex topology construction. **2023**, 124, 103778 ○
- 45 On enrichment strategies and methods to extract stress intensity factors using extended finite element method for bimetals. **2023**, 281, 109060 ○
- 44 Peridynamics for mechanism analysis of soil desiccation cracking: Coupled hygro-mechanical model, staggered and monolithic solution. **2023**, 406, 115896 ○
- 43 Numerical simulation of interfacial and subinterfacial crack propagation by using extended peridynamics. **2023**, 279, 106971 ○
- 42 Fatigue assessment and crack propagation of floorbeam cutout in orthotropic bridge decks. **2023**, 226, 111676 ○
- 41 Preconditioned numerical manifold method for linear elastic fractures. **2023**, 406, 115911 ○
- 40 A novel boundary tracing method without enrichment for modeling cracks and their propagation. **2023**, 124, 103799 ○
- 39 A review on fracture propagation in concrete: Models, methods, and benchmark tests. **2023**, 281, 109100 ○
- 38 A modified bond-based peridynamic model without limitations on elastic properties. **2023**, 149, 261-281 ○

- 37 A Fully Coupled Hydro-Mechanical Approach for Multi-Fracture Propagation Simulations. **2023**, 16, 1601 ○
- 36 Lateral behaviour of masonry walls with different types of brick bonds, aspect ratio and strengthening measures by polypropylene bands and wire mesh. **2023**, 49, 623-639 ○
- 35 Failure Analysis of Beam Composite Elements Subjected to Three-Point Bending Using Advanced Numerical Damage Models. **2023**, 17, 133-144 ○
- 34 Accelerated Peridynamic Computation on GPU for Quasi-static Fracture Simulations. ○
- 33 A probabilistic FEM approach for the structural design of glass components. **2023**, 282, 109157 ○
- 32 Isolating the Role of Bone Lacunar Morphology on Static and Fatigue Fracture Progression through Numerical Simulations. **2023**, 16, 1931 ○
- 31 Fracture analysis of CNT-reinforced composites under thermo-mechanical loading using XIGA. **2023**, 45, ○
- 30 An enriched phase-field method for the efficient simulation of fracture processes. **2023**, 71, 1015-1039 ○
- 29 A FDEM approach to study mechanical and fracturing responses of geo-materials with high inclusion contents using a novel reconstruction strategy. **2023**, 282, 109171 3
- 28 Mechanics theories for anisotropic or composite materials. **2023**, ○
- 27 Fatigue fracture investigation of a tube-to-tubesheet welded joint. **2023**, 283, 115908 ○
- 26 Fracture analysis of cracked thin plate by NURBS-based extended finite element method. **2023**, 45, ○
- 25 Scaled boundary finite element method for calculating the J-integral based on LEFM. 1-12 ○
- 24 Model Development of Stress Intensity Factor on 7057T6 Aluminum Alloy Using Extended Finite Element Method. **2023**, 13, 581 3
- 23 The simple shifted fracture method. ○
- 22 A phase-field model for mixed-mode elastoplastic fatigue crack. **2023**, 282, 109176 ○
- 21 An X \mathbb{B} EM technique for numerical simulation of variable-density flow in fractured porous media. **2023**, 10, 102137 ○
- 20 Mixed mode stress intensity factors of single edge cracked/notched plates under different boundary conditions using strain energy approach. ○

- 19 Finite element evaluation of fracture toughness and crack propagation in LB-PBF AlSi10Mg. **2023**, 35, 677-697 ○
- 18 Modeling fracture of multidirectional thin-ply laminates using an anisotropic phase field formulation at the macro-scale. **2023**, 112221 ○
- 17 Modeling Three-Dimensional Pattern of Fluid-Driven Fracturing Using a Simplified Flow-Mechanical Damage Model. ○
- 16 A comparative study between phase-field and micromorphic gradient-extended damage models for brittle fracture. **2023**, 22, ○
- 15 Extended-FEM Analysis of Injection-Induced Slip on a Fault with Rate-and-State Friction: Insights into Parameters that Control Induced Seismicity. ○
- 14 A general anisotropic peridynamic plane model based on micro-beam bond. ○
- 13 Extended isogeometric analysis of multi-material and multi-physics problems using hierarchical B-splines. ○
- 12 Phase-field simulation of microscale crack propagation/deflection in SiC f /SiC composites with weak interphase. ○
- 11 An Evaluation Method of Crack Variation on Structural Performance of Concrete Dams with Fusion Entropy Based on Observation and Simulation. **2023**, 2023, 1-19 ○
- 10 Coupled Thermo-hydro-mechanical Simulation of Hydraulic Fracturing in Deep Reservoirs Using Finite-Discrete Element Method. ○
- 9 Lateral behaviour of unreinforced masonry walls with different types of opening and effect of strengthening measures: A computational approach. ○
- 8 Numerical simulation of fracture propagation in child wells considering dual-stress field. 1-17 ○
- 7 Mode-I Interlaminar Fracture Modeling of DCB Composite Laminate using Finite Element Techniques. ○
- 6 Implementation into OpenSees of XFEM for Analysis of Crack Propagation in Brittle Materials. **2023**, 157-165 ○
- 5 Mixed Element Method for Progressive Collapse Analysis: Method Description and Verification. **2023**, 289-298 ○
- 4 A Comprehensive Review of the Oil Flow Mechanism and Numerical Simulations in Shale Oil Reservoirs. **2023**, 16, 3516 ○
- 3 An eXtended finite element method implementation in COMSOL multiphysics: Thermo-hydro-mechanical modeling of fluid flow in discontinuous porous media. **2023**, 159, 105458 ○
- 2 A New Immersed Finite Element Method for Two-Phase Stokes Problems Having Discontinuous Pressure. **2023**, ○

1 Assessment of EqP in XFEM for weak discontinuities. **2023**, 45,

o