

Marc Gd Geers

List of Publications by Year in Descending Order

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

328
papers

11,844
citations

56
h-index

97
g-index

334
ext. papers

13,255
ext. citations

3.5
avg, IF

6.75
L-index

#	Paper	IF	Citations
328	A continuum consistent discrete particle method for continuum-discontinuum transitions and complex fracture problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2022 , 390, 114460	5.7	
327	Computational analysis of the evolution of the brittle-to-ductile transition of tungsten under fusion conditions. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2021 , 29, 015005	2	3
326	The initiation and progression of damage in composite overwrapped pressure vessels subjected to contact loads. <i>Journal of Reinforced Plastics and Composites</i> , 2021 , 40, 594-605	2.9	2
325	Recrystallization-mediated crack initiation in tungsten under simultaneous high-flux hydrogen plasma loads and high-cycle transient heating. <i>Nuclear Fusion</i> , 2021 , 61, 046018	3.3	5
324	Prediction of the deformed geometry of vat photo-polymerized components using a multi-physical modeling framework. <i>Additive Manufacturing</i> , 2021 , 40, 101922	6.1	3
323	Two-scale analysis of transient diffusion problems through a homogenized enriched continuum. <i>European Journal of Mechanics, A/Solids</i> , 2021 , 87, 104212	3.7	6
322	Revisiting the martensite/ferrite interface damage initiation mechanism: The key role of substructure boundary sliding. <i>Acta Materialia</i> , 2021 , 205, 116533	8.4	6
321	Integral nonlocal approach to model interface decohesion in FFT solvers. <i>Engineering Fracture Mechanics</i> , 2021 , 243, 107516	4.2	0
320	Parameter identification of micron-sized freestanding stretchable electronic interconnects using integrated digital height correlation. <i>Measurement Science and Technology</i> , 2021 , 32, 064001	2	1
319	Data-driven reduced homogenization for transient diffusion problems with emergent history effects. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 380, 113773	5.7	3
318	Modeling the effect of creep in paper fibres under the influence of external loading and changes in moisture. <i>Mechanics of Materials</i> , 2021 , 163, 104075	3.3	0
317	Multi-scale fracture probability analysis of tungsten monoblocks under fusion conditions. <i>Nuclear Materials and Energy</i> , 2021 , 28, 101032	2.1	0
316	Computational homogenization of locally resonant acoustic metamaterial panels towards enriched continuum beam/shell structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2021 , 387, 114161	5.7	3
315	A numerical model for the recrystallization kinetics of tungsten monoblocks under cyclic heat loads. <i>Fusion Engineering and Design</i> , 2021 , 173, 112827	1.7	
314	Assessment of contact-induced damage mechanisms in thick-walled composite cylinders. <i>Journal of Reinforced Plastics and Composites</i> , 2020 , 39, 679-699	2.9	5
313	Experimental full-field analysis of size effects in miniaturized cellular elastomeric metamaterials. <i>Materials and Design</i> , 2020 , 193, 108684	8.1	5
312	Broadening the attenuation range of acoustic metafoams through graded microstructures. <i>Journal of Sound and Vibration</i> , 2020 , 483, 115472	3.9	9

3 ¹¹	An In-Situ, Micro-Mechanical Setup with Accurate, Tri-Axial, Piezoelectric Force Sensing and Positioning. <i>Experimental Mechanics</i> , 2020 , 60, 713-725	2.6	1
3 ¹⁰	Roadmap on multiscale materials modeling. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2020 , 28, 043001	2	4 ⁰
3 ⁰⁹	Spatially dependent kinetics of helium in tungsten under fusion conditions. <i>Journal of Nuclear Materials</i> , 2020 , 535, 152104	3.3	7
3 ⁰⁸	Robust and precise identification of the hygro-expansion of single fibers: a full-field fiber topography correlation approach. <i>Cellulose</i> , 2020 , 27, 6777-6792	5.5	5
3 ⁰⁷	Omnidirectional stretchability of freestanding interconnects for stretchable electronics. <i>Smart Materials and Structures</i> , 2020 , 29, 045019	3.4	
3 ⁰⁶	Multi-axial electro-mechanical testing methodology for highly stretchable freestanding micron-sized structures. <i>Journal of Micromechanics and Microengineering</i> , 2020 , 30, 055002	2	1
3 ⁰⁵	Full-field identification of mixed-mode adhesion properties in a flexible, multi-layer microelectronic material system. <i>Engineering Fracture Mechanics</i> , 2020 , 226, 106879	4.2	1
3 ⁰⁴	Extended micromorphic computational homogenization for mechanical metamaterials exhibiting multiple geometric pattern transformations. <i>Extreme Mechanics Letters</i> , 2020 , 37, 100708	3.9	4
3 ⁰³	Multi-dimensional wavelet reduction for the homogenisation of microstructures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020 , 359, 112652	5.7	2
3 ⁰²	Experimental investigation of the microstructural changes of tungsten monoblocks exposed to pulsed high heat loads. <i>Nuclear Materials and Energy</i> , 2020 , 22, 100716	2.1	8
3 ⁰¹	Frequency domain boundary value problem analyses of acoustic metamaterials described by an emergent generalized continuum. <i>Computational Mechanics</i> , 2020 , 65, 789-805	4	2
3 ⁰⁰	An FFT-based spectral solver for interface decohesion modelling using a gradient damage approach. <i>Computational Mechanics</i> , 2020 , 65, 925-939	4	11
2 ⁹⁹	A Newton solver for micromorphic computational homogenization enabling multiscale buckling analysis of pattern-transforming metamaterials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020 , 372, 113333	5.7	2
2 ⁹⁸	Brittle-ductile transition temperature of recrystallized tungsten following exposure to fusion relevant cyclic high heat load. <i>Journal of Nuclear Materials</i> , 2020 , 541, 152416	3.3	6
2 ⁹⁷	Model reduction in computational homogenization for transient heat conduction. <i>Computational Mechanics</i> , 2020 , 65, 249-266	4	12
2 ⁹⁶	Multi-scale process simulation for additive manufacturing through particle filled vat photopolymerization. <i>Computational Materials Science</i> , 2020 , 180, 109647	3.2	13
2 ⁹⁵	Numerical investigation of the brittle-to-ductile transition temperature of rolled high-purity tungsten. <i>Mechanics of Materials</i> , 2020 , 145, 103394	3.3	4
2 ⁹⁴	Stabilization of coupled convection-diffusion-reaction equations for continuum dislocation transport. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2019 , 27, 055009	2	

293	Computational homogenisation of acoustic metafoams. <i>European Journal of Mechanics, A/Solids</i> , 2019 , 77, 103805	3.7	6
292	Correction of Scanning Electron Microscope Imaging Artifacts in a Novel Digital Image Correlation Framework. <i>Experimental Mechanics</i> , 2019 , 59, 489-516	2.6	21
291	Transient analysis of nonlinear locally resonant metamaterials via computational homogenization. <i>Mathematics and Mechanics of Solids</i> , 2019 , 24, 3136-3155	2.3	4
290	Lath martensite plasticity enabled by apparent sliding of substructure boundaries. <i>Materials and Design</i> , 2019 , 172, 107646	8.1	7
289	Mixed-mode cohesive zone parameters from integrated digital image correlation on micrographs only. <i>International Journal of Solids and Structures</i> , 2019 , 156-157, 179-193	3.1	8
288	A computational approach towards modelling dislocation transmission across phase boundaries. <i>Philosophical Magazine</i> , 2019 , 99, 2126-2151	1.6	7
287	Micromorphic computational homogenization for mechanical metamaterials with patterning fluctuation fields. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 123, 119-137	5	26
286	Influence of particle shape in the additive manufacturing process for ceramics. <i>Computers and Mathematics With Applications</i> , 2019 , 78, 2360-2376	2.7	4
285	Mechanical Shape Correlation: A novel integrated digital image correlation approach. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019 , 345, 983-1006	5.7	3
284	Towards acoustic metafoams: The enhanced performance of a poroelastic material with local resonators. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 124, 189-205	5	11
283	A quantitative assessment of the scale separation limits of classical and higher-order asymptotic homogenization. <i>European Journal of Mechanics, A/Solids</i> , 2018 , 71, 89-100	3.7	38
282	Anomalous precipitation hardening in Al-(1 wt%)Cu thin films. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2018 , 722, 37-46	5.3	3
281	Multiphysical modeling of the photopolymerization process for additive manufacturing of ceramics. <i>European Journal of Mechanics, A/Solids</i> , 2018 , 71, 210-223	3.7	21
280	On micromechanical parameter identification with integrated DIC and the role of accuracy in kinematic boundary conditions. <i>International Journal of Solids and Structures</i> , 2018 , 146, 241-259	3.1	7
279	Correction of scan line shift artifacts in scanning electron microscopy: An extended digital image correlation framework. <i>Ultramicroscopy</i> , 2018 , 187, 144-163	3.1	18
278	Ferrite slip system activation investigated by uniaxial micro-tensile tests and simulations. <i>Acta Materialia</i> , 2018 , 146, 314-327	8.4	36
277	A bulge test based methodology for characterizing ultra-thin buckled membranes. <i>Thin Solid Films</i> , 2018 , 660, 88-100	2.2	7
276	Martensite crystallography and chemistry in dual phase and fully martensitic steels. <i>Materials Characterization</i> , 2018 , 139, 411-420	3.9	15

275	Image-based interface characterization with a restricted microscopic field of view. <i>International Journal of Solids and Structures</i> , 2018 , 132-133, 218-231	3.1	7
274	Contribution of austenite-martensite transformation to deformability of advanced high strength steels: From atomistic mechanisms to microstructural response. <i>Acta Materialia</i> , 2018 , 156, 463-478	8.4	20
273	Homogenized enriched continuum analysis of acoustic metamaterials with negative stiffness and double negative effects. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 119, 104-117	5	26
272	From Fibrils to Toughness: Multi-Scale Mechanics of Fibrillating Interfaces in Stretchable Electronics. <i>Materials</i> , 2018 , 11,	3.5	4
271	Size effects in nonlinear periodic materials exhibiting reversible pattern transformations. <i>Mechanics of Materials</i> , 2018 , 124, 55-70	3.3	11
270	Advances in Delamination Modeling of Metal/Polymer Systems: Continuum Aspects 2018 , 83-128		
269	A general multiscale framework for the emergent effective elastodynamics of metamaterials. <i>Journal of the Mechanics and Physics of Solids</i> , 2018 , 111, 414-433	5	39
268	Scale effects in the hygro-thermo-mechanical response of fibrous networks. <i>European Journal of Mechanics, A/Solids</i> , 2018 , 71, 113-121	3.7	6
267	A stabilization technique for coupled convection-diffusion-reaction equations. <i>International Journal for Numerical Methods in Engineering</i> , 2018 , 116, 43-65	2.4	2
266	Finite strain FFT-based non-linear solvers made simple. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2017 , 318, 412-430	5.7	64
265	Detecting precursors of localization by strain-field analysis. <i>Mechanics of Materials</i> , 2017 , 110, 84-97	3.3	5
264	A semi-analytical approach towards plane wave analysis of local resonance metamaterials using a multiscale enriched continuum description. <i>International Journal of Mechanical Sciences</i> , 2017 , 133, 188-198	5.5	14
263	The attenuation performance of locally resonant acoustic metamaterials based on generalised viscoelastic modelling. <i>International Journal of Solids and Structures</i> , 2017 , 126-127, 163-174	3.1	44
262	A Uni-Axial Nano-Displacement Micro-Tensile Test of Individual Constituents from Bulk Material. <i>Experimental Mechanics</i> , 2017 , 57, 1249-1263	2.6	7
261	On the underlying micromechanisms in time-dependent anelasticity in Al-(1wt%)Cu thin films. <i>Acta Materialia</i> , 2017 , 124, 47-58	8.4	5
260	A review of predictive nonlinear theories for multiscale modeling of heterogeneous materials. <i>Journal of Computational Physics</i> , 2017 , 330, 192-220	4.1	237
259	Self-adaptive Isogeometric Global Digital Image Correlation and Digital Height Correlation. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2017 , 165-172	0.3	1
258	A finite element perspective on nonlinear FFT-based micromechanical simulations. <i>International Journal for Numerical Methods in Engineering</i> , 2017 , 111, 903-926	2.4	59

257	Fracture in multi-phase materials: Why some microstructures are more critical than others. <i>Engineering Fracture Mechanics</i> , 2017 , 169, 354-370	4.2	6
256	Ultra-Stretchable Interconnects for High-Density Stretchable Electronics. <i>Micromachines</i> , 2017 , 8,	3.3	16
255	Predicting deformation-induced polymer/steel interface roughening and failure. <i>European Journal of Mechanics, A/Solids</i> , 2016 , 55, 1-11	3.7	1
254	Deformation behaviour of lath martensite in multi-phase steels. <i>Scripta Materialia</i> , 2016 , 110, 74-77	5.6	16
253	Local network effects on hygroscopic expansion in digital ink-jet printing. <i>Nordic Pulp and Paper Research Journal</i> , 2016 , 31, 684-691	1.1	4
252	High toughness fibrillating metal-elastomer interfaces: On the role of discrete fibrils within the fracture process zone. <i>Engineering Fracture Mechanics</i> , 2016 , 164, 93-105	4.2	4
251	Microscopic plasticity and damage in two-phase steels: On the competing role of crystallography and phase contrast. <i>Mechanics of Materials</i> , 2016 , 101, 147-159	3.3	21
250	Visco-elastic effects on wave dispersion in three-phase acoustic metamaterials. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 96, 29-47	5	81
249	Fracture initiation in multi-phase materials: A statistical characterization of microstructural damage sites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 673, 551-556	5.3	11
248	Competing damage mechanisms in a two-phase microstructure: How microstructure and loading conditions determine the onset of fracture. <i>International Journal of Solids and Structures</i> , 2016 , 97-98, 687-698	3.1	18
247	Predictive modeling of interfacial damage in substructured steels: application to martensitic microstructures. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2016 , 24, 025006	2	7
246	Systematic and objective identification of the microstructure around damage directly from images. <i>Scripta Materialia</i> , 2016 , 113, 101-105	5.6	4
245	Homogenization of locally resonant acoustic metamaterials towards an emergent enriched continuum. <i>Computational Mechanics</i> , 2016 , 57, 423-435	4	57
244	Free energy of dislocations in a multi-slip geometry. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 88, 267-273	5	3
243	Viscoplastic flow rule for dislocation-mediated plasticity from systematic coarse-graining. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 90, 77-90	5	4
242	Reduced crystal plasticity for materials with constrained slip activity. <i>Mechanics of Materials</i> , 2016 , 92, 198-210	3.3	10
241	A Statistical/Computational/Experimental Approach to Study the Microstructural Morphology of Damage. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2016 , 61-65	0.3	
240	On image gradients in digital image correlation. <i>International Journal for Numerical Methods in Engineering</i> , 2016 , 105, 243-260	2.4	42

239	Micromechanical modeling of roll-to-roll processing of oriented polyethylene terephthalate films. <i>Journal of Applied Polymer Science</i> , 2016 , 133, n/a-n/a	2.9	2
238	Three-dimensional finite element modeling of ductile crack initiation and propagation. <i>Advanced Modeling and Simulation in Engineering Sciences</i> , 2016 , 3,	2.7	6
237	Adaptive Isogeometric Digital Height Correlation: Application to Stretchable Electronics. <i>Strain</i> , 2016 , 52, 336-354	1.7	14
236	Plasticity of lath martensite by sliding of substructure boundaries. <i>Scripta Materialia</i> , 2016 , 120, 37-40	5.6	37
235	Multiscale modeling of microstructure-property relations. <i>MRS Bulletin</i> , 2016 , 41, 610-616	3.2	33
234	2D Phase field modeling of sintering of silver nanoparticles. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2016 , 312, 492-508	5.7	31
233	Defect redistribution within a continuum grain boundary plasticity model. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 83, 243-262	5	15
232	Analysis of the dissipative mechanisms in metal-blastomer interfaces. <i>Engineering Fracture Mechanics</i> , 2015 , 149, 412-424	4.2	11
231	Bridging network properties to the effective hygro-expansivity of paper: experiments and modelling. <i>Philosophical Magazine</i> , 2015 , 95, 3385-3401	1.6	13
230	A Generic, Time-Resolved, Integrated Digital Image Correlation, Identification Approach. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2015 , 257-263	0.3	
229	A multiscale-compatible approach in modeling ionic transport in the electrolyte of (Lithium ion) batteries. <i>Journal of Power Sources</i> , 2015 , 293, 892-911	8.9	22
228	Effective mobility of dislocations from systematic coarse-graining. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2015 , 2015, P06005	1.9	5
227	Microstructural modeling of ductile fracture initiation in multi-phase materials. <i>Engineering Fracture Mechanics</i> , 2015 , 147, 318-330	4.2	13
226	Thermo-mechanical analyses of heterogeneous materials with a strongly anisotropic phase: the case of cast iron. <i>International Journal of Solids and Structures</i> , 2015 , 63, 153-166	3.1	22
225	Time-resolved integrated digital image correlation. <i>International Journal for Numerical Methods in Engineering</i> , 2015 , 103, 157-182	2.4	40
224	Microscopically derived free energy of dislocations. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 78, 186-209	5	18
223	Governing equations for a two-scale analysis of Li-ion battery cells. <i>International Journal of Solids and Structures</i> , 2015 , 59, 90-109	3.1	29
222	Grain boundary interfacial plasticity with incorporation of internal structure and energy. <i>Mechanics of Materials</i> , 2015 , 90, 69-82	3.3	15

221	Microstructural topology effects on the onset of ductile failure in multi-phase materials – A systematic computational approach. <i>International Journal of Solids and Structures</i> , 2015 , 67-68, 326-339	3.1	26
220	Micromechanical modelling of reversible and irreversible thermo-mechanical deformation of oriented polyethylene terephthalate. <i>Computational Materials Science</i> , 2015 , 98, 189-200	3.2	9
219	Numerical–experimental assessment of roughness-induced metal–polymer interface failure. <i>Mechanics of Materials</i> , 2015 , 80, 234-245	3.3	5
218	Anelasticity in Al-Alloy Thin Films: A Micro-mechanical Analysis. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2015 , 107-112	0.3	
217	A multiscale model of grain boundary structure and energy: From atomistics to a continuum description. <i>Acta Materialia</i> , 2015 , 82, 513-529	8.4	50
216	Interface debonding characterization by image correlation integrated with Double Cantilever Beam kinematics. <i>International Journal of Solids and Structures</i> , 2015 , 55, 79-91	3.1	54
215	The mechanical reliability of an electronic textile investigated using the virtual-power-based quasicontinuum method. <i>Mechanics of Materials</i> , 2015 , 80, 52-66	3.3	13
214	Microstructural model for the time-dependent thermomechanical analysis of cast irons. <i>GAMM Mitteilungen</i> , 2015 , 38, 248-267	1.8	0
213	A homogenization approach for characterization of the fluid–solid coupling parameters in Biot’s equations for acoustic poroelastic materials. <i>Journal of Sound and Vibration</i> , 2015 , 351, 251-267	3.9	14
212	On the role of fibril mechanics in the work of separation of fibrillating interfaces. <i>Mechanics of Materials</i> , 2015 , 88, 1-11	3.3	8
211	Multi-scale experimental analysis of rate dependent metal–elastomer interface mechanics. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 80, 26-36	5	13
210	Interface modeling in continuum dislocation transport. <i>Mechanics of Materials</i> , 2015 , 88, 30-43	3.3	6
209	Towards an unconditionally stable numerical scheme for continuum dislocation transport. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2015 , 23, 085013	2	4
208	Climb-Enabled Discrete Dislocation Plasticity Analysis of the Deformation of a Particle Reinforced Composite. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2015 , 82,	2.7	11
207	Preventing interface damage by pre-conditioning polymer-coated steels via rolling. <i>International Journal of Solids and Structures</i> , 2015 , 58, 1-11	3.1	3
206	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
205	Predicting hygro-elastic properties of paper sheets based on an idealized model of the underlying fibrous network. <i>International Journal of Solids and Structures</i> , 2015 , 56-57, 43-52	3.1	24
204	Multi-scale modeling of delamination through fibrillation. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 66, 117-132	5	29

203	A multiscale framework for localizing microstructures towards the onset of macroscopic discontinuity. <i>Computational Mechanics</i> , 2014 , 54, 299-319	4	30
202	Consistent remeshing and transfer for a three dimensional enriched mixed formulation of plasticity and non-local damage. <i>Computational Mechanics</i> , 2014 , 53, 625-639	4	7
201	A multiscale quasicontinuum method for dissipative lattice models and discrete networks. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 64, 154-169	5	37
200	A multiscale quasicontinuum method for lattice models with bond failure and fiber sliding. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2014 , 269, 108-122	5-7	37
199	Subgrain lath martensite mechanics: A numerical-experimental analysis. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 73, 69-83	5	34
198	Characterization of time-dependent anelastic microbeam bending mechanics. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 355306	3	17
197	Towards optimal design of locally resonant acoustic metamaterials. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 71, 179-196	5	102
196	Characterisation and modelling of anisotropic thermo-mechanical behaviour of oriented polyethylene terephthalate. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2014 , 22, 055024	6	6
195	A homogenization-based quasi-discrete method for the fracture of heterogeneous materials. <i>Computational Mechanics</i> , 2014 , 53, 909-923	4	8
194	Elevated temperature creep of pearlitic steels: an experimental-numerical approach. <i>Mechanics of Time-Dependent Materials</i> , 2014 , 18, 611-631	1.2	6
193	Gradient crystal plasticity modelling of anelastic effects in particle strengthened metallic thin films. <i>Meccanica</i> , 2014 , 49, 2657-2685	2.1	4
192	On the role of interlath retained austenite in the deformation of lath martensite. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2014 , 22, 045011	2	41
191	Coupled glide-climb diffusion-enhanced crystal plasticity. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 70, 136-153	5	41
190	Central summation in the quasicontinuum method. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 70, 242-261	5	22
189	Collective behaviour of dislocations in a finite medium. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2014 , 2014, P04028	1.9	13
188	On-wafer time-dependent high reproducibility nano-force tensile testing. <i>Journal Physics D: Applied Physics</i> , 2014 , 47, 495306	3	13
187	Mechanics of dislocation pile-ups: A unification of scaling regimes. <i>Journal of the Mechanics and Physics of Solids</i> , 2014 , 70, 42-61	5	28
186	Direct Stress-Strain Measurements from Bulged Membranes Using Topography Image Correlation. <i>Experimental Mechanics</i> , 2014 , 54, 717-727	2.6	52

185	Irreversible mixed mode interface delamination using a combined damage-plasticity cohesive zone enabling unloading. <i>International Journal of Fracture</i> , 2014 , 185, 77-95	2.3	16
184	Quantification of Three-Dimensional Surface Deformation using Global Digital Image Correlation. <i>Experimental Mechanics</i> , 2014 , 54, 557-570	2.6	26
183	Integrated Global Digital Image Correlation for Interface Delamination Characterization. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2014 , 27-32	0.3	
182	Asymptotic Behaviour of a Pile-Up of Infinite Walls of Edge Dislocations. <i>Archive for Rational Mechanics and Analysis</i> , 2013 , 209, 495-539	2.3	48
181	Towards a homogenized plasticity theory which predicts structural and microstructural size effects. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 2240-2259	5	13
180	A practical approach for the separation of interfacial toughness and structural plasticity in a delamination growth experiment. <i>International Journal of Fracture</i> , 2013 , 183, 1-18	2.3	7
179	Application of non-convex rate dependent gradient plasticity to the modeling and simulation of inelastic microstructure development and inhomogeneous material behavior. <i>Computational Materials Science</i> , 2013 , 80, 51-60	3.2	20
178	Transient computational homogenization for heterogeneous materials under dynamic excitation. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 2125-2146	5	88
177	Multi-scale mechanics of traumatic brain injury: predicting axonal strains from head loads. <i>Biomechanics and Modeling in Mechanobiology</i> , 2013 , 12, 137-50	3.8	89
176	Homogenization towards a grain-size dependent plasticity theory for single slip. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 913-927	5	17
175	On the lack of rotational equilibrium in cohesive zone elements. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2013 , 254, 146-153	5.7	24
174	Simulation of interlaminar damage in mixed-mode bending tests using large deformation self-adaptive cohesive zones. <i>Engineering Fracture Mechanics</i> , 2013 , 109, 387-402	4.2	6
173	Grain boundary interface mechanics in strain gradient crystal plasticity. <i>Journal of the Mechanics and Physics of Solids</i> , 2013 , 61, 2659-2679	5	49
172	Micromechanical modelling of short-term and long-term large-strain behaviour of polyethylene terephthalate. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2013 , 21, 085015	2	9
171	Crystal plasticity based modeling of time and scale dependent behavior of thin films. <i>GAMM Mitteilungen</i> , 2013 , 36, 161-185	1.8	
170	Enhanced Global Digital Image Correlation for Accurate Measurement of Microbeam Bending. <i>Advanced Structured Materials</i> , 2013 , 43-51	0.6	6
169	Global Digital Image Correlation for Pressure Deflected Membranes. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2013 , 135-140	0.3	
168	Micromechanical Characterization of Ductile Damage in DP Steel. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , 2013 , 29-35	0.3	

167	A tissue-level anisotropic criterion for brain injury based on microstructural axonal deformation. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2012 , 5, 41-52	4.1	25
166	Novel boundary conditions for strain localization analyses in microstructural volume elements. <i>International Journal for Numerical Methods in Engineering</i> , 2012 , 90, 1-21	2.4	93
165	A Micropillar Compression Methodology for Ductile Damage Quantification. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2012 , 43, 796-801	2.3	2
164	A multi-scale approach to bridge microscale damage and macroscale failure: a nested computational homogenization-localization framework. <i>International Journal of Fracture</i> , 2012 , 178, 157-178	2.3	56
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