# Geralf Htter

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 43 papers | 563 citations | 14 h-index | 22 g-index |
| 46 ext. papers | 677 ext. citations | 2.9 avg, IF | 4.89 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 43 | Influence of topology and porosity on size effects in stripes of cellular material with honeycomb structure under shear, tension and bending. *Mechanics of Materials*, **2021**, 154, 103727 | 3.3 | 2 |
| 42 | Analytical solutions of the cylindrical bending problem for the relaxed micromorphic continuum and other generalized continua. *Continuum Mechanics and Thermodynamics*, **2021**, 33, 1505-1539 | 3.5 | 5 |
| 41 | Micromechanical simulation of fatigue in nodular cast iron under stress-controlled loading. *Material Design and Processing Communications*, **2021**, 3, e214 | 0.9 | 1 |
| 40 | A hybrid approach for the multi-scale simulation of irreversible material behavior incorporating neural networks. *Proceedings in Applied Mathematics and Mechanics*, **2021**, 20, e202000248 | 0.2 | |
| 39 | Analytical solutions of the simple shear problem for micromorphic models and other generalized continua. *Archive of Applied Mechanics*, **2021**, 91, 2237-2254 | 2.2 | 8 |
| 38 | An efficient monolithic solution scheme for FE2 problems. *Computer Methods in Applied Mechanics and Engineering*, **2021**, 382, 113886 | 5.7 | 7 |
| 37 | Kinematics and constitutive relations in the stress-gradient theory: interpretation by homogenization. *International Journal of Solids and Structures*, **2020**, 193-194, 90-97 | 3.1 | 8 |
| 36 | On the identification and uniqueness of constitutive parameters for a non-local GTN-model. *Engineering Fracture Mechanics*, **2020**, 229, 106817 | 4.2 | 12 |
| 35 | A hybrid approach to simulate the homogenized irreversible elastic–plastic deformations and damage of foams by neural networks. *International Journal of Plasticity*, **2020**, 126, 102624 | 7.6 | 28 |
| 34 | On the micro-macro relation for the microdeformation in the homogenization towards micromorphic and micropolar continua. *Journal of the Mechanics and Physics of Solids*, **2019**, 127, 62-79 | 5 | 14 |
| 33 | Characterising Fatigue Behaviour of Nodular Cast Iron Using Micromechanical Simulations. *MATEC Web of Conferences*, **2019**, 300, 13002 | 0.3 | |
| 32 | Numerical investigation of low cycle fatigue mechanism in nodular cast iron. *International Journal of Fatigue*, **2018**, 113, 290-298 | 5 | 11 |
| 31 | An efficient FE-implementation of implicit gradient-enhanced damage models to simulate ductile failure. *Engineering Fracture Mechanics*, **2018**, 199, 41-60 | 4.2 | 29 |
| 30 | A Novel Micromechanics Approach for Understanding of Fatigue in Nodular Cast Iron. *Procedia Structural Integrity*, **2018**, 13, 607-612 | 1 | 1 |
| 29 | Effect of Gradient Plasticity on Crack Initiation and Propagation in the Ductile-Brittle Transition Region of Ferritic Steel. *Procedia Structural Integrity*, **2018**, 13, 45-50 | 1 | 0 |
| 28 | Dislocation pile-up and cleavage: effects of strain gradient plasticity on micro-crack initiation in ferritic steel. *International Journal of Fracture*, **2018**, 214, 1-15 | 2.3 | 7 |
| 27 | A micromechanical gradient extension of Gurson's model of ductile damage within the theory of microdilatational media. *International Journal of Solids and Structures*, **2017**, 110-111, 15-23 | 3.1 | 16 |

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| 26 | Influence of carbide particles on crack initiation and propagation with competing ductile-brittle transition in ferritic steel. *Theoretical and Applied Fracture Mechanics*, **2017**, 92, 89-98 | 3.7 | 17 |
| 25 | Homogenization of a Cauchy continuum towards a micromorphic continuum. *Journal of the Mechanics and Physics of Solids*, **2017**, 99, 394-408 | 5 | 35 |
| 24 | Micromorphic homogenisation and its application to a model of ductile damage. *Proceedings in Applied Mathematics and Mechanics*, **2017**, 17, 599-600 | 0.2 | 2 |
| 23 | Micromorphic Homogenisation of a Porous Medium: Application to Size Effects and Quasi-Brittle Damage. *Proceedings in Applied Mathematics and Mechanics*, **2016**, 16, 347-348 | 0.2 | |
| 22 | Meinhard Kuna: Physics and Engineering at the Crack Tip – A Retrospective **2016**, 3-22 | | |
| 21 | Application of a microstrain continuum to size effects in bending and torsion of foams. *International Journal of Engineering Science*, **2016**, 101, 81-91 | 5.7 | 11 |
| 20 | Micromechanical Modeling of Crack Initiation and Propagation in the Ductile-Brittle Transition Region. *Key Engineering Materials*, **2016**, 713, 58-61 | 0.4 | |
| 19 | An extended Coleman–Noll procedure for generalized continuum theories. *Continuum Mechanics and Thermodynamics*, **2016**, 28, 1935-1941 | 3.5 | 7 |
| 18 | Micromechanisms of fracture in nodular cast iron: From experimental findings towards modeling strategies – A review. *Engineering Fracture Mechanics*, **2015**, 144, 118-141 | 4.2 | 65 |
| 17 | Micromechanical modeling of crack propagation in nodular cast iron with competing ductile and cleavage failure. *Engineering Fracture Mechanics*, **2015**, 147, 388-397 | 4.2 | 18 |
| 16 | Micromorphic homogenization of a porous medium: elastic behavior and quasi-brittle damage. *Continuum Mechanics and Thermodynamics*, **2015**, 27, 1059-1072 | 3.5 | 16 |
| 15 | Size effects in ductile failure of porous materials containing two populations of voids. *European Journal of Mechanics, A/Solids*, **2014**, 45, 8-19 | 3.7 | 29 |
| 14 | Simulation of fatigue crack growth with a cyclic cohesive zone model. *International Journal of Fracture*, **2014**, 188, 23-45 | 2.3 | 47 |
| 13 | Size effects due to secondary voids during ductile crack propagation. *International Journal of Solids and Structures*, **2014**, 51, 839-847 | 3.1 | 13 |
| 12 | Micromechanical Modeling of Crack Propagation with Competing Ductile and Cleavage Failure **2014**, 3, 428-433 | | 5 |
| 11 | A modeling approach for the complete ductile–brittle transition region: cohesive zone in combination with a non-local Gurson-model. *International Journal of Fracture*, **2014**, 185, 129-153 | 2.3 | 26 |
| 10 | A first-order strain gradient damage model for simulating quasi-brittle failure in porous elastic solids. *Archive of Applied Mechanics*, **2013**, 83, 955-967 | 2.2 | 9 |
| 9 | Simulation of ductile crack initiation and propagation by means of a non-local Gurson-model. *International Journal of Solids and Structures*, **2013**, 50, 662-671 | 3.1 | 39 |

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| 8 | Consistent simulation of ductile crack propagation with discrete 3D voids. *Computational Materials Science*, **2013**, 80, 61-70 | 3.2 | 18 |
| 7 | Simulation of crack propagation using a gradient-enriched ductile damage model based on dilatational strain. *Engineering Fracture Mechanics*, **2012**, 95, 13-28 | 4.2 | 35 |
| 6 | Ductile crack propagation by plastic collapse of the intervoid ligaments. *International Journal of Fracture*, **2012**, 176, 81-96 | 2.3 | 11 |
| 5 | Simulation of Crack Propagation under Small-Scale Yielding by means of a Non-local GTN-Model. *Proceedings in Applied Mathematics and Mechanics*, **2011**, 11, 157-158 | 0.2 | |
| 4 | Simulation of local instabilities during crack propagation in the ductile-brittle transition region. *European Journal of Mechanics, A/Solids*, **2011**, 30, 195-203 | 3.7 | 7 |
| 3 | A Hybrid Approach Employing Neural Networks to Simulate the Elasto-Plastic Deformation Behavior of 3D-Foam Structures. *Advanced Engineering Materials*,2100641 | 3.5 | 0 |
| 2 | Analytical solution of the cylindrical torsion problem for the relaxed micromorphic continuum and other generalized continua (including full derivations). *Mathematics and Mechanics of Solids*,10812865211023[2] | 2.3 | 2 |
| 1 | Influence of the Foam Morphology on the Mechanical Behavior of Flow-Through Foam Filters During Filtration Processes. *Advanced Engineering Materials*,2100784 | 3.5 | 1 |