# Anne Habraken

## List of Publications by Year in Descending Order



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| 101 papers | 1,906 citations | 22 h-index | 41 g-index |
| 107 ext. papers | 2,188 ext. citations | 3.2 avg, IF | 4.66 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 101 | Characterization, propagation, and sensitivity analysis of uncertainties in the directed energy deposition process using a deep learning-based surrogate model. *Probabilistic Engineering Mechanics*, **2022**, 103297 | 2.6 | 0 |
| 100 | Identification and Validation of Brass Material Parameters Using Single Point Incremental Forming. *Minerals, Metals and Materials Series*, **2022**, 873-883 | 0.3 | |
| 99 | Mechanical response of nickel multicrystals for shear and tensile conditions at room temperature and 573 K. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2021**, 809, 140987 | 5.3 | 0 |
| 98 | Nanomechanical Characterization of the Deformation Response of Orthotropic Ti-6Al-4V. *Advanced Engineering Materials*, **2021**, 23, 2001341 | 3.5 | 0 |
| 97 | Identification and validation of an extended Stewart-Cazacu micromechanics damage model applied to Ti-6Al-4V specimens exhibiting positive stress triaxialities. *Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications*, **2021**, 235, 1248-1261 | 1.3 | 0 |
| 96 | Thermal model for the directed energy deposition of composite coatings of 316L stainless steel enriched with tungsten carbides. *Materials and Design*, **2021**, 204, 109661 | 8.1 | 7 |
| 95 | Thermal Analysis of Solidifying Steel Shell in Continuous Casting Process. *Procedia Manufacturing*, **2020**, 47, 686-692 | 1.5 | |
| 94 | Experimental characterization of the compressive mechanical behaviour of Ti6Al4V alloy at constant strain rates over the full elastoplastic range. *International Journal of Material Forming*, **2020**, 13, 709-724 | 2 | 5 |
| 93 | Tunable surface boundary conditions in strain gradient crystal plasticity model. *Mechanics of Materials*, **2020**, 145, 103393 | 3.3 | 0 |
| 92 | 2D thermal finite element analysis of laser cladding of 316L+WC Composite coatings. *Procedia Manufacturing*, **2020**, 50, 86-92 | 1.5 | 3 |
| 91 | 2D thermal finite element analysis of sticker breakout in continuous casting. *Procedia Manufacturing*, **2020**, 50, 376-383 | 1.5 | |
| 90 | Sensitivity Analysis in the Modelling of a High Speed Steel Thin-Wall Produced by Directed Energy Deposition. *Metals*, **2020**, 10, 1554 | 2.3 | 6 |
| 89 | Impact of distortional hardening and the strength differential effect on the prediction of large deformation behavior of the Ti6Al4V alloy. *Meccanica*, **2019**, 54, 1823-1840 | 2.1 | 6 |
| 88 | Influence of Si precipitates on fracture mechanisms of AlSi10Mg parts processed by Selective Laser Melting. *Acta Materialia*, **2019**, 175, 160-170 | 8.4 | 87 |
| 87 | Thermal histories and microstructures in Direct Energy Deposition of a High Speed Steel thick deposit. *Materials Letters*, **2019**, 236, 42-45 | 3.3 | 8 |
| 86 | Single point incremental forming: state-of-the-art and prospects. *International Journal of Material Forming*, **2018**, 11, 743-773 | 2 | 104 |
| 85 | Damage prediction in single point incremental forming using an extended Gurson model. *International Journal of Solids and Structures*, **2018**, 151, 45-56 | 3.1 | 32 |

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| 84 | Damage characterization in a ferritic steel sheet: Experimental tests, parameter identification and numerical modeling. *International Journal of Solids and Structures*, **2018**, 155, 109-122 | 3.1 | 4 |
| 83 | FE modeling of the cooling and tempering steps of bimetallic rolling mill rolls. *International Journal of Material Forming*, **2017**, 10, 287-305 | 2 | 4 |
| 82 | 3D thermal finite element analysis of laser cladding processed Ti-6Al-4V part with microstructural correlations. *Materials and Design*, **2017**, 128, 130-142 | 8.1 | 41 |
| 81 | Single point incremental forming simulation with adaptive remeshing technique using solid-shell elements. *Engineering Computations*, **2016**, 33, 1388-1421 | 1.4 | 8 |
| 80 | Comparison of residual stresses on long rolled profiles measured by X-ray diffraction, ring core and the sectioning methods and simulated by FE method. *Thin-Walled Structures*, **2016**, 104, 126-134 | 4.7 | 20 |
| 79 | Size effects and temperature dependence on strain-hardening mechanisms in some face centered cubic materials. *Mechanics of Materials*, **2015**, 91, 136-151 | 3.3 | 22 |
| 78 | Phase Transformations and Crack Initiation in a High-Chromium Cast Steel Under Hot Compression Tests. *Journal of Materials Engineering and Performance*, **2015**, 24, 2025-2041 | 1.6 | 7 |
| 77 | Implementation of a damage evolution law for dual-phase steels in Gurson-type models. *Materials and Design*, **2015**, 88, 1213-1222 | 8.1 | 7 |
| 76 | Anisotropy and tension□compression asymmetry modeling of the room temperature plastic response of Ti□Al□V. *International Journal of Plasticity*, **2015**, 67, 53-68 | 7.6 | 72 |
| 75 | Effect of stress path on the miniaturization size effect for nickel polycrystals. *International Journal of Plasticity*, **2015**, 64, 26-39 | 7.6 | 12 |
| 74 | Assessment of Damage and Anisotropic Plasticity Models to Predict Ti-6Al-4V Behavior. *Key Engineering Materials*, **2015**, 651-653, 575-580 | 0.4 | 7 |
| 73 | On the elasto-viscoplastic behavior of the Ti5553 alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 617, 97-109 | 5.3 | 1 |
| 72 | Impact of anisotropy and viscosity to model the mechanical behavior of Ti□Al□V alloy. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2014**, 605, 39-50 | 5.3 | 19 |
| 71 | Study of Residual Stresses in Bimetallic Work Rolls. *Advanced Materials Research*, **2014**, 996, 580-585 | 0.5 | 4 |
| 70 | Effect of the Kinematic Hardening in the Simulations of the Straightening of Long Rolled Profiles. *Key Engineering Materials*, **2014**, 611-612, 178-185 | 0.4 | 2 |
| 69 | Impact of Metallurgical Size Effects on Plasticity of Thin Metallic Materials. *Materials Science Forum*, **2014**, 783-786, 2290-2295 | 0.4 | |
| 68 | Experimental Investigation and Phenomenological Modeling of the Quasi-Static Mechanical Behavior of TA6V Titanium Alloy. *Key Engineering Materials*, **2014**, 622-623, 1200-1206 | 0.4 | 1 |
| 67 | Numerical Simulation of a Pyramid Steel Sheet Formed by Single Point Incremental Forming Using Solid-Shell Finite Elements. *Key Engineering Materials*, **2013**, 549, 180-188 | 0.4 | 11 |

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| 66 | Parametric Study of Metal/Polymer Multilayer Coatings for Temperature Wrinkling Prediction. *Journal of Materials Engineering and Performance*, **2013**, 22, 2437-2445 | 1.6 | |
| 65 | Numerical investigation and experimental validation of physically based advanced GTN model for DP steels. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2013**, 569, 1-12 | 5.3 | 12 |
| 64 | Numerical Modeling and Digital Image Correlation Strain Measurements of Coated Metal Sheets Submitted to Large Bending Deformation. *Key Engineering Materials*, **2013**, 554-557, 2424-2431 | 0.4 | 1 |
| 63 | Towards Fracture Prediction in Single Point Incremental Forming. *Key Engineering Materials*, **2013**, 554-557, 2355-2362 | 0.4 | 4 |
| 62 | Finite element analysis of the free surface effects on the mechanical behavior of thin nickel polycrystals. *International Journal of Plasticity*, **2012**, 29, 155-172 | 7.6 | 45 |
| 61 | Finite element investigation of size effects on the mechanical behavior of nickel single crystals. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing* , **2012**, 550, 342-349 | 5.3 | 10 |
| 60 | Experimental and numerical study of TA-6V mechanical behavior in different monotonic loading conditions at room temperature. *Procedia IUTAM*, **2012**, 3, 100-114 | | 7 |
| 59 | Study of the geometrical inaccuracy on a SPIF two-slope pyramid by finite element simulations. *International Journal of Solids and Structures*, **2012**, 49, 3594-3604 | 3.1 | 32 |
| 58 | Compression Test for Metal Characterization using Digital Image Correlation and Inverse Modeling. *Procedia IUTAM*, **2012**, 4, 206-214 | | 14 |
| 57 | Twinning in pure Ti subjected to monotonic simple shear deformation. *Materials Characterization*, **2012**, 72, 24-36 | 3.9 | 31 |
| 56 | Evaluation of the Enhanced Assumed Strain and Assumed Natural Strain in the SSH3D and RESS3 Solid Shell Elements for Single Point Incremental Forming Simulation. *Key Engineering Materials*, **2012**, 504-506, 913-918 | 0.4 | 4 |
| 55 | A partial hybrid stress solid-shell element for the analysis of laminated composites. *Computer Methods in Applied Mechanics and Engineering*, **2011**, 200, 3526-3539 | 5.7 | 13 |
| 54 | A finite element analysis of the bending and the bendability of metallic sheets. *International Journal of Material Forming*, **2011**, 4, 283-297 | 2 | 2 |
| 53 | Strain evolution in the single point incremental forming process: digital image correlation measurement and finite element prediction. *International Journal of Material Forming*, **2011**, 4, 55-71 | 2 | 64 |
| 52 | Phenomenological and crystal plasticity approaches to describe the mechanical behaviour of Ti6Al4V titanium alloy. *International Journal of Material Forming*, **2011**, 4, 205-215 | 2 | 11 |
| 51 | On the numerical integration of an advanced Gurson model. *International Journal for Numerical Methods in Engineering*, **2011**, 85, 1049-1072 | 2.4 | 18 |
| 50 | Experimental characterization and elasto-plastic modeling of the quasi-static mechanical response of TA-6V at room temperature. *International Journal of Solids and Structures*, **2011**, 48, 1277-1289 | 3.1 | 69 |
| 49 | Material behavior of the hexagonal alpha phase of a titanium alloy identified from nanoindentation tests. *European Journal of Mechanics, A/Solids*, **2011**, 30, 248-255 | 3.7 | 18 |

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| 48 | Experimental and numerical study of an AlMgSc sheet formed by an incremental process. *Journal of Materials Processing Technology*, **2011**, 211, 1684-1693 | 5.3 | 19 |
| 47 | Numerical modeling of damage evolution of DP steels on the basis of X-ray tomography measurements. *Mechanics of Materials*, **2011**, 43, 139-156 | 3.3 | 14 |
| 46 | Roller Pressure Quench Process of Steel Plate Modelling **2011**, | | 1 |
| 45 | Notched Specimens Fracture Prediction with an Advanced GTN Model. *Key Engineering Materials*, **2011**, 488-489, 77-80 | 0.4 | |
| 44 | Material Parameter Identification of Cazacu's Model for Ti6Al4V Using the Simulated Annealing Algorithm. *Materials Science Forum*, **2010**, 636-637, 1125-1130 | 0.4 | 2 |
| 43 | Transient Yielding during Compression Tests on ECAP'ed AA1050 Aluminium. *Materials Science Forum*, **2010**, 667-669, 955-960 | 0.4 | 3 |
| 42 | Modeling the Vertical Spincasting of Large Bimetallic Rolling Mill Rolls. *Key Engineering Materials*, **2010**, 443, 15-20 | 0.4 | |
| 41 | Prediction of the Tension/Compression Asymmetry of ECAP Processed FCC Material Using an Integrated Model Based on Dislocation and Back-Stress. *Materials Science Forum*, **2010**, 667-669, 961-966 | 0.4 | 1 |
| 40 | Simulation of the bending process of hardening metallic sheets using damage model. Part I: Theoretical development and numerical implementation. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 528, 434-441 | 5.3 | 6 |
| 39 | Simulation of the bending process of hardening metallic sheets using damage model. Part II: Numerical investigations. *Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing*, **2010**, 528, 442-448 | 5.3 | 5 |
| 38 | Temperature Wrinkling Prediction in Metal/Polymer Multilayer Coatings. *International Journal of Material Forming*, **2010**, 3, 559-562 | 2 | 2 |
| 37 | Multiscale modeling of back-stress evolution in equal-channel angular pressing: from one pass to multiple passes. *Journal of Materials Science*, **2010**, 45, 4696-4704 | 4.3 | 6 |
| 36 | Accurate stress computation in plane strain tensile tests for sheet metal using experimental data. *Journal of Materials Processing Technology*, **2010**, 210, 1772-1779 | 5.3 | 39 |
| 35 | Modeling of Crack Propagation in Weld Beam-to-Column Connections Submitted to Cyclic Loading with a Cohesive Zone Model. *Journal of ASTM International*, **2010**, 7, 102531 | | 1 |
| 34 | Interests and limitations of nanoindentation for bulk multiphase material identification: Application to the β phase of Ti-5553. *Acta Materialia*, **2009**, 57, 5186-5195 | 8.4 | 41 |
| 33 | Study of the formability of steels. *International Journal of Material Forming*, **2009**, 2, 515-518 | 2 | 2 |
| 32 | Crystal plasticity prediction of Lankford coefficients using the MULTISITE model: influence of the critical resolved shear stresses. *International Journal of Material Forming*, **2009**, 2, 65-68 | 2 | 4 |
| 31 | Multiaxial fatigue damage modelling at macro scale of Ti-6Al-4V alloy. *International Journal of Fatigue*, **2009**, 31, 2031-2040 | 5 | 47 |

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| 30 | Modelling compression tests on aluminium produced by equal channel angular extrusion. *Acta Materialia*, **2009**, 57, 1821-1830 | 8.4 | 14 |
| 29 | Identification of material parameters to predict Single Point Incremental Forming forces. *International Journal of Material Forming*, **2008**, 1, 1147-1150 | 2 | 27 |
| 28 | A new finite element integration scheme. Application to a simple shear test of anisotropic material. *International Journal for Numerical Methods in Engineering*, **2008**, 73, 1395-1412 | 2.4 | 6 |
| 27 | Process window enhancement for single point incremental forming through multi-step toolpaths. *CIRP Annals - Manufacturing Technology*, **2008**, 57, 253-256 | 4.9 | 144 |
| 26 | Multiscale Approaches **2007**, 125-141 | | 3 |
| 25 | Finite element study of the effect of some local defects on the risk of transverse cracking in continuous casting of steel slabs. *Computer Methods in Applied Mechanics and Engineering*, **2007**, 196, 2285-2299 | 5.7 | 18 |
| 24 | Length changes and texture prediction during free end torsion test of copper bars with FEM and remeshing techniques. *International Journal of Plasticity*, **2007**, 23, 1417-1438 | 7.6 | 38 |
| 23 | Study of a 2024 aluminium rod produced by rotary forging. *Journal of Materials Processing Technology*, **2007**, 184, 19-26 | 5.3 | 6 |
| 22 | Correcting tensile test results of ECAE-deformed aluminium. *Scripta Materialia*, **2007**, 56, 749-752 | 5.6 | 8 |
| 21 | Validation of a New Finite Element for Incremental Forming Simulation Using a Dynamic Explicit Approach. *Key Engineering Materials*, **2007**, 344, 495-502 | 0.4 | 15 |
| 20 | On The Evaluation Of The Through Thickness Residual Stresses Distribution Of Cold Formed Profiles. *AIP Conference Proceedings*, **2007**, | 0 | 3 |
| 19 | Plane Strain Test for Metal Sheet Characterization. *Key Engineering Materials*, **2007**, 344, 135-142 | 0.4 | 3 |
| 18 | Out-of-plane displacement derivative measurement: comparison of results obtained by a shearographic interferometer using the separation of the polarization states and the finite element method **2006**, | | 3 |
| 17 | Material Identification Using a Bi-Axial Test Machine. *Applied Mechanics and Materials*, **2006**, 3-4, 91-98 | 0.3 | 2 |
| 16 | Quality assessment of speckle patterns for digital image correlation. *Optics and Lasers in Engineering*, **2006**, 44, 1132-1145 | 4.6 | 332 |
| 15 | Finite Element Modeling of Incremental Forming of Aluminum Sheets. *Advanced Materials Research*, **2005**, 6-8, 525-532 | 0.5 | 18 |
| 14 | Analysis of the sensitivity of FEM predictions to numerical parameters in deep drawing simulations. *European Journal of Mechanics, A/Solids*, **2005**, 24, 614-629 | 3.7 | 23 |
| 13 | Thermo-mechanical-metallurgical model to predict geometrical distortions of rings during cooling phase after ring rolling operations. *International Journal of Machine Tools and Manufacture*, **2005**, 45, 657-664 | 9.4 | 31 |

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| 12 | Analysis of Texture Evolution and Hardening Behavior during Deep Drawing with an Improved Mixed Type FEM Element. *AIP Conference Proceedings*, **2005**, | 0 | 3 |
| 11 | Deep Drawing Simulations With Different Polycrystalline Models. *AIP Conference Proceedings*, **2004**, | 0 | 1 |
| 10 | Anisotropic elasto-plastic finite element analysis using a stress–strain interpolation method based on a polycrystalline model. *International Journal of Plasticity*, **2004**, 20, 1525-1560 | 7.6 | 45 |
| 9 | Development of a Mesoscopic Cell Modeling the Damage Process in Steel at Elevated Temperature. *Key Engineering Materials*, **2003**, 233-236, 145-150 | 0.4 | 2 |
| 8 | Texture evolution during deep-drawing processes. *Journal of Materials Processing Technology*, **2002** , 125-126, 110-118 | 5.3 | 8 |
| 7 | Numerical Simulation of Compacting Process of a Multi-stepped Part with Comparison to Experiments.. *Funtai Oyobi Fummatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy*, **1999**, 46, 696-704 | 0.2 | 7 |
| 6 | Contact between deformable solids: The fully coupled approach. *Mathematical and Computer Modelling*, **1998**, 28, 153-169 | | 42 |
| 5 | Simulation of square-cup deep-drawing with different finite elements. *Journal of Materials Processing Technology*, **1995**, 50, 81-91 | 5.3 | 8 |
| 4 | Automatic adaptive remeshing for numerical simulations of metalforming. *Computer Methods in Applied Mechanics and Engineering*, **1992**, 101, 283-298 | 5.7 | 27 |
| 3 | Fast and accurate prediction of temperature evolutions in additive manufacturing process using deep learning. *Journal of Intelligent Manufacturing*,1 | 6.7 | 1 |
| 2 | Comparison of FEM Simulations for the Incremental Forming Process. *Advanced Materials Research*,533-542 | 0.5 | 7 |
| 1 | Multiscale Modeling of Equal Channel Angular Extruded Aluminum with Strain Gradient Crystal Plasticity and Phenomenological Models. *Ceramic Transactions*,671-678 | 0.1 | 1 |