# B Clausen

List of Publications by Year
in descending order



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|---|---|---|---|
| 214 papers | 9,327 citations | 34016 52 h-index | 48187 88 g-index |
| 218 all docs | 218 docs citations | 218 times ranked | 5849 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Determining elastic anisotropy of textured polycrystals using resonant ultrasound spectroscopy. Journal of Materials Science, 2021, 56, 10053-10073. | 1.7 | 10 |
| 2 | Effect of the scanning strategy on the formation of residual stresses in additively manufactured Ti-6Al-4V. Additive Manufacturing, 2021, 45, 102003. | 1.7 | 26 |
| 3 | Residual stress analysis of in situ surface layer heating effects on laser powder bed fusion of 316L stainless steel. Additive Manufacturing, 2021, 47, 102252. | 1.7 | 8 |
| 4 | Evolution of the Microstructure of Laser Powder Bed Fusion Ti-6Al-4V During Post-Build Heat Treatment. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2021, 52, 5165-5181. | 1.1 | 10 |
| 5 | In-Situ Grain Resolved Stress Characterization During Damage Initiation in Cu-10%W Alloy. Jom, 2020, 72, 48-56. | 0.9 | 7 |
| 6 | Complementary Measurements of Residual Stresses Before and After Base Plate Removal in an Intricate Additively-Manufactured Stainless-Steel Valve Housing. Additive Manufacturing, 2020, 36, 101555. | 1.7 | 7 |
| 7 | The role of ternary alloying elements in eutectoid transformation of Uâ€“10Mo alloy part II. In and ex-situ neutron diffraction-based assessment of eutectoid phase transformation kinetics in U-9.8Mo-0.2X alloy (XÂ=ÂCr, Ni or Co). Journal of Nuclear Materials, 2020, 540, 152383. | 1.3 | 1 |
| 8 | Perspectives on Quenching and Tempering 4340 Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 4984-5005. | 1.1 | 34 |
| 9 | Reversion of Post-Shape Memory Effect Twins During Unloading of Uranium-6ÂwtÂpct Niobium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1614-1624. | 1.1 | 5 |
| 10 | Predicting deformation behavior of Î±-uranium during tension, compression, load reversal, rolling, and sheet forming using elasto-plastic, multi-level crystal plasticity coupled with finite elements. Journal of the Mechanics and Physics of Solids, 2020, 138, 103924. | 2.3 | 34 |
| 11 | In-Situ High-Energy X-ray Diffraction During a Linear Deposition of 308 Stainless Steel via Wire Arc Additive Manufacture. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2020, 51, 1379-1394. | 1.1 | 11 |
| 12 | Experimental determination of precision, resolution, accuracy and trueness of time-of-flight neutron diffraction strain measurements. Journal of Applied Crystallography, 2020, 53, 494-511. | 1.9 | 5 |
| 13 | Deformation Behavior of a Double Soaked Medium Manganese Steel with Varied Martensite Strength. Metals, 2019, 9, 761. | 1.0 | 16 |
| 14 | Elastic Residual Strain and Stress Measurements and Corresponding Part Deflections of 3D Additive Manufacturing Builds of IN625 AM-Bench Artifacts Using Neutron Diffraction, Synchrotron X-Ray Diffraction, and Contour Method. Integrating Materials and Manufacturing Innovation, 2019, 8, 318-334. | 1.2 | 45 |
| 15 | Equation of state and strain-induced stabilization of Î´-phase stabilized plutonium alloys. Journal of Nuclear Materials, 2019, 524, 54-59. | 1.3 | 2 |
| 16 | A Planar Biaxial Experiment Platform for In Situ High-Energy Diffraction Studies. Experimental Mechanics, 2019, 59, 749-774. | 1.1 | 9 |
| 17 | An analysis of phase stresses in additively manufactured 304L stainless steel using neutron diffraction measurements and crystal plasticity finite element simulations. International Journal of Plasticity, 2019, 121, 201-217. | 4.1 | 51 |
| 18 | A generalized spherical harmonics-based procedure for the interpolation of partial datasets of orientation distributions to enable crystal mechanics-based simulations. Materialia, 2019, 6, 100328. | 1.3 | 28 |

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| 19 | Using In Situ Neutron Diffraction to Isolate Specific Features of Additively Manufactured Microstructures in 304L Stainless Steel and Identify Their Effects on Macroscopic Strength. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 3399-3413. | 1.1 | 14 |
| 20 | Microstructure Development of 308L Stainless Steel During Additive Manufacturing. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2538-2553. | 1.1 | 17 |
| 21 | In Situ Time-Resolved Phase Evolution and Phase Transformations in U-6ÂWtÂPct Nb. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2019, 50, 2619-2628. | 1.1 | 12 |
| 22 | Evaluation of a thermomechanical model for prediction of residual stress during laser powder bed fusion of Ti-6Al-4V. Additive Manufacturing, 2019, 27, 489-502. | 1.7 | 93 |
| 23 | Line profile analysis of dislocation densities of the Î´-phase 239Pu-2.0â€¯at%Ga alloy using neutron diffraction. Journal of Nuclear Materials, 2019, 517, 152-156. | 1.3 | 2 |
| 24 | Influence of the solute concentration on the anelasticity in Mg-Al alloys: A multiple-approach study. Journal of Alloys and Compounds, 2019, 786, 779-790. | 2.8 | 25 |
| 25 | Loading Path and Control Mode Effects During Thermomechanical Cycling of Polycrystalline Shape Memory NiTi. Shape Memory and Superelasticity, 2018, 4, 143-157. | 1.1 | 6 |
| 26 | In-situ neutron diffraction of a quasicrystal-containing Mg alloy interpreted using a new polycrystal plasticity model of hardening due to {10.2} tensile twinning. International Journal of Plasticity, 2018, 100, 34-51. | 4.1 | 47 |
| 27 | Deformation twinning and grain partitioning in a hexagonal close-packed magnesium alloy. Nature Communications, 2018, 9, 4761. | 5.8 | 61 |
| 28 | Signatures of the unique microstructure of additively manufactured steel observed via diffraction. Scripta Materialia, 2018, 155, 16-20. | 2.6 | 34 |
| 29 | Coupled experimental and computational study of residual stresses in additively manufactured Ti-6Al-4V components. Materials Letters, 2018, 231, 221-224. | 1.3 | 69 |
| 30 | Boundary Effects in the Eigenstrain Method. Experimental Mechanics, 2018, 58, 799-814. | 1.1 | 1 |
| 31 | Equation of state, phase stability, and phase transformations of uranium-6 wt.â€‰% niobium under high pressure and temperature. Journal of Applied Physics, 2018, 123, . | 1.1 | 9 |
| 32 | Spatially resolved texture and microstructure evolution of additively manufactured and gas gun deformed 304L stainless steel investigated by neutron diffraction and electron backscatter diffraction. Powder Diffraction, 2018, 33, 141-146. | 0.4 | 9 |
| 33 | A crystal plasticity model based on transition state theory. International Journal of Plasticity, 2017, 93, 251-268. | 4.1 | 39 |
| 34 | Processing and consolidation of copper/tungsten. Journal of Materials Science, 2017, 52, 1172-1182. | 1.7 | 8 |
| 35 | Deformation behavior of additively manufactured GP1 stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 696, 331-340. | 2.6 | 37 |
| 36 | Dependence of twinned volume fraction on loading mode and Schmid factor in randomly textured magnesium. Acta Materialia, 2017, 130, 319-328. | 3.8 | 50 |

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| 37 | In situ neutron diffraction analyses of temperature and stresses during friction stir processing of Mg-3Al-1Zn magnesium alloy. Materials Letters, 2017, 196, 284-287. | 1.3 | 12 |
| 38 | In Situ Neutron Diffraction Study of the Influence of Microstructure on the Mechanical Response of Additively Manufactured 304L Stainless Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2017, 48, 6055-6069. | 1.1 | 44 |
| 39 | High Temperature Deformation Mechanism in Hierarchical and Single Precipitate Strengthened Ferritic Alloys by In Situ Neutron Diffraction Studies. Scientific Reports, 2017, 7, 45965. | 1.6 | 22 |
| 40 | The influence of impurities on the crystal structure and mechanical properties of additive manufactured Uâ€“14 at.% Nb. Scripta Materialia, 2017, 130, 59-63. | 2.6 | 16 |
| 41 | Microstructural characteristics of a Ni2TiAl-precipitate-strengthened ferritic alloy. Journal of Alloys and Compounds, 2017, 693, 921-928. | 2.8 | 30 |
| 42 | Using Neutron Diffraction to Investigate Texture Evolution During Consolidation of Deuterated Triaminotrinitrobenzene (d-TATB) Explosive Powder. Crystals, 2017, 7, 138. | 1.0 | 13 |
| 43 | Neutron Diffraction Measurements and Micromechanical Modelling of Temperatureâ€Dependent Variations in TATB Lattice Parameters. Propellants, Explosives, Pyrotechnics, 2016, 41, 514-525. | 1.0 | 15 |
| 44 | High energy X-ray diffraction study of the relationship between the macroscopic mechanical properties and microstructure of irradiated HT-9 steel. Journal of Nuclear Materials, 2016, 475, 46-56. | 1.3 | 9 |
| 45 | Neutron diffraction measurements of residual stress in additively manufactured stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 678, 291-298. | 2.6 | 78 |
| 46 | Neutron diffraction measurement of residual stresses, dislocation density and texture in Zr-bonded U-10Mo â€œminiâ€•fuel foils and plates. Journal of Nuclear Materials, 2016, 482, 63-74. | 1.3 | 16 |
| 47 | On the feasibility of partial slip reversal and de-twinning during the cyclic loading of TWIP steel. Materials Letters, 2016, 182, 294-297. | 1.3 | 7 |
| 48 | Direct numerical simulation of deformation twinning in polycrystals. Acta Materialia, 2016, 120, 348-363. | 3.8 | 17 |
| 49 | Neutron diffraction measurement of residual stresses in Al-clad Uâ€“10Mo fuel plates. Journal of Nuclear Materials, 2016, 474, 8-18. | 1.3 | 11 |
| 50 | Stress and strain relaxation in magnesium AZ31 rolled plate: In-situ neutron measurement and elastic viscoplastic polycrystal modeling. International Journal of Plasticity, 2016, 79, 275-292. | 4.1 | 87 |
| 51 | Effect of martensitic phase transformation on the behavior of 304 austenitic stainless steel under tension. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 649, 174-183. | 2.6 | 63 |
| 52 | Tailored thermal expansion alloys. Acta Materialia, 2016, 102, 333-341. | 3.8 | 92 |
| 53 | Load partitioning between the bcc-iron matrix and NiAl-type precipitates in a ferritic alloy on multiple length scales. Scientific Reports, 2016, 6, 23137. | 1.6 | 10 |
| 54 | Ferritic Alloys with Extreme Creep Resistance via Coherent Hierarchical Precipitates. Scientific Reports, 2015, 5, 16327. | 1.6 | 80 |

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| 55 | In Situ Neutron Diffraction Studies of Increasing Tension Strains of Superelastic Nitinol. Shape Memory and Superelasticity, 2015, 1, 375-386. | 1.1 | 18 |
| 56 | In Situ Neutron Diffraction Studies of Large Monotonic Deformations of Superelastic Nitinol. Shape Memory and Superelasticity, 2015, 1, 252-267. | 1.1 | 33 |
| 57 | Effect of the loading mode on the evolution of the deformation mechanisms in randomly textured magnesium polycrystals â€“ Comparison of experimental and modeling results. International Journal of Plasticity, 2015, 72, 127-150. | 4.1 | 86 |
| 58 | The NeXus data format. Journal of Applied Crystallography, 2015, 48, 301-305. | 1.9 | 133 |
| 59 | Residual Stress Measurements in Dissimilar Weld Metal. Experimental Mechanics, 2015, 55, 1093-1103. | 1.1 | 12 |
| 60 | Investigation of the dependence of deformation mechanisms on solute content in polycrystalline Mgâ€“Al magnesium alloys by neutron diffraction and acoustic emission. Journal of Alloys and Compounds, 2015, 642, 185-191. | 2.8 | 24 |
| 61 | Thermomechanical behavior and microstructural evolution of a Ni(Pd)-rich Ni24.3Ti49.7Pd26 high temperature shape memory alloy. Journal of Alloys and Compounds, 2015, 643, 275-289. | 2.8 | 17 |
| 62 | Dislocation structure in different texture components determined by neutron diffraction line profile analysis in a highly textured Zircaloy-2 rolled plate. Journal of Applied Crystallography, 2015, 48, 409-417. | 1.9 | 9 |
| 63 | Neutron Diffraction Study of Low-Cycle Fatigue Behavior in an Austeniticâ€“Ferritic Stainless Steel. Acta Metallurgica Sinica (English Letters), 2015, 28, 1247-1256. | 1.5 | 4 |
| 64 | In situ neutron diffraction evidence for fully reversible dislocation motion in highly textured polycrystalline Ti2AlC samples. Acta Materialia, 2015, 98, 51-63. | 3.8 | 27 |
| 65 | An in-situ neutron diffraction study of a multi-phase transformation and twinning-induced plasticity steel during cyclic loading. Applied Physics Letters, 2015, 106, . | 1.5 | 20 |
| 66 | Comparison of neutron diffraction and Raman spectroscopic studies of the ferroelastic behavior of ceria-stabilized zirconia at elevated temperatures. Journal of the European Ceramic Society, 2015, 35, 623-629. | 2.8 | 4 |
| 67 | Effect of Loading Mode on the Evolution of the Dislocation Structure in Magnesium. Acta Physica Polonica A, 2015, 128, 700-704. | 0.2 | 4 |
| 68 | Twinning Evolution as a Function of Loading Direction in Magnesium. Acta Physica Polonica A, 2015, 128, 762-765. | 0.2 | 9 |
| 69 | Analysis of the Deformation Behavior of Magnesium-Rare Earth Alloys Mg-2Âpct Mn-1Âpct Rare Earth and Mg-5Âpct Y-4Âpct Rare Earth by In Situ Energy-Dispersive X-ray Synchrotron Diffraction and Elasto-Plastic Self-Consistent Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2014, 45, 5721-5735. | 1.1 | 33 |
| 70 | Stability of the two-phase (Î±/Î‰) microstructure of shocked zirconium. Acta Materialia, 2014, 67, 383-394. | 3.8 | 31 |
| 71 | Observations of a dynamical-to-kinematic diffraction transition in plastically deformed polycrystalline intermetallic YCu. Acta Materialia, 2014, 70, 307-315. | 3.8 | 3 |
| 72 | Study of the loading mode dependence of the twinning in random textured cast magnesium by acoustic emission and neutron diffraction methods. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 602, 25-32. | 2.6 | 77 |

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| 73 | Strain partitioning in ultra-fine grained medium-manganese transformation induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 609, 323-333. | 2.6 | 84 |
| 74 | Forensic determination of residual stresses and KI from fracture surface mismatch. Engineering Fracture Mechanics, 2014, 116, 158-171. | 2.0 | 17 |
| 75 | In situ neutron diffraction study on temperature dependent deformation mechanisms of ultrafine grained austenitic Feâ€“14Crâ€“16Ni alloy. International Journal of Plasticity, 2014, 53, 125-134. | 4.1 | 10 |
| 76 | Self-consistent modelling of lattice strains during the in-situ tensile loading of twinning induced plasticity steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 589, 66-75. | 2.6 | 17 |
| 77 | On the evolution and modelling of lattice strains during the cyclic loading of TWIP steel. Acta Materialia, 2013, 61, 5247-5262. | 3.8 | 40 |
| 78 | Neutron Diffraction Measurement of Stress Redistribution in Parallel Seven-Wire Strands after Local Fracture. Experimental Mechanics, 2013, 53, 183-193. | 1.1 | 9 |
| 79 | Micromechanical quantification of elastic, twinning, and slip strain partitioning exhibited by polycrystalline, monoclinic nickelâ€“titanium during large uniaxial deformations measured via in-situ neutron diffraction. Journal of the Mechanics and Physics of Solids, 2013, 61, 2302-2330. | 2.3 | 105 |
| 80 | Temperature dependent deformation of the B2 austenite phase of a NiTi shape memory alloy. International Journal of Plasticity, 2013, 51, 103-121. | 4.1 | 117 |
| 81 | Elastic properties of rolled uraniumâ€“10wt.% molybdenum nuclear fuel foils. Scripta Materialia, 2013, 69, 666-669. | 2.6 | 16 |
| 82 | Effect of high temperature heat treatments on the deformation behavior of Mgâ€“2%Mnâ€“0.7%Ce extrusions investigated by in-situ energy-dispersive synchrotron X-ray diffraction and elasto-plastic self-consistent modeling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 586, 178-189. | 2.6 | 13 |
| 83 | Microstructure evolution during tensile deformation of a nanostructured bainitic steel. Scripta Materialia, 2013, 69, 777-780. | 2.6 | 53 |
| 84 | Studying the effect of stress relaxation and creep on lattice strain evolution of stainless steel under tension. Acta Materialia, 2013, 61, 1179-1188. | 3.8 | 89 |
| 85 | The influence of phase and substructural evolution during dynamic loading on subsequent mechanical properties of zirconium. Acta Materialia, 2013, 61, 7712-7719. | 3.8 | 38 |
| 86 | High energy X-ray diffraction measurement of residual stresses in a monolithic aluminum clad uraniumâ€“10wt% molybdenum fuel plate assembly. Journal of Nuclear Materials, 2013, 441, 252-261. | 1.3 | 10 |
| 87 | Spatially resolved in situ strain measurements from an interior twinned grain in bulk polycrystalline AZ31 alloy. Acta Materialia, 2013, 61, 3612-3620. | 3.8 | 61 |
| 88 | An in situ neutron diffraction study of shape setting shape memory NiTi. Acta Materialia, 2013, 61, 3585-3599. | 3.8 | 32 |
| 89 | In situ neutron diffraction and polycrystal plasticity modeling of a Mgâ€“Yâ€“Ndâ€“Zr alloy: Effects of precipitation on individual deformation mechanisms. Acta Materialia, 2013, 61, 3769-3780. | 3.8 | 151 |
| 90 | Effect of loading mode on lattice strain measurements via neutron diffraction. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 577, 169-178. | 2.6 | 5 |

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| 91 | Twinning and de-twinning in beryllium during strain path changes. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2013, 559, 29-39. | 2.6 | 26 |
| 92 | Microstress partitioning in porous and microcracked synthetic cordierite. Scripta Materialia, 2013, 68, 100-103. | 2.6 | 4 |
| 93 | In Situ Neutron Diffraction Measurements During Annealing of Deformed Beryllium With Differing Initial Textures. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5665-5675. | 1.1 | 15 |
| 94 | Investigation of Twinning Activity in Magnesium Using Advanced In Situ Methods. Materials Science Forum, 2013, 765, 532-536. | 0.3 | 2 |
| 95 | Methodology for Combined Neutron Diffraction and Bragg Edge Imaging. Materials Research Society Symposia Proceedings, 2013, 1528, 1. | 0.1 | 7 |
| 96 | Residual Stress Characterization in a Dissimilar Metal Weld Nuclear Reactor Piping System Mock Up. Journal of Pressure Vessel Technology, Transactions of the ASME, 2013, 135, . | 0.4 | 12 |
| 97 | Neutron-diffraction study and modeling of the lattice parameters of a NiAl-precipitate-strengthened Fe-based alloy. Acta Materialia, 2012, 60, 5362-5369. | 3.8 | 64 |
| 98 | In situ neutron diffraction analysis of grain structure during friction stir processing of an aluminum alloy. Materials Letters, 2012, 85, 29-32. | 1.3 | 10 |
| 99 | Elastic Moduli Inheritance and the Weakest Link in Bulk Metallic Glasses. Physical Review Letters, 2012, 108, 085501. | 2.9 | 103 |
| 100 | Cyclic-Loading Induced Lattice-Strain Asymmetry in Loading and Transverse Directions. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1454-1461. | 1.1 | 17 |
| 101 | In Situ Neutron-Diffraction Studies on the Creep Behavior of a Ferritic Superalloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 1497-1508. | 1.1 | 36 |
| 102 | Engineering Applications of Time-of-Flight Neutron Diffraction. Jom, 2012, 64, 117-126. | 0.9 | 5 |
| 103 | A slip system-based kinematic hardening model application to in situ neutron diffraction of cyclic deformation of austenitic stainless steel. International Journal of Fatigue, 2012, 36, 181-193. | 2.8 | 48 |
| 104 | Role of twinning and slip during compressive deformation of beryllium as a function of strain rate. International Journal of Plasticity, 2012, 29, 120-135. | 4.1 | 105 |
| 105 | In situ neutron diffraction and Elasticâ€“Plastic Self-Consistent polycrystal modeling of HT-9. Journal of Nuclear Materials, 2012, 425, 228-232. | 1.3 | 5 |
| 106 | Large Strain Deformation in Uranium 6ÂWtÂPct Niobium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2012, 43, 520-530. | 1.1 | 36 |
| 107 | On the response of titanium sulfocarbide to stress studied by in situ neutron diffraction and the elastoplastic self-consistent approach. Scripta Materialia, 2011, 65, 573-576. | 2.6 | 8 |
| 108 | On elastic moduli and elastic anisotropy in polycrystalline martensitic NiTi. Acta Materialia, 2011, 59, 5055-5066. | 3.8 | 95 |

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| 109 | Connecting the macro- and microstrain responses in technical porous ceramics: modeling and experimental validations. Journal of Materials Science, 2011, 46, 161-173. | 1.7 | 74 |
| 110 | Measuring Inaccessible Residual Stresses Using Multiple Methods and Superposition. Experimental Mechanics, 2011, 51, 1123-1134. | 1.1 | 98 |
| 111 | In-Situ Neutron Diffraction Study of the Bauschinger Effect in B2 Structured CoZr. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 60-70. | 1.1 | 15 |
| 112 | Austenite Stability Effects on Tensile Behavior of Manganese-Enriched-Austenite Transformation-Induced Plasticity Steel. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2011, 42, 3691-3702. | 1.1 | 313 |
| 113 | Critical comparison of two independent measurements of residual stress in an electron-beam welded uranium cylinder: Neutron diffraction and the contour method. Acta Materialia, 2011, 59, 864-873. | 3.8 | 58 |
| 114 | Measurement of thermal residual stresses in ZrB2â€“SiC composites. Journal of the European Ceramic Society, 2011, 31, 1811-1820. | 2.8 | 85 |
| 115 | Application of a Finite Strain Elastic-Plastic Self-Consistent Model to Deformation of Magnesium. Conference Proceedings of the Society for Experimental Mechanics, 2011, , 33-34. | 0.3 | 0 |
| 116 | In-situ neutron diffraction study of phase stress evolutions inÂaÂNi-based porous anode solid oxide fuel cells under uniaxial load. Applied Physics A: Materials Science and Processing, 2010, 99, 579-584. | 1.1 | 3 |
| 117 | The role of residual stress in the tension and compression response of WCâ€“Ni. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 3595-3601. | 2.6 | 16 |
| 118 | The effects of texture and extension twinning on the low-cycle fatigue behavior of a rolled magnesium alloy, AZ31B. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 7057-7067. | 2.6 | 170 |
| 119 | Detwinning of High-Purity Zirconium: In-Situ Neutron Diffraction Experiments. Experimental Mechanics, 2010, 50, 125-133. | 1.1 | 38 |
| 120 | Measurement of Strain/Load Transfer in Parallel Seven-wire Strands with Neutron Diffraction. Experimental Mechanics, 2010, 50, 265-272. | 1.1 | 21 |
| 121 | X-Ray and Neutron Diffraction Measurements of Dislocation Density and Subgrain Size in a Friction-Stir-Welded Aluminum Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1210-1216. | 1.1 | 82 |
| 122 | Intergranular Strain Evolution in a Zircaloy-4 Alloy with Basketweave Morphology. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 1255-1260. | 1.1 | 9 |
| 123 | Hydride-Phase Formation and its Influence on Fatigue Crack Propagation Behavior in a Zircaloy-4 Alloy. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2010, 41, 2816-2828. | 1.1 | 10 |
| 124 | Stress measurements in ZrB2â€“SiC composites using Raman spectroscopy and neutron diffraction. Journal of the European Ceramic Society, 2010, 30, 2165-2171. | 2.8 | 63 |
| 125 | Fatigue-induced reversible/irreversible structural-transformations in a Ni-based superalloy. International Journal of Plasticity, 2010, 26, 1124-1137. | 4.1 | 35 |
| 126 | Modeling lattice strain evolution at finite strains and experimental verification for copper and stainless steel using in situ neutron diffraction. International Journal of Plasticity, 2010, 26, 1772-1791. | 4.1 | 149 |

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| 127 | Influence of strain rate on mechanical properties and deformation texture of hot-pressed and rolled beryllium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2010, 527, 5181-5188. | 2.6 | 32 |
| 128 | Dynamic processes of domain switching in lead zirconate titanate under cyclic mechanical loading by in situ neutron diffraction. Acta Materialia, 2010, 58, 1897-1908. | 3.8 | 12 |
| 129 | On the stress-free lattice expansion of porous cordierite. Acta Materialia, 2010, 58, 1994-2003. | 3.8 | 52 |
| 130 | Design, implementation, and testing of a cryogenic loading capability on an engineering neutron diffractometer. Review of Scientific Instruments, 2010, 81, 063903. | 0.6 | 6 |
| 131 | Deformation Crossover: From Nano- to Mesoscale. Physical Review Letters, 2009, 103, 035502. | 2.9 | 51 |
| 132 | Measurement of the lattice plane strain and phase fraction evolution during heating and cooling in shape memory NiTi. Applied Physics Letters, 2009, 95, . | 1.5 | 56 |
| 133 | Known Residual Stress Specimens Using Opposed Indentation. Journal of Engineering Materials and Technology, Transactions of the ASME, 2009, 131, . | 0.8 | 24 |
| 134 | Phase response of WCâ€“Ni to cyclic compressive loading and its relation to toughness. International Journal of Refractory Metals and Hard Materials, 2009, 27, 313-316. | 1.7 | 9 |
| 135 | Measurement of residual thermal stress in WCâ€“Co by neutron diffraction. International Journal of Refractory Metals and Hard Materials, 2009, 27, 282-287. | 1.7 | 49 |
| 136 | Stressâ€Dependent Elastic Properties of Porous Microcracked Ceramics. Advanced Engineering Materials, 2009, 11, 1023-1029. | 1.6 | 9 |
| 137 | In situ neutron-diffraction study of tensile deformation of a bulk nanocrystalline alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 506, 187-190. | 2.6 | 13 |
| 138 | Development of intergranular thermal residual stresses in beryllium during cooling from processing temperatures. Acta Materialia, 2009, 57, 972-979. | 3.8 | 24 |
| 139 | Evolution of stress in individual grains and twins in a magnesium alloy aggregate. Physical Review B, 2009, 80, . | 1.1 | 149 |
| 140 | Temperature and direction dependence of internal strain and texture evolution during deformation of uranium. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2009, 512, 67-75. | 2.6 | 39 |
| 141 | In-situ Measurement of Crystalline Lattice Strains in Polytetrafluoroethylene. Experimental Mechanics, 2008, 48, 119-131. | 1.1 | 55 |
| 142 | In-Situ Neutron Scattering Measurement of Stress-Strain Behavior of a Bulk Metallic Glass. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 1942-1946. | 1.1 | 8 |
| 143 | Probing the Characteristic Deformation Behaviors of Transformation-Induced Plasticity Steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 3105-3112. | 1.1 | 37 |
| 144 | In-Situ Time-of-Flight Neutron Diffraction Study of High-Temperature Î±-to-Î² Phase Transition in Elemental Scandium. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 2815-2819. | 1.1 | 7 |

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| 145 | Tensile Deformation Behavior of Duplex Stainless Steel Studied by In-Situ Time-of-Flight Neutron Diffraction. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 3134-3140. | 1.1 | 38 |
| 146 | Slip-System-Related Dislocation Study from In-Situ Neutron Measurements. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2008, 39, 3079-3088. | 1.1 | 27 |
| 147 | Twinningâ€“detwinning behavior during the strain-controlled low-cycle fatigue testing of a wrought magnesium alloy, ZK60A. Acta Materialia, 2008, 56, 688-695. | 3.8 | 453 |
| 148 | Microstructure, texture and residual stress in a friction-stir-processed AZ31B magnesium alloy. Acta Materialia, 2008, 56, 1701-1711. | 3.8 | 174 |
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