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## Twinning and the ductility of magnesium alloys

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#	Paper	IF	Citations
1000	Microstructural evolution of MgAlCaZn alloy during creep. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2008</b> , 498, 369-376	5.3	21
999	Enhancing compressive response of AZ31B magnesium alloy using alumina nanoparticulates. <b>2008</b> , 68, 2185-2192		115
998	Magnesium alloy applications in automotive structures. <b>2008</b> , 60, 57-62		210
997	Electron Backscatter Diffraction Mapping of Microstructural Evolution of Pure Magnesium during Creep. <b>2008</b> , 39, 688-695		6
996	Strain-Controlled Low-Cycle Fatigue Properties of a Newly Developed Extruded Magnesium Alloy. <b>2008</b> , 39, 3014-3026		124
995	Internal stress relaxation and load redistribution during the twinning-detwinning-dominated cyclic deformation of a wrought magnesium alloy, ZK60A. <b>2008</b> , 56, 3699-3707		224
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669	Fracture behavior of magnesium alloys [Role of tensile twinning]. <b>2015</b> , 94, 281-293		61
668	Improving tensile properties of dilute Mg-0.27Al-0.13Ca-0.21Mn (at.%) alloy by low temperature high speed extrusion. <b>2015</b> , 648, 428-437		50
667	Effect of local strains on the texture and mechanical properties of AZ31 magnesium alloy produced by continuous variable cross-section direct extrusion (CVCDE). <b>2015</b> , 85, 389-395		14
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664	Fracture mechanism of AZ31 magnesium alloy processed by equal channel angular pressing comparing three point bending test and tensile test. <b>2015</b> , 58, 322-335		17
663	Microstructure and mechanical properties of LA51 and LA510.5Y alloys with different accumulated strains and rolling temperatures. <b>2015</b> , 85, 190-196		15
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660	Effect of local stress heterogeneities on dislocation fields: Examples from transient creep in polycrystalline ice. <b>2015</b> , 90, 303-309		21

659	High-Temperature Tensile Flow Behavior of Caliber-Rolled Mg-3Al-1Zn Alloy. <b>2015</b> , 46, 3028-3042		5
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644	Effect of calcium addition on microstructure and texture modification of Mg rolled sheets. <b>2015</b> , 25, 2875-2883		10
643	Twinning effects in deformed and annealed magnesium-neodymium alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 647, 91-104	5-3	22
642	Dynamic recrystallization mechanisms during hot compression of Mg <sub>97</sub> Al <sub>1</sub> Zn alloy. <b>2015</b> , 25, 1831-1839		10



641	Tension-compression-tension tertiary twins in coarse-grained polycrystalline pure magnesium at room temperature. <b>2015</b> , 95, 194-201		9
640	A constitutive model of twin nucleation, propagation and growth in magnesium crystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 625, 140-145	5-3	73
639	Fuel cap stamping simulation of AA5754 sheets using a microstructure based macro-micro multi-scale approach. <b>2015</b> , 98, 354-365		6
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637	Improvement in cold formability of AZ31 magnesium alloy sheets processed by equal channel angular pressing. <b>2015</b> , 217, 286-293		44
636	Effect of grain size on slip activity in pure magnesium polycrystals. <b>2015</b> , 84, 443-456		138
635	Visco-plastic modeling of mechanical responses and texture evolution in extruded AZ31 magnesium alloy for various loading conditions. <b>2015</b> , 68, 1-20		154
634	Controlling the recrystallization behavior of a Mg <sub>90</sub> Al <sub>7</sub> Zn alloy containing extension twins. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2015</b> , 622, 178-183	5-3	43
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528	Interface structures and twinning mechanisms of twins in hexagonal metals. <b>2017</b> , 5, 449-464		56
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522	The role of crystallographic texture on load reversal and low cycle fatigue performance of commercially pure titanium. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 691, 100-109	5-3	14
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517	Dynamic mechanical response and microstructural evolution of extruded Mg AZ31B plate over a wide range of strain rates. <b>2017</b> , 696, 1067-1079		11
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417	Influence of {101 $\bar{2}$ } twin characteristics on detwinning in Mg-3Al-1Zn alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2018</b> , 735, 243-249	5:3	10
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385	Current-Induced Ductility Enhancement of a Magnesium Alloy AZ31 in Uniaxial Micro-Tension Below 373 K. <b>2018</b> , 12,			10
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381	Strength-ductility combination of fine-grained magnesium alloy with high deformation twin density. <b>2019</b> , 798, 350-359			20
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369	On the ductility of magnesium based materials: A mini review. <b>2019</b> , 792, 652-664		48
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366	Numerical Investigation of the Origin of Anomalous Tensile Twinning in Magnesium Alloys. <b>2019</b> , 141,		5
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359	Influence of crystal structure on size dependent deformation behavior and strain heterogeneity in micro-scale deformation. <b>2019</b> , 118, 147-172		30
358	Dynamic mechanical behavior of magnesium alloys: a review. <b>2019</b> , 110, 1105-1115		11
357	Texture tailoring and bendability improvement of rolled AZ31 alloy using {10 $\bar{1}$ 2} twinning: The effect of precompression levels. <b>2019</b> , 7, 648-660		18
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355	Detwinning-related Bauschinger effect of an extruded magnesium alloy AZ31B. <b>2019</b> , 148, 63-70		8
354	Effect of Thermomechanical Treatment on Subsequent Deformation Behavior in a Binary Z1 Magnesium Alloy Studied by the Acoustic Emission Technique. <b>2019</b> , 21, 1800915		1

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352	Effect of electropulsing treatment on static recrystallization behavior of cold-rolled magnesium alloy ZK60 with different reductions. <b>2019</b> , 35, 1113-1120		23
351	Experimental and computational modelling study of Ni substitution for Fe in Zr <sub>3</sub> Fe and its hydride. <b>2019</b> , 781, 131-139		1
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348	Strain-Path Dependence of ( { 10bar{1}2} ) Twinning in a Rolled MgβAlZn Alloy: Influence of Twinning Model. <b>2019</b> , 50, 118-131		14
347	Unravelling the local ring-like atomic pattern of twin boundary in an Mg-Zn-Y alloy. <b>2019</b> , 99, 306-317		3
346	Effect of pre-existing {101̄2} extension twins on mechanical properties, microstructure evolution and dynamic recrystallization of AZ31 Mg alloy during uniaxial compression. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 744, 456-470	5:3	28
345	Microstructure, texture evolution and tensile properties of extruded Mg-4.58Zn-2.6Gd-0.16Zr alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 744, 277-289	5:3	14
344	Mechanical properties of Mg-based materials fabricated by mechanical milling and spark plasma sintering. <b>2019</b> , 233, 1972-1984		3
343	Effect of deformation twinning on crystallographic texture evolution in a Mgβ.6Zn0.2Ca (ZX70) alloy during recrystallisation. <b>2019</b> , 774, 556-564		22
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341	Influence of pre-twinning on high strain rate compressive behavior of AZ31 Mg-alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2019</b> , 742, 309-317	5:3	24
340	Modeling of trans-grain twin transmission in AZ31 via a neighborhood-based viscoplastic self-consistent model. <b>2019</b> , 117, 21-32		19
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