Olaf Engler

List of Publications by Year
in descending order

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106	3,082	218592	233338
papers	citations	26 h-index	45 g-index

112	112	112	1774
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Texture control by thermomechanical processing of AA6xxx Alâ€“Mgâ€“Si sheet alloys for automotive applicationsâ€”a review. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2002, 336, 249-262.	2.6	355
2	Alloy-dependent rolling texture simulation of aluminium alloys with a grain-interaction model. Acta Materialia, 2005, 53, 2241-2257.	3.8	118
3	Control of second-phase particles in the Al-Mg-Mn alloy AA 5083. Journal of Alloys and Compounds, 2016, 689, 998-1010.	2.8	112
4	Evolution of the cube texture in high purity aluminum capacitor foils by continuous recrystallization and subsequent grain growth. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 1999, 271, 371-381.	2.6	86
5	On the origin of the R orientation in the recrystallization textures of aluminum alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1999, 30, 1517-1527.	1.1	79
6	An EBSD local texture study on the nucleation of recrystallization at shear bands in the alloy Al-3%Mg. Scripta Materialia, 2001, 44, 229-236.	2.6	70
7	Impact of homogenization on particles in the Alâ€“Mgâ€“Mn alloy AA 5454 â€“ Experiment and simulation. Journal of Alloys and Compounds, 2013, 560, 111-122.	2.8	67
8	Development of intermetallic particles during solidification and homogenization of two AA 5xxx series Al-Mg alloys with different Mg contents. Journal of Alloys and Compounds, 2017, 728, 669-681.	2.8	67
9	Through-process simulation of texture and properties during the thermomechanical processing of aluminium sheets. Acta Materialia, 2007, 55, 5449-5463.	3.8	65
10	Crystal-plasticity simulation of the correlation of microtexture and roping in AA 6xxx Alâ€“Mgâ€“Si sheet alloys for automotive applications. Acta Materialia, 2012, 60, 5217-5232.	3.8	54
11	Effect of Throughâ€Thickness Macro and Microâ€Texture Gradients on Ridging of 17%Cr Ferritic Stainless Steel Sheet. Steel Research International, 2005, 76, 797-806.	1.0	52
12	Effect of natural ageing and pre-straining on strength and anisotropy in aluminium alloy AA 6016. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 65-74.	2.6	51
13	Simulation of earing profiles from texture data by means of a visco-plastic self-consistent polycrystal plasticity approach. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 373, 350-362.	2.6	50
14	Polycrystal-plasticity simulation of six and eight ears in deep-drawn aluminum cups. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2007, 452-453, 640-651.	2.6	47
15	Texture and anisotropy in the Alâ€“Mg alloy AA 5005 â€“ Part II: Correlation of texture and anisotropic properties. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 663-671.	2.6	47
16	Control of texture and earing in aluminium alloy AA 3105 sheet for packaging applications. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 538, 69-80.	2.6	46
17	Impact of homogenization on microchemistry and recrystallization of the Alâ€“Feâ€“Mn alloy AA 8006. Materials Characterization, 2013, 79, 60-75.	1.9	45
18	Flexible rolling of aluminium alloy sheetâ€”Process optimization and control of materials properties. Journal of Materials Processing Technology, 2016, 229, 139-148.	3.1	44

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19	Crystal-plasticity analysis of ridging in ferritic stainless steel sheets. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 3127-3139.	1.1	40
20	Recrystallization Textures and Plastic Anisotropy in Al-Mg-Si Sheet Alloys. Materials Science Forum, 1996, 217-222, 479-486.	0.3	38
21	Characterization of second-phase particles in two aluminium foil alloys. Journal of Alloys and Compounds, 2016, 660, 276-288.	2.8	37
22	Effect of primary recrystallization texture on abnormal grain growth in an aluminum alloy. Scripta Materialia, 2007, 57, 325-327.	2.6	33
23	A new approach in texture research: local orientation determination with EBSP. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 1992, 63, 413-418.	0.2	31
24	Plastic anisotropy and texture evolution during tensile testing of extruded aluminium profiles. Modelling and Simulation in Materials Science and Engineering, 2005, 13, 783-795.	0.8	29
25	Bendability enhancement of an age-hardenable aluminum alloy: Part II â€" multiscale numerical modeling of shear banding and fracture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 754, 161-177.	2.6	28
26	Recrystallization Textures and the Evolution of the P-Orientation as a Function of Precipitation in an AA3103 Alloy. Materials Science Forum, 2002, 408-412, 1471-1476.	0.3	27
27	On the Influence of Dispersoids on the Particle Stimulated Nucleation of Recrystallization in an Al-Fe-Si Model Alloy. Materials Science Forum, 1998, 273-275, 483-488.	0.3	26
28	Texture and anisotropy in the Alâ€"Mg alloy AA 5005 â€" Part I: Texture evolution during rolling and recrystallization. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 618, 654-662.	2.6	26
29	Influence of copper additions on materials properties and corrosion behaviour of Alâ€"Mg alloy sheet. Journal of Alloys and Compounds, 2017, 710, 650-662.	2.8	26
30	Control of recrystallisation texture and texture-related properties in industrial production of aluminium sheet. International Journal of Materials Research, 2009, 100, 564-575.	0.1	24
31	Bendability enhancement of an age-hardenable aluminum alloy: Part I â€" relationship between microstructure, plastic deformation and fracture. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2019, 753, 179-191.	2.6	24
32	On the Correlation of Texture and Ridging in AA6016 Automotive Alloys. Materials Science Forum, 2002, 396-402, 345-350.	0.3	23
33	Texture-based design of a convoluted cut-edge for earing-free beverage cans. Journal of Materials Processing Technology, 2011, 211, 1278-1284.	3.1	23
34	Orientation relationship between Al6Mn precipitates and the Al matrix during continuous recrystallization in Alâ€"1.3%Mn. Journal of Applied Crystallography, 1999, 32, 1105-1118.	1.9	22
35	Modelling of ductile failure in aluminium sheet forming simulation. International Journal of Material Forming, 2011, 4, 163-182.	0.9	22
36	Effect of Texture Components on the Lankford Parameters in Ferritic Stainless Steel Sheets. ISIJ International, 2012, 52, 522-529.	0.6	22

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37	Analysis of Earing in Deep Drawn Cups. AIP Conference Proceedings, 2010, , .	0.3	20
38	Statistics, Evaluation and Representation of Single Grain Orientation Measurements. Materials Science Forum, 1994, 157-162, 259-274.	0.3	19
39	Evolution of through-thickness texture gradients in various steel sheets. Metals and Materials International, 1999, 5, 437-443.	0.2	19
40	Evaluation of constitutive models for textured aluminium alloys using plane-strain tension and shear tests. International Journal of Material Forming, 2011, 4, 227-241.	0.9	19
41	Impact of chromium on the microchemistry evolution during solidification and homogenization of the Al-Mg alloy AA 5052. Journal of Alloys and Compounds, 2018, 744, 561-573.	2.8	19
42	Recrystallization Modeling of AA8XXX Alloys with Cellular Automata Considering Recovering Kinetics. Advanced Engineering Materials, 2010, 12, 131-140.	1.6	18
43	Thermodynamics based modelling of the precipitation kinetics in commercial aluminium alloys. Computational Materials Science, 2014, 81, 410-417.	1.4	18
44	Texture and anisotropy in cold rolled and recovery annealed AA 5182 sheets. Materials Science and Technology, 2015, 31, 1058-1065.	0.8	17
45	Evolution of strain states and textures during roll-cladding in STS/Al/STS sheets. Journal of Materials Science, 2004, 39, 5371-5374.	1.7	16
46	Influence of solution treatment on the microstructure and crystallographic texture of cold rolled and recrystallised low carbon steel. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 1995, 66, 353-359.	0.2	15
47	Temper rolling to control texture and earing in aluminium alloy AA 5050A. Journal of Materials Processing Technology, 2021, 288, 116910.	3.1	15
48	Effect of strain paths on development of shear textures during rolling in aluminum sheets. Metals and Materials International, 2010, 16, 851-856.	1.8	14
49	Quantitative Analysis of Microâ€Textures during Recrystallization in an Interstitialâ€Free Steel. Steel Research International, 2012, 83, 919-926.	1.0	14
50	A modified processing route for high strength Al-Mg-Si aluminum conductors based on twin-roll cast strip. Journal of Materials Processing Technology, 2020, 278, 116463.	3.1	14
51	Rolling Texture Development in Cu-Mn-Alloys. Materials Science Forum, 1994, 157-162, 679-684.	0.3	13
52	Evolution of Texture and Microstructure in AA3004 Sheets during Continuous Confined Strip Shearing Deformation and Subsequent Annealing. Materials Science Forum, 2002, 396-402, 475-480.	0.3	13
53	Through-process modelling of the impact of intermediate annealing on texture evolution in aluminium alloy AA 5182. Modelling and Simulation in Materials Science and Engineering, 2003, 11, 863-882.	0.8	13
54	Correlation of Texture and Plastic Anisotropy in the Al-Mg Alloy AA 5005. Solid State Phenomena, 2005, 105, 277-284.	0.3	12

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55	Effect of strain rate and dynamic strain ageing on work-hardening for aluminium alloy AA5182-O. International Journal of Materials Research, 2012, 103, 1035-1041.	0.1	12
56	A virtual materials testing approach to calibrate anisotropic yield functions for the simulation of earing during deep drawing of aluminium alloy sheet. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 818, 141389.	2.6	12
57	Effect of precipitation state on plastic anisotropy in sheets of the age-hardenable aluminium alloys AA 6016 and AA 7021. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 830, 142324.	2.6	12
58	Investigation of the Nucleation of Recrystallization in an Al-Cu Single Crystal by Means of EBSP. Materials Science Forum, 1993, 113-115, 127-132.	0.3	11
59	The Effect of Precipitates on Texture Development. Materials Science Forum, 1994, 157-162, 1501-1506.	0.3	11
60	Influence of a solution treatment on the evolution of throughâ€thickness texture gradients in dry cold rolled and recrystallized low carbon steel. Steel Research = Archiv FÃ¼r Das EisenhÃ¼ttenwesen, 2000, 71, 239-248.	0.2	10
61	Modelling of Recrystallisation Kinetics and Texture during the Thermo-Mechanical Processing of Aluminium Sheets. Materials Science Forum, 2005, 495-497, 555-566.	0.3	10
62	Effect of deformation routes on the evolution of strain states and texture during asymmetrical cold rolling and subsequent annealing in interstitial-free steel. International Journal of Materials Research, 2010, 101, 1029-1036.	0.1	10
63	Control of texture and earing in aluminium alloy AA 8011A-H14 closure stock. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 775, 138965.	2.6	10
64	Formation of Recrystallization Textures and Plastic Anisotropy in Al-Mg-Si Alloys. Materials Science Forum, 1994, 157-162, 939-944.	0.3	9
65	Rolling and Annealing Texture in Twin Roll Cast Commercial Purity Aluminium. Materials Science Forum, 1994, 157-162, 913-918.	0.3	9
66	Texture Evolution of an AA3xxx Alloy after Different Homogenisation Treatments. Materials Science Forum, 2002, 396-402, 463-468.	0.3	9
67	Modeling of Texture and Texture-Related Properties during the Thermo-Mechanical Processing of Aluminum Sheets. Materials Science Forum, 2003, 426-432, 3655-3660.	0.3	9
68	Efficient and Robust Prediction of Localized Necking in Sheet Metals. , 2011, , .		9
69	A simple ductile failure model with application to AA5182 aluminium sheet forming. International Journal of Material Forming, 2014, 7, 289-304.	0.9	9
70	Effect of r-value and texture on plastic deformation and necking behavior in interstitial-free steel sheets. Metals and Materials International, 2017, 23, 26-34.	1.8	9
71	Taylor-Type Homogenization Methods for Texture and Anisotropy. , 2005, , 459-472.		8
72	Modelling of Microstructure and Texture and the Resulting Properties during the Thermo-Mechanical Processing of Aluminium Sheets. Materials Science Forum, 2006, 519-521, 1563-1568.	0.3	7

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73	Behaviour of Statistical Texture Parameters Applied to Single Grain Orientation Measurements in Recrystallized Al-Mn. Materials Science Forum, 1994, 157-162, 933-938.	0.3	6
74	Simulation of Rolling and Recrystallization Textures in Aluminium Alloy Sheets. Materials Science Forum, 2007, 550, 23-34.	0.3	6
75	Evolution of micro-chemistry during solidification and homogenisation of AA 3xxx aluminiumâ€“manganese alloys. Materials Science and Technology, 2021, 37, 893-908.	0.8	6
76	Influence of the Rolling Temperature on the Texture Gradient in an Al-Mg-Si Alloy. Materials Science Forum, 1994, 157-162, 673-678.	0.3	5
77	Formation of Shear Texture and Ultra-fine Grains in Warm Rolled AA 3004 Sheets. Materials Science Forum, 2002, 408-412, 1453-1458.	0.3	5
78	Effect of Strain Paths on the Evolution of Texture and Work Hardening in AA 5052 Sheets during Continuous Confined Strip Shearing Deformation. Materials Science Forum, 2002, 408-412, 1495-1500.	0.3	5
79	Property Control in Production of Aluminum Sheet by Use of Simulation. , 2005, , 705-725.		4
80	Modelling the Combined Effect of Room Temperature Storage and Cold Deformation on the Age-Hardening Behaviour of Al-Mg-Si Alloys-Part 1. Materials Science Forum, 0, 794-796, 670-675.	0.3	4
81	Crystal-Plasticity Simulation of the Evolution of the Matt Surface in Pack Rolling of Aluminium Foil. Materials Science Forum, 0, 794-796, 553-558.	0.3	4
82	Simulation-Based Design of 5xxx Series Alloys with Improved Resistivity against Intergranular Corrosion for Automotive Applications. Materials Science Forum, 0, 794-796, 622-627.	0.3	4
83	Accuracy assessment of analytical earing models. European Journal of Mechanics, A/Solids, 2019, 78, 103839.	2.1	4
84	Accuracy analysis of earing compensation procedures. International Journal of Solids and Structures, 2020, 191-192, 418-433.	1.3	4
85	Evolution of Texture and Microstructure during Repeated Shear Deformation in Aluminum 1100 Alloy Sheets. Materials Science Forum, 2002, 396-402, 447-452.	0.3	3
86	Effect of texture on grain growth in an interstitial-free steel sheet. International Journal of Materials Research, 2012, 103, 1423-1433.	0.1	3
87	Modelling the Combined Effect of Room Temperature Storage and Cold Deformation on the Age-Hardening Behaviour of Al-Mg-Si Alloys-Part 2. Materials Science Forum, 0, 794-796, 722-727.	0.3	3
88	A Combined TEM and Atom Probe Approach to Analyse the Early Stages of Age Hardening in AA 6016. Materials Science Forum, 2016, 877, 231-236.	0.3	3
89	Microstructure and texture of aluminium alloys for autobody applications. Materiaux Et Techniques, 2002, 90, 71-78.	0.3	3
90	The Influence of Homogenisation Heat Treatment on Microstructure Development in Al-Mg-Mn Alloy AA5454. Materials Science Forum, 2002, 396-402, 351-356.	0.3	2

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91	Modelling Time-Dependent Nucleation of Recrystallization in Aluminium Alloys. Materials Science Forum, 2013, 753, 147-152.	0.3	2
92	Methodology for Quantification of the Roping Phenomena in 6xxx Automotive Car Body Sheet Alloys. Materials Science Forum, 0, 794-796, 45-50.	0.3	2
93	Simulation of Microstructure and Texture Evolution in Aluminum Sheet. , 2009, , 510-521.		2
94	Microchemistry-dependent simulation of yield stress and flow stress in non-heat treatable Al sheet alloys. Modelling and Simulation in Materials Science and Engineering, 2020, 28, 035010.	0.8	2
95	Texture Evolution during Roll-Cladding of a Composite of Five Plies of Ferritic Stainless Steel and Aluminium Sheets. Materials Science Forum, 2005, 495-497, 1681-1686.	0.3	1
96	Advanced modelling of failure mechanisms in aluminium sheet forming simulation. International Journal of Material Forming, 2009, 2, 355-358.	0.9	1
97	Texture Analysis for Determining the Rate Controlling Process in the Transient and Steady State Regions of Superplastic Flow. Materials Science Forum, 0, 702-703, 360-365.	0.3	1
98	Characterization and statistical modeling of the precipitation kinetics in the commercial aluminum alloy AA5182. Materials Research Society Symposia Proceedings, 2011, 1369, 1.	0.1	1
99	Simulation of Recrystallization and Recrystallization Textures in Aluminium Alloys. Materials Science Forum, 0, 715-716, 399-406.	0.3	1
100	Effect of Natural Ageing on Strength and Anisotropy in Aluminium Alloy AA 6005C. Materials Science Forum, 0, 877, 688-694.	0.3	1
101	Non-Heat Treatable Al-Alloys: Development of Intermetallic Particles during Solidification and Homogenization. , 2019, , .		1
102	Modeling of Rolling and Recrystallization Textures in the Production of Aluminum Sheets. Materials Science Forum, 2002, 408-412, 1407-1412.	0.3	0
103	On the Impact of Thermo-Mechanical Processing on Texture and the Resultant Anisotropy of Aluminium Sheet. Materials Science Forum, 0, 702-703, 427-434.	0.3	0
104	Ductile Failure Modelling in AA5182 Aluminium Alloy Sheet Forming. Key Engineering Materials, 0, 554-557, 47-62.	0.4	0
105	Quantification of roping in aluminium sheet alloys for car body applications by combining 3D surface measurements with Fourier analysis. International Journal of Materials Research, 2015, 106, 248-257.	0.1	0
106	Temper rolling to control texture and earing in aluminium alloy AA 5050A. MATEC Web of Conferences, 2020, 326, 05002.	0.1	0