Alexander M Pesin

List of Publications by Year
in descending order

64	419	933447	888059
papers	citations	10	17
		h-index	g-index

64	64	64	232
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of tool path strategy and tooltip profile on geometrical feature and surface quality of Al-6061 alloy during deformation machining in bending mode. Advances in Materials and Processing Technologies, 2023, 9, 297-314.	1.4	4
2	In Situ Heating Neutron and Xâ€Ray Diffraction Analyses for Revealing Structural Evolution during Postprinting Treatments of Additiveâ€Manufactured 316L Stainless Steel. Advanced Engineering Materials, 2022, 24, .	3.5	8
3	In Situ Heating Neutron and Xâ€Ray Diffraction Analyses for Revealing Structural Evolution during Postprinting Treatments of Additiveâ€Manufactured 316L Stainless Steel. Advanced Engineering Materials, 2022, 24, .	3.5	2
4	Effects of Heat Treatment on the Surface Quality and Improvement in Formability of Deformation Machined Products of Al 6061. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2022, 144, .	2.2	2
5	Significance of grain refinement on micro-mechanical properties and structures of additively-manufactured CoCrFeNi high-entropy alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 807, 140898.	5.6	59
6	Effect of Rolling Temperature and Subsequence Ageing on the Mechanical Properties and Microstructure Evolution of an Al-Cu-Li Alloy. Metals, 2021, 11, 853.	2.3	1
7	Asymmetric (Hot, Warm, Cold, Cryo) Rolling of Light Alloys: A Review. Metals, 2021, 11, 956.	2.3	18
8	Mechanical properties and thermal stability of gradient structured Zr via cyclic skin-pass cryorolling. Materials Letters, 2021, 302, 130406.	2.6	2
9	A Comparative Investigation of Conventional and Hammering-Assisted Incremental Sheet Forming Processes for AA1050 H14 Sheets. Metals, 2021, 11, 1862.	2.3	2
10	Multiscale Simulation of the Stress-Strain State of Low Carbon Steel Strip Processed by Asymmetric Rolling. Solid State Phenomena, 2020, 304, 107-112.	0.3	2
11	Structure and Properties of Al-Ca(Fe, Si, Zr, Sc) Wire Alloy Manufactured from As-Cast Billet. Jom, 2020, 72, 3760-3768.	1.9	10
12	FEM simulation of fabrication of Al-steel layered composites with mechanical bonding through the interfacial concavo-convex lock effect. Procedia Manufacturing, 2020, 50, 579-583.	1.9	2
13	Influence of microstructure on inhomogeneity of stress and strain in the deformation zone during asymmetric cold rolling of ferritic-pearlitic steels. Procedia Manufacturing, 2020, 50, 514-519.	1.9	4
14	Sandwichâ€Like Cu/Al/Cu Composites Fabricated by Cryorolling. Advanced Engineering Materials, 2020, 22, 2000122.	3.5	12
15	Microstructural Evolution and Mechanical Properties of Ultrafineâ€Grained Ti Fabricated by Cryorolling and Subsequent Annealing. Advanced Engineering Materials, 2020, 22, 1901463.	3.5	8
16	Application of Statistical Representation of Microstructure during Simulation of Ferritic-Pearlitic Steel Wire Drawing. Materials Science Forum, 2020, 989, 691-698.	0.3	1
17	Recent Development of Superplasticity in Aluminum Alloys: A Review. Metals, 2020, 10, 77.	2.3	42
18	Fabrication and Characterization of High-Bonding-Strength Al/Ti/Al-Laminated Composites via Cryorolling. Acta Metallurgica Sinica (English Letters), 2020, 33, 871-880.	2.9	16

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19	FEM simulation of strain gradients induced in metal sheets by special rolling techniques. AIP Conference Proceedings, 2019, , .	0.4	0
20	Interface shear strain of 1050/6061 laminated composite processed by asymmetric accumulative roll bonding. AIP Conference Proceedings, 2019, , .	0.4	2
21	Phase composition and mechanical properties of Alâ€“1.5%Cuâ€“1.5%Mnâ€“0.35%Zr(Fe,Si) wire alloy. Journal of Alloys and Compounds, 2019, 782, 735-746.	5.5	25
22	FEM simulation of strain distribution through thickness of multilayered metal composite processed by asymmetric accumulative roll bonding. , 2019, , .		0
23	Surface Wear in Hadfield Steel Castings DOPED with Nitrided Vanadium. Metals, 2018, 8, 845.	2.3	11
24	Finite element analysis of strain gradients in aluminium alloy sheets processed by asymmetric rolling. Procedia Manufacturing, 2018, 15, 129-136.	1.9	9
25	Novel technique for physical simulation of asymmetric rolling. Procedia Manufacturing, 2018, 15, 137-143.	1.9	1
26	Modification of the Shear-Compression Specimen and Development of a Special Technique for the Physical Simulation of Asymmetric Rolling with a Large Strain. Defect and Diffusion Forum, 2018, 385, 461-467.	0.4	0
27	Improvement in formability and geometrical accuracy of incrementally formed AA1050 sheets by microstructure and texture reformation through preheating, and their FEA and experimental validation. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	1.6	20
28	FE Simulation of the Stress-Strain State during Shear-Compression Testing and Asymmetric Three-Roll Rolling Process. MATEC Web of Conferences, 2017, 95, 12009.	0.2	1
29	Finite element simulation of extremely high shear strain during a single-pass asymmetric warm rolling of Al-6.2Mg-0.7Mn alloy sheets. Procedia Engineering, 2017, 207, 1463-1468.	1.2	8
30	Physical simulation of asymmetric sheet rolling process by multicycle shear-compression testing. Procedia Engineering, 2017, 207, 1487-1492.	1.2	3
31	Development of the Technology of Large Bodies Manufacturing Based on Combined Process of Plate Rolling and Stamping. IOP Conference Series: Materials Science and Engineering, 2017, 293, 012006.	0.6	0
32	Modeling of the roll wear and material damage during high-ratio differential speed rolling of aluminium alloy 7075. MATEC Web of Conferences, 2016, 80, 04006.	0.2	2
33	Finite Element Modelling of Combined Process of Plate Rolling and Stamping. MATEC Web of Conferences, 2016, 80, 15008.	0.2	2
34	Heat transfer modeling in asymmetrical sheet rolling of aluminium alloys with ultra high shear strain. MATEC Web of Conferences, 2016, 80, 04005.	0.2	2
35	Finite Element Simulation of Heat Transfer during Cryogenic Asymmetric Sheet Rolling of Aluminum Alloys. Key Engineering Materials, 2016, 716, 692-699.	0.4	1
36	Development of the Technology of Various Large Bodies Manufacturing Based on Combined Methods of Deformation. Key Engineering Materials, 2016, 716, 659-666.	0.4	1

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37	FE Analysis of the Applicability of the Shear-Compression Testing to the Modeling of the Asymmetric Rolling Process. Materials Science Forum, 2016, 870, 226-233.	0.3	2
38	Finite Element Analysis of Symmetric and Asymmetric Three-roll Rolling Process. MATEC Web of Conferences, 2015, 26, 03006.	0.2	4
39	Finite Element Modeling of Roll Wear during Cold Asymmetric Sheet Rolling of Aluminum Alloy 5083. MATEC Web of Conferences, 2015, 26, 01010.	0.2	3
40	Study of Different Large Bodies Manufacturing Based on Combined Methods of Deformation. MATEC Web of Conferences, 2015, 26, 03007.	0.2	2
41	Finite Element Modeling of Strain Distribution through Sheet Thickness during Cold Rolling with Grooved Rolls. MATEC Web of Conferences, 2015, 26, 03009.	0.2	0
42	Research of edge defect formation in plate rolling by finite element method. Journal of Materials Processing Technology, 2015, 220, 96-106.	6.3	15
43	Finite Element Modeling of Edge Defect Formation in Plate Rolling. Procedia Engineering, 2014, 81, 132-136.	1.2	4
44	Influence of Process Parameters on Distribution of Shear Strain through Sheet Thickness in Asymmetric Rolling. Key Engineering Materials, 2014, 622-623, 929-935.	0.4	20
45	Finite Element Modeling of Shear Strain in Asymmetric and Symmetric Rolling in Multi Roll Calibers. Procedia Engineering, 2014, 81, 2469-2474.	1.2	5
46	Numerical Research of Shear Strain in an Extreme Case of Asymmetric Rolling. Advanced Materials Research, 2013, 742, 476-481.	0.3	10
47	Theoretical Basis and Technology Development of the Combined Process of Asymmetric Rolling and Plastic Bending. Advanced Materials Research, 2012, 586, 259-264.	0.3	4
48	Improving the quality control system for hot- and cold-rolled products at the Magnitogorsk Metallurgical Combine. Metallurgist, 2011, 55, 364-370.	0.6	2
49	Transverse Crack Modeling of Continuously Casted Slabs through Finite Element Method in Roughing Rolling at Wide Strip Mill. , 2010, , .		3
50	Plate Rolling Modeling at Mill 5000 of OJSC â€œMagnitogorsk Iron and Steelâ€•for Analysis and Optimization of Temperature Rates. AIP Conference Proceedings, 2010, , .	0.4	4
51	Behavior of transverse corner cracks of a slab in horizontal rollers. Steel in Translation, 2010, 40, 212-215.	0.3	4
52	Main structural factors of strengthening of low-carbon low-alloy pipe steels after controlled rolling. Metal Science and Heat Treatment, 2009, 51, 40-44.	0.6	4
53	Efficient deformation in the roughing group of the 2000 mill. Steel in Translation, 2009, 39, 912-914.	0.3	0
54	Production of >16-mm strip after reconstruction of the 2000 mill. Steel in Translation, 2009, 39, 915-917.	0.3	1

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55	Forming characteristics of slabs during rough rolling. Metallurgist, 2008, 52, 700-704.	0.6	0
56	Effective rough rolling of low-alloy steel. Steel in Translation, 2008, 38, 767-769.	0.3	4
57	Mathematical modelling of the stressâ€“strain state in asymmetric flattening of metal band. Journal of Materials Processing Technology, 2002, 125-126, 689-694.	6.3	7
58	Finite Element Modeling of Shear Strain in Rolling with Velocity Asymmetry in Multi-Roll Calibers. Key Engineering Materials, 0, 622-623, 912-918.	0.4	9
59	Technology Development of Large-Size Bodies Manufacturing from Thick Plate Materials Based on Combined Methods of Deformation. Key Engineering Materials, 0, 685, 375-379.	0.4	4
60	Finite Element Simulation of Shear Strain during High-Ratio Differential Speed Rolling of Aluminum Alloy 5083. Key Engineering Materials, 0, 716, 700-707.	0.4	2
61	Numerical Study of Grain Evolution and Dislocation Density during Asymmetric Rolling of Aluminum Alloy 7075. Key Engineering Materials, 0, 685, 162-166.	0.4	16
62	Finite Element Modeling of Influence of Roll Form of Vertical Scale Breaker on Decreased Formation of Surface Defects during Roughing Hot Rolling. Key Engineering Materials, 0, 685, 181-185.	0.4	2
63	FEM Simulation of Influence of Asymmetric Cold Rolling on Through-Thickness Strain Gradient in Low-Carbon Steel Sheets. Defect and Diffusion Forum, 0, 385, 455-460.	0.4	3
64	Numerical Modelling and Development of New Technical Solutions in Metallurgy and Material Processing. Solid State Phenomena, 0, 304, 113-119.	0.3	2