Hamid Jahed

List of Publications by Year in descending order

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138 papers 3,215 citations

34 h-index 50 g-index

144 all docs

144 docs citations

144 times ranked 1604 citing authors

#	Article	IF	CITATIONS
1	Microstructure and fatigue behavior of cold spray coated Al5052. Acta Materialia, 2012, 60, 6555-6561.	7.9	126
2	An Axisymmetric Method of Elastic-Plastic Analysis Capable of Predicting Residual Stress Field. Journal of Pressure Vessel Technology, Transactions of the ASME, 1997, 119, 264-273.	0.6	102
3	Upper and lower fatigue life limits model using energy-based fatigue properties. International Journal of Fatigue, 2006, 28, 467-473.	5.7	93
4	ECAP effect on the micro-structure and mechanical properties of AM30 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2014, 593, 178-184.	5.6	89
5	The effect of pure aluminum cold spray coating on corrosion and corrosion fatigue of magnesium (3% Al-1% Zn) extrusion. Surface and Coatings Technology, 2017, 309, 423-435.	4.8	88
6	Residual stress induced by cold spray coating of magnesium AZ31B extrusion. Materials & Design, 2014, 60, 72-84.	5.1	81
7	An energy-based fatigue life assessment model for various metallic materials under proportional and non-proportional loading conditions. International Journal of Fatigue, 2007, 29, 647-655.	5.7	77
8	Microstructure, texture and mechanical behavior characterization of hot forged cast ZK60 magnesium alloy. Journal of Materials Science and Technology, 2017, 33, 907-918.	10.7	74
9	Cyclic axial and cyclic torsional behaviour of extruded AZ31B magnesium alloy. International Journal of Fatigue, 2011, 33, 1403-1416.	5.7	70
10	Role of compression direction on recrystallization behavior and texture evolution during hot deformation of extruded ZK60 magnesium alloy. Journal of Alloys and Compounds, 2017, 702, 274-289.	5.5	68
11	The impact of AA7075 cold spray coating on the fatigue life of AZ31B cast alloy. Surface and Coatings Technology, 2018, 337, 150-158.	4.8	65
12	Customizing mechanical properties of additively manufactured Hastelloy X parts by adjusting laser scanning speed. Journal of Alloys and Compounds, 2020, 812, 152097.	5.5	62
13	Low-cycle fatigue characterization and texture induced ratcheting behaviour of forged AZ80 Mg alloys. International Journal of Fatigue, 2018, 116, 429-438.	5.7	61
14	Cyclic behaviour of wrought magnesium alloy under multiaxial load. International Journal of Fatigue, 2011, 33, 1127-1139.	5.7	60
15	Optimum Autofrettage and Shrink-Fit Combination in Multi-Layer Cylinders. Journal of Pressure Vessel Technology, Transactions of the ASME, 2006, 128, 196-200.	0.6	58
16	Friction-stir processing of a cold sprayed AA7075 coating layer on the AZ31B substrate: Structural homogeneity, microstructures and hardness. Surface and Coatings Technology, 2017, 331, 116-128.	4.8	57
17	Multiaxial effects on LCF behaviour and fatigue failure of AZ31B magnesium extrusion. International Journal of Fatigue, 2014, 67, 103-116.	5.7	56
18	Fatigue strength of Al alloy cold sprayed with nanocrystalline powders. International Journal of Fatigue, 2014, 65, 51-57.	5.7	56

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19	Role of loading direction on cyclic behaviour characteristics of AM30 extrusion and its fatigue damage modelling. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2016, 670, 26-40.	5.6	56
20	Additively Manufactured Gradient Porous Ti–6Al–4V Hip Replacement Implants Embedded with Cell-Laden Gelatin Methacryloyl Hydrogels. ACS Applied Materials & 1, 2011, 13, 22110-22123.	8.0	56
21	Effect of forging on the low cycle fatigue behavior of cast AZ31B alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2017, 706, 342-356.	5.6	54
22	A numerical optimization technique for design of wheel profiles. Wear, 2008, 264, 1-10.	3.1	53
23	A variable material property approach for solving elastic-plastic problems. International Journal of Pressure Vessels and Piping, 1997, 71, 285-291.	2.6	47
24	Monotonic and cyclic behaviour of cast and cast-forged AZ80 Mg. International Journal of Fatigue, 2017, 104, 136-149.	5.7	47
25	Minimum weight design of inhomogeneous rotating discs. International Journal of Pressure Vessels and Piping, 2005, 82, 35-41.	2.6	46
26	Interfacial bonding mechanisms between aluminum and titanium during cold gas spraying followed by friction-stir modification. Applied Surface Science, 2018, 462, 739-752.	6.1	46
27	Multiaxial behaviour of wrought magnesium alloys – A review and suitability of energy-based fatigue life model. Theoretical and Applied Fracture Mechanics, 2014, 73, 97-108.	4.7	44
28	On the evolution of substrate's residual stress during cold spray process: A parametric study. Materials and Design, 2018, 138, 90-102.	7.0	44
29	Multiaxial cyclic behaviour of extruded and forged AZ80 Mg alloy. International Journal of Fatigue, 2019, 127, 324-337.	5.7	43
30	Effect of temperature on the hot deformation behavior of AZ80 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2020, 794, 139923.	5.6	42
31	Fatigue characteristics and modeling of cast and cast-forged ZK60 magnesium alloy. International Journal of Fatigue, 2019, 118, 282-297.	5.7	41
32	Loading and unloading behaviour of a thermoplastic disc. International Journal of Pressure Vessels and Piping, 2001, 78, 637-645.	2.6	40
33	Load path sensitivity and fatigue life estimation of 30CrNiMo8HH. International Journal of Fatigue, 2012, 37, 123-133.	5.7	39
34	Optimum design of inhomogeneous non-uniform rotating discs. Computers and Structures, 2004, 82, 773-779.	4.4	36
35	Multiaxial cyclic behaviour and fatigue modelling of AM30 Mg alloy extrusion. International Journal of Fatigue, 2017, 97, 150-161.	5.7	36
36	An asymmetric elastic–plastic analysis of the load-controlled rotating bending test and its application in the fatigue life estimation of wrought magnesium AZ31B. International Journal of Fatigue, 2014, 64, 33-41.	5.7	33

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37	Anisotropy in the quasi-static and cyclic behavior of ZK60 extrusion: Characterization and fatigue modeling. Materials and Design, 2018, 160, 936-948.	7.0	32
38	Split sleeve cold expansion of AZ31B sheet: Microstructure, texture and residual stress. Materials and Design, 2020, 186, 108213.	7.0	32
39	Surface protection of Mg alloys in automotive applications: A review. AIMS Materials Science, 2019, 6, 567-600.	1.4	32
40	Fatigue characterization and modeling of 30CrNiMo8HH under multiaxial loading. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 2484-2494.	5.6	29
41	Enhancing metallurgical and mechanical properties of friction stir butt welded joints of Al–Cu via cold sprayed Ni interlayer. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2021, 809, 140992.	5.6	28
42	Fatigue life prediction of autofrettage tubes using actual material behaviour. International Journal of Pressure Vessels and Piping, 2006, 83, 749-755.	2.6	27
43	Effect of Forging on Microstructure, Texture, and Uniaxial Properties of Cast AZ31B Alloy. Journal of Materials Engineering and Performance, 2017, 26, 3090-3103.	2.5	27
44	An axisymmetric method of creep analysis for primary and secondary creep. International Journal of Pressure Vessels and Piping, 2003, 80, 597-606.	2.6	26
45	Actual Unloading Behavior and Its Significance on Residual Stress in Machined Autofrettaged Tubes. Journal of Pressure Vessel Technology, Transactions of the ASME, 2003, 125, 321-325.	0.6	26
46	Surface Modification of a Cold Gas Dynamic Spray-Deposited Titanium Coating on Aluminum Alloy by using Friction-Stir Processing. Journal of Thermal Spray Technology, 2019, 28, 1185-1198.	3.1	26
47	Characterization of magnesium spot welds under tensile and cyclic loadings. Materials & Design, 2011, 32, 4890-4900.	5.1	25
48	Corrosion and corrosion fatigue performances of microâ€arc oxidation coating on AZ31B cast magnesium alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2019, 70, 268-280.	1.5	24
49	Improving Corrosion and Corrosion-Fatigue Resistance of AZ31B Cast Mg Alloy Using Combined Cold Spray and Top Coatings. Coatings, 2018, 8, 443.	2.6	22
50	A cyclic small-strain plasticity model for wrought Mg alloys under multiaxial loading: Numerical implementation and validation. International Journal of Mechanical Sciences, 2018, 145, 318-329.	6.7	22
51	On the definition of elastic strain energy density in fatigue modelling. International Journal of Fatigue, 2019, 121, 237-242.	5.7	22
52	Cohesive zone modeling of fatigue crack growth in brazed joints. Engineering Fracture Mechanics, 2014, 120, 43-59.	4.3	20
53	Tailoring the residual stress during two-step cold gas spraying and friction-stir surface integration of titanium coating. Surface and Coatings Technology, 2019, 380, 125008.	4.8	20
54	Enhanced strength and ductility in dissimilar friction stir butt welded Al/Cu joints by addition of a cold-spray Ni interlayer. Journal of Manufacturing Processes, 2020, 60, 573-577.	5.9	20

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55	Re-Autofrettage. Journal of Pressure Vessel Technology, Transactions of the ASME, 2006, 128, 223-226.	0.6	19
56	Fatigue behaviour of dissimilar Al 5052 and Mg AZ31 resistance spot welds with Snâ€coated steel interlayer. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 1048-1058.	3.4	19
57	Characterization of anisotropic behaviour of ZK60 extrusion under stress-control condition and notes on fatigue modeling. International Journal of Fatigue, 2019, 127, 101-109.	5.7	19
58	Fatigue of ZEK100-F magnesium alloy: Characterisation and modelling. International Journal of Fatigue, 2019, 125, 179-186.	5.7	18
59	Customization of residual stress induced in cold spray printing. Journal of Materials Processing Technology, 2021, 289, 116928.	6.3	17
60	Nondestructive Phase Variation-Based Chipless Sensing Methodology for Metal Crack Monitoring. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.	4.7	17
61	On the effect of laser powder-bed fusion process parameters on quasi-static and fatigue behaviour of Hastelloy X: A microstructure/defect interaction study. Additive Manufacturing, 2021, 38, 101805.	3.0	17
62	The choice of cyclic plasticity models in fatigue life assessment of 304 and 1045 steel alloys based on the critical plane-energy fatigue damage approach. International Journal of Fatigue, 2012, 43, 217-225.	5.7	16
63	On the Surface Residual Stress Measurement in Magnesium Alloys Using X-Ray Diffraction. Materials, 2020, 13, 5190.	2.9	16
64	Role of heat balance on the microstructure evolution of cold spray coated AZ31B with AA7075. Journal of Magnesium and Alloys, 2021, , .	11.9	16
65	Low cycle fatigue behavior of AZ31B extrusion at elevated temperatures. International Journal of Fatigue, 2020, 139, 105803.	5.7	15
66	MagForge – Mechanical Behaviour of Forged AZ31B Extruded Magnesium in Monotonic Compression. Materials Science Forum, 0, 828-829, 291-297.	0.3	14
67	Characterization of the corrosion performances of as ast Mg–Al and Mg–Zn magnesium alloys with microarc oxidation coatings. Materials and Corrosion - Werkstoffe Und Korrosion, 2020, 71, 992-1006.	1.5	14
68	Tensile and fatigue behaviour of as-forged AZ31B extrusion. Frattura Ed Integrita Strutturale, 2016, 10, 251-258.	0.9	14
69	Mechanical reliability characterization of low carbon steel brazed joints with copper filler metal. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 6146-6156.	5.6	13
70	Characterization of single- and multilayer cold-spray coating of Zn on AZ31B. Surface and Coatings Technology, 2021, 416, 127155.	4.8	13
71	Fatigue characterization and modeling of AZ31B magnesium alloy spot-welds. International Journal of Fatigue, 2014, 64, 1-13.	5.7	12
72	Residual Stress Measurements in an Autofrettage Tube Using Hole Drilling Method. Journal of Pressure Vessel Technology, Transactions of the ASME, 2012, 134, .	0.6	11

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73	Characterization of Nanolayer Intermetallics Formed in Cold Sprayed Al Powder on Mg Substrate. Materials, 2019, 12, 1317.	2.9	10
74	Multiaxial Fatigue and Cracking Orientation of Forged AZ80 Magnesium Alloy. Procedia Structural Integrity, 2020, 25, 486-495.	0.8	10
75	Variable material property method in the analysis of cold-worked fastener holes. Journal of Strain Analysis for Engineering Design, 2000, 35, 137-142.	1.8	9
76	The actual unloading behavior effect on thermo-mechanical stress intensity factor and life of autofrettage tubes. International Journal of Fatigue, 2007, 29, 360-369.	5.7	9
77	Creep and Fatigue Failure in Single- and Double Hot Arm MEMS Thermal Actuators. Journal of Failure Analysis and Prevention, 2009, 9, 159-170.	0.9	9
78	Cohesive zone modeling of ductile tearing process in brazed joints. Engineering Fracture Mechanics, 2013, 102, 156-170.	4.3	9
79	Constitutive Modeling for Cyclic Behavior of AZ31B Magnesium Alloy and its Application. Advanced Materials Research, 0, 891-892, 809-814.	0.3	9
80	On the sensitivity and repeatability of fiber Bragg grating sensors used in strain and material degradation measurement of magnesium alloys under cyclic loads. International Journal of Advanced Manufacturing Technology, 2016, 86, 3453-3461.	3.0	9
81	Applications of Neuber's and Glinka's notch plasticity correction rules to asymmetric magnesium alloys under cyclic load. Theoretical and Applied Fracture Mechanics, 2020, 105, 102431.	4.7	9
82	Characterization of closed-die forged AZ31B under pure axial and pure shear loading. International Journal of Fatigue, 2020, 139, 105754.	5.7	9
83	Determination of the fatigue behavior of mechanical components through infrared thermography. Engineering Failure Analysis, 2022, 134, 106018.	4.0	9
84	The effect of cooling rate and degassing on microstructure and mechanical properties of cast AZ80 magnesium alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 844, 143176.	5.6	9
85	Total deformation theory for non-proportional loading. International Journal of Pressure Vessels and Piping, 1998, 75, 633-642.	2.6	8
86	Ratchetting strain prediction. International Journal of Pressure Vessels and Piping, 2007, 84, 223-233.	2.6	8
87	A Continuum-Based Cyclic Plasticity Model for AZ31B Magnesium Alloy under Proportional loading. Procedia Engineering, 2011, 10, 1366-1371.	1.2	8
88	Fatigue life improvement of cast ZK60 Mg alloy through low temperature closed-die forging for automotive applications. MATEC Web of Conferences, 2018, 165, 06009.	0.2	8
89	An in-situ study of the interface microstructure of solid-state additive deposition of AA7075 on AZ31B substrate. Applied Surface Science, 2020, 508, 144974.	6.1	8
90	Enhancing fatigue life of additive manufactured parts with electrospark deposition post-processing. Additive Manufacturing, 2020, 36, 101526.	3.0	8

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91	Manufacturing processes' role over the residual stress state evolution of crankshafts. International Journal of Advanced Manufacturing Technology, 2021, 112, 2425-2433.	3.0	8
92	A Method for Comparing the Fatigue Performance of Forged AZ80 Magnesium. Metals, 2021, 11, 1290.	2.3	8
93	Effect of Feedstock Powder Morphology on Cold-Sprayed Titanium Dioxide Coatings. Journal of Thermal Spray Technology, 2018, 27, 1542-1550.	3.1	7
94	Fabrication of Zinc Anodes for Aqueous Lithiumâ€lon Batteries by Supersonic Cold Spraying. ChemElectroChem, 2019, 6, 1333-1337.	3.4	7
95	Microstructure and mechanical properties of plasma transferred wire arc spray coating on aluminum cylinder bores. Surface and Coatings Technology, 2021, 426, 127757.	4.8	7
96	Effect of thermomechanical processing defects on fatigue and fracture behaviour of forged magnesium. Frattura Ed Integrita Strutturale, 2021, 15, 213-227.	0.9	7
97	Corrosion Protection of ZK60 Wrought Magnesium Alloys by Micro-Arc Oxidation. Metals, 2022, 12, 449.	2.3	7
98	Effects of aluminum and copper cover tube casing on the ECAP process of AM30 magnesium alloy. Materials and Manufacturing Processes, 2017, 32, 1375-1383.	4.7	6
99	Variable Material Properties Approach: A Review on Twenty Years of Progress. Journal of Pressure Vessel Technology, Transactions of the ASME, 2018, 140, .	0.6	6
100	Fatigue life enhancement of cast Mg alloy by surface modification in cold spray process. MATEC Web of Conferences, 2018, 165, 03014.	0.2	6
101	Low cycle fatigue behavior of magnesium matrix nanocomposite at ambient and elevated temperatures. Materials Science & Department of Materials: Properties, Microstructure and Processing, 2020, 793, 139890.	5.6	6
102	A Lagrangian model for hardening behaviour of materials at finite deformation based on the right plastic stretch tensor. Materials & Design, 2010, 31, 2342-2354.	5.1	5
103	Effect of Nugget Size on Tensile and Fatigue Strength of Spot Welded AZ31 Magnesium Alloy. , 2010, , .		5
104	Eulerian Framework for Inelasticity Based on the Jaumann Rate and a Hyperelastic Constitutive Relationâ€"Part I: Rate-Form Hyperelasticity. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	5
105	Incorporation of asymmetric yield and hardening behaviour in axisymmetric elastoplastic problems. Materials and Design, 2016, 99, 490-499.	7.0	5
106	Multi-Layer Cold Spray Coating: Strain Distribution. Key Engineering Materials, 0, 813, 411-416.	0.4	5
107	Effect of Forging on Microstructure, Texture and Compression Behavior of Extruded AZ31B. Minerals, Metals and Materials Series, 2017, , 347-354.	0.4	5
108	Improvement of Fatigue Properties of AZ31B Extruded Magnesium Alloy through Forging. Frattura Ed Integrita Strutturale, 2020, 14, 152-165.	0.9	5

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109	Fatigue crack initiation in cold spray coated AZ31B-H24 with AA7075 powder. International Journal of Fatigue, 2022, 163, 107084.	5.7	5
110	Monotonic and Fatigue Behavior of Magnesium Extrusion Alloy AM30: An International Benchmark Test in the $\hat{a} \in \infty$ Magnesium Front End Research and Development Project $\hat{a} \in \mathbb{R}$, 2010, , .		4
111	Influence of Low Temperature Forging on Microstructure and Low Cycle Fatigue Behavior of Cast AZ31B Mg Alloy. Minerals, Metals and Materials Series, 2018, , 267-273.	0.4	4
112	Cyclic hysteresis of AZ31B extrusion under loadâ€control tests using embedded sensor technology. Fatigue and Fracture of Engineering Materials and Structures, 2017, 40, 221-232.	3.4	3
113	Compression Behaviour of Semi-closed Die Forged AZ80 Extrusion. Minerals, Metals and Materials Series, 2017, , 361-369.	0.4	3
114	Failure Mechanisms of MEMS Thermal Actuators. , 2006, , .		3
115	Cyclic plasticity applied to the notch analysis of metals. , 2022, , 283-323.		3
116	Fatigue Characterization and Modeling of Additively Manufactured Hastelloy-X Superalloy. Journal of Materials Engineering and Performance, 2022, 31, 6234-6245.	2.5	3
117	Multiaxial fatigue behavior of lowâ€temperature closedâ€die forged ZK60 extrusion under proportional and nonâ€proportional loading. Fatigue and Fracture of Engineering Materials and Structures, 2022, 45, 1866-1881.	3.4	3
118	Using Level Set Method in Order to Design Structures Against Buckling. , 2010, , .		2
119	Eulerian Framework for Inelasticity Based on the Jaumann Rate and a Hyperelastic Constitutive Relationâ€"Part II: Finite Strain Elastoplasticity. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	2.2	2
120	On the phase angle role in the shear response of ZK60 Mg alloys under multiaxial fatigue. MATEC Web of Conferences, 2019, 300, 08005.	0.2	2
121	A Novel Test Design for Large Strain Uniaxial Reverse Loading of AZ31B Sheet Out of the Rolling Plane. Journal of Engineering Materials and Technology, Transactions of the ASME, 2021, 143, .	1.4	2
122	Characterization of Semi-Closed Die-Forged ZK60ÂMg Alloy Extrusion. Minerals, Metals and Materials Series, 2017, , 329-334.	0.4	2
123	A Phase Variation-Based Smart Structure for Crack Detection on Metals Using Cold Spray Additive Manufacturing. IEEE Transactions on Instrumentation and Measurement, 2023, 72, 1-10.	4.7	2
124	Modelling Residual Stresses in Shot-Peened Magnesium Alloys: A Hybrid Method. Metals and Materials International, 2022, 28, 2395-2412.	3.4	2
125	Optimum Design of Multi-Layered Vessels. , 2005, , 207.		1
126	Multiaxial Cyclic Response of Low Temperature Closed-Die Forged AZ31B Mg Alloy. Minerals, Metals and Materials Series, 2019, , 289-296.	0.4	1

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127	Microstructure and Texture Evolution During Hot Compression of Cast and Extruded AZ80 Magnesium Alloy. Minerals, Metals and Materials Series, 2019, , 89-94.	0.4	1
128	On the Load Multiaxiality Effect on the Cyclic Behaviour of Magnesium Alloys. Minerals, Metals and Materials Series, 2020, , 151-159.	0.4	1
129	Influence of Cold Spray on the Microstructure and Residual Stress of Resistance Spot Welded Steel-Mg. Minerals, Metals and Materials Series, 2018, , 635-644.	0.4	1
130	Experimental observations in cyclic loading of metals. , 2022, , 3-22.		1
131	A Fast Method for Ratchetting Strain Prediction. , 2006, , 345.		0
132	Fatigue of Electroformed Nickel. Journal of Failure Analysis and Prevention, 2009, 9, 549-557.	0.9	0
133	Fatigue failure analysis of welded structures. , 2016, , 355-386.		0
134	Corrosion Protection of AZ80 and ZK60 Forged Magnesium Alloys with Micro-arc Oxidation and Composite Coating. Minerals, Metals and Materials Series, 2021, , 169-178.	0.4	0
135	Proportional analysis of non-proportional loadings. WIT Transactions on State-of-the-art in Science and Engineering, 2005, , 15-53.	0.0	0
136	Monotonic and Fatigue Behavior of Mg Alloy Friction Stir Spot Welds: An International Benchmark Test in the "Magnesium Front End Research and Development―Project. , 2011, , 629-634.		0
137	Effect of Split Sleeve Cold Expansion on the Residual Stress, Texture and Fatigue Life of Rolled AZ31B Magnesium Alloy. Minerals, Metals and Materials Series, 2019, , 353-358.	0.4	0
138	Erratum to "Nondestructive Phase Variation Based Chipless Sensing Methodology for Metal Crack Monitoring― IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-1.	4.7	0