

# Dan Eliezer

## List of Publications by Citations

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173  
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177  
ext. papers

4,890  
ext. citations

3.5  
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L-index

#	Paper	IF	Citations
173	The role of the magnesium industry in protecting the environment. <i>Journal of Materials Processing Technology</i> , <b>2001</b> , 117, 381-385	5.3	316
172	The relation between severe plastic deformation microstructure and corrosion behavior of AZ31 magnesium alloy. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 468, 222-229	5.7	315
171	The science, technology, and applications of magnesium. <i>Jom</i> , <b>1998</b> , 50, 30-34	2.1	228
170	Magnesium Science, Technology and Applications. <i>Materials Technology</i> , <b>1998</b> , 5, 201-212		218
169	The relation between microstructure and corrosion behavior of AZ80 Mg alloy following different extrusion temperatures. <i>Corrosion Science</i> , <b>2008</b> , 50, 1766-1778	6.8	174
168	Characteristics of hydrogen embrittlement, stress corrosion cracking and tempered martensite embrittlement in high-strength steels. <i>Engineering Failure Analysis</i> , <b>2002</b> , 9, 167-184	3.2	173
167	The relation between microstructure and corrosion behavior of Mg <sub>92</sub> RE <sub>8</sub> alloys. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 431, 269-276	5.7	117
166	Positive effects of hydrogen in metals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 280, 220-224	5.3	109
165	The role of Si and Ca on new wrought Mg <sub>92</sub> Zn <sub>8</sub> Mn based alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 447, 35-43	5.3	102
164	An increase of the spall strength in aluminum, copper, and Metglas at strain rates larger than 107 s <sup>-1</sup> . <i>Journal of Applied Physics</i> , <b>1998</b> , 83, 4004-4011	2.5	98
163	The hydrogen embrittlement of titanium-based alloys. <i>Jom</i> , <b>2005</b> , 57, 46-49	2.1	76
162	Hydrogen-assisted processing of materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 289, 41-53	5.3	76
161	An Overview of Hydrogen Interaction with Amorphous Alloys. <i>Materials Technology</i> , <b>1999</b> , 6, 5-31		74
160	Experimental measurements of the strength of metals approaching the theoretical limit predicted by the equation of state. <i>Applied Physics Letters</i> , <b>2000</b> , 76, 1555-1557	3.4	72
159	Hydrogen-Assisted Degradation of Titanium Based Alloys. <i>Materials Transactions</i> , <b>2004</b> , 45, 1594-1600	1.3	69
158	Phase changes related to hydrogen-induced cracking in austenitic stainless steel. <i>Acta Metallurgica</i> , <b>1987</b> , 35, 2329-2340		66
157	The mechanochemical behavior of type 316L stainless steel. <i>Corrosion Science</i> , <b>1996</b> , 38, 1141-1145	6.8	61

156	Thermal desorption spectroscopy (TDS) Application in quantitative study of hydrogen evolution and trapping in crystalline and non-crystalline materials. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 445-446, 625-631	5.3	54
155	Microstructure and corrosion behavior of Mg <sub>70</sub> Zn <sub>30</sub> Ag alloys. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 435-436, 579-587	5.3	52
154	The role of Mg <sub>2</sub> Si on the corrosion behavior of wrought Mg <sub>70</sub> Zn <sub>30</sub> Mn alloy. <i>Intermetallics</i> , <b>2008</b> , 16, 860-867	3.5	51
153	Production, Characteristics, and Commercialization of Titanium Aluminides.. <i>ISIJ International</i> , <b>1991</b> , 31, 1235-1248	1.7	48
152	Hydrogen cracking in titanium-based alloys. <i>Journal of Alloys and Compounds</i> , <b>2005</b> , 404-406, 621-625	5.7	46
151	The relation between microstructure and corrosion behavior of GTA welded AZ31B magnesium sheet. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2007</b> , 452-453, 210-218	5.3	44
150	Performance of hydrogen trapping and phase transformation in hydrogenated duplex stainless steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 4851-4857	5.3	41
149	Hydrogen absorption and desorption in a duplex-annealed Ti <sub>60</sub> Al <sub>40</sub> V alloy during exposure to different hydrogen-containing environments. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 433, 298-304	5.3	41
148	Hydrogenation of Zr-based metallic glasses and quasicrystals. <i>Journal of Non-Crystalline Solids</i> , <b>1999</b> , 250-252, 893-897	3.9	40
147	Effect of Second Phases on the Corrosion Behavior of Magnesium Alloys. <i>Materials Science Forum</i> , <b>2003</b> , 419-422, 857-866	0.4	39
146	Stress corrosion cracking of new Mg <sub>70</sub> Zn <sub>30</sub> Mn wrought alloys containing Si. <i>Corrosion Science</i> , <b>2008</b> , 50, 1505-1517	6.8	38
145	The role of Ca microalloying on the microstructure and corrosion behavior of Mg <sub>70</sub> Zn <sub>30</sub> Mn(0.5%)Si alloys. <i>Corrosion Science</i> , <b>2009</b> , 51, 776-784	6.8	37
144	Environmental Behavior of Magnesium and Magnesium Alloys. <i>Materials Technology</i> , <b>2001</b> , 16, 110-126	2.1	37
143	Hydrogen trapping mechanism of different duplex stainless steels alloys. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 644, 280-286	5.7	36
142	Microstructure and Mechanical Properties of Mg-Zn-Ag Alloys. <i>Materials Science Forum</i> , <b>2003</b> , 419-422, 159-164	0.4	36
141	Hydrogen trapping in Ti-15 titanium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2006</b> , 421, 200-207	5.3	35
140	The effects of low fugacity hydrogen in duplex- and beta-annealed Ti <sub>60</sub> Al <sub>40</sub> V alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2004</b> , 381, 230-236	5.3	33
139	Hydrogen effects in Ti <sub>3</sub> Al <sub>7</sub> Nb alloy. <i>Scripta Metallurgica</i> , <b>1989</b> , 23, 1313-1318		33

138	Hydrogen behavior in SAF 2205 duplex stainless steel. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 695, 2689-2695	5.7	31
137	Hydrogen evolution from Zr-based amorphous and quasicrystalline alloys. <i>Journal of Alloys and Compounds</i> , <b>2000</b> , 305, 272-281	5.7	31
136	Mechanisms of hydrogen trapping in austenitic, duplex, and super martensitic stainless steels. <i>Journal of Alloys and Compounds</i> , <b>2017</b> , 720, 451-459	5.7	30
135	The Art of Developing New Magnesium Alloys for High Temperature Applications. <i>Materials Science Forum</i> , <b>2003</b> , 419-422, 407-418	0.4	30
134	Effect of compression deformation on the microstructure and corrosion behavior of magnesium alloys. <i>Journal of Alloys and Compounds</i> , <b>2012</b> , 528, 84-90	5.7	29
133	Laser-induced tension to measure the ultimate strength of metals related to the equation of state. <i>Laser and Particle Beams</i> , <b>2002</b> , 20, 87-92	0.9	29
132	Evaluation of hydrogen trapping mechanisms during performance of different hydrogen fugacity in a lean duplex stainless steel. <i>Journal of Alloys and Compounds</i> , <b>2015</b> , 648, 601-608	5.7	28
131	Measurements of laser driven spallation in tin and zinc using an optical recording velocity interferometer system. <i>Journal of Applied Physics</i> , <b>1999</b> , 86, 4242-4248	2.5	28
130	Hydrogen trapping in alloys studied by thermal desorption spectrometry. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 747, 511-522	5.7	27
129	Nanoparticles and nanotubes induced by femtosecond lasers. <i>Laser and Particle Beams</i> , <b>2005</b> , 23,	0.9	26
128	Electron microscopical investigation of as cast AZ91D alloy. <i>Materials Science and Technology</i> , <b>2000</b> , 16, 1001-1006	1.5	26
127	Corrosion behaviour of rapidly solidified Al-Er binary and ternary alloys in NaCl solution at room temperature. <i>Journal of Materials Science Letters</i> , <b>1987</b> , 6, 1227-1228		26
126	Trapping of hydrogen in helium-implanted metals. <i>Journal of Materials Science Letters</i> , <b>1988</b> , 7, 108-110		26
125	Hydrogen trapping in helium damaged metals: a theoretical approach. <i>Journal of Materials Science</i> , <b>1992</b> , 27, 2595-2598	4.3	25
124	The effect of manufacturing processes on the fatigue lifetime of aeronautical bolts. <i>Engineering Failure Analysis</i> , <b>2001</b> , 8, 227-235	3.2	24
123	Some particularities of the corrosion behaviour of Mg <sub>2</sub> NiMnSiCa alloys in alkaline chloride solutions. <i>Corrosion Science</i> , <b>2010</b> , 52, 2280-2290	6.8	23
122	Hydrogen effects on an amorphous Fe-Si-B alloy. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2000</b> , 31, 2517-2526	2.3	23
121	Dynamic fracture and spall in aluminum with helium bubbles. <i>International Journal of Fracture</i> , <b>2010</b> , 163, 217-224	2.3	22

120	High fugacity hydrogen effects at room temperature in titanium based alloys. <i>Journal of Alloys and Compounds</i> , <b>2005</b> , 404-406, 613-616	5-7	22
119	A new model for the diffusion behavior of hydrogen in metallic glasses. <i>Acta Materialia</i> , <b>1999</b> , 47, 2981-2989	5-7	22
118	Influence of hydrogen on microstructure and dynamic strength of lean duplex stainless steel. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 4025-4031	4-3	21
117	Microstructure and creep properties of a cast Mg-1.7%wt rare earth-0.3%wt Mn alloy. <i>Journal of Materials Science</i> , <b>2002</b> , 37, 5371-5379	4-3	21
116	Role of Sn in microstructure and corrosion behavior of new wrought Mg-5Al alloy. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 777, 835-849	5-7	20
115	Time-of-Flight Secondary Ion Mass Spectrometry (ToF-SIMS) imaging of deuterium assisted cracking in a 2205 duplex stainless steel micro-structure. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 676, 271-277	5-3	19
114	Hydrogen trapping in 3D-printed (additive manufactured) Ti-6Al-4V. <i>Materials Characterization</i> , <b>2018</b> , 144, 297-304	3-9	18
113	Hydrogenation of Pd-coated ZrCuNiAl metallic glasses and quasicrystals. <i>Journal of Alloys and Compounds</i> , <b>2003</b> , 356-357, 654-657	5-7	18
112	The applicability of Norton's creep power law and its modified version to a single-crystal superalloy type CMSX-2. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1996</b> , 216, 125-130	5-3	18
111	Phase transitions at the crack tip in type 316L stainless steel cathodically hydrogen charged. <i>Scripta Metallurgica</i> , <b>1982</b> , 16, 981-984		18
110	Helium bubbles formation in aluminum: Bulk diffusion and near-surface diffusion using TEM observations. <i>Journal of Nuclear Materials</i> , <b>2009</b> , 392, 413-419	3-3	17
109	The Influence of Hydrogen on Thermal Desorption Processes in Structural Materials. <i>Procedia Engineering</i> , <b>2011</b> , 10, 3668-3676		17
108	Internal stresses in austenitic steels cathodically charged with hydrogen. <i>Journal of Materials Science Letters</i> , <b>1983</b> , 2, 63-66		17
107	Investigation of hydrogen-deformation interactions in Ti-15 titanium alloy using thermal desorption spectroscopy. <i>Journal of Alloys and Compounds</i> , <b>2007</b> , 440, 204-209	5-7	16
106	Hydrogen effects in titanium-aluminide alloy stabilized by Nb, V, and Mo. <i>Scripta Metallurgica Et Materialia</i> , <b>1990</b> , 24, 129-134		16
105	Hydrogen trapping energy levels and hydrogen diffusion at high and low strain rates ( $\sim 10^5 \text{ s}^{-1}$ and $10^7 \text{ s}^{-1}$ ) in lean duplex stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2016</b> , 674, 419-427	5-3	15
104	Novel approach to image hydrogen distribution and related phase transformation in duplex stainless steels at the sub-micron scale. <i>International Journal of Hydrogen Energy</i> , <b>2017</b> , 42, 25114-25120	6-7	15
103	Influence of hydrogen on formation and stability of Zr-based quasicrystals. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2000</b> , 294-296, 112-115	5-3	15

102	Nature of the $\delta$ and $\epsilon$ phases in austenitic stainless steels cathodically charged with hydrogen. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1988</b> , 19, 723-730		15
101	Gas trapping and release in polycrystalline nickel preimplanted with helium. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1994</b> , 25, 949-959	2.3	14
100	Effects of residual stresses on hydrogen trapping in duplex stainless steels. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2017</b> , 684, 64-70	5.3	13
99	The influence of Ca on the corrosion behavior of new die cast Mg-Al-based alloys for elevated temperature applications. <i>Journal of Materials Science</i> , <b>2010</b> , 45, 3007-3015	4.3	13
98	Influence of Si, Ca and Ag addition on corrosion behaviour of new wrought Mg-Zn alloys. <i>Materials Science and Technology</i> , <b>2006</b> , 22, 1213-1218	1.5	13
97	Hydrogen effects on the spall strength and fracture characteristics of amorphous Fe-Si-B alloy at very high strain rates. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2000</b> , 31, 1085-1093	2.3	13
96	Microstructure and thermal stability of a rapidly solidified Al-4Er alloy. <i>Journal of Materials Science</i> , <b>1990</b> , 25, 3541-3545	4.3	13
95	Tensile flow and fracture behaviour of austenitic stainless steels after thermal aging in a hydrogen atmosphere. <i>Materials Science and Engineering</i> , <b>1984</b> , 67, 91-107		13
94	TEM study on the formation of microcracks in connection with $\delta$ -martensite. <i>Journal of Materials Science Letters</i> , <b>1982</b> , 1, 192-194		13
93	Absorption/desorption behavior of hydrogen and deuterium in a Pd-coated Zr-based amorphous alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2003</b> , 358, 219-225	5.3	12
92	Advanced Production Process and Properties of Die Cast Magnesium Composites Based on AZ91D and SiC. <i>Journal of Materials Engineering and Performance</i> , <b>2009</b> , 18, 886-892	1.6	11
91	The effect of heat treatment and HCF performance on hydrogen trapping mechanism in Timetal LCB alloy. <i>Journal of Alloys and Compounds</i> , <b>2009</b> , 468, 77-86	5.7	11
90	Nanoindentation measurements and mechanical testing of as-soldered and aged Sn-0.7Cu lead-free miniature joints. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2010</b> , 527, 4014-4020	5.3	11
89	Microstructural observations and thermal stability of a rapidly solidified aluminum-gadolinium alloy. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1987</b> , 18, 1533-1536		11
88	Quantitative X-ray phase analysis of surface layers. <i>Journal of Applied Crystallography</i> , <b>1984</b> , 17, 18-21	3.8	11
87	The mechanical properties of anodically formed aluminium oxide films. <i>Materials Research Bulletin</i> , <b>1971</b> , 6, 153-162	5.1	11
86	In situ analysis of hydrogen behaviour in stainless steels by high energy synchrotron radiation. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2011</b> , 528, 1608-1614	5.3	10
85	Corrosion of New Wrought Magnesium Alloys. <i>Materials Science Forum</i> , <b>2005</b> , 488-489, 839-844	0.4	10

84	Phase formation in alpha 2 titanium aluminide during hydrogen cathodic charging. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 845-850		10
83	Microstructural transitions in an RS Al-4La alloy. <i>Journal of Materials Science</i> , <b>1989</b> , 24, 1474-1478	4.3	10
82	Precipitation behaviour of a sensitized AISI type 316 austenitic stainless steel in hydrogen. <i>Journal of Materials Science</i> , <b>1986</b> , 21, 3065-3070	4.3	10
81	Dynamic deformation of hydrogen charged austenitic-ferritic steels: Hydrogen trapping mechanisms, and simulations. <i>Journal of Alloys and Compounds</i> , <b>2018</b> , 731, 1238-1246	5.7	9
80	Oxidation of Glassy and Nanocrystalline Zr70Pd30 Alloys. <i>Materials Science Forum</i> , <b>2002</b> , 386-388, 627-632	4	9
79	The effects of hydrogen on titanium aluminides. <i>Jom</i> , <b>1991</b> , 43, 59-62	2.1	9
78	Quantitative X-ray phase analysis of sensitized type 316 stainless steel after cathodic hydrogen charging. <i>Materials Science and Engineering</i> , <b>1984</b> , 67, L1-L4		9
77	Influences of hydrogen and textural anisotropy on the microstructure and mechanical properties of duplex stainless steel at high strain rate ( $\sim 105 \text{ s}^{-1}$ ). <i>Journal of Materials Science</i> , <b>2016</b> , 51, 10442-10451	4.3	8
76	Aging condition and trapped hydrogen effects on the mechanical behavior of a precipitation hardened martensitic stainless steel. <i>Journal of Alloys and Compounds</i> , <b>2019</b> , 805, 509-516	5.7	8
75	Experimental investigation of helium migration in an fcc aluminum matrix. <i>Journal of Nuclear Materials</i> , <b>2009</b> , 393, 230-234	3.3	8
74	Hardening and phase stability in rapidly solidified AlBeTi alloys. <i>Journal of Materials Science</i> , <b>1998</b> , 33, 833-837	4.3	8
73	Hydrogen induced microstructural changes in Al-Ti alloys. <i>Scripta Materialia</i> , <b>1999</b> , 40, 1071-1077	5.6	8
72	Non-Arrhenius behavior of the diffusion coefficient of hydrogen in amorphous metals. <i>Materials Letters</i> , <b>1999</b> , 39, 255-259	3.3	8
71	Hydrogen-induced cracking in an Al-Al <sub>3</sub> Ti-Al <sub>4</sub> C <sub>3</sub> alloy. <i>Scripta Metallurgica Et Materialia</i> , <b>1995</b> , 33, 1315-1320		8
70	Channelling effect on helium implantation behavior in copper single crystal. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 26, 277-282		8
69	The influence of hydrogen on the plastic flow and fracture behavior of 316L stainless steel. <i>Scripta Metallurgica</i> , <b>1981</b> , 15, 861-866		8
68	The mechanical properties of anodic tantalum oxide films. <i>Thin Solid Films</i> , <b>1972</b> , 12, 319-323	2.2	8
67	Hydrogen Effect on Duplex Stainless Steels at Very High Strain Rates. <i>Energy Procedia</i> , <b>2017</b> , 107, 199-204	3	7

66	Corrosion behavior of wrought Mg8%Zn1%Mn0.5Si0.5Ca alloy. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , <b>2013</b> , 64, 516-521	1.6	7
65	Corrosion and oxidation of alloys of the Mg-Y-Zr-REM system. <i>Metal Science and Heat Treatment</i> , <b>2006</b> , 48, 518-523	0.6	7
64	Comparative study of deuterium desorption from Pd-coated Zr-based amorphous and quasicrystalline alloys. <i>Scripta Materialia</i> , <b>2005</b> , 52, 777-783	5.6	7
63	Embrittlement of secondary Hydrogen-containing phases in Titanium-based alloys. <i>Glass Physics and Chemistry</i> , <b>2005</b> , 31, 96-101	0.7	7
62	Hydrogen trapping in nickel pre-implanted with helium. <i>Journal of Nuclear Materials</i> , <b>1994</b> , 212-215, 1406-1410	5.3	7
61	A TEM study of a rapidly solidified Al-4La alloy. <i>Journal of Materials Science Letters</i> , <b>1989</b> , 8, 725-726		7
60	A 3-dimensional calculation of hydrogen trapping in helium contained metals. <i>Scripta Metallurgica Et Materialia</i> , <b>1990</b> , 24, 1387-1392		7
59	Hydrogen embrittlement of electron beam melted Ti6Al4V. <i>Journal of Materials Research and Technology</i> , <b>2020</b> , 9, 16126-16134	5.5	7
58	Recent Studies of Hydrogen Embrittlement in Structural Materials. <i>Procedia Structural Integrity</i> , <b>2018</b> , 13, 2233-2238	1	7
57	Mutual effects of hydrogenation and deformation in Ti-Nb alloys. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2003</b> , 34, 2199-2206	2.3	6
56	Structural changes in a copper alloy due to helium implantation. <i>Scripta Materialia</i> , <b>1996</b> , 35, 1385-1389	5.6	6
55	Effects of heat treatment on the corrosion behaviour of rapidly solidified Al-Er alloys in NaCl solution. <i>Journal of Materials Science Letters</i> , <b>1988</b> , 7, 76-78		6
54	Hydrogen Behavior in GTA Welded Ti-6Al-4V and Beta-21S Aerospace Applicative Titanium Alloys. <i>Materials Science Forum</i> , <b>2007</b> , 546-549, 1413-1420	0.4	5
53	Addition of B4C to AZ91 via Diecasting and Its Effect on Wear Behaviour. <i>Materials Science Forum</i> , <b>2005</b> , 488-489, 741-744	0.4	5
52	Phase relation in titanium-aluminide alloy in X-ray study. <i>Journal of Materials Science</i> , <b>1994</b> , 29, 373-375	4.3	5
51	Sputtering and roughness of the (0 01), (01 1) and (111) copper single-crystal planes. <i>Journal of Materials Science Letters</i> , <b>1994</b> , 13, 1591-1593		5
50	The formation of hydrogen induced blisters and their growth in nickel pre-implanted with helium. <i>Journal of Nuclear Materials</i> , <b>1994</b> , 217, 287-293	3.3	5
49	Strengthening effects arising from hydrogen-induced $\epsilon$ martensite phase in stainless steel. <i>Materials Science and Engineering</i> , <b>1986</b> , 83, 269-279		5



48	Hydrogen Interaction with Residual Stresses in Steel Studied by Synchrotron X-Ray Diffraction. <i>Materials Science Forum</i> , <b>2013</b> , 772, 91-95	0.4	4
47	Hydrogen effects in gamma titanium aluminides. <i>Journal of Materials Science</i> , <b>1997</b> , 32, 2229-2232	4.3	4
46	Positive effects of hydrogen on the plasticity of 2 1/4 Cr-Mo steel. <i>Journal of Alloys and Compounds</i> , <b>2003</b> , 356-357, 809-812	5.7	4
45	Surface behaviour of first-wall materials due to the synergistic effect of helium and hydrogen isotopes. <i>Journal of Nuclear Materials</i> , <b>1994</b> , 212-215, 1390-1395	3.3	4
44	Oxidation behaviour of rapidly solidified aluminium-rare-earth alloys. <i>Journal of Materials Science Letters</i> , <b>1989</b> , 8, 178-182		4
43	The influence of alkali-halide additions on the stress corrosion cracking of an austenitic stainless steel in MgCl <sub>2</sub> solution. <i>Corrosion Science</i> , <b>1981</b> , 21, 417-423	6.8	4
42	Mössbauer study of $\beta$ phase in Fe-Ti binary system. <i>Applied Physics Letters</i> , <b>1975</b> , 26, 340-341	3.4	4
41	Hydrogen trapping in additive manufactured Ti-6Al-4V alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>2021</b> , 811, 141050	5.3	4
40	Metallurgical and Hydrogen Effects on the Small Punch Tested Mechanical Properties of PH-13-8Mo Stainless Steel. <i>Materials</i> , <b>2018</b> , 11,	3.5	4
39	In situ synchrotron X-ray radiation analysis of hydrogen behavior in stainless steel subjected to continuous heating. <i>Journal of Materials Science</i> , <b>2012</b> , 47, 5879-5885	4.3	3
38	Corrosion and corrosion-fatigue of AZ31 Magnesium weldments. <i>Welding in the World, Le Soudage Dans Le Monde</i> , <b>2011</b> , 55, 40-47	1.9	3
37	On the blister formation in copper alloys due to the helium ion implantation. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>1997</b> , 28, 755-762	2.3	3
36	Effect of Grain Size on Necklace Formation of Magnesium Alloys. <i>Materials Science Forum</i> , <b>2007</b> , 546-549, 233-236	0.4	3
35	Microstructure and corrosion resistance of alloys of the Mg-Zn-Ag system. <i>Metal Science and Heat Treatment</i> , <b>2006</b> , 48, 524-530	0.6	3
34	The effect of elevated-temperature reverse cyclic loading on fracture toughness of aluminium alloy type 2618. <i>Journal of Materials Science</i> , <b>1991</b> , 26, 2045-2049	4.3	3
33	A study of the influence of near-surface He concentration on the blistering formation in Cu-Be. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 27, 1039-1044		3
32	Behavior of sensitized AISI types 321 and 347 austenitic stainless steels in hydrogen. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1989</b> , 20, 2187-2190		3
31	Hydrogen Attack of 1020 Steel: Influence of Hydrogen Sulfide. <i>Corrosion</i> , <b>1979</b> , 35, 17-21	1.8	3

30	Effects of Shielding with Various Hydrogen-Argon Mixtures on Supermartensitic Stainless Steel TIG Welds. <i>Materialpruefung/Materials Testing</i> , <b>2010</b> , 52, 306-315	1.9	3
29	Pressure Resistance of Glass Capillaries for Hydrogen Storage. <i>Materialpruefung/Materials Testing</i> , <b>2011</b> , 53, 14-18	1.9	3
28	Galvanic Weld Metal-Base Metal Corrosion in AZ31 Magnesium Weldments. <i>Advanced Materials Research</i> , <b>2010</b> , 95, 39-42	0.5	2
27	A Sulfur Diffusion Investigation in Metal and Oxide Phases. <i>Defect and Diffusion Forum</i> , <b>2006</b> , 258-260, 433-440	0.7	2
26	The controlling effect of 0.05% hydrogen sulfide gaseous atmosphere on the accelerated fatigue failure of coated MM-002 nickel-base superalloy at 650 °C. <i>Journal of Materials Science</i> , <b>1996</b> , 31, 2735-2740	4.3	2
25	X-ray analysis of nickel pre-implanted with helium by using CuK $\alpha$ radiation. <i>Scripta Metallurgica Et Materialia</i> , <b>1992</b> , 26, 981-985		2
24	Hydrogen effects in (Al?Ti)?SiC particle metal matrix composites. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , <b>1992</b> , 159, 237-242	5.3	2
23	Phase transitions at the crack tip in titanium-modified type 316 stainless steel cathodically hydrogen charged. <i>Journal of Materials Science</i> , <b>1989</b> , 24, 1931-1935	4.3	2
22	Phase transitions in rapidly solidified stainless steels cathodically hydrogen charged. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , <b>1990</b> , 21, 1251-1259		2
21	Effect of cathodic charging on Al-32Si-2Cu alloy in acidic solution. <i>Materials Research</i> , <b>2010</b> , 13, 361-367	1.5	1
20	Studies on the Influence of Chloride Ion Concentration on the Corrosion Behavior of ZSMX Magnesium Alloy. <i>Advanced Materials Research</i> , <b>2010</b> , 95, 47-50	0.5	1
19	Electrochemical hydrogenation and corrosion studies of Ti-48Al-2Cr-2Nb alloy in acidic solution. <i>Anti-Corrosion Methods and Materials</i> , <b>2010</b> , 57, 280-289	0.8	1
18	Hydrogen Absorption/Desorption Behavior in Gaseous-Phase Charged Duplex-Annealed Ti-6Al-4V Alloy. <i>Materials Science Forum</i> , <b>2007</b> , 546-549, 1367-1372	0.4	1
17	He bubble sites in implanted copper alloy. <i>Scripta Materialia</i> , <b>1996</b> , 34, 1851-1856	5.6	1
16	DETERMINATION OF STRUCTURE AND COMPOSITION IN CERAMICS AND AEROSPACE MATERIALS BY NEUTRON RADIOGRAPHY. <i>Nondestructive Testing and Evaluation</i> , <b>1994</b> , 11, 149-153	2	1
15	Mössbauer study of rapidly solidified Al-rare-earth alloys. <i>Journal of Materials Science Letters</i> , <b>1986</b> , 5, 781-782		1
14	Hydrogen induced phase transitions of sensitized titanium-modified type-316 stainless steel. <i>Scripta Metallurgica</i> , <b>1988</b> , 22, 1415-1419		1
13	Phase transitions at the crack tip in type 310 stainless steel cathodically hydrogen charged. <i>Scripta Metallurgica</i> , <b>1988</b> , 22, 1493-1498		1

12	The effect of constant-load creep on fracture toughness and tensile behavior of precipitation-free zone aluminum alloy type 2618. <i>Scripta Metallurgica</i> , <b>1988</b> , 22, 1503-1508		1
11	Hydrogen induced delay failure of AISI 316L and 321 types stainless steels. <i>Journal of Materials Science Letters</i> , <b>1983</b> , 2, 602-604		1
10	NMR study of hydrogen in cathodically charged Inconel 718. <i>Journal of Nuclear Materials</i> , <b>1983</b> , 119, 73-77		1
9	The stress corrosion cracking of welded austenitic stainless steels in MgCl <sub>2</sub> solutions in the presence of NaI additions. <i>Corrosion Science</i> , <b>1983</b> , 23, 1285-1291	6.8	1
8	Corrosion behavior of AM-Ti-6Al-4V: a comparison between EBM and SLM. <i>Progress in Additive Manufacturing</i> , 1	5	1
7	Microstructure of Ti-45Al-5Nb after Cathodic Charging. <i>Advanced Materials Research</i> , <b>2010</b> , 95, 87-90	0.5	
6	The Relation between Microstructure and Corrosion Behavior of New Mg-Al-X Alloys for Transportation Application. <i>Advanced Materials Research</i> , <b>2010</b> , 95, 43-46	0.5	
5	High Fugacity Hydrogen Effects in Beta-21S Titanium Alloy. <i>Materials Science Forum</i> , <b>2007</b> , 546-549, 1355-1360		
4	Influence of hydrogenation on the microstructure and crystallization of Zr-Cu-Ni-Al-Y metallic glass. <i>Philosophical Magazine</i> , <b>2003</b> , 83, 2545-2556	1.6	
3	Oxidation of Glassy and Nanocrystalline Zr <sub>70</sub> Pd <sub>30</sub> Alloys. <i>Journal of Metastable and Nanocrystalline Materials</i> , <b>2002</b> , 13, 627-632	0.2	
2	Dynamic fracture and spall in aluminum with helium bubbles. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2010</b> , 471-478	0.3	
1	Corrosion Mechanisms of New Wrought Mg-Al Based Alloys Alloying with Mn, Zn and Sn. <i>Materials Science Forum</i> , <b>2018</b> , 941, 1880-1885	0.4	