

# Ren-guo Song

## List of Publications by Year in descending order

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Version: 2024-02-01

51  
papers

1,533  
citations

279798

23  
h-index

315739

38  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1195  
citing authors

#	ARTICLE	IF	CITATIONS
1	Stress corrosion cracking and hydrogen embrittlement of an Al–Zn–Mg–Cu alloy. <i>Acta Materialia</i> , 2004, 52, 4727-4743.	7.9	220
2	A study on stress corrosion cracking and hydrogen embrittlement of AZ31 magnesium alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2005, 399, 308-317.	5.6	126
3	Surface modification of TiO <sub>2</sub> nanoparticles and its effect on the properties of fluoropolymer/TiO <sub>2</sub> nanocomposite coatings. <i>Applied Surface Science</i> , 2013, 276, 761-768.	6.1	93
4	Grain boundary segregation and hydrogen-induced fracture in 7050 aluminium alloy. <i>Acta Materialia</i> , 1996, 44, 3241-3248.	7.9	86
5	A study on microstructure and corrosion resistance of ZrO <sub>2</sub> -containing PEO coatings formed on AZ31 Mg alloy in phosphate-based electrolyte. <i>Applied Surface Science</i> , 2015, 357, 1463-1471.	6.1	74
6	Effects of TiC on the microstructure and properties of TiC/TiAl composite coating prepared by laser cladding. <i>Optics and Laser Technology</i> , 2019, 112, 339-348.	4.6	63
7	The improvement of localized corrosion resistance in sensitized stainless steel by laser surface remelting. <i>Surface and Coatings Technology</i> , 1998, 102, 245-255.	4.8	60
8	Effects of current density on microstructure and properties of plasma electrolytic oxidation ceramic coatings formed on 6063 aluminum alloy. <i>Transactions of Nonferrous Metals Society of China</i> , 2016, 26, 806-813.	4.2	56
9	LSP/MAO composite bio-coating on AZ80 magnesium alloy for biomedical application. <i>Materials Science and Engineering C</i> , 2017, 75, 1299-1304.	7.3	52
10	The n-MAO/EPD bio-ceramic composite coating fabricated on ZK60 magnesium alloy using combined micro-arc oxidation with electrophoretic deposition. <i>Applied Surface Science</i> , 2014, 322, 230-235.	6.1	50
11	Microstructure and corrosion behaviour of laser-cladding Al-Ni-TiC-CeO <sub>2</sub> composite coatings on S355 offshore steel. <i>Journal of Alloys and Compounds</i> , 2019, 770, 771-783.	5.5	45
12	Degradation behavior of n-MAO/EPD bio-ceramic composite coatings on magnesium alloy in simulated body fluid. <i>Journal of Alloys and Compounds</i> , 2015, 625, 258-265.	5.5	44
13	Microstructure and corrosion behaviours of composite coatings on S355 offshore steel prepared by laser cladding combined with micro-arc oxidation. <i>Applied Surface Science</i> , 2019, 497, 143703.	6.1	44
14	Simultaneously enhancing the tensile properties and intergranular corrosion resistance of Al–Mg–Si–Cu alloys by a thermo-mechanical treatment. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2014, 617, 165-174.	5.6	43
15	The improvement of corrosion resistance of fluoropolymer coatings by SiO <sub>2</sub> /poly(styrene-co-butyl) Tj ETQq1 1 0.784314 rgBT /Overlook	6.1	39
16	Hydrogen permeation resistance of plasma-sprayed Al <sub>2</sub> O <sub>3</sub> and Al <sub>2</sub> O <sub>3</sub> –13wt.% TiO <sub>2</sub> ceramic coatings on austenitic stainless steel. <i>Surface and Coatings Technology</i> , 2003, 168, 191-194.	4.8	37
17	Microstructure and corrosion resistance of Ti <sub>3</sub> O <sub>5</sub> -HA bio-ceramic coating fabricated on AZ80 magnesium alloy. <i>Surface and Coatings Technology</i> , 2017, 325, 239-247.	4.8	33
18	Microstructures and Properties of Laser Cladding Al-TiC-CeO <sub>2</sub> Composite Coatings. <i>Materials</i> , 2018, 11, 198.	2.9	33

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19	Microstructure and properties of Al <sub>2</sub> O <sub>3</sub> /TiO <sub>2</sub> nanostructured ceramic composite coatings prepared by plasma spraying. <i>Journal of Alloys and Compounds</i> , 2012, 544, 13-18.	5.5	31
20	A study on photocatalytic activity of micro-arc oxidation TiO <sub>2</sub> films and Ag <sup>+</sup> /MAO-TiO <sub>2</sub> composite films. <i>Applied Surface Science</i> , 2015, 347, 454-460.	6.1	28
21	Microstructure and mechanical properties of ceramic coatings formed on 6063 aluminium alloy by micro-arc oxidation. <i>Transactions of Nonferrous Metals Society of China</i> , 2015, 25, 3323-3328.	4.2	26
22	Microstructures and properties of Ni/TiC/La <sub>2</sub> O <sub>3</sub> reinforced Al based composite coatings by laser cladding. <i>Optics and Laser Technology</i> , 2019, 117, 18-27.	4.6	26
23	Effects of ageing treatment on corrosion behavior of 7075 aluminum alloy coated by micro arc oxidation (MAO). <i>Corrosion Science</i> , 2022, 199, 110164.	6.6	25
24	Microstructure and photocatalytic property of TiO <sub>2</sub> and Fe <sup>3+</sup> :TiO <sub>2</sub> films produced by micro-arc oxidation. <i>Surface and Coatings Technology</i> , 2017, 315, 196-204.	4.8	19
25	Effects of laser surface remelting on hydrogen permeation resistance of thermally-sprayed pure aluminum coatings. <i>Surface and Coatings Technology</i> , 2000, 130, 20-23.	4.8	17
26	Bioceramic Coating Produced on AZ80 Magnesium Alloy by One-Step Microarc Oxidation Process. <i>Journal of Materials Engineering and Performance</i> , 2019, 28, 1719-1727.	2.5	17
27	Effect of solution pH on stress corrosion cracking behavior of modified AZ80 magnesium alloy in simulated body fluid. <i>Materials Chemistry and Physics</i> , 2021, 261, 124232.	4.0	16
28	Microstructure and Corrosion Resistance of PEO Coatings Formed on KBM10 Mg Alloy Pretreated with Nd(NO <sub>3</sub> ) <sub>3</sub> . <i>Materials</i> , 2018, 11, 1062.	2.9	14
29	A Study on the Susceptibility to SCC of 7050 Aluminum Alloy by DCB Specimens. <i>Materials</i> , 2016, 9, 884.	2.9	12
30	Effect of Various Additives on Performance of Plasma Electrolytic Oxidation Coatings Formed on AZ31 Magnesium Alloy in the Phosphate Electrolytes. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 703-709.	1.0	12
31	Electron beam surface remelting of AISI D2 cold-worked die steel. <i>Surface and Coatings Technology</i> , 2002, 157, 1-4.	4.8	11
32	Behavior of stress corrosion cracking in a magnesium alloy. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2009, 24, 111-113.	1.0	9
33	Effects of oxidation time on corrosion resistance of plasma electrolytic oxidation coatings on magnesium alloy. <i>International Journal of Materials Research</i> , 2017, 108, 758-766.	0.3	7
34	Effects of Aging Treatment on Intergranular Corrosion and Stress Corrosion Cracking Behavior of AA7003. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2018, 33, 1198-1204.	1.0	7
35	Localized Corrosion and Stress Corrosion Cracking Behavior of AA7003 in a 3.5 wt% NaCl Aqueous Solution. <i>Journal Wuhan University of Technology, Materials Science Edition</i> , 2020, 35, 986-995.	1.0	7
36	Effects of applied potential on the stress corrosion cracking behavior of 7003 aluminum alloy in acid and alkaline chloride solutions. <i>International Journal of Minerals, Metallurgy and Materials</i> , 2016, 23, 819-826.	4.9	6

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37	Correspondence between susceptibility to SCC of 7050 aluminum alloy and passive film-induced stress at various pH values. Journal Wuhan University of Technology, Materials Science Edition, 2017, 32, 173-178.	1.0	6
38	Role of grain boundary segregation in corrosion fatigue process of high strength aluminium alloy. Materials Chemistry and Physics, 1996, 45, 84-87.	4.0	5
39	Electron beam surface treatment. Part II: microstructure evolution of stainless steel and aluminum alloy during electron beam rapid solidification. Vacuum, 2003, 69, 517-520.	3.5	5
40	Corrosion protection of AM50 magnesium alloy by Nafion/DMSO organic coatings. Journal Wuhan University of Technology, Materials Science Edition, 2008, 23, 204-206.	1.0	4
41	MoS <sub>2</sub> additive to the MAO Al <sub>2</sub> O <sub>3</sub> composite coatings with enhanced mechanical performances. Materials Research Express, 2019, 6, 016543.	1.6	4
42	Effect of micro-arc oxidation coating on stress corrosion behavior of AA7050. Anti-Corrosion Methods and Materials, 2020, 67, 178-186.	1.5	4
43	Study on double peaks aging strengthening and stress corrosion cracking behaviour of 7075 aluminium alloy. Corrosion Engineering Science and Technology, 2021, 56, 668-677.	1.4	4
44	Study on the inhibition of hydrogen embrittlement of 7050 aluminum alloy in humid air by MAO coating. Anti-Corrosion Methods and Materials, 2020, 67, 387-394.	1.5	3
45	Microstructure and properties of rare earth CeO <sub>2</sub> -doped graphene composite coatings prepared by MAO on AA7050. International Journal of Materials Research, 2020, 111, 923-930.	0.3	3
46	Influence of Interfacial Stress Produced by MAO on Electrochemical Corrosion and Stress Corrosion Cracking Behavior in 7075 Aluminum Alloy. Journal of the Electrochemical Society, 2022, 169, 020559.	2.9	3
47	Effects of cathodic polarization on SCC behavior of AA7003 under various aging treatments. Journal of Central South University, 2018, 25, 2299-2308.	3.0	2
48	Effect of Current Density on Microstructure and Corrosion Behavior of Plasma Electrolytic Oxidation Coated 6063 Aluminum Alloy. Journal Wuhan University of Technology, Materials Science Edition, 2018, 33, 1503-1510.	1.0	1
49	Investigation of WS <sub>2</sub> -Embedded Al <sub>2</sub> O <sub>3</sub> Coatings Prepared by Microarc Oxidation. Journal of Materials Engineering and Performance, 2020, 29, 1060-1067.	2.5	1
50	Burnt Microstructure and Properties of 7003 Aluminum Alloy. Advanced Materials Research, 0, 217-218, 1454-1457.	0.3	0
51	EFFECT OF BORATES AND SILICATES ON WEARING PROPERTIES OF MAO COATINGS. Surface Review and Letters, 2017, 24, 1750061.	1.1	0