Seong-Jong Kim

List of Publications by Year
in descending order

73	776	471371 17	642610 23
papers	citations	h-index	g-index

73	73	73	514
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An electrochemical study of cathodic protection of steel used for marine structures. Korean Journal of Chemical Engineering, 2003, 20, 560-565.	1.2	39
2	Effects of thickness of Al thermal spray coating for STS 304. Transactions of Nonferrous Metals Society of China, 2009, 19, 925-929.	1.7	36
3	Optimum condition by mechanical characteristic evaluation in friction stir welding for 5083-O Al alloy. Transactions of Nonferrous Metals Society of China, 2009, 19, s17-s22.	1.7	34
4	Electrochemical study of hydrogen embrittlement and optimum cathodic protection potential of welded high strength Steel. Metals and Materials International, 2005, 11, 63-69.	1.8	32
5	Determination of corrosion protection current density requirement of zinc sacrificial anode for corrosion protection of AA5083-H321 in seawater. Applied Surface Science, 2020, 509, 145346.	3.1	28
6	The electrochemical study on mechanical and hydrogen embrittlement properties of HAZ part as a function of post-weld heat treatment in SMAW. Surface and Coatings Technology, 2003, 169-170, 163-167.	2.2	25
7	Cavitation erosion behavior in seawater of electroless Ni-P coating and process optimization using Taguchi method. Applied Surface Science, 2019, 477, 37-43.	3.1	25
8	Evaluation of the characteristics using slow strain rate tests of 5456 Al-Mg alloy for ship construction. Korean Journal of Chemical Engineering, 2006, 23, 1028-1033.	1.2	24
9	The corrosion and mechanical properties of Al alloy 5083-H116 in metal inert gas welding based on slow strain rate test. Surface and Coatings Technology, 2010, 205, S73-S78.	2.2	24
10	Mechanical and electrochemical characteristics in sea water of 5052-O aluminum alloy for ship. Transactions of Nonferrous Metals Society of China, 2013, 23, 636-641.	1.7	23
11	Electrochemical characteristics under cavitation-erosion for STS 316L in seawater. Materials Research Bulletin, 2014, 58, 244-247.	2.7	21
12	Corrosion behavior in seawater of arc thermal sprayed Inconel 625 coatings with sealing treatment. Surface and Coatings Technology, 2017, 325, 729-737.	2.2	21
13	Effect of pH of the sulfuric acid bath on cavitation erosion behavior in natural seawater of electroless nickel plating coating. Applied Surface Science, 2019, 483, 194-204.	3.1	20
14	The effect of post-weld heat treatment affecting corrosion resistance and hydrogen embrittlement of HAZ part in FCAW. Surface and Coatings Technology, 2003, 169-170, 675-678.	2.2	19
15	Optimization of Corrosion Protection Potential for Stress Corrosion Cracking and Hydrogen Embrittlement of 5083-H112 Alloy in Seawater. Metals and Materials International, 2008, 14, 203-211.	1.8	19
16	The relationship between corrosion protection and hydrogen embrittlement properties of HAZ in flux cored are welding. Metals and Materials International, 2002, 8, 387-393.	1.8	18
17	Electrochemical characteristics of Al-Mg alloy in seawater for leisure ship: Stress corrosion cracking and hydrogen embrittlement. Korean Journal of Chemical Engineering, 2009, 26, 250-257.	1.2	18
18	Electrochemical characteristics of stainless steel using impressed current cathodic protection in seawater. Transactions of Nonferrous Metals Society of China, 2009, 19, 930-934.	1.7	18

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19	Microstructure and cavitation damage characteristics of surface treated gray cast iron by plasma ion nitriding. Applied Surface Science, 2019, 477, 147-153.	3.1	18
20	Hydrogen embrittlement properties of heat affected zone of high strength steel in shielded metal arc welding. Metals and Materials International, 2002, 8, 395-401.	1.8	16
21	Effects of water cavitation peening on electrochemical characteristic by using micro-droplet cell of Alâ€“Mg alloy. Current Applied Physics, 2012, 12, S24-S30.	1.1	16
22	Essential anti-corrosive behavior of anodized Al alloy by applied current density. Applied Surface Science, 2019, 481, 637-641.	3.1	16
23	Electrochemical properties of Al and Al alloys relevant to corrosion protection in seawater environments. Korean Journal of Chemical Engineering, 2006, 23, 847-853.	1.2	15
24	Electrochemical Characteristics in Seawater for Cold Thermal Spray-Coated Alâ€“Mg Alloy Layer. Acta Metallurgica Sinica (English Letters), 2016, 29, 727-734.	1.5	15
25	Formation of Anodic Films on Mg-Al Alloys in NaOH solutions at Constant Potentials. Materials Transactions, 2003, 44, 1036-1041.	0.4	13
26	Effects of solution heat treatment on corrosion resistance of 5083F Al alloy. Transactions of Nonferrous Metals Society of China, 2009, 19, 887-891.	1.7	13
27	Sealing effects of anodic oxide films formed on Mg-Al alloys. Korean Journal of Chemical Engineering, 2004, 21, 915-920.	1.2	12
28	Surface characteristics of chemical conversion coating for Mg-Al alloy. Transactions of Nonferrous Metals Society of China, 2009, 19, 892-897.	1.7	12
29	Electrochemical characteristics of Alâ€“Mg and Alâ€“Mgâ€“Si alloy in sea water. Transactions of Nonferrous Metals Society of China, 2012, 22, s881-s886.	1.7	12
30	Characterization of the Silica Conversion Film Formed on Zinc-Electroplated Steel. Materials Transactions, 2003, 44, 782-786.	0.4	11
31	Cavitation and electrochemical characteristics of thermal spray coating with sealing material. Transactions of Nonferrous Metals Society of China, 2013, 23, 1002-1010.	1.7	10
32	Electrochemical properties and corrosion protection of stainless steel for hot water tank. Korean Journal of Chemical Engineering, 2004, 21, 739-745.	1.2	9
33	Corrosion and optimum corrosion protection potential of friction stir welded 5083-O Al alloy for leisure ship. Transactions of Nonferrous Metals Society of China, 2009, 19, 898-903.	1.7	9
34	Role of M23C6 carbide on the corrosion characteristics of modified 9Cr-1Mo steel in N2-O2-CO2-SO2 atmosphere at 650â€¯Â°C. Applied Surface Science, 2019, 483, 417-424.	3.1	9
35	Improvement of hydrogen embrittlement and stress corrosion cracking by annealing for Al-4.4Mg-0.6Mn alloy. Transactions of Nonferrous Metals Society of China, 2011, 21, s17-s22.	1.7	8
36	Surface analysis of Alâ€Mg alloy series for ship after cavitation test. Surface and Interface Analysis, 2012, 44, 1389-1392.	0.8	8

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37	Optimization of friction stir welding with the various welding parameters for Al-Mg alloys. Rare Metals, 2011, 30, 628-632.	3.6	7
38	Investigation on the cavitation damage behavior with temperature and cavitation time in seawater. Surface and Interface Analysis, 2012, 44, 1407-1410.	0.8	7
39	An Investigation on the Optimum Corrosion Protection Potential for Minimization of Cavitation Damage Using the Potentiostatic Method in Seawater. Microscopy and Microanalysis, 2013, 19, 73-76.	0.2	7
40	Effect of various factors on solid particle erosion behavior of degraded 9Cr-1MoVNb steel with experiment design. Applied Surface Science, 2020, 506, 144956.	3.1	7
41	Evaluation of Mechanical Characteristic and Investigation on Optimum Condition in Friction Stir Processing for 5456-H116 Al Alloy. Journal of the Korean Institute of Surface Engineering, 2009, 42, 13-20.	0.1	7
42	Electrochemical characteristics of HVOF spray coated layer with WCâ€“27NiCr and WCâ€“10Co4Cr for Al bronze. Transactions of Nonferrous Metals Society of China, 2012, 22, s753-s759.	1.7	6
43	MECHANICAL CHARACTERISTICS OF CAST AC7AV ALLOY AFTER ALTERNATIVE MULTI-PASS FRICTION STIR PROCESSING. Surface Review and Letters, 2010, 17, 69-72.	0.5	5
44	Effects of precipitation strengthening heat treatment for Al-Mg alloy. Transactions of Nonferrous Metals Society of China, 2011, 21, 1218-1224.	1.7	5
45	Corrosion characteristics of steel in seawater containing various chloride concentrations generated by electrochemical method. Transactions of Nonferrous Metals Society of China, 2009, 19, s50-s55.	1.7	4
46	Investigation on SCC and HE of STS 304 austenitic stainless steel for offshore structures. Rare Metals, 2011, 30, 633-638.	3.6	4
47	Potentiostatic corrosion protection technology under cavitation condition for 5083-H116 Al alloy. Transactions of Nonferrous Metals Society of China, 2013, 23, 3206-3214.	1.7	4
48	Evaluation of Corrosion Resistance for Two-Step Aluminum Anodizing with Processing Time. Journal of Nanoscience and Nanotechnology, 2016, 16, 11262-11266.	0.9	4
49	Synergistic damage mechanism of corrosion and cavitation-erosion for plasma ion nitrided 18Crâ€“8Niâ€“1.1Mnâ€“0.43C stainless steel in seawater. Japanese Journal of Applied Physics, 2017, 56, 01AG03.	0.8	4
50	Cavitation and Electrochemical Characteristics Using Hydrogen Overpotential Method for ALBC3 Alloy. Journal of the Korean Institute of Surface Engineering, 2011, 44, 277-283.	0.1	4
51	Electrochemical characteristics and surface morphology in non-chromate chemical conversion coating for Zn-electroplated steel sheets. Transactions of Nonferrous Metals Society of China, 2009, 19, s45-s49.	1.7	3
52	Evaluation of the surface damage to stainless steel caused by a micro-jet in seawater. Journal of the Korean Physical Society, 2016, 68, 368-372.	0.3	3
53	CAVITATION AND ELECTROCHEMICAL CHARACTERISTICS IN SEAWATER BY WATER CAVITATION PEENING OF 5083-O Al ALLOY FOR SHIPS. Surface Review and Letters, 2017, 24, 1750076.	0.5	3
54	Effect of lead nitrate concentration on electroless nickel plating characteristics of gray cast iron. Surface and Coatings Technology, 2019, 376, 2-7.	2.2	3

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55	Effect of stabilizer concentration on the cavitation erosion resistance characteristics of the electroless nickel plated gray cast iron in seawater. Surface and Coatings Technology, 2019, 376, 31-37.	2.2	3
56	Evaluation of Electrochemical Characteristic and Investigation on Optimum Condition in Friction Stir Welding for 6061-T6 Al Alloy. Journal of the Korean Institute of Surface Engineering, 2008, 41, 341-350.	0.1	3
57	Mechanical and Electrochemical Characteristics in Welding with Robot on 6061-T6 Al Alloy for Al Ship. Journal of Advanced Marine Engineering and Technology, 2009, 33, 313-321.	0.1	3
58	Effects of applied potential on SCC and HE for STS 316L in seawater. Physica Scripta, 2010, T139, 014037.	1.2	2
59	INCORPORATION OF MULTI-WALLED CARBON NANOTUBES INTO OXIDE LAYER FORMED ON AL ALLOY BY PLASMA ELECTROLYTIC OXIDATION. Surface Review and Letters, 2020, 27, 2050007.	0.5	2
60	Investigation on Optimum Protection Potential Decision of Al Alloy(5083F) in Sea Water by Impressed Current Cathodic Protection. Journal of the Korean Institute of Surface Engineering, 2007, 40, 262-270.	0.1	2
61	Optimization of Painting Process to Improve Durability of Mega Yacht and Cavitation Erosion Characteristics. Journal of Welding and Joining, 2019, 37, 254-261.	0.6	2
62	Mechanical and electrochemical characteristics evaluation in annealing treatment for ship material. Transactions of Nonferrous Metals Society of China, 2009, 19, s40-s44.	1.7	1
63	Electrochemical properties in a seawater environment of 5456-H116 aluminum alloy subjected to optimal friction stir processing. Physica Scripta, 2010, T139, 014038.	1.2	1
64	Effect of Applied Current Density on Cavitation-Erosion Characteristics for Anodized Al Alloy. Journal of Nanoscience and Nanotechnology, 2018, 18, 1365-1368.	0.9	1
65	EFFECT OF ANODIC AND CATHODIC CURRENT DENSITIES ON THE CAVITATION DAMAGE CHARACTERISTICS OF ALUMINUM ALLOY IN SEAWATER. Surface Review and Letters, 2020, 27, 1950125.	0.5	1
66	Observation of Surface Characteristics for Aluminum Anodizing Layer With Processing Time. Journal of Nanoscience and Nanotechnology, 2017, 17, 4169-4172.	0.9	1
67	Evaluation of Anti-Cavitation Performance of Polyurethane Coatings in Seawater using Ultrasonic Vibratory Method. Journal of Welding and Joining, 2019, 37, 455-462.	0.6	1
68	The Welding Surface and Mechanical Characteristics in Friction Stir Welding for 5456-H116 Alloy. Journal of the Korean Society of Marine Environment and Safety, 2012, 18, 273-278.	0.1	0
69	Electrochmical Characteristics by Water Cavitation Peening of Cu Alloy. Journal of Advanced Marine Engineering and Technology, 2012, 36, 1083-1090.	0.1	0
70	Evaluation on Damage Behavior of Al-4.5%Mg-0.6%Mn Al Alloy with Potentiostatic Experiment Time. Journal of the Korean Society of Marine Environment and Safety, 2012, 18, 569-576.	0.1	0
71	Effects of rotation speed and time in potentiostatic experiment in seawater for 5083-H116 Al alloy. Journal of Advanced Marine Engineering and Technology, 2014, 38, 974-980.	0.1	0
72	Effect of Plasma Ion Nitriding Temperature on the Durability of SCM440 Steel. Journal of Welding and Joining, 2019, 37, 448-454.	0.6	0

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73	Cavitation erosion characteristics of hard chromium plated diesel engine cylinder liner. Transactions of the Institute of Metal Finishing, 0, , 1-4.	0.6	0