

Joaquin Rams

List of Publications by Year in descending order

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127
docs citations

127
times ranked

2687
citing authors

#	ARTICLE	IF	CITATIONS
1	Influence of process parameters in additive manufacturing of highly reinforced 316L / SiCp composites. Journal of Materials Processing Technology, 2022, 299, 117325.	3.1	17
2	Effect of Magnesium Addition and High Energy Processing on the Degradation Behavior of Iron Powder in Modified Hanksâ€™™ Solution for Bioabsorbable Implant Applications. Metals, 2022, 12, 78.	1.0	2
3	Impact of Remelting in the Microstructure and Corrosion Properties of the Ti6Al4V Fabricated by Selective Laser Melting. Coatings, 2022, 12, 284.	1.2	6
4	Wear Resistance of Aluminum Matrix Compositesâ€™™ Coatings Added on AA6082 Aluminum Alloy by Laser Cladding. Coatings, 2022, 12, 41.	1.2	8
5	Manufacturing of Aluminum Matrix Composites Reinforced with Carbon Fiber Fabrics by High Pressure Die Casting. Materials, 2022, 15, 3400.	1.3	6
6	The Role of the Sol-Gel Synthesis Process in the Biomedical Field and Its Use to Enhance the Performance of Bioabsorbable Magnesium Implants. Gels, 2022, 8, 426.	2.1	7
7	Local Induction Heating Capabilities of Zeolites Charged with Metal and Oxide MNPs for Application in HDPE Hydrocracking: A Proof of Concept. Materials, 2021, 14, 1029.	1.3	7
8	Influence of roughness and grinding direction on the thickness and adhesion of sol-gel coatings deposited by dip-coating on AZ31 magnesium substrates. A Landauâ€™™Levich equation revision. Surface and Coatings Technology, 2021, 408, 126798.	2.2	20
9	Analysis of strain sensitivity under flexural load of 3D printed carbon nanotube-doped epoxy circuits. Nanotechnology, 2021, 32, 185501.	1.3	2
10	Evaluation of the Wear Resistance and Corrosion Behavior of Laser Cladding Al/SiC Metal Matrix Composite Coatings on ZE41 Magnesium Alloy. Coatings, 2021, 11, 639.	1.2	10
11	Modulation of Crystallinity through Radiofrequency Electromagnetic Fields in PLLA/Magnetic Nanoparticles Composites: A Proof of Concept. Materials, 2021, 14, 4300.	1.3	1
12	Hard Anodizing and Plasma Electrolytic Oxidation of an Additively Manufactured Al-Si alloy. Surface and Coatings Technology, 2021, 420, 127339.	2.2	25
13	Structural health monitoring of a CFRP structural bonded repair by using a carbon nanotube modified adhesive film. Composite Structures, 2021, 270, 114091.	3.1	16
14	Plastic waste recycling via pyrolysis: A bibliometric survey and literature review. Journal of Analytical and Applied Pyrolysis, 2021, 158, 105265.	2.6	81
15	Sol-gel coatings doped with graphene nanoplatelets for improving the degradation rate and the cytocompatibility of AZ31 alloy for biomedical applications. Surface and Coatings Technology, 2021, 426, 127745.	2.2	7
16	Comparison of Different Additive Manufacturing Methods for 316L Stainless Steel. Materials, 2021, 14, 6504.	1.3	30
17	Application of computational approach in plastic pyrolysis kinetic modelling: a review. Reaction Kinetics, Mechanisms and Catalysis, 2021, 134, 591-614.	0.8	14
18	Cavity formation and hardness change in He implanted EUROFER97 and EU-ODS EUROFER. Nuclear Materials and Energy, 2020, 22, 100717.	0.6	1

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19	Silicon oxide multilayer coatings doped with carbon nanotubes and graphene nanoplatelets for corrosion protection of AZ31B magnesium alloy. <i>Progress in Organic Coatings</i> , 2020, 148, 105836.	1.9	23
20	Corrosion Resistance of Al/SiC Laser Cladding Coatings on AA6082. <i>Coatings</i> , 2020, 10, 673.	1.2	10
21	Influence of the Feed Powder Composition in Mechanical Properties of AlN-Nano-Reinforced Aluminium Composites Coatings Deposited by Reactive Direct Laser Deposition. <i>Metals</i> , 2020, 10, 926.	1.0	3
22	Additively Manufactured Al/SiC Cylindrical Structures by Laser Metal Deposition. <i>Materials</i> , 2020, 13, 3331.	1.3	7
23	High Power Diode Laser (HPDL) surface treatments to improve the mechanical properties and the corrosion behaviour of Mg-Zn-Ca alloys for biodegradable implants. <i>Surface and Coatings Technology</i> , 2020, 402, 126314.	2.2	12
24	Microstructural, mechanical and corrosion characterization of an as-cast Mg ₃ Zn _{0.4} Ca alloy for biomedical applications. <i>Journal of Magnesium and Alloys</i> , 2020, 8, 510-522.	5.5	44
25	Fabrication, Wear, and Corrosion Resistance of HVOF Sprayed WC-12Co on ZE41 Magnesium Alloy. <i>Coatings</i> , 2020, 10, 502.	1.2	11
26	PLA deposition on surface treated magnesium alloy: Adhesion, toughness and corrosion behaviour. <i>Surface and Coatings Technology</i> , 2020, 388, 125593.	2.2	30
27	Mg ₁ Zn ₁ Ca alloy for biomedical applications. Influence of the secondary phases on the mechanical and corrosion behaviour. <i>Journal of Alloys and Compounds</i> , 2020, 831, 154735.	2.8	35
28	Application of DOE and ANOVA in Optimization of HVOF Spraying Parameters in the Development of New Ti Coatings. <i>Journal of Thermal Spray Technology</i> , 2020, 29, 384-399.	1.6	15
29	Effect of the process parameters in the additive manufacturing of in situ Al/AlN samples. <i>Journal of Manufacturing Processes</i> , 2019, 46, 271-278.	2.8	24
30	Effect of graphene nanoplatelets thickness on strain sensitivity of nanocomposites: A deeper theoretical to experimental analysis. <i>Composites Science and Technology</i> , 2019, 181, 107697.	3.8	33
31	Characterisation and mechanical properties of Al/SiC metal matrix composite coatings formed on ZE41 magnesium alloys by laser cladding. <i>Results in Physics</i> , 2019, 13, 102160.	2.0	25
32	Corrosion behavior of 316L stainless steel coatings on ZE41 magnesium alloy in chloride environments. <i>Surface and Coatings Technology</i> , 2019, 378, 124994.	2.2	22
33	Characterization and mechanical properties of stainless steel coatings deposited by HVOF on ZE41 magnesium alloy. <i>Surface and Coatings Technology</i> , 2019, 359, 73-84.	2.2	21
34	Nanoindentation and TEM to Study the Cavity Fate after Post-Irradiation Annealing of He Implanted EUROFER97 and EU-ODS EUROFER. <i>Micromachines</i> , 2018, 9, 633.	1.4	11
35	Wear Resistance of Stainless Steel Coatings on ZE41 Magnesium Alloy. <i>Journal of Thermal Spray Technology</i> , 2018, 27, 1615-1631.	1.6	13
36	Interfacial characterization by TEM and nanoindentation of W-Eurofer brazed joints for the first wall component of the DEMO fusion reactor. <i>Materials Characterization</i> , 2018, 142, 162-169.	1.9	18

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37	Effect of alloy elements added on microstructure and hardening of Al/SiC laser clad coatings. Journal of Alloys and Compounds, 2017, 727, 671-682.	2.8	36
38	Dry sliding wear behavior of globular AZ91 magnesium alloy and AZ91/SiCp composites. Wear, 2017, 390-391, 1-10.	1.5	120
39	Modification of microstructure and superficial properties of A356 and A356/10%SiCp by Selective Laser Surface Melting (SLSM). Surface and Coatings Technology, 2017, 309, 1001-1009.	2.2	11
40	Role of Laser Cladding Parameters in Composite Coating (Al-SiC) on Aluminum Alloy. Journal of Thermal Spray Technology, 2016, 25, 1177-1191.	1.6	31
41	316L stainless steel coatings on ZE41 magnesium alloy using HVOF thermal spray for corrosion protection. Surface and Coatings Technology, 2016, 287, 9-19.	2.2	54
42	Analysis and optimization of process parameters in Al-SiCp laser cladding. Optics and Lasers in Engineering, 2016, 78, 165-173.	2.0	68
43	Al/SiCp and Al11Si/SiCp coatings on AZ91 magnesium alloy by HVOF. Surface and Coatings Technology, 2015, 261, 130-140.	2.2	27
44	Protection of carbon steel against molten aluminum attack and high temperature corrosion using high velocity oxygen-fuel WC-Co coatings. Surface and Coatings Technology, 2015, 262, 123-133.	2.2	33
45	Comparative study of helium effects on EU-ODS EUROFER and EUROFER97 by nanoindentation and TEM. Journal of Nuclear Materials, 2015, 460, 226-234.	1.3	20
46	Optimisation of the high velocity oxygen fuel (HVOF) parameters to produce effective corrosion control coatings on AZ91 magnesium alloy. Materials and Corrosion - Werkstoffe Und Korrosion, 2015, 66, 423-433.	0.8	32
47	Fracture behaviour of a magnesium-aluminium alloy treated by selective laser surface melting treatment. Materials & Design, 2014, 55, 361-365.	5.1	18
48	Influence of the chloride ion concentration on the corrosion of high-purity Mg, ZE41 and AZ91 in buffered Hank's solution. Journal of Materials Science: Materials in Medicine, 2014, 25, 329-345.	1.7	49
49	Corrosion behaviour of laser surface melted magnesium alloy AZ91D. Materials & Design, 2014, 57, 40-50.	5.1	73
50	High-temperature corrosion behavior of Ni-50Cr coating deposited by high velocity oxygen-fuel technique on low alloy ferritic steel. Materials & Design, 2014, 59, 94-102.	5.1	34
51	Dry sliding wear behavior of AM50B magnesium alloy. Materials & Design, 2014, 56, 549-556.	5.1	77
52	Analysis of the brazability of W-W joints using a high temperature Ni-based alloy. Materials & Design, 2014, 54, 900-905.	5.1	16
53	Effect of helium implantation on mechanical properties of EUROFER97 evaluated by nanoindentation. Journal of Nuclear Materials, 2014, 448, 301-309.	1.3	16
54	Dry sliding wear behaviour of laser surface melting treated AM60B magnesium alloy. Surface and Coatings Technology, 2013, 236, 368-379.	2.2	23

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55	Oxy-acetylene flame thermal sprayed coatings of aluminium matrix composites reinforced with MoSi ₂ intermetallic particles. <i>Surface and Coatings Technology</i> , 2013, 236, 274-283.	2.2	17
56	Dry sliding wear behavior of AM60B magnesium alloy. <i>Wear</i> , 2013, 301, 615-625.	1.5	81
57	Novel laser surface treatments on AZ91 magnesium alloy. <i>Surface and Coatings Technology</i> , 2013, 222, 118-127.	2.2	33
58	Influence of high velocity oxygen-fuel spraying parameters on the wear resistance of Al-SiC composite coatings deposited on ZE41A magnesium alloy. <i>Materials & Design</i> , 2013, 43, 144-152.	5.1	45
59	Characterization of the Corrosion Behavior of a Mg Alloy in Chloride Solution. <i>Corrosion</i> , 2013, 69, 497-508.	0.5	13
60	Use of carbon nanotubes for strain and damage sensing of epoxy-based composites. <i>International Journal of Smart and Nano Materials</i> , 2012, 3, 152-161.	2.0	14
61	Selective laser surface melting of a magnesium-aluminium alloy. <i>Materials Letters</i> , 2012, 85, 98-101.	1.3	47
62	Application of atomic force microscopy to the study of blown polyethylene films. <i>Polymer Testing</i> , 2012, 31, 136-148.	2.3	5
63	Wear resistant coatings: Silica sol-gel reinforced with carbon nanotubes. <i>Thin Solid Films</i> , 2011, 519, 7904-7910.	0.8	28
64	Experimental study of W-Eurofer laser brazing for divertor application. <i>Journal of Nuclear Materials</i> , 2011, 418, 239-248.	1.3	28
65	Dry sliding wear behaviour of ZE41A magnesium alloy. <i>Wear</i> , 2011, 271, 2836-2844.	1.5	67
66	Characterization of carbon nanofiber/epoxy nanocomposites by the nanoindentation technique. <i>Composites Part B: Engineering</i> , 2011, 42, 638-644.	5.9	62
67	Wear improvement of sol-gel silica coatings on A380/SiCp aluminium composite substrate by diode laser sintering. <i>Materials & Design</i> , 2011, 32, 3865-3875.	5.1	8
68	Sol-gel coatings of low sintering temperature for corrosion protection of ZE41 magnesium alloy. <i>Surface and Coatings Technology</i> , 2011, 205, 4183-4191.	2.2	32
69	Sol-gel silica coatings on ZE41 magnesium alloy for corrosion protection. <i>Surface and Coatings Technology</i> , 2010, 205, 2375-2385.	2.2	27
70	Fabrication of novel sol-gel silica coatings reinforced with multi-walled carbon nanotubes. <i>Materials Letters</i> , 2010, 64, 924-927.	1.3	10
71	Tough ceramic coatings: Carbon nanotube reinforced silica sol-gel. <i>Applied Surface Science</i> , 2010, 256, 6375-6384.	3.1	25
72	Wear behaviour of thermal spray Al/SiCp coatings. <i>Wear</i> , 2010, 268, 828-836.	1.5	40

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73	Fabrication of aluminium composites reinforced with carbon fibres by a centrifugal infiltration process. <i>Composites Part A: Applied Science and Manufacturing</i> , 2010, 41, 1605-1611.	3.8	61
74	Corrosion behaviour of thermally sprayed Al and Al/SiCp composite coatings on ZE41 magnesium alloy in chloride medium. <i>Corrosion Science</i> , 2010, 52, 761-768.	3.0	54
75	Estudio de la intercara de una preforma hÃbrida infiltrada sin presiÃ³n. <i>Revista De Metalurgia</i> , 2010, 46, 33-39.	0.1	0
76	Properties and microstructure of Al-11Si/SiCp composite coatings fabricated by thermal spray. <i>Surface and Coatings Technology</i> , 2009, 203, 1947-1955.	2.2	24
77	Oxy-Acetylene Flame Thermal Spray of Al/SiCp Composites with High Fraction of Reinforcements. <i>Journal of Thermal Spray Technology</i> , 2009, 18, 642-651.	1.6	8
78	Laser densification of sol-gel silica coatings on aluminium matrix composites for corrosion and hardness improvement. <i>Surface and Coatings Technology</i> , 2009, 203, 1474-1480.	2.2	16
79	Corrosion resistance of thermally sprayed Al and Al/SiC coatings on Mg. <i>Surface and Coatings Technology</i> , 2009, 203, 3224-3230.	2.2	106
80	Effect of reinforcement coatings on the dry sliding wear behaviour of aluminium/SiC particles/carbon fibres hybrid composites. <i>Wear</i> , 2009, 266, 1128-1136.	1.5	66
81	Microstructure and wear resistance of Al-SiC composites coatings on ZE41 magnesium alloy. <i>Applied Surface Science</i> , 2009, 255, 9174-9181.	3.1	58
82	High power diode laser treatments for improving corrosion resistance of A380/SiCp aluminium composites. <i>Surface and Coatings Technology</i> , 2008, 202, 4291-4301.	2.2	22
83	Oxidation Mechanisms of Copper and Nickel Coated Carbon Fibers. <i>Oxidation of Metals</i> , 2008, 69, 327-341.	1.0	16
84	Protection against corrosion of aluminium-SiC composites by sol-gel silica coatings. <i>Surface and Coatings Technology</i> , 2008, 202, 3755-3763.	2.2	19
85	Al/SiC composite coatings of steels by thermal spraying. <i>Materials Letters</i> , 2008, 62, 2114-2117.	1.3	21
86	Hardness recovery of ceramic coated aluminium matrix composites using thermal-shock resistant sol-gel silica coatings. <i>Materials Letters</i> , 2008, 62, 4315-4318.	1.3	8
87	Electroless nickel coated short carbon fibres in aluminium matrix composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 566-575.	3.8	114
88	Effect of copper electroless coatings on the interaction between a molten Al-Si-Mg alloy and coated short carbon fibres. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 1947-1956.	3.8	68
89	Assessment of tensile behaviour of an Al-Mg alloy composite reinforced with NiAl and oxidized NiAl powder particles helped by nanoindentation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 2536-2540.	3.8	19
90	Thermal spray coatings of highly reinforced aluminium matrix composites with sol-gel silica coated SiC particles. <i>Surface and Coatings Technology</i> , 2007, 201, 7552-7559.	2.2	29

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91	Surface treatment of aluminum matrix composites using a high power diode laser. Surface and Coatings Technology, 2007, 202, 1199-1203.	2.2	24
92	Electroless multilayer coatings on aluminium-silicon carbide composites for electronics packaging. Journal of the European Ceramic Society, 2007, 27, 3983-3986.	2.8	18
93	Dual layer silica coatings of SiC particle reinforcements in aluminium matrix composites. Surface and Coatings Technology, 2006, 200, 4017-4026.	2.2	17
94	Characterisation of multilayered sol-gel silica coatings on aluminium-SiC composites. Surface and Coatings Technology, 2006, 201, 3715-3722.	2.2	15
95	Characterization of interfacial mechanical properties in carbon fiber/aluminium matrix composites by the nanoindentation technique. Composites Science and Technology, 2005, 65, 2025-2038.	3.8	108
96	Effect of silica coatings on interfacial mechanical properties in aluminium-SiC composites characterized by nanoindentation. Scripta Materialia, 2005, 52, 977-982.	2.6	45
97	Characterization of LiNbO3 waveguides fabricated by proton exchange in water. Applied Physics A: Materials Science and Processing, 2005, 81, 205-208.	1.1	6
98	Effect of Reinforcement Coating on the Oxidation Behavior of AA6061/SiC/20p Composite. Oxidation of Metals, 2005, 63, 215-227.	1.0	28
99	Determinación mediante nanoindentación de las propiedades mecánicas de la interfaz en materiales compuestos de aluminio reforzados con partículas de SiC recubiertas de sílice. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2005, 44, 270-277.	0.9	3
100	Sol-gel coatings to improve processing of aluminium matrix SiC reinforced composite materials. Journal of Materials Research, 2004, 19, 2109-2116.	1.2	20
101	Temperature effects in proton exchanged LiNbO3 waveguides. Applied Physics B: Lasers and Optics, 2004, 79, 845-849.	1.1	15
102	Sol-Gel Coatings as Active Barriers to Protect Ceramic Reinforcement in Aluminum Matrix Composites. Advanced Engineering Materials, 2004, 6, 57-61.	1.6	19
103	Interacción entre el aluminio fundido y las fibras de carbono recubiertas con cobre y níquel en materiales compuestos de matriz metálica. Boletín De La Sociedad Española De Cerámica Y Vidrio, 2004, 43, 409-412.	0.9	3
104	Las pequeñas y medianas empresas del sector metalúrgico en la zona sur de la Comunidad de Madrid: Gestión medioambiental y necesidades de formación. Revista De Metalurgia, 2004, 40, 209-213.	0.1	2
105	Optical damage inhibition and thresholding effects in lithium niobate above room temperature. Optics Communications, 2000, 178, 211-216.	1.0	31
106	CdTe epilayers for uses in optical waveguides. Applied Physics A: Materials Science and Processing, 2000, 71, 277-279.	1.1	18
107	Second harmonic generation of thin LiNbO3 samples for acoustic wave devices. Electronics Letters, 2000, 36, 1596.	0.5	0
108	Effects of pump heating on laser and spectroscopic properties of the Nd:[YAl3(BO3)4] self-frequency-doubling laser. Journal of Applied Physics, 2000, 87, 1042-1048.	1.1	37

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109	ANALYTICAL ESTIMATES OF THE EFFECT OF NONLINEAR DAMPING IN SOME NONLINEAR OSCILLATORS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2000, 10, 2257-2267.	0.7	49
110	Mode gaps in the refractive index properties of low-dose ion-implanted LiNbO ₃ waveguides. Journal of Applied Physics, 2000, 87, 3199-3202.	1.1	64
111	Second harmonic generation in the strong absorption regime. Journal of Modern Optics, 2000, 47, 1659-1669.	0.6	8
112	Cathodoluminescence enhancement in porous silicon cracked in vacuum. Applied Physics Letters, 1999, 74, 1728-1730.	1.5	16
113	Nonlinear optical efficient LiNbO ₃ waveguides proton exchanged in benzoic acid vapor: Effect of the vapor pressure. Journal of Applied Physics, 1999, 85, 1322-1328.	1.1	12
114	Cathodoluminescence from mechanically cracked porous silicon. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 68, 126-129.	1.7	4
115	Improved surface quality of Nd:YAG monitored by second harmonic generation. Optics Communications, 1999, 167, 171-176.	1.0	6
116	Light-induced damage mechanisms in $\hat{\lambda}$ -phase proton-exchanged LiNbO ₃ waveguides. Applied Physics B: Lasers and Optics, 1999, 68, 989-993.	1.1	18
117	Near-field characterization of thin planar optical waveguides. Journal of Modern Optics, 1999, 46, 1137-1147.	0.6	0
118	Preparation of proton-exchange LiNbO ₃ waveguides in benzoic acid vapor. Journal of the Optical Society of America B: Optical Physics, 1999, 16, 401.	0.9	28
119	Second harmonic generation capabilities of ion implanted LiNbO ₃ waveguides. Journal of Applied Physics, 1998, 84, 5180-5183.	1.1	31
120	SHG-capabilities of reverse PE-LiNbO ₃ waveguides. Electronics Letters, 1997, 33, 322.	0.5	15
121	Refractive indices of rutile as a function of temperature and wavelength. Journal of Applied Physics, 1997, 82, 994-997.	1.1	54
122	Proton exchange of quasistoichiometric LiNbO ₃ . Journal of Applied Physics, 1997, 82, 4752-4757.	1.1	19
123	Structure of high index proton exchange LiNbO ₃ waveguides with undegraded nonlinear optical coefficients. Applied Physics Letters, 1997, 71, 3356-3358.	1.5	17
124	High-index proton-exchanged waveguides in Z-cut LiNbO ₃ with undegraded nonlinear optical coefficients. Applied Physics Letters, 1997, 70, 2076-2078.	1.5	16
125	A far-field method for characterizing thin planar optical waveguides. Optics Communications, 1997, 139, 205-208.	1.0	4
126	Hydrogen in lithium niobate. Advances in Physics, 1996, 45, 349-392.	35.9	165

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127	Relationship between Laser Parameters - Microstructural Modification - Mechanical Properties of Laser Surface Melted Magnesium Alloy AZ91D. Materials Science Forum, 0, 765, 678-682.	0.3	0