MarÃ-a JosÃ© Tobar

List of Publications by Year
in descending order

47 papers	1,211 citations	361413 20 h-index	377865 34 g-index
48 all docs	48 docs citations	48 times ranked	1058 citing authors

#	Article	IF	Citations
1	Morphology and characterization of laser clad composite NiCrBSiâ€“WC coatings on stainless steel. Surface and Coatings Technology, 2006, 200, 6313-6317.	4.8	171
2	First measurement of the <mml:math altimg="si1.gif" overflow="scroll" xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.elsevier.com/xml/ja/dtd" xmlns:ja="http://www.elsevier.com/xml/ja/dtd" xmlns:mml="http://www.w3.org/1998/Math/MathML" xmlns:tb="http://www.elsevier.com/xml/common/table/dtd" xmlns:sb="http://www.elsevier.com/xml/common/struct-bib/dtd" xmlns:ce="http://www.elsevier.com/x	4.1	90
3	Laser cladding of tungsten carbides (SpheroteneÂ®) hardfacing alloys for the mining and mineral industry. Applied Surface Science, 2009, 255, 5553-5556.	6.1	86
4	Tribology and high temperature friction wear behavior of MCrAlY laser cladding coatings on stainless steel. Wear, 2015, 330-331, 280-287.	3.1	77
5	High temperature oxidation behavior of laser cladding MCrAlY coatings on austenitic stainless steel. Surface and Coatings Technology, 2015, 270, 243-248.	4.8	58
6	Study of residual stresses generated inside laser cladded plates using FEM and diffraction of synchrotron radiation. Surface and Coatings Technology, 2010, 204, 1983-1988.	4.8	53
7	Crack Free Tungsten Carbide Reinforced Ni(Cr) Layers obtained by Laser Cladding. Physics Procedia, 2011, 12, 338-344.	1.2	50
8	Characteristics of Tribaloy T-800 and T-900 coatings on steel substrates by laser cladding. Surface and Coatings Technology, 2008, 202, 2297-2301.	4.8	49
9	Laser transformation hardening of a tool steel: Simulation-based parameter optimization and experimental results. Surface and Coatings Technology, 2006, 200, 6362-6367.	4.8	43
10	Comparative Study of Co-based Alloys in Repairing Low Cr-Mo steel Components by Laser Cladding. Physics Procedia, 2012, 39, 368-375.	1.2	42
11	Compositional analysis of Hispanic Terra Sigillata by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1149-1154.	2.9	41
12	Modeling of phase transformations of Ti6Al4V during laser metal deposition. Physics Procedia, 2011, 12, 666-673.	1.2	40
13	Boron addition in a non-equiatomic Fe50Mn30Co10Cr10 alloy manufactured by laser cladding: Microstructure and wear abrasive resistance. Applied Surface Science, 2020, 515, 146084.	6.1	39
14	Determination of Ï€Ï€ scattering lengths from measurement of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.gif" overflow="scroll"><mml:msup><mml:mi>Ï€</mml:mi><mml:mo>+</mml:mo></mml:msup><mml:msup><mml:mi>Ï€</mml:mi><mml:m	37	
	atom lifetime. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2011, 704, 24-29.		
15	DIRAC: A high resolution spectrometer for pionium detection. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2003, 515, 467-496.	1.6	34
16	The ring imaging Cherenkov detectors of DELPHI. IEEE Transactions on Nuclear Science, 1995, 42, 499-504.	2.0	32
17	Laser Cladding of MCrAlY Coatings on Stainless Steel. Physics Procedia, 2014, 56, 276-283.	1.2	29
18	Characterization of hard coatings produced by laser cladding using laser-induced breakdown spectroscopy technique. Applied Surface Science, 2015, 336, 396-400.	6.1	27

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19	Detection of Ï€+Ï€â^' atoms with the DIRAC spectrometer at CERN. Journal of Physics G: Nuclear and Particle Physics, 2004, 30, 1929-1946.	3.6	23
20	Ni-based Metal Matrix Composite Functionally Graded Coatings. Physics Procedia, 2012, 39, 362-367.	1.2	23
21	Experimental and simulation studies on laser conduction welding of AA5083 aluminium alloys. Physics Procedia, 2010, 5, 299-308.	1.2	18
22	A comparison of laser deposition of commercially pure titanium using gas atomized or Ti sponge powders. Surface and Coatings Technology, 2019, 374, 253-263.	4.8	15
23	Laser Cladding of Ni-WC Layers with Graded WC Content. Physics Procedia, 2014, 56, 269-275.	1.2	14
24	A Study on the Effects of the Use of Gas or Water Atomized AISI 316L Steel Powder on the Corrosion Resistance of Laser Deposited Material. Physics Procedia, 2016, 83, 606-612.	1.2	14
25	Surface Modification of Porous Titanium Discs Using Femtosecond Laser Structuring. Metals, 2020, 10, 748.	2.3	14
26	Effect of alloying elements on laser surface modification of powder metallurgy to improve surface mechanical properties of beta titanium alloys for biomedical application. Journal of Materials Research and Technology, 2021, 14, 1222-1234.	5.8	14
27	Application of the Laplace transform dual reciprocity boundary element method in the modelling of laser heat treatments. Engineering Analysis With Boundary Elements, 2005, 29, 126-135.	3.7	12
28	Current achievements of the DELPHI ring imaging Cherenkov detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 371, 12-15.	1.6	11
29	ModelizaciÃ³n de las transformaciones de fase en el proceso de endurecimiento de aceros con lÃ¡ser de CO₂. Revista De Metalurgia, 2004, 40, 365-368.	0.5	10
30	The time-of-flight detector of the DIRAC experiment. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2002, 491, 41-53.	1.6	9
31	Laser Surface Modification in Ti-xNb-yMo Alloys Prepared by Powder Metallurgy. Metals, 2021, 11, 367.	2.3	6
32	Laser Powder Welding with a Co-based alloy for repairing steam circuit components in thermal power stations. Physics Procedia, 2010, 5, 349-358.	1.2	5
33	ModelizaciÃ³n y monitorizaciÃ³n de procesos de refusiÃ³n lÃ¡ser de recubrimientos depositados por plasma. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 441-444.	1.9	5
34	Dirac experiment. Nuclear Physics, Section B, Proceedings Supplements, 2001, 96, 259-266.	0.4	4
35	Laser Cladding of Ni Based Cermets. Materials Science Forum, 2006, 514-516, 723-728.	0.3	4
36	Separation of fluorocarbons in the fluid systems of the DELPHI Barrel RICH detector. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1996, 371, 263-267.	1.6	3

#	Article	IF	Citations
37	Effects of Laser Surface Melting on Tiâ€“30Nbâ€“2Sn Sintered Alloy. Advanced Engineering Materials, 2017, 19, 1500640.	3.5	3
38	Performance of the ring imaging Cherenkov detector of DELPHI. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1995, 367, 233-239.	1.6	1
39	Tribaloy-800 coatings on steel substrates by means of laser cladding: Dilution effects on the microstructure and coating performance. , 2006, , .		1
40	Effect of processing parameters in manufacturing of 3D parts through laser direct metal deposition. , 2010, , 451-454.		1
41	Beam attenuation in the laser cladding process. , 0, , .		0
42	A 3D FEM model of residual stress generation during laser cladding. , 2007, , .		0
43	Laser cladding of tungsten carbide hardfacing alloys on steels used in mining industry. , 2008, , .		0
44	Direct metal deposition of functional graded material. , 2013, , .		0
45	Application of 3D laser manufacturing in fabrication or repair of high-value metal component for the foundry industry. Advances in Materials and Processing Technologies, 2016, 2, 539-547.	1.4	0
46	Laser cladding of multiple track composite NiCrBSi coatings. , 2006, , .		0
47	Microstructure of MCrAlY coatings on steel substrates. , 2013, , .		0