

# MarÃ-a JosÃ© Tobar

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1329327/publications.pdf>

Version: 2024-02-01

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	Laser Surface Modification in Ti-xNb-yMo Alloys Prepared by Powder Metallurgy. <i>Metals</i> , 2021, 11, 367.	2.3	6
2	Effect of alloying elements on laser surface modification of powder metallurgy to improve surface mechanical properties of beta titanium alloys for biomedical application. <i>Journal of Materials Research and Technology</i> , 2021, 14, 1222-1234.	5.8	14
3	Boron addition in a non-equiautomic Fe50Mn30Co10Cr10 alloy manufactured by laser cladding: Microstructure and wear abrasive resistance. <i>Applied Surface Science</i> , 2020, 515, 146084.	6.1	39
4	Surface Modification of Porous Titanium Discs Using Femtosecond Laser Structuring. <i>Metals</i> , 2020, 10, 748.	2.3	14
5	A comparison of laser deposition of commercially pure titanium using gas atomized or Ti sponge powders. <i>Surface and Coatings Technology</i> , 2019, 374, 253-263.	4.8	15
6	Effects of Laser Surface Melting on Tiâ€“30Nbâ€“2Sn Sintered Alloy. <i>Advanced Engineering Materials</i> , 2017, 19, 1500640.	3.5	3
7	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. <i>Physics Procedia</i> , 2016, 83, 606-612.	1.2	14
8	Application of 3D laser manufacturing in fabrication or repair of high-value metal component for the foundry industry. <i>Advances in Materials and Processing Technologies</i> , 2016, 2, 539-547.	1.4	0
9	Tribology and high temperature friction wear behavior of MCrAlY laser cladding coatings on stainless steel. <i>Wear</i> , 2015, 330-331, 280-287.	3.1	77
10	High temperature oxidation behavior of laser cladding MCrAlY coatings on austenitic stainless steel. <i>Surface and Coatings Technology</i> , 2015, 270, 243-248.	4.8	58
11	Characterization of hard coatings produced by laser cladding using laser-induced breakdown spectroscopy technique. <i>Applied Surface Science</i> , 2015, 336, 396-400.	6.1	27
12	Laser Cladding of MCrAlY Coatings on Stainless Steel. <i>Physics Procedia</i> , 2014, 56, 276-283.	1.2	29
13	Laser Cladding of Ni-WC Layers with Graded WC Content. <i>Physics Procedia</i> , 2014, 56, 269-275.	1.2	14
14	Direct metal deposition of functional graded material. , 2013, , .	0	
15	Microstructure of MCrAlY coatings on steel substrates. , 2013, , .	0	
16	Comparative Study of Co-based Alloys in Repairing Low Cr-Mo steel Components by Laser Cladding. <i>Physics Procedia</i> , 2012, 39, 368-375.	1.2	42
17	Ni-based Metal Matrix Composite Functionally Graded Coatings. <i>Physics Procedia</i> , 2012, 39, 362-367.	1.2	23
18	Determination of $\langle \sigma \rangle$ scattering lengths from measurement of $\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="sil.gif" overflow="scroll" \rangle$ $\langle mml:msup \rangle$ $\langle mml:mi \rangle \langle mml:mo \rangle + \langle /mml:mo \rangle \langle /mml:msup \rangle$ $\langle mml:msup \rangle$ $\langle mml:mi \rangle \langle /mml:msup \rangle$ $\langle mml:mi \rangle \langle /mml:mi \rangle$ atom lifetime. <i>Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics</i> , 2011, 704, 24-29.	1.2	0

#	ARTICLE	IF	CITATIONS
19	Crack Free Tungsten Carbide Reinforced Ni(Cr) Layers obtained by Laser Cladding. Physics Procedia, 2011, 12, 338-344.	1.2	50
20	Modeling of phase transformations of Ti6Al4V during laser metal deposition. Physics Procedia, 2011, 12, 666-673.	1.2	40
21	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
22	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
23	Experimental and simulation studies on laser conduction welding of AA5083 aluminium alloys. Physics Procedia, 2010, 5, 299-308.	1.2	18
24	Effect of processing parameters in manufacturing of 3D parts through laser direct metal deposition. , 2010, , 451-454.	1	
25	Laser cladding of tungsten carbides (Spherotene®) hardfacing alloys for the mining and mineral industry. Applied Surface Science, 2009, 255, 5553-5556.	6.1	86
26	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
27	Laser cladding of tungsten carbide hardfacing alloys on steels used in mining industry. , 2008, , .		0
28	A 3D FEM model of residual stress generation during laser cladding. , 2007, , .		0
29	Tribaloy-800 coatings on steel substrates by means of laser cladding: Dilution effects on the microstructure and coating performance. , 2006, , .	1	
30	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
31	Morphology and characterization of laser clad composite NiCrBSiâ€“WC coatings on stainless steel. Surface and Coatings Technology, 2006, 200, 6313-6317.	4.8	171
32	Laser Cladding of Ni Based Cermets. Materials Science Forum, 2006, 514-516, 723-728.	0.3	4
33	Laser cladding of multiple track composite NiCrBSi coatings. , 2006, , .		0
34	Compositional analysis of Hispanic Terra Sigillata by laser-induced breakdown spectroscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2005, 60, 1149-1154. First measurement of the common lifetime spectrum over many "scans".	2.9	41
35	xmlns:xocs="http://www.elsevier.com/xml/xocs/dtd" xmlns:xs="http://www.w3.org/2001/XMLSchema-instance" 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:tb2="http://www.elsevier.com/xml/common/struct/bib/dtd" xmlns:se="http://www.elsevier.com/xml/se/dtd"	4.1	90
36	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

#	ARTICLE	IF	CITATIONS
37	Detection of $\alpha$ atoms with the DIRAC spectrometer at CERN. Journal of Physics G: Nuclear and Particle Physics, 2004, 30, 1929-1946.	3.6	23
38	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
39	ModelizaciÃ³n de las transformaciones de fase en el proceso de endurecimiento de aceros con lÃ;ser de CO <sub>2</sub> . Revista De Metalurgia, 2004, 40, 365-368.	0.5	10
40	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
41	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
42	Dirac experiment. Nuclear Physics, Section B, Proceedings Supplements, 2001, 96, 259-266.	0.4	4
43	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
44	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
45	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
46	The ring imaging Cherenkov detectors of DELPHI. IEEE Transactions on Nuclear Science, 1995, 42, 499-504.	2.0	32
47	Beam attenuation in the laser cladding process. , 0, , .	0	