

# JosÃ© L Ocaña

## List of Publications by Year in descending order

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175  
papers

3,896  
citations

81900

39  
h-index

144013

57  
g-index

178  
all docs

178  
docs citations

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times ranked

2394  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of laser shock processing on fatigue crack growth and fracture toughness of 6061-T6 aluminum alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 386, 291-295.	5.6	189
2	One-step fabrication of near superhydrophobic aluminum surface by nanosecond laser ablation. <i>Applied Surface Science</i> , 2016, 374, 2-11.	6.1	140
3	Wear and friction of 6061-T6 aluminum alloy treated by laser shock processing. <i>Wear</i> , 2006, 260, 847-854.	3.1	137
4	Effect of laser shock processing on fatigue crack growth of duplex stainless steel. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 914-919.	5.6	111
5	Numerical simulation of surface deformation and residual stresses fields in laser shock processing experiments. <i>Applied Surface Science</i> , 2004, 238, 242-248.	6.1	105
6	Effect of advancing direction on fatigue life of 316L stainless steel specimens treated by double-sided laser shock peening. <i>International Journal of Fatigue</i> , 2015, 79, 1-9.	5.7	103
7	Effect of an absorbent overlay on the residual stress field induced by laser shock processing on aluminum samples. <i>Applied Surface Science</i> , 2006, 252, 6201-6205.	6.1	92
8	Wettability modification of laser-fabricated hierarchical surface structures in Ti-6Al-4V titanium alloy. <i>Applied Surface Science</i> , 2019, 463, 838-846.	6.1	92
9	Influence of ambient conditions on the evolution of wettability properties of an IR-, ns-laser textured aluminium alloy. <i>RSC Advances</i> , 2017, 7, 39617-39627.	3.6	91
10	Laser shock peening without absorbent coating (LSPWC) effect on 3D surface topography and mechanical properties of 6082-T651 Al alloy. <i>Surface and Coatings Technology</i> , 2012, 208, 109-116.	4.8	84
11	Effects of laser processing on the transformation characteristics of NiTi: A contribute to additive manufacturing. <i>Scripta Materialia</i> , 2018, 152, 122-126.	5.2	84
12	Bio inspired self-cleaning ultrahydrophobic aluminium surface by laser processing. <i>RSC Advances</i> , 2016, 6, 72933-72941.	3.6	82
13	High level compressive residual stresses produced in aluminum alloys by laser shock processing. <i>Applied Surface Science</i> , 2005, 252, 883-887.	6.1	80
14	Random-type scanning patterns in laser shock peening without absorbing coating in 2024-T351 Al alloy: A solution to reduce residual stress anisotropy. <i>Optics and Laser Technology</i> , 2015, 73, 179-187.	4.6	78
15	Effect of laser shock processing on fatigue crack growth and fracture toughness of 6061-T6 aluminum alloy. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2004, 386, 291-295.	5.6	74
16	Microprocessing of ITO and a-Si thin films using ns laser sources. <i>Journal of Micromechanics and Microengineering</i> , 2005, 15, 1271-1278.	2.6	74
17	Robust fabrication of $\hat{1}/4$ -patterns with tunable and durable wetting properties: hydrophilic to ultrahydrophobic via a vacuum process. <i>Journal of Materials Chemistry A</i> , 2017, 5, 7125-7136.	10.3	73
18	Residual stress analysis in laser welded NiTi sheets using synchrotron X-ray diffraction. <i>Materials and Design</i> , 2016, 100, 180-187.	7.0	68

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19	Corrosion resistance of laser patterned ultrahydrophobic aluminium surface. <i>Materials Letters</i> , 2016, 184, 100-103.	2.6	68
20	Development of new low transformation temperature welding consumable to prevent cold cracking in high strength steel welds. <i>Science and Technology of Welding and Joining</i> , 2007, 12, 516-522.	3.1	65
21	Fatigue in laser shock peened open-hole thin aluminium specimens. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2012, 534, 573-579.	5.6	60
22	Experimental assessment of the influence of irradiation parameters on surface deformation and residual stresses in laser shock processed metallic alloys. <i>Applied Surface Science</i> , 2004, 238, 501-505.	6.1	57
23	Superhydrophobicity on hierarchical periodic surface structures fabricated via direct laser writing and direct laser interference patterning on an aluminium alloy. <i>Optics and Lasers in Engineering</i> , 2018, 111, 193-200.	3.8	57
24	Short pulse laser microforming of thin metal sheets for MEMS manufacturing. <i>Applied Surface Science</i> , 2007, 254, 997-1001.	6.1	56
25	A mathematical model for penetration laser welding as a free-boundary problem. <i>Journal Physics D: Applied Physics</i> , 1997, 30, 1300-1313.	2.8	54
26	Influence of pulse sequence and edge material effect on fatigue life of Al2024-T351 specimens treated by laser shock processing. <i>International Journal of Fatigue</i> , 2015, 70, 196-204.	5.7	54
27	Fabrication of multi-scale periodic surface structures on Ti-6Al-4V by direct laser writing and direct laser interference patterning for modified wettability applications. <i>Optics and Lasers in Engineering</i> , 2017, 98, 134-142.	3.8	54
28	Eigenstrain simulation of residual stresses induced by laser shock processing in a Ti6Al4V hip replacement. <i>Materials &amp; Design</i> , 2015, 79, 106-114.	5.1	52
29	Numerical/experimental analysis of the laser surface hardening with overlapped tracks to design the configuration of the process for Cr-Mo steels. <i>Materials and Design</i> , 2016, 102, 225-237.	7.0	52
30	Effect of laser welding parameters on the austenite and martensite phase fractions of NiTi. <i>Materials Characterization</i> , 2016, 119, 148-151.	4.4	52
31	Laser Shock Processing of 6061-T6 Al alloy with 1064nm and 532nm wavelengths. <i>Applied Surface Science</i> , 2010, 256, 5828-5831.	6.1	51
32	Mechanical behaviour of Nd:YAG laser welded superelastic NiTi. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2011, 528, 5560-5565.	5.6	50
33	Design Optimization and Fabrication of a Novel Structural SOI Piezoresistive Pressure Sensor with High Accuracy. <i>Sensors</i> , 2018, 18, 439.	3.8	48
34	Hybrid laser and vacuum process for rapid ultrahydrophobic Ti-6Al-4V surface formation. <i>Applied Surface Science</i> , 2019, 471, 759-766.	6.1	47
35	Laser shock microforming of thin metal sheets. <i>Applied Surface Science</i> , 2009, 255, 5633-5636.	6.1	46
36	Numerical simulation of plasma dynamics in laser shock processing experiments. <i>Applied Surface Science</i> , 2009, 255, 5181-5185.	6.1	45

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37	Model based optimization criteria for the generation of deep compressive residual stress fields in high elastic limit metallic alloys by ns-laser shock processing. Surface and Coatings Technology, 2008, 202, 2257-2262.	4.8	44
38	Analysis of directly driven ICF targets. Laser and Particle Beams, 1986, 4, 349-392.	1.0	43
39	On the fatigue behavior of medical Ti6Al4V roughened by grit blasting and abrasiveless waterjet peening. Journal of the Mechanical Behavior of Biomedical Materials, 2016, 63, 390-398.	3.1	43
40	Uncertainty analysis for non-uniform residual stresses determined by the hole drilling strain gauge method. Measurement: Journal of the International Measurement Confederation, 2017, 97, 51-63.	5.0	41
41	Surface modification of laser- and shot-peened 6082 aluminium alloy. International Journal of Structural Integrity, 2011, 2, 9-21.	3.3	34
42	Influence of laser shock peening pulse density and spot size on the surface integrity of X2NiCoMo18-9-5 maraging steel. Surface and Coatings Technology, 2016, 307, 262-270.	4.8	34
43	Application of massive laser shock processing for improvement of mechanical and tribological properties. Surface and Coatings Technology, 2018, 342, 1-11.	4.8	34
44	Optical observation of shock waves and cavitation bubbles in high intensity laser-induced shock processes. Applied Optics, 2009, 48, 3671.	2.1	32
45	Specific properties of ferritic/austenitic Dissimilar Metals Welded Joints. Welding in the World, Le Soudage Dans Le Monde, 2011, 55, 2-11.	2.5	30
46	Technological windows for MIAB welding of tubes featuring original longitudinal magnetization system with peripheral solenoids. Journal of Materials Processing Technology, 2010, 210, 951-960.	6.3	25
47	Laser Shock Processing of thin Al2024-T351 plates for induction of through-thickness compressive residual stresses fields. Journal of Materials Processing Technology, 2015, 223, 8-15.	6.3	25
48	Efficacy of laser shock processing of biodegradable Mg and Mg-1Zn alloy on their in vitro corrosion and bacterial response. Surface and Coatings Technology, 2020, 384, 125320.	4.8	25
49	Laser ablation modelling of aluminium, silver and crystalline silicon for applications in photovoltaic technologies. Surface Engineering, 2011, 27, 414-423.	2.2	24
50	Laser Shock Processing influence on local properties and overall tensile behavior of friction stir welded joints. Surface and Coatings Technology, 2012, 206, 2422-2429.	4.8	23
51	Predictive assessment and experimental characterization of the influence of irradiation parameters on surface deformation and residual stresses in laser-shock-processed metallic alloys. , 2004, , .		22
52	Design and optimization of a novel structural MEMS piezoresistive pressure sensor. Microsystem Technologies, 2017, 23, 4531-4541.	2.0	21
53	The effect of material cyclic deformation properties on residual stress generation by laser shock processing. International Journal of Mechanical Sciences, 2019, 156, 370-381.	6.7	21
54	Measured strains correction for eccentric holes in the determination of non-uniform residual stresses by the hole drilling strain gauge method. Materials and Design, 2017, 132, 302-313.	7.0	19

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55	Optical characterization of extremely small volumes of liquid in sub-micro-holes by simultaneous reflectivity, ellipsometry and spectrometry. <i>Optics Express</i> , 2007, 15, 13318.	3.4	18
56	Design, fabrication and characterization of an annularly grooved membrane combined with rood beam piezoresistive pressure sensor for low pressure measurements. <i>Sensors and Actuators A: Physical</i> , 2018, 279, 525-536.	4.1	18
57	Space and time resolved absorption spectroscopy of directly and indirectly driven expanding plasmas. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1995, 54, 155-166.	2.3	17
58	Numerical-experimental analysis of the effect of surface oxidation on the laser transformation hardening of CrãMo steels. <i>Applied Surface Science</i> , 2015, 357, 1236-1243.	6.1	17
59	The design and analysis of a novel structural piezoresistive pressure sensor for low pressure measurement. <i>Microsystem Technologies</i> , 2017, 23, 5677-5687.	2.0	17
60	Design optimization and fabrication of a novel structural piezoresistive pressure sensor for micro-pressure measurement. <i>Solid-State Electronics</i> , 2018, 139, 39-47.	1.4	17
61	Laser machined ultralow water adhesion surface by low pressure processing. <i>Materials Letters</i> , 2020, 270, 127721.	2.6	17
62	Model for the coupled predictive assessment of plasma expansion and material compression in laser shock processing applications. , 2000, 3885, 252.		16
63	Effect of plasma confinement on laser shock microforming of thin metal sheets. <i>Applied Surface Science</i> , 2011, 257, 5408-5412.	6.1	16
64	Effect of Three Different Finishing Processes on the Surface Morphology and Fatigue Life of A357.0 Parts Produced by LaserãBased Powder Bed Fusion. <i>Advanced Engineering Materials</i> , 2019, 21, 1801357.	3.5	16
65	Advanced 3D micromachining techniques using UV laser sources. <i>Microelectronic Engineering</i> , 2007, 84, 1337-1340.	2.4	15
66	Surface Modification of Aluminium Alloys with Laser Shock Processing. <i>Strojniski Vestnik/Journal of Mechanical Engineering</i> , 2011, 57, .	1.1	15
67	Effects of Laser Shock Peening on the Surface Integrity of 18 % Ni Maraging Steel. <i>Strojniski Vestnik/Journal of Mechanical Engineering</i> , 2016, 62, 291-298.	1.1	15
68	Laser Shock Processing: an emerging technique for the enhancement of surface properties and fatigue life of high-strength metal alloys. <i>International Journal of Microstructure and Materials Properties</i> , 2013, 8, 38.	0.1	14
69	Simultaneous Analysis of Neutron Damage, Tritium Generation and Energy Deposition in Different Cavity Designs for ICF Systems. <i>Fusion Science and Technology</i> , 1985, 8, 1850-1855.	0.6	13
70	Design of an advanced incremental fuzzy logic controller for laser surface heat treatments. <i>International Journal of Advanced Manufacturing Technology</i> , 2008, 36, 732-737.	3.0	13
71	Laser Shock Microforming of Thin Metal Sheets with ns Lasers. <i>Physics Procedia</i> , 2011, 12, 201-206.	1.2	13
72	Wettability and Surface Roughness Analysis of Laser Surface Texturing of AISI 430 Stainless Steel. <i>Materials</i> , 2022, 15, 2955.	2.9	13

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73	Thermomechanical modelling of stress fields in metallic targets subject to laser shock processing. International Journal of Structural Integrity, 2011, 2, 51-61.	3.3	12
74	Measurement of plasma electron density generated in an experiment of Laser Shock Processing, utilizing the H $\beta$ -line. Journal of Materials Processing Technology, 2016, 232, 9-18.	6.3	12
75	Durability of superhydrophobic laser-treated metal surfaces under icing conditions. Materials Letters: X, 2019, 3, 100021.	0.7	12
76	Hybrid fuzzy logic control of laser surface heat treatments. Applied Surface Science, 2007, 254, 879-883.	6.1	11
77	New techniques for laser microprocessing of photovoltaic devices based on thin-film a-Si:H. Applied Surface Science, 2007, 254, 1115-1120.	6.1	11
78	Laser Shock Processing as a Method for the Improvement of Metallic Materials Surface Properties: A Discussion on the Influence of Combined Mechanical and Thermal Effects. Materials Science Forum, 2007, 539-543, 1116-1121.	0.3	10
79	Laser Shock Processing of the Maraging Steel Surface. Materials Science Forum, 0, 537-538, 655-662.	0.3	10
80	Selective ablation of photovoltaic materials with UV laser sources for monolithic interconnection of devices based on a-Si:H. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2009, 159-160, 18-22.	3.5	10
81	Material flow and hardening at butt cold welding of aluminium. Journal of Materials Processing Technology, 2009, 209, 4255-4263.	6.3	10
82	Direct generation of superhydrophobic microstructures in metals by UV laser sources in the nanosecond regime. Advanced Optical Technologies, 2016, 5, 87-93.	1.7	10
83	Chemical and Mechanical Characterization of AISI 304 and AISI 1010 Laser Welding. Materials and Manufacturing Processes, 2016, 31, 311-318.	4.7	10
84	A review of the physics and technological issues of high intensity laser shock processing of materials as a method for mechanical properties modification. , 2006, , .		9
85	Minimization of the thermal material effects on pulsed dynamic laser welding. Journal of Materials Processing Technology, 2017, 246, 13-21.	6.3	9
86	Recent results in the analysis of heavy-ion-beam-driven ICF targets. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 1989, 278, 105-109.	1.6	7
87	A theoretical method for the calculation of frequency- and temperature-dependent interaction constants applicable to the predictive assessment of laser materials processing. Journal Physics D: Applied Physics, 2000, 33, 305-312.	2.8	7
88	Study of the refractive index change in a-Si:H thin films patterned by 532 nm laser radiation for photovoltaic applications. Thin Solid Films, 2010, 518, 5331-5339.	1.8	7
89	Characterization of laser peening-induced effects on a biomedical Ti6Al4V alloy by thermoelectric means. Optical Engineering, 2014, 53, 122502.	1.0	7
90	Customized laser beam intensity distribution for the laser surface treatment of geometrically convoluted components. Journal of Materials Processing Technology, 2019, 263, 223-232.	6.3	7

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91	Simulation code for ICF including radiative energy transfer. Laser and Particle Beams, 1989, 7, 305-313.	1.0	6
92	Fatigue Properties of Maraging Steel after Laser Peening. Metals, 2019, 9, 1271.	2.3	6
93	Simultaneous Reflectivity, Ellipsometry and Spectrometry Measurements in Submicron Structures for Liquid Sensing. Sensor Letters, 2008, 6, 564-569.	0.4	6
94	Nanosecond Laser Shock Microforming of Thin Metal Components. Journal of Laser Micro Nanoengineering, 2009, 4, 55-60.	0.1	6
95	<title>Ablation processes induced by UV lasers in metals and ceramics</title>. , 1998, , .		5
96	FEM model of butt cold welding. Science and Technology of Welding and Joining, 2007, 12, 402-409.	3.1	5
97	Ultraviolet nanosecond laser-assisted micro-modifications in lithium niobate monitored by Nd <sup>3+</sup> luminescence. Applied Physics A: Materials Science and Processing, 2007, 87, 87-90.	2.3	5
98	Annularly grooved membrane combined with rood beam piezoresistive pressure sensor for low pressure applications. Review of Scientific Instruments, 2017, 88, 035002.	1.3	5
99	Numerical-Experimental Study of the Consolidation Phenomenon in the Selective Laser Melting Process with a Thermo-Fluidic Coupled Model. Materials, 2018, 11, 1414.	2.9	5
100	Experimental Determination of Electronic Density and Temperature in Water-Confined Plasmas Generated by Laser Shock Processing. Metals, 2019, 9, 808.	2.3	5
101	Development of model-based laser irradiation customization strategies for optimized material phase transformations in the laser hardening of Cr-Mo steels. Materials and Design, 2021, 199, 109411.	7.0	5
102	Metallurgical and Mechanical Characterization of Low Carbon SteelâStainless Steel Dissimilar Joints Made by Laser Autogenous Welding. Metals, 2021, 11, 810.	2.3	5
103	Integrated Numerical-Experimental Assessment of the Effect of the AZ31B Anisotropic Behaviour in Extended-Surface Treatments by Laser Shock Processing. Metals, 2020, 10, 195.	2.3	5
104	Morphological Analysis of Laser Surface Texturing Effect on AISI 430 Stainless Steel. Materials, 2022, 15, 4580.	2.9	5
105	UV laser surface processing of metallic alloys: comparison of experimental and numerical results. Applied Surface Science, 1999, 138-139, 169-173.	6.1	4
106	Laser shock processing as a method of decreasing fatigue of a die-casting die made of maraging steel. International Journal of Microstructure and Materials Properties, 2008, 3, 271.	0.1	4
107	Induction of Engineered Residual Stresses Fields and Associate Surface Properties Modification by Short Pulse Laser Shock Processing. Materials Science Forum, 2010, 638-642, 2446-2451.	0.3	4
108	Numerical Thermo-Mechanical Modelling of Stress Fields and Residual Constraints in Metallic Targets Subject to Laser Shock Processing. Materials Science Forum, 2010, 638-642, 2682-2687.	0.3	4

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109	Uncertainty Estimation for Performance Evaluation of a Confocal Microscope as Metrology Equipment. <i>Mapan - Journal of Metrology Society of India</i> , 2014, 29, 29-42.	1.5	4
110	Minimization of the Thermal Impact in the Laser Welding of Dissimilar Stainless Steels. <i>Metals</i> , 2018, 8, 650.	2.3	4
111	Direct Generation of High-Aspect-Ratio Structures of AISI 316L by Laser-Assisted Powder Deposition. <i>Materials</i> , 2020, 13, 5670.	2.9	4
112	Induction of Thermo-Mechanical Residual Stresses in Metallic Materials by Laser Shock Processing. , 2014, , 2427-2444.		4
113	Modification of Ti6Al4V surface properties by combined DLW-DLIP hierarchical micro-nano structuring. <i>Advanced Optical Technologies</i> , 2020, 9, 121-130.	1.7	4
114	Control de procesos de temple con láser mediante dispositivos pirométricos. <i>Revista De Metalurgia</i> , 2002, 38, 195-204.	0.5	4
115	APLICACIÓN DE MODELOS SIMPLIFICADOS PARA LA DETERMINACIÓN DE VENTANAS DE TRABAJO PARA EL TEMPLE DE ACEROS POR LÁSER. <i>Dyna (Spain)</i> , 2014, 89, 533-541.	0.2	4
116	Laser heat treatments driven by integrated beams: role of irradiation nonuniformities. <i>Applied Optics</i> , 1999, 38, 4570.	2.1	3
117	Application of plasma monitoring methods to the optimized design of laser shock processing applications. , 2006, , .		3
118	&lt;i>In Situ&/i> Structural Characterization of Laser Welded NiTi Shape Memory Alloys. <i>Materials Science Forum</i> , 0, 738-739, 338-343.	0.3	3
119	Residual Stress Distributions in Bi-Metal (Ferritic to Austenitic Steel) Joints Made by Laser Welding. <i>Materials Science Forum</i> , 0, 772, 181-185.	0.3	3
120	Induction of through-thickness compressive residual stress fields in thin Al2024-T351 plates by laser shock processing. <i>International Journal of Structural Integrity</i> , 2015, 6, 725-736.	3.3	3
121	Development of a Cyber-Physical System based on selective Gaussian naïve Bayes model for a self-predict laser surface heat treatment process control. , 2016, , 1-8.		3
122	Numerical simulation of energy transport mechanisms in high-intensity laser-matter interaction experiments. , 1991, , .		2
123	<title>Numerical simulation and experimental diagnosis of the laser-plasma interaction in high-intensity processing applications</title>. , 1993, , .		2
124	Neural Model Reference Control of Laser Surface Heat Treatments. , 2007, , .		2
125	Adaptive neural network control system for laser surface heat treatments. <i>International Journal of Advanced Manufacturing Technology</i> , 2009, 41, 513-518.	3.0	2
126	Optical characterization of the heat-affected zone in laser patterning of thin film a-Si:H. , 2009, , .		2



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127	Laser Shock Processing of Metallic Materials: Coupling of Laser-Plasma Interaction and Material Behaviour Models for the Assessment of Key Process Issues. AIP Conference Proceedings, 2010, , .	0.4	2
128	UV laser-induced high resolution cleaving of Si wafers for microâ€“nano devices and polymeric waveguide characterization. Applied Surface Science, 2011, 257, 5424-5428.	6.1	2
129	Physical characterization of laser interaction and shock generation in laser shock processing: Coupled theoretical-experimental analysis. , 2012, , .		2
130	Compressive Residual Stresses and Associated Surface Modifications Induced in Ti6Al4V by Laser Shock Processing. Materials Science Forum, 2016, 879, 1408-1413.	0.3	2
131	The design of a novel structural four-beams-bossed-membrane (FBBM) piezoresistive pressure sensor. , 2017, , .		2
132	Improvement of surface and mechanical properties of high strength metallic alloys by laser shock processing. Advances in Materials and Processing Technologies, 2017, 3, 12-22.	1.4	2
133	Laser Shock Processing and Related Phenomena. Metals, 2020, 10, 797.	2.3	2
134	Modelo numÃ©rico tridimensional para la simulaciÃ³n de procesos de tratamiento superficial de materiales con lÃ¡ser. Revista De Metalurgia, 1999, 35, 75-83.	0.5	2
135	<title>Numerical modeling of laser-matter interaction in high-intensity laser applications</title>. , 1991, 1397, 813.		1
136	Characterization of UV laser ablation for microprocessing of a-Si:H thin films. , 2006, , .		1
137	Laser shock processing to improve residual stresses with and without paint layer on 6061-T6 aluminum alloy. , 2007, , .		1
138	Application of Laser Shock Processing System by Underwater Irradiation (1064 nm) in Metal Surface. AIP Conference Proceedings, 2008, , .	0.4	1
139	Surface Repair of Tool Made of 12 Ni Maraging Steel by Laser Cladding of NiCoMo Powder. Advanced Materials Research, 0, 89-91, 675-680.	0.3	1
140	Mechanical Properties Enhancement of High Reliability Metallic Materials by Laser Shock Processing. Materials Science Forum, 0, 706-709, 2565-2570.	0.3	1
141	Induction of engineered residual stresses fields and enhancement of fatigue life of high reliability metallic components by laser shock processing. , 2013, , .		1
142	Laser Plasma Interaction and Shock Material Processing. , 2014, , 47-74.		1
143	Laser shock processing influence on constitutive behaviour of graded structures produced by laser welding of ferritic to austenitic stainless steel. Science and Technology of Welding and Joining, 2014, 19, 302-309.	3.1	1
144	Numerical modelling and experimental implementation of laser shock micro-forming of thin metal sheets. International Journal of Microstructure and Materials Properties, 2015, 10, 31.	0.1	1

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145	Fatigue life enhancement of high reliability metallic components by laser shock processing. Proceedings of SPIE, 2015, , .	0.8	1
146	Analysis of residual stress and corrosion resistance of laser shock-processed 6012 and 6082 aluminium alloys. Proceedings of SPIE, 2008, , .	0.8	1
147	<title>Set of numerical models for the characterization of laser processing applications</title>. , 1993, , .		0
148	Development of a model-based, integrated monitoring and control system for laser processing applications. , 1994, , .		0
149	Study of Surface Modifications on Metals and Ceramics Induced by Excimer Lasers. , 0, , .		0
150	<title>Surface properties modifications obtained on ceramics and metals resulting from excimer laser processing technique</title>. , 1998, , .		0
151	<title>Laser shock processing system by underwater irradiation (532 nm) in metal surface</title>. , 2004, , .		0
152	Assessment of laser ablation techniques in a-si technologies for position-sensor development. , 2005, , .		0
153	<title>Advanced 3D micromachining techniques using V-LIV laser sources in the nanosecond regime</title>. , 2005, , .		0
154	Numerical simulation of laser shock processing of metal alloys. , 0, , .		0
155	Laser shock processing on (AISI 1040) steel surface. , 2006, , .		0
156	Thin-film silicon position sensors made using laser scribing. , 2006, 6189, 141.		0
157	Model based plasma monitoring methods for the predictive assessment of LSP applications. , 2007, , .		0
158	Optical sensing based on simultaneous ellipsometry, reflectivity and spectrometry profiles in sub-micro-holes structures for bio-applications. , 2007, , .		0
159	Model based optimization criteria for the generation of deep compressive residual stresses in high elastic limit alloys by laser shock processing. , 2007, , .		0
160	Real Time Fuzzy Logic Control of Laser Surface Heat Treatments. , 2007, , .		0
161	Photonic sensors based on integrated reflectivity, ellipsometry and spectrometry measurements in submicron size geometries. , 2007, , .		0
162	Short pulse Laser Shock Microforming of thin metal MEMS components. , 2009, , .		0

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163	Model based analysis of the effect of irradiation parameters on the plasma driven thermal fluxes in laser shock processing. , 2009, , .		0
164	Improvement of mechanical properties and life extension of high reliability structural components by laser shock processing. , 2011, , .		0
165	Effect of Thermal Treatments on the Mechanical Properties Enhancement of High Reliability Metallic Materials by Laser Shock Processing. Materials Science Forum, 0, 783-786, 2376-2381.	0.3	0
166	Thermoelectric assessment of laser peening induced effects on a metallic biomaterial Ti6Al4V. , 2014, , .		0
167	Computer-Aided Development of Thermo-Mechanical Laser Surface Treatments for the Fatigue Life Extension of Bio-Mechanical Components. Lecture Notes in Computer Science, 2015, , 429-438.	1.3	0
168	Robust generation of bio-inspired ultrahydrophobic metallic surfaces by nanosecond pulsed lasers. International Journal of Microstructure and Materials Properties, 2017, 12, 276.	0.1	0
169	Effect of laser shock processing and heat treatment sequence on surface layer characteristics of high strength Ni-Co-Mo steel. International Journal of Microstructure and Materials Properties, 2017, 12, 427.	0.1	0
170	Laser Shock Processing as an Advanced Technique for the Surface and Mechanical Resistance Properties Modification of Bioabsorbable Magnesium Alloys. Materials Science Forum, 2018, 941, 2489-2494.	0.3	0
171	Chemical analysis on laser processed Ultrahydrophobic Ti-6Al-4V surface by high vacuum Process. Data in Brief, 2019, 22, 954-959.	1.0	0
172	SIMULACIÓN TERMO-MECÁNICA DE PROCESOS DE CONFORMADO DIRECTO POR LÁSER. Dyna (Spain), 2016, 91, 88-95.	0.2	0
173	Caracterización de la reacción de oxidación superficial y su influencia sobre la absorción de radiación durante el proceso de temple superficial con láser para el acero 42CrMo4. Revista De Metalurgia, 2016, 52, e067.	0.5	0
174	Caracterización experimental de las emisiones de nanopartículas en el tratamiento de AA6061, AISI304 y Ti6Al4V por ondas de choque generadas por LASER. Revista De Metalurgia, 2017, 53, 104.	0.5	0
175	Metrologic Assessment of High Power Laser Generated Surface Roughness by Confocal Laser Scanning Microscopy. , 2005, , 133-140.		0