JosÃ© L OcaÃ‘a

List of Publications by Year
in descending order

175 papers	3,896 citations	81900 39 h-index	144013 57 g-index
178 all docs	178 docs citations	178 times ranked	2394 citing authors

#	Article	IF	Citations
1	Wettability and Surface Roughness Analysis of Laser Surface Texturing of AISI 430 Stainless Steel. Materials, 2022, 15, 2955.	2.9	13
2	Morphological Analysis of Laser Surface Texturing Effect on AISI 430 Stainless Steel. Materials, 2022, 15, 4580.	2.9	5
3	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
4	Metallurgical and Mechanical Characterization of Low Carbon Steelâ€"Stainless Steel Dissimilar Joints Made by Laser Autogenous Welding. Metals, 2021, 11, 810.	2.3	5
5	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
6	Direct Generation of High-Aspect-Ratio Structures of AISI 316L by Laser-Assisted Powder Deposition. Materials, 2020, 13, 5670.	2.9	4
7	Laser Shock Processing and Related Phenomena. Metals, 2020, 10, 797.	2.3	2
8	Laser machined ultralow water adhesion surface by low pressure processing. Materials Letters, 2020, 270, 127721.	2.6	17
9	Modification of Ti6Al4V surface properties by combined DLW-DLIP hierarchical micro-nano structuring. Advanced Optical Technologies, 2020, 9, 121-130.	1.7	4
10	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
11	Experimental Determination of Electronic Density and Temperature in Water-Confined Plasmas Generated by Laser Shock Processing. Metals, 2019, 9, 808.	2.3	5
12	Chemical analysis on laser processed Ultrahydrophobic Ti-6Al-4V surface by high vacuum Process. Data in Brief, 2019, 22, 954-959.	1.0	0
13	Durability of superhydrophobic laser-treated metal surfaces under icing conditions. Materials Letters: X, 2019, 3, 100021.	0.7	12
14	Effect of Three Different Finishing Processes on the Surface Morphology and Fatigue Life of A357.0 Parts Produced by Laserâ€Based Powder Bed Fusion. Advanced Engineering Materials, 2019, 21, 1801357.	3.5	16
15	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
16	Fatigue Properties of Maraging Steel after Laser Peening. Metals, 2019, 9, 1271.	2.3	6
17	Wettability modification of laser-fabricated hierarchical surface structures in Ti-6Al-4V titanium alloy. Applied Surface Science, 2019, 463, 838-846.	6.1	92
18	Hybrid laser and vacuum process for rapid ultrahydrophobic Ti-6Al-4â€¯V surface formation. Applied Surface Science, 2019, 471, 759-766.	6.1	47

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19	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
20	Application of massive laser shock processing for improvement of mechanical and tribological properties. Surface and Coatings Technology, 2018, 342, 1-11.	4.8	34
21	Effects of laser processing on the transformation characteristics of NiTi: A contribute to additive manufacturing. Scripta Materialia, 2018, 152, 122-126.	5.2	84
22	Design optimization and fabrication of a novel structural piezoresistive pressure sensor for micro-pressure measurement. Solid-State Electronics, 2018, 139, 39-47.	1.4	17
23	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
24	Minimization of the Thermal Impact in the Laser Welding of Dissimilar Stainless Steels. Metals, 2018, 8, 650.	2.3	4
25	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
26	Superhydrophobicity on hierarchical periodic surface structures fabricated via direct laser writing and direct laser interference patterning on an aluminium alloy. Optics and Lasers in Engineering, 2018, 111, 193-200.	3.8	57
27	Design, fabrication and characterization of an annularly grooved membrane combined with rood beam piezoresistive pressure sensor for low pressure measurements. Sensors and Actuators A: Physical, 2018, 279, 525-536.	4.1	18
28	Design Optimization and Fabrication of a Novel Structural SOI Piezoresistive Pressure Sensor with High Accuracy. Sensors, 2018, 18, 439.	3.8	48
29	Annularly grooved membrane combined with rood beam piezoresistive pressure sensor for low pressure applications. Review of Scientific Instruments, 2017, 88, 035002.	1.3	5
30	The design and analysis of a novel structural piezoresistive pressure sensor for low pressure measurement. Microsystem Technologies, 2017, 23, 5677-5687.	2.0	17
31	The design of a novel structural four-beams-bossed-membrane (FBBM) piezoresistive pressure sensor. , 2017, , .		2
32	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
33	Robust fabrication of Î¼-patterns with tunable and durable wetting properties: hydrophilic to ultrahydrophobic via a vacuum process. Journal of Materials Chemistry A, 2017, 5, 7125-7136.	10.3	73
34	Minimization of the thermal material effects on pulsed dynamic laser welding. Journal of Materials Processing Technology, 2017, 246, 13-21.	6.3	9
35	Design and optimization of a novel structural MEMS piezoresistive pressure sensor. Microsystem Technologies, 2017, 23, 4531-4541.	2.0	21
36	Fabrication of multi-scale periodic surface structures on Ti-6Al-4V by direct laser writing and direct laser interference patterning for modified wettability applications. Optics and Lasers in Engineering, 2017, 98, 134-142.	3.8	54

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37	Influence of ambient conditions on the evolution of wettability properties of an IR-, ns-laser textured aluminium alloy. RSC Advances, 2017, 7, 39617-39627.	3.6	91
38	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
39	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
40	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
41	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
42	CaracterizaciÃ³n experimental de las emisiones de nanopartÃculas en el tratamiento de AA6061, AISI304 y Ti6Al4V por ondas de choque generadas por LASER. Revista De Metalurgia, 2017, 53, 104.	0.5	0
43	Residual stress analysis in laser welded NiTi sheets using synchrotron X-ray diffraction. Materials and Design, 2016, 100, 180-187.	7.0	68
44	Numerical/experimental analysis of the laser surface hardening with overlapped tracks to design the configuration of the process for Cr-Mo steels. Materials and Design, 2016, 102, 225-237.	7.0	52
45	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
46	Effect of laser welding parameters on the austenite and martensite phase fractions of NiTi. Materials Characterization, 2016, 119, 148-151.	4.4	52
47	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
48	Corrosion resistance of laser patterned ultrahydrophobic aluminium surface. Materials Letters, 2016, 184, 100-103.	2.6	68
49	Compressive Residual Stresses and Associated Surface Modifications Induced in Ti6Al4V by Laser Shock Processing. Materials Science Forum, 2016, 879, 1408-1413.	0.3	2
50	Bio inspired self-cleaning ultrahydrophobic aluminium surface by laser processing. RSC Advances, 2016, 6, 72933-72941.	3.6	82
51	Measurement of plasma electron density generated in an experiment of Laser Shock Processing, utilizing the HÎ±-line. Journal of Materials Processing Technology, 2016, 232, 9-18.	6.3	12
52	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
53	Chemical and Mechanical Characterization of AISI 304 and AISI 1010 Laser Welding. Materials and Manufacturing Processes, 2016, 31, 311-318.	4.7	10
54	One-step fabrication of near superhydrophobic aluminum surface by nanosecond laser ablation. Applied Surface Science, 2016, 374, 2-11.	6.1	140

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55	Development of a Cyber-Physical System based on selective Gaussian naÃ¯ve Bayes model for a self-predict laser surface heat treatment process control. , 2016, , 1-8.		3
56	Effects of Laser Shock Peening on the Surface Integrity of 18 % Ni Maraging Steel. Strojniski Vestnik/Journal of Mechanical Engineering, 2016, 62, 291-298.	1.1	15
57	SIMULACIÃ“N TERMO-MECÃNICA DE PROCESOS DE CONFORMADO DIRECTO POR LÃSER. Dyna (Spain), 2016, 91, 88-95.	0.2	0
58	CaracterizaciÃ³n de la reacciÃ³n de oxidaciÃ³n superficial y su influencia sobre la absorciÃ³n de radiaciÃ³n durante el proceso de temple superficial con lÃ¡ser para el acero 42CrMo4. Revista De Metalurgia, 2016, 52, e067.	0.5	0
59	Induction of through-thickness compressive residual stress fields in thin Al2024-T351 plates by laser shock processing. International Journal of Structural Integrity, 2015, 6, 725-736.	3.3	3
60	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
61	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
62	Random-type scanning patterns in laser shock peening without absorbing coating in 2024-T351 Al alloy: A solution to reduce residual stress anisotropy. Optics and Laser Technology, 2015, 73, 179-187.	4.6	78
63	Eigenstrain simulation of residual stresses induced by laser shock processing in a Ti6Al4V hip replacement. Materials & Design, 2015, 79, 106-114.	5.1	52
64	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
65	Fatigue life enhancement of high reliability metallic components by laser shock processing. Proceedings of SPIE, 2015, , .	0.8	1
66	Effect of advancing direction on fatigue life of 316L stainless steel specimens treated by double-sided laser shock peening. International Journal of Fatigue, 2015, 79, 1-9.	5.7	103
67	Numerical-experimental analysis of the effect of surface oxidation on the laser transformation hardening of Crâ€“Mo steels. Applied Surface Science, 2015, 357, 1236-1243.	6.1	17
68	Influence of pulse sequence and edge material effect on fatigue life of Al2024-T351 specimens treated by laser shock processing. International Journal of Fatigue, 2015, 70, 196-204.	5.7	54
69	Laser Plasma Interaction and Shock Material Processing. , 2014, , 47-74.		1
70	Characterization of laser peening-induced effects on a biomedical Ti6Al4V alloy by thermoelectric means. Optical Engineering, 2014, 53, 122502.	1.0	7
71	Uncertainty Estimation for Performance Evaluation of a Confocal Microscope as Metrology Equipment. Mapan - Journal of Metrology Society of India, 2014, 29, 29-42.	1.5	4
72	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

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73	Thermoelectric assessment of laser peening induced effects on a metallic biomaterial Ti6Al4V. , 2014, , .		0
74	Induction of Thermo-Mechanical Residual Stresses in Metallic Materials by Laser Shock Processing. , 2014, , 2427-2444.		4
75	APLICACIÃ“N DE MODELOS SIMPLIFICADOS PARA LA DETERMINACIÃ“N DE VENTANAS DE TRABAJO PARA EL TEMPLE DE ACEROS POR LÃSER. Dyna (Spain), 2014, 89, 533-541.	0.2	4
76	Laser Shock Processing: an emerging technique for the enhancement of surface properties and fatigue life of high-strength metal alloys. International Journal of Microstructure and Materials Properties, 2013, 8, 38.	0.1	14
77	Induction of engineered residual stresses fields and enhancement of fatigue life of high reliability metallic components by laser shock processing. , 2013, , .		1
78	Physical characterization of laser interaction and shock generation in laser shock processing: Coupled theoretical-experimental analysis. , 2012, , .		2
79	Laser shock peening without absorbent coating (LSPwC) effect on 3D surface topography and mechanical properties of 6082-T651 Al alloy. Surface and Coatings Technology, 2012, 208, 109-116.	4.8	84
80	Fatigue in laser shock peened open-hole thin aluminium specimens. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2012, 534, 573-579.	5.6	60
81	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
82	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
83	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
84	Improvement of mechanical properties and life extension of high reliability structural components by laser shock processing. , 2011, , .		0
85	Surface modification of laserâ€•and shotâ€peened 6082 aluminium alloy. International Journal of Structural Integrity, 2011, 2, 9-21.	3.3	34
86	Effect of plasma confinement on laser shock microforming of thin metal sheets. Applied Surface Science, 2011, 257, 5408-5412.	6.1	16
87	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
88	Effect of laser shock processing on fatigue crack growth of duplex stainless steel. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 914-919.	5.6	111
89	Mechanical behaviour of Nd:YAG laser welded superelastic NiTi. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2011, 528, 5560-5565.	5.6	50
90	Laser Shock Microforming of Thin Metal Sheets with ns Lasers. Physics Procedia, 2011, 12, 201-206.	1.2	13

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91	Surface Modification of Aluminium Alloys with Laser Shock Processing. Strojniski Vestnik/Journal of Mechanical Engineering, 2011, 57, .	1.1	15
92	Laser ablation modelling of aluminium, silver and crystalline silicon for applications in photovoltaic technologies. Surface Engineering, 2011, 27, 414-423.	2.2	24
93	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
94	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
95	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
96	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
97	Laser Shock Processing of 6061-T6 Al alloy with 1064nm and 532nm wavelengths. Applied Surface Science, 2010, 256, 5828-5831.	6.1	51
98	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
99	Short pulse Laser Shock Microforming of thin metal MEMS components. , 2009, , .		0
100	Model based analysis of the effect of irradiation parameters on the plasma driven thermal fluxes in laser shock processing. , 2009, , .		0
101	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
102	Adaptive neural network control system for laser surface heat treatments. International Journal of Advanced Manufacturing Technology, 2009, 41, 513-518.	3.0	2
103	Material flow and hardening at butt cold welding of aluminium. Journal of Materials Processing Technology, 2009, 209, 4255-4263.	6.3	10
104	Laser shock microforming of thin metal sheets. Applied Surface Science, 2009, 255, 5633-5636.	6.1	46
105	Numerical simulation of plasma dynamics in laser shock processing experiments. Applied Surface Science, 2009, 255, 5181-5185.	6.1	45
106	Optical observation of shock waves and cavitation bubbles in high intensity laser-induced shock processes. Applied Optics, 2009, 48, 3671.	2.1	32
107	Optical characterization of the heat-affected zone in laser patterning of thin film a-Si:H. , 2009, , .		2
108	Nanosecond Laser Shock Microforming of Thin Metal Components. Journal of Laser Micro Nanoengineering, 2009, 4, 55-60.	0.1	6

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109	Design of an advanced incremental fuzzy logic controller for laser surface heat treatments. International Journal of Advanced Manufacturing Technology, 2008, 36, 732-737.	3.0	13
110	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
111	Application of Laser Shock Processing System by Underwater Irradiation (1064 nm) in Metal Surface. AIP Conference Proceedings, 2008, , .	0.4	1
112	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
113	Simultaneous Reflectivity, Ellipsometry and Spectrometry Measurements in Submicron Structures for Liquid Sensing. Sensor Letters, 2008, 6, 564-569.	0.4	6
114	Analysis of residual stress and corrosion resistance of laser shock-processed 6012 and 6082 aluminium alloys. Proceedings of SPIE, 2008, , .	0.8	1
115	Model based plasma monitoring methods for the predictive assessment of LSP applications. , 2007, , .		0
116	Development of new low transformation temperature welding consumable to prevent cold cracking in high strength steel welds. Science and Technology of Welding and Joining, 2007, 12, 516-522.	3.1	65
117	FEM model of butt cold welding. Science and Technology of Welding and Joining, 2007, 12, 402-409.	3.1	5
118	Optical sensing based on simultaneous ellipsometry, reflectivity and spectrometry profiles in sub-micro-holes structures for bio-applications. , 2007, , .		0
119	Model based optimization criteria for the generation of deep compressive residual stresses in high elastic limit alloys by laser shock processing. , 2007, , .		0
120	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
121	Laser shock processing to improve residual stresses with and without paint layer on 6061-T6 aluminum alloy. , 2007, , .		1
122	Optical characterization of extremely small volumes of liquid in sub-micro-holes by simultaneous reflectivity, ellipsometry and spectrometry. Optics Express, 2007, 15, 13318.	3.4	18
123	Real Time Fuzzy Logic Control of Laser Surface Heat Treatments. , 2007, , .		0
124	Neural Model Reference Control of Laser Surface Heat Treatments. , 2007, , .		2
125	Photonic sensors based on integrated reflectivity, ellipsometry and spectrometry measurements in submicron size geometries. , 2007, , .		0
126	Advanced 3D micromachining techniques using UV laser sources. Microelectronic Engineering, 2007, 84, 1337-1340.	2.4	15

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127	Ultraviolet nanosecond laser-assisted micro-modifications in lithium niobate monitored by Nd3+ luminescence. Applied Physics A: Materials Science and Processing, 2007, 87, 87-90.	2.3	5
128	Hybrid fuzzy logic control of laser surface heat treatments. Applied Surface Science, 2007, 254, 879-883.	6.1	11
129	Short pulse laser microforming of thin metal sheets for MEMS manufacturing. Applied Surface Science, 2007, 254, 997-1001.	6.1	56
130	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
131	Laser shock processing on (AISI 1040) steel surface. , 2006, , .		0
132	Characterization of UV laser ablation for microprocessing of a-Si:H thin films. , 2006, , .		1
133	Thin-film silicon position sensors made using laser scribing. , 2006, 6189, 141.		0
134	Effect of an absorbent overlay on the residual stress field induced by laser shock processing on aluminum samples. Applied Surface Science, 2006, 252, 6201-6205.	6.1	92
135	Wear and friction of 6061-T6 aluminum alloy treated by laser shock processing. Wear, 2006, 260, 847-854.	3.1	137
136	Application of plasma monitoring methods to the optimized design of laser shock processing applications. , 2006, , .		3
137	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
138	Assessment of laser ablation techniques in a-si technologies for position-sensor development. , 2005, , .		0
139	<title>Advanced 3D micromachining techniques using V-UV laser sources in the nanosecond regime</title>. , 2005, , .		0
140	High level compressive residual stresses produced in aluminum alloys by laser shock processing. Applied Surface Science, 2005, 252, 883-887.	6.1	80
141	Microprocessing of ITO and a-Si thin films using ns laser sources. Journal of Micromechanics and Microengineering, 2005, 15, 1271-1278.	2.6	74
142	Metrologic Assessment of High Power Laser Generated Surface Roughness by Confocal Laser Scanning Microscopy. , 2005, , 133-140.		0
143	Effect of laser shock processing on fatigue crack growth and fracture toughness of 6061-T6 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 291-295.	5.6	189
144	Numerical simulation of surface deformation and residual stresses fields in laser shock processing experiments. Applied Surface Science, 2004, 238, 242-248.	6.1	105

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145	Experimental assessment of the influence of irradiation parameters on surface deformation and residual stresses in laser shock processed metallic alloys. Applied Surface Science, 2004, 238, 501-505.	6.1	57
146	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
147	<title>Laser shock processing system by underwater irradiation (532 nm) in metal surface</title>. , 2004, , .		0
148	Effect of laser shock processing on fatigue crack growth and fracture toughness of 6061-T6 aluminum alloy. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2004, 386, 291-295.	5.6	74
149	Control de procesos de temple con lÃ¡ser mediante dispositivos piromÃ©tricos. Revista De Metalurgia, 2002, 38, 195-204.	0.5	4
150	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
151	Model for the coupled predictive assessment of plasma expansion and material compression in laser shock processing applications. , 2000, 3885, 252.		16
152	UV laser surface processing of metallic alloys: comparison of experimental and numerical results. Applied Surface Science, 1999, 138-139, 169-173.	6.1	4
153	Laser heat treatments driven by integrated beams: role of irradiation nonuniformities. Applied Optics, 1999, 38, 4570.	2.1	3
154	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
155	<title>Ablation processes induced by UV lasers in metals and ceramics</title>. , 1998, , .		5
156	<title>Surface properties modifications obtained on ceramics and metals resulting from excimer laser processing technique</title>. , 1998, , .		0
157	A mathematical model for penetration laser welding as a free-boundary problem. Journal Physics D: Applied Physics, 1997, 30, 1300-1313.	2.8	54
158	Space and time resolved absorption spectroscopy of directly and indirectly driven expanding plasmas. Journal of Quantitative Spectroscopy and Radiative Transfer, 1995, 54, 155-166.	2.3	17
159	Development of a model-based, integrated monitoring and control system for laser processing applications. , 1994, , .		0
160	<title>Numerical simulation and experimental diagnosis of the laser-plasma interaction in high-intensity processing applications</title>. , 1993, , .		2
161	<title>Set of numerical models for the characterization of laser processing applications</title>. , 1993, , .		0
162	<title>Numerical modeling of laser-matter interaction in high-intensity laser applications</title>. , 1991, 1397, 813.		1

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163	Numerical simulation of energy transport mechanisms in high-intensity laser-matter interaction experiments. , 1991, , .		2
164	Simulation code for ICF including radiative energy transfer. Laser and Particle Beams, 1989, 7, 305-313.	1.0	6
165	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
166	Analysis of directly driven ICF targets. Laser and Particle Beams, 1986, 4, 349-392.	1.0	43
167	Simultaneous Analysis of Neutron Damage, Tritium Generation and Energy Deposition in Different Cavity Designs for ICF Systems. Fusion Science and Technology, 1985, 8, 1850-1855.	0.6	13
168	Study of Surface Modifications on Metals and Ceramics Induced by Excimer Lasers. , 0, , .		0
169	Numerical simulation of laser shock processing of metal alloys. , 0, , .		0
170	Laser Shock Processing of the Maraging Steel Surface. Materials Science Forum, 0, 537-538, 655-662.	0.3	10
171	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
172	Mechanical Properties Enhancement of High Reliability Metallic Materials by Laser Shock Processing. Materials Science Forum, 0, 706-709, 2565-2570.	0.3	1
173	<i>In Situ</i> Structural Characterization of Laser Welded NiTi Shape Memory Alloys. Materials Science Forum, 0, 738-739, 338-343.	0.3	3
174	Residual Stress Distributions in Bi-Metal (Ferritic to Austenitic Steel) Joints Made by Laser Welding. Materials Science Forum, 0, 772, 181-185.	0.3	3
175	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