Pedro Serra

List of Publications by Year
in descending order

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105 papers	4,132 citations	101535 36 h-index	123420 61 g-index
118 all docs	118 docs citations	118 times ranked	2923 citing authors

#	Article	IF	Citations
1	The Combined Use of Gold Nanoparticles and Infrared Radiation Enables Cytosolic Protein Delivery. Chemistry - A European Journal, 2021, 27, 4670-4675.	3.3	6
2	Laser-induced forward transfer of conductive screen-printing inks. Applied Surface Science, 2020, 507, 145047.	6.1	30
3	Superparamagnetic Nanoparticles with Efficient Near-Infrared Photothermal Effect at the Second Biological Window. Molecules, 2020, 25, 5315.	3.8	7
4	Laser-Induced Forward Transfer: A Method for Printing Functional Inks. Crystals, 2020, 10, 651.	2.2	25
5	Laserâ€Induced Forward Transfer: A Digital Approach for Printing Devices on Regular Paper. Advanced Materials Technologies, 2020, 5, 2000080.	5.8	8
6	Transparent and conductive silver nanowires networks printed by laser-induced forward transfer. Applied Surface Science, 2019, 476, 828-833.	6.1	27
7	Laserâ€Induced Forward Transfer: Fundamentals and Applications. Advanced Materials Technologies, 2019, 4, 1800099.	5.8	212
8	Laser-induced forward transfer for printed electronics applications. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	39
9	Spraying dynamics in continuous wave laser printing of conductive inks. Scientific Reports, 2018, 8, 7999.	3.3	13
10	Laser-induced forward transfer of low viscosity inks. Applied Surface Science, 2017, 418, 530-535.	6.1	21
11	Low-Cost Fabrication of Printed Electronics Devices through Continuous Wave Laser-Induced Forward Transfer. ACS Applied Materials & Interfaces, 2017, 9, 29412-29417.	8.0	45
12	Laser-induced forward transfer: Propelling liquids with light. Applied Surface Science, 2017, 418, 559-564.	6.1	31
13	Laser printing of functional materials. , 2017, , .		1
14	Direct Laser Printing of Tailored Polymeric Microlenses. ACS Applied Materials & Interfaces, 2016, 8, 17028-17032.	8.0	54
15	Beam waist position study for surface modification of polymethyl-methacrylate with femtosecond laser pulses. Applied Surface Science, 2016, 374, 353-358.	6.1	7
16	Printing of silver conductive lines through laser-induced forward transfer. Applied Surface Science, 2016, 374, 265-270.	6.1	16
17	Sub-wavelength Laser Nanopatterning using Droplet Lenses. Scientific Reports, 2015, 5, 16199.	3.3	30
18	A surface acoustic wave bio-electronic nose for detection of volatile odorant molecules. Biosensors and Bioelectronics, 2015, 67, 516-523.	10.1	58

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19	Conductive silver ink printing through the laser-induced forward transfer technique. Applied Surface Science, 2015, 336, 304-308.	6.1	38
20	Laser-induced forward transfer of silver nanopaste for microwave interconnects. Applied Surface Science, 2015, 331, 254-261.	6.1	39
21	Femtosecond laser surface ablation of polymethyl-methacrylate with position control through<i>z</i>-scan. Journal Physics D: Applied Physics, 2015, 48, 335302.	2.8	8
22	Precise surface modification of polymethyl-methacrylate with near-infrared femtosecond laser. Applied Surface Science, 2015, 336, 170-175.	6.1	9
23	High-speed multi-jets printing using laser forward transfer: time-resolved study of the ejection dynamics. Optics Express, 2014, 22, 17122.	3.4	37
24	Interaction between jets during laser-induced forward transfer. Applied Physics Letters, 2014, 105, 014101.	3.3	23
25	Laser-generated liquid microjets: correlation between bubble dynamics and liquid ejection. Microfluidics and Nanofluidics, 2014, 16, 55-63.	2.2	62
26	Film-free laser printing: Jetting dynamics analyzed through time-resolved imaging. Applied Surface Science, 2014, 302, 303-308.	6.1	12
27	Surface ablation of transparent polymers with femtosecond laser pulses. Applied Surface Science, 2014, 302, 226-230.	6.1	13
28	Preparation of surface acoustic wave odor sensors by laser-induced forward transfer. Sensors and Actuators B: Chemical, 2014, 192, 369-377.	7.8	37
29	Deposition and characterization of lines printed through laser-induced forward transfer. Applied Physics A: Materials Science and Processing, 2013, 110, 751-755.	2.3	27
30	Applications of laser printing for organic electronics. Proceedings of SPIE, 2013, , .	0.8	17
31	Irradiation of glass with infrared femtosecond laser pulses. Applied Physics A: Materials Science and Processing, 2013, 112, 203-207.	2.3	5
32	Femtosecond laser ablation of polymethyl-methacrylate with high focusing control. Applied Surface Science, 2013, 278, 185-189.	6.1	35
33	Laser microfabrication of biomedical devices: time-resolved microscopy of the printing process. Proceedings of SPIE, 2013, , .	0.8	0
34	Film-free laser microprinting of complex materials. , 2013, , .		0
35	Surface acoustic wave biosensor based on odorant binding proteins deposited by laser induced forward transfer. , 2013, , .		4
36	Film-free laser microprinting of transparent solutions. , 2013, , .		1

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37	On the correlation between droplet volume and irradiation conditions in the laser forward transfer of liquids. Applied Physics A: Materials Science and Processing, 2012, 109, 5-14.	2.3	12
38	Surface modification of UHMWPE with infrared femtosecond laser. Applied Surface Science, 2012, 258, 9256-9259.	6.1	12
39	Microdroplet deposition through a film-free laser forward printing technique. Applied Surface Science, 2012, 258, 9412-9416.	6.1	10
40	Influence of solution properties in the laser forward transfer of liquids. Applied Surface Science, 2012, 258, 9379-9384.	6.1	32
41	Optimization of laser printing of nanoparticle suspensions for microelectronic applications. Applied Physics A: Materials Science and Processing, 2012, 106, 471-478.	2.3	53
42	Study of liquid deposition during laser printing of liquids. Applied Surface Science, 2011, 257, 5255-5258.	6.1	21
43	Liquids microprinting through a novel film-free femtosecond laser based technique. Applied Surface Science, 2011, 257, 5190-5194.	6.1	19
44	Droplet printing through bubble contact in the laser forward transfer of liquids. Applied Surface Science, 2011, 257, 2825-2829.	6.1	15
45	3D features of modified photostructurable glassâ€“ceramic with infrared femtosecond laser pulses. Applied Surface Science, 2011, 257, 5219-5222.	6.1	6
46	Microchannel formation through FoturanÂ® with infrared femtosecond and ultraviolet nanosecond lasers. Journal of Micromechanics and Microengineering, 2011, 21, 025005.	2.6	5
47	Sessile droplet formation in the laser-induced forward transfer of liquids: A time-resolved imaging study. Thin Solid Films, 2010, 518, 5321-5325.	1.8	65
48	Novel laser printing technique for miniaturized biosensors preparation. Sensors and Actuators B: Chemical, 2010, 145, 596-600.	7.8	62
49	The laser-induced forward transfer technique for microprinting. , 2010, , 367-393.		6
50	Film-free laser forward printing of transparent and weakly absorbing liquids. Optics Express, 2010, 18, 21815.	3.4	47
51	Laser-Induced Forward Transfer: A Laser-Based Technique for Biomolecules Printing. , 2010, , 53-80.		7
52	Time-resolved imaging of the laser forward transfer of liquids. Journal of Applied Physics, 2009, 106, .	2.5	128
53	Laser fabricated microchannels inside photostructurable glass-ceramic. Applied Surface Science, 2009, 255, 5499-5502.	6.1	35
54	Liquids microprinting through laser-induced forward transfer. Applied Surface Science, 2009, 255, 5342-5345.	6.1	52

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55	Printing biological solutions through laser-induced forward transfer. Applied Physics A: Materials Science and Processing, 2008, 93, 941-945.	2.3	57
56	Jet formation in the laser forward transfer of liquids. Applied Physics A: Materials Science and Processing, 2008, 93, 453-456.	2.3	94
57	New method to deliver exogenous material into developing planarian embryos. Journal of Experimental Zoology Part B: Molecular and Developmental Evolution, 2008, 310B, 668-681.	1.3	16
58	Laser Direct-Write Techniques for Printing of Complex Materials. MRS Bulletin, 2007, 32, 23-31.	3.5	325
59	Production of miniaturized biosensors through laser-induced forward transfer. , 2007, , .		3
60	Laser printing of enamels on tiles. Applied Surface Science, 2007, 253, 7733-7737.	6.1	8
61	Study of the laser-induced forward transfer of liquids for laser bioprinting. Applied Surface Science, 2007, 253, 7855-7859.	6.1	105
62	Laser-induced forward transfer of liquids: Study of the droplet ejection process. Journal of Applied Physics, 2006, 99, 084909.	2.5	122
63	Laser-induced forward Transfer: a Direct-writing Technique for Biosensors Preparation. Journal of Laser Micro Nanoengineering, 2006, 1, 236-242.	0.1	61
64	Influence of preheating and hematite content of clay brick pavers on the characteristics of lines marked with a Nd:YAG laser. Applied Surface Science, 2006, 253, 2272-2277.	6.1	8
65	Growth of large microcones in steel under multipulsed Nd:YAG laser irradiation. Applied Physics A: Materials Science and Processing, 2006, 83, 417-420.	2.3	34
66	Marking of lines on clay brick pavers by vitrification with a Nd:YAG laser. Journal of Laser Applications, 2006, 18, 156-160.	1.7	3
67	DNA deposition through laser induced forward transfer. Biosensors and Bioelectronics, 2005, 20, 1638-1642.	10.1	186
68	Laser-Induced Growth of Titanium Nitride Microcolumns on Biased Titanium Targets. Journal of Materials Research, 2005, 20, 62-67.	2.6	7
69	Preparation of functional DNA microarrays through laser-induced forward transfer. Applied Physics Letters, 2004, 85, 1639-1641.	3.3	158
70	Laser-induced forward transfer of biomolecules. Thin Solid Films, 2004, 453-454, 27-30.	1.8	102
71	Structure formation on titanium during oxidation induced by cumulative pulsed Nd:YAG laser irradiation. Applied Physics A: Materials Science and Processing, 2004, 78, 765-770.	2.3	38
72	Laser direct writing of biomolecule microarrays. Applied Physics A: Materials Science and Processing, 2004, 79, 949-952.	2.3	57

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73	Coloring of titanium through laser oxidation: comparative study with anodizing. Surface and Coatings Technology, 2004, 187, 106-112.	4.8	118
74	Influence of the ambient gas in laser structuring of the titanium surface. Surface and Coatings Technology, 2004, 187, 245-249.	4.8	33
75	Chemical composition of dome-shaped structures grown on titanium by multi-pulse Nd:YAG laser irradiation. Applied Surface Science, 2004, 222, 415-422.	6.1	24
76	In vitro bioactivity of laser ablation pseudowollastonite coating. Biomaterials, 2004, 25, 1983-1990.	11.4	53
77	<title>Production of biomolecule microarrays through laser induced forward transfer</title>. , 2004, , .		8
78	<title>Surface structuring of titanium under pulsed Nd:YAG laser irradiation</title>. , 2004, , .		0
79	Depth profiling characterisation of the surface layer obtained by pulsed Nd:YAG laser irradiation of titanium in nitrogen. Surface and Coatings Technology, 2003, 173, 265-270.	4.8	171
80	Laser surface processing of titanium in air: Influence of scan traces overlapping. Journal of Laser Applications, 2003, 15, 120-123.	1.7	12
81	Microcolumn development on titanium by multipulse laser irradiation in nitrogen. Journal of Materials Research, 2003, 18, 2228-2234.	2.6	17
82	Crown-like structure development on titanium exposed to multipulse Nd:YAG laser irradiation. Applied Physics A: Materials Science and Processing, 2002, 74, 755-759.	2.3	37
83	Surface nitridation of titanium by pulsed Nd:YAG laser irradiation. Applied Surface Science, 2002, 186, 130-134.	6.1	82
84	Oxidation of titanium through Nd:YAG laser irradiation. Applied Surface Science, 2002, 197-198, 887-890.	6.1	94
85	Growth of surface structures on titanium through pulsed Nd:YAG laser irradiation in vacuum. Applied Surface Science, 2002, 197-198, 851-855.	6.1	22
86	Single pulse Nd:YAG laser irradiation of titanium: influence of laser intensity on surface morphology. Surface and Coatings Technology, 2002, 154, 63-67.	4.8	62
87	Coloring of titanium by pulsed laser processing in air. Thin Solid Films, 2002, 415, 201-205.	1.8	92
88	Pulsed laser deposition of pseudowollastonite coatings. Biomaterials, 2002, 23, 2057-2061.	11.4	31
89	Evolution of the deposition rate during pulsed laser deposition of hydroxyapatite coatings and its relation with target morphology. Applied Physics A: Materials Science and Processing, 2001, 72, 613-618.	2.3	11
90	Structural characterization of laser-treated Cr₃C₂â€"NiCr coatings. Journal of Materials Research, 2001, 16, 3416-3422.	2.6	13

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91	Evidence of chemical reactions in the hydroxyapatite laser ablation plume with a water atmosphere. Journal of Applied Physics, 1999, 85, 3289-3293.	2.5	6
92	Surface treatment of titanium by Nd:YAG laser irradiation in the presence of nitrogen. Applied Physics A: Materials Science and Processing, 1999, 69, S699-S702.	2.3	20
93	Deposition of hydroxyapatite thin films by excimer laser ablation. Thin Solid Films, 1998, 317, 393-396.	1.8	94
94	Analysis of hydroxyapatite laser ablation plumes in a water atmosphere. Applied Physics A: Materials Science and Processing, 1998, 67, 289-294.	2.3	10
95	Study of material emission in ArF and KrF excimer laser ablation of yttria stabilized zirconia single crystals. Thin Solid Films, 1998, 317, 108-111.	1.8	7
96	Fluence dependence of hydroxyapatite laser ablation plumes. Thin Solid Films, 1998, 335, 43-48.	1.8	11
97	Imaging and spectral analysis of hydroxyapatite laser ablation plumes. Applied Surface Science, 1998, 127-129, 662-667.	6.1	14
98	Species resolved analysis of the expansion of hydroxyapatite laser ablation plumes. Journal of Materials Research, 1998, 13, 1132-1135.	2.6	9
99	Interaction effects of an excimer laser beam with hydroxyapatite targets. Applied Surface Science, 1997, 109-110, 384-388.	6.1	11
100	Analysis of the expansion of hydroxyapatite laser ablation plumes. Applied Surface Science, 1996, 96-98, 216-221.	6.1	21
101	Carbon nitride thin films obtained by laser ablation of graphite in a nitrogen plasma. Applied Surface Science, 1996, 96-98, 870-873.	6.1	15
102	Analysis of the expansion of hydroxyapatite laser ablation plumes. , 1996, , 216-221.		0
103	Laser wavelength dependence of YBa2Cu3Oy laser ablation plumes. Applied Surface Science, 1995, 86, 59-63.	6.1	4
104	Characterization of hydroxyapatite laser ablation plumes by fast intensified CCD-imaging. Journal of Materials Research, 1995, 10, 473-478.	2.6	15
105	Evolution of the plumes produced by laser ablation of a carbon target. Diamond and Related Materials, 1995, 4, 337-341.	3.9	8