

# Antonio Santagata

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3070153/publications.pdf>

Version: 2024-02-01

116  
papers

2,547  
citations

201674

27  
h-index

243625

44  
g-index

117  
all docs

117  
docs citations

117  
times ranked

2422  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cavitation dynamics of laser ablation of bulk and wire-shaped metals in water during nanoparticles production. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3083-3092.	2.8	155
2	Laser Ablation of Graphite in Water in a Range of Pressure from 1 to 146 atm Using Single and Double Pulse Techniques for the Production of Carbon Nanostructures. <i>Journal of Physical Chemistry C</i> , 2011, 115, 5123-5130.	3.1	103
3	Quantitative laser induced breakdown spectroscopy analysis of ancient marbles and corrections for the variability of plasma parameters and of ablation rate. <i>Journal of Analytical Atomic Spectrometry</i> , 2004, 19, 429.	3.0	101
4	The role of continuum radiation in laser induced plasma spectroscopy. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2010, 65, 385-394.	2.9	92
5	Picosecond and femtosecond pulsed laser ablation and deposition of quasicrystals. <i>Applied Surface Science</i> , 2003, 210, 307-317.	6.1	67
6	Pulsed laser ablation of a continuously-fed wire in liquid flow for high-yield production of silver nanoparticles. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3093-3098.	2.8	64
7	Characterization of the plasma plume and of thin film epitaxially produced during laser ablation of SnSe. <i>Applied Surface Science</i> , 1995, 90, 505-514.	6.1	62
8	Laser Induced Breakdown Spectroscopy methodology for the analysis of copper-based-alloys used in ancient artworks. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2008, 63, 585-590.	2.9	62
9	Early stage emission spectroscopy study of metallic titanium plasma induced in air by femtosecond- and nanosecond-laser pulses. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2005, 60, 935-947.	2.9	60
10	Dynamics of laser-induced bubble and nanoparticles generation during ultra-short laser ablation of Pd in liquid. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 445301.	2.8	55
11	Laser-induced plasma analysis of copper alloys based on Local Thermodynamic Equilibrium: An alternative approach to plasma temperature determination and archeometric applications. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2012, 74-75, 38-45.	2.9	52
12	ns- and fs-LIBS of copper-based-alloys: A different approach. <i>Applied Surface Science</i> , 2007, 253, 7677-7681.	6.1	48
13	High productive and continuous nanoparticle fabrication by laser ablation of a wire-target in a liquid jet. <i>Applied Surface Science</i> , 2017, 403, 487-499.	6.1	48
14	A Laser Induced Breakdown Spectroscopy application based on Local Thermodynamic Equilibrium assumption for the elemental analysis of alexandrite gemstone and copper-based alloys. <i>Chemical Physics</i> , 2012, 398, 233-238.	1.9	47
15	Deep-Subwavelength 2D Periodic Surface Nanostructures on Diamond by Double-Pulse Femtosecond Laser Irradiation. <i>Nano Letters</i> , 2021, 21, 4477-4483.	9.1	47
16	Fe-doped hydroxyapatite coatings for orthopedic and dental implant applications. <i>Applied Surface Science</i> , 2014, 307, 301-305.	6.1	46
17	3D additive manufactured 316L components microstructural features and changes induced by working life cycles. <i>Applied Surface Science</i> , 2017, 418, 437-445.	6.1	43
18	Femtosecond pulsed laser ablation and deposition of titanium carbide. <i>Thin Solid Films</i> , 2006, 515, 1411-1418.	1.8	41

#	ARTICLE	IF	CITATIONS
19	Iron and iron oxide nanoparticles obtained by ultra-short laser ablation in liquid. Applied Surface Science, 2015, 353, 433-438.	6.1	41
20	Fs/ns-dual-pulse orthogonal geometry plasma plume reheating for copper-based-alloys analysis. Applied Surface Science, 2006, 252, 4685-4690.	6.1	39
21	Nanoparticles and Thin Film Formation in Ultrashort Pulsed Laser Deposition of Vanadium Oxide. Journal of Physical Chemistry A, 2009, 113, 14969-14974.	2.5	38
22	Formation of Titanium Carbide (TiC) and TiC@C core-shell nanostructures by ultra-short laser ablation of titanium carbide and metallic titanium in liquid. Journal of Colloid and Interface Science, 2017, 489, 76-84.	9.4	38
23	Silicon supported TiC films produced by pulsed laser ablation. Applied Surface Science, 1998, 134, 53-62.	6.1	36
24	Femtosecond pulsed laser ablation deposition of tantalum carbide. Applied Surface Science, 2007, 254, 1220-1223.	6.1	36
25	Carbon-Based Nanostructures Obtained in Water by Ultrashort Laser Pulses. Journal of Physical Chemistry C, 2011, 115, 5160-5164.	3.1	33
26	LIBS used as a diagnostic tool during the laser cleaning of ancient marble from Mediterranean areas. Applied Physics A: Materials Science and Processing, 2004, 79, 213-219.	2.3	31
27	Laser ablation and deposition of Bioglass® 45S5 thin films. Applied Surface Science, 2001, 183, 10-17.	6.1	29
28	Double pulse laser induced breakdown spectroscopy of a solid in water: Effect of hydrostatic pressure on laser induced plasma, cavitation bubble and emission spectra. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2017, 133, 63-71.	2.9	28
29	Ultra-short pulse laser ablation of Al70Cu20Fe10 alloy: Nanoparticles generation and thin films deposition. Thin Solid Films, 2009, 517, 1880-1886.	1.8	27
30	Zirconium carbide thin films deposited by pulsed laser ablation. Applied Surface Science, 2000, 168, 284-287.	6.1	26
31	Chromium carbide thin films deposited by ultra-short pulse laser deposition. Applied Surface Science, 2009, 255, 7729-7733.	6.1	26
32	Ultra-short pulsed laser deposition of thin silver films for surface enhanced Raman scattering. Surface and Coatings Technology, 2012, 207, 279-285.	4.8	26
33	Rutile microtubes assembly from nanostructures obtained by ultra-short laser ablation of titanium in liquid. Applied Surface Science, 2013, 268, 571-578.	6.1	26
34	Study of the Effect of Water Pressure on Plasma and Cavitation Bubble Induced by Pulsed Laser Ablation in Liquid of Silver and Missed Variations of Observable Nanoparticle Features. ChemPhysChem, 2017, 18, 1165-1174.	2.1	26
35	Pulsed laser ablation of indium tin oxide in the nano and femtosecond regime: Characterization of transient species. Applied Surface Science, 2006, 252, 4632-4636.	6.1	24
36	fs/ns dual-pulse LIBS analytic survey for copper-based alloys. Applied Surface Science, 2007, 254, 863-867.	6.1	24

#	ARTICLE	IF	CITATIONS
37	RBP1 bioactive glass-ceramic films obtained by Pulsed Laser Deposition. <i>Materials Letters</i> , 2016, 175, 195-198.	2.6	23
38	Study of the gaseous phase from pulsed laser ablation of titanium carbide. <i>Applied Surface Science</i> , 1997, 109-110, 376-379.	6.1	22
39	Pulsed laser ablation of wire-shaped target in a thin water jet: effects of plasma features and bubble dynamics on the PLAL process. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 185204.	2.8	22
40	Diamond-like carbon thin films produced by femtosecond pulsed laser deposition of fullerite. <i>Surface and Coatings Technology</i> , 2011, 205, 3747-3753.	4.8	21
41	Optical emission spectroscopy investigation of an ultra-short laser induced titanium plasma reheated by a ns laser pulse. <i>Applied Surface Science</i> , 2007, 253, 7792-7797.	6.1	20
42	Nanostructured thin films obtained by ultra-short pulse laser deposition of vanadium carbide. <i>Applied Surface Science</i> , 2009, 255, 5220-5223.	6.1	20
43	Lone-Pair Delocalization Effects within Electron Donor Molecules: The Case of Triphenylamine and Its Thiophene-Analog. <i>Journal of Physical Chemistry C</i> , 2018, 122, 17706-17717.	3.1	20
44	Theoretical Modeling of Laser Ablation of Quaternary Bronze Alloys: Case Studies Comparing Femtosecond and Nanosecond LIBS Experimental Data. <i>Journal of Physical Chemistry A</i> , 2009, 113, 14364-14374.	2.5	19
45	Laser synthesis of iron nanoparticle for Fe doped hydroxyapatite coatings. <i>Materials Chemistry and Physics</i> , 2019, 225, 365-370.	4.0	19
46	LIPSS Applied to Wide Bandgap Semiconductors and Dielectrics: Assessment and Future Perspectives. <i>Materials</i> , 2022, 15, 1378.	2.9	19
47	Hafnium carbide hard coatings produced by pulsed laser ablation and deposition. <i>Surface and Coatings Technology</i> , 2002, 151-152, 531-533.	4.8	18
48	Role and importance of nanoparticles in femtosecond pulsed laser ablation deposition of Al <sub>1-x</sub> Cu <sub>x</sub> Fe quasicrystal. <i>Chemical Physics Letters</i> , 2007, 438, 85-88.	2.6	18
49	The role of the solvent in the ultrashort laser ablation of palladium target in liquid. <i>Applied Physics A: Materials Science and Processing</i> , 2014, 117, 211-216.	2.3	18
50	Plume dynamics in TiC laser ablation. <i>Applied Surface Science</i> , 2003, 208-209, 113-118.	6.1	17
51	Reactive pulsed laser deposition of zinc oxide thin films. <i>Applied Physics A: Materials Science and Processing</i> , 2004, 79, 1061-1065.	2.3	17
52	Comparison of the performances of nanosecond and femtosecond Laser Induced Breakdown Spectroscopy for depth profiling of an artificially corroded bronze. <i>Applied Surface Science</i> , 2014, 302, 275-279.	6.1	17
53	Fs <sup>ns</sup> double-pulse Laser Induced Breakdown Spectroscopy of copper-based-alloys: Generation and elemental analysis of nanoparticles. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 101, 261-268.	2.9	17
54	Production of silver-silica core-shell nanocomposites using ultra-short pulsed laser ablation in nanoporous aqueous silica colloidal solutions. <i>Journal Physics D: Applied Physics</i> , 2015, 48, 205304.	2.8	17

#	ARTICLE	IF	CITATIONS
55	All-carbon THz components based on laser-treated diamond. Carbon, 2020, 163, 197-201.	10.3	17
56	Nanocrystalline lanthanum boride thin films by femtosecond pulsed laser deposition as efficient emitters in hybrid thermionic-photovoltaic energy converters. Applied Surface Science, 2020, 513, 145829.	6.1	17
57	Transition Metal Carbide Core/Shell Nanoparticles by Ultra-Short Laser Ablation in Liquid. Nanomaterials, 2020, 10, 145.	4.1	17
58	Pulsed laser deposition of thin films of TiO <sub>2</sub> for Li-ion batteries. Applied Surface Science Advances, 2021, 4, 100090.	6.8	17
59	Emission spectroscopy of aluminum nitride plasma plume induced by ultra-short pulsed laser ablation. Applied Surface Science, 2003, 208-209, 101-106.	6.1	16
60	Orthogonal fs/ns double-pulse libs for copper-based-alloy analysis. Applied Physics A: Materials Science and Processing, 2008, 93, 929-934.	2.3	16
61	Laser ablation of GaAs in liquid: the role of laser pulse duration. Journal Physics D: Applied Physics, 2016, 49, 035301.	2.8	16
62	Novel concepts and nanostructured materials for thermionic-based solar and thermal energy converters. Nanotechnology, 2021, 32, 024002.	2.6	14
63	Studies on nitridation of laser evaporated III-IV group elements with gaseous ammonia and thin film deposition. Nuclear Instruments & Methods in Physics Research B, 1997, 122, 415-419.	1.4	13
64	Thin films deposited by femtosecond pulsed laser ablation of tungsten carbide. Applied Surface Science, 2012, 258, 9198-9201.	6.1	13
65	Comparison of silver nanoparticles confined in nanoporous silica prepared by chemical synthesis and by ultra-short pulsed laser ablation in liquid. Applied Physics A: Materials Science and Processing, 2014, 117, 55-62.	2.3	12
66	Study of the electronic structure of short chain oligothiophenes. Journal of Chemical Physics, 2017, 146, 054303.	3.0	12
67	Polycrystalline aluminum nitride films prepared by laser assisted Al and NH <sub>3</sub> reaction. Applied Surface Science, 1997, 109-110, 533-537.	6.1	11
68	Boron nitride thin films deposited by RF plasma reactive pulsed laser ablation. Applied Surface Science, 2003, 208-209, 575-581.	6.1	11
69	Femtosecond pulsed laser ablation of group 4 carbides. Applied Surface Science, 2005, 247, 51-56.	6.1	11
70	Applications of ultra-short pulsed laser ablation: thin films deposition and fs/ns dual-pulse laser-induced breakdown spectroscopy. Physica Scripta, 2008, 78, 058113.	2.5	11
71	Iron doped LiCoPO <sub>4</sub> thin films for lithium-ion microbatteries obtained by ns pulsed laser deposition. Applied Surface Science, 2018, 445, 56-64.	6.1	11
72	Femtosecond laser surface texturing of polypropylene copolymer for automotive paint applications. Surface and Coatings Technology, 2021, 406, 126727.	4.8	11

#	ARTICLE	IF	CITATIONS
73	Use of ns and fs pulse excitation in laser-induced breakdown spectroscopy to improve its analytical performances: A case study on quaternary bronze alloys. <i>Spectrochimica Acta, Part B: Atomic Spectroscopy</i> , 2014, 99, 185-192.	2.9	10
74	First application of homogeneous Pd nanoparticles prepared by pulsed laser ablation in liquid to a Suzuki-type reaction. <i>Catalysis Communications</i> , 2017, 100, 164-168.	3.3	10
75	S2p core level spectroscopy of short chain oligothiophenes. <i>Journal of Chemical Physics</i> , 2017, 147, 244301.	3.0	10
76	Femtosecond pulsed laser deposition of nanostructured ITO thin films. <i>Materials Science and Engineering C</i> , 2007, 27, 1034-1037.	7.3	9
77	Femtosecond laser ablation of CaF2: Plasma characterization and thin films deposition. <i>Applied Surface Science</i> , 2014, 302, 145-148.	6.1	9
78	Fullerene-reduced graphene oxide composites obtained by ultrashort laser ablation of fullerite in water. <i>Applied Surface Science</i> , 2015, 336, 67-72.	6.1	9
79	Pulsed laser ablation of MoSi2: gas phase analysis. <i>Applied Surface Science</i> , 2002, 186, 335-338.	6.1	8
80	RF plasma reactive pulsed laser deposition of boron nitride thin films. <i>Applied Surface Science</i> , 2005, 247, 123-127.	6.1	8
81	Emission spectra investigation of fs induced NPs probed by the ns laser pulse of a fs/ns DP-LIBS orthogonal configuration. <i>Applied Surface Science</i> , 2009, 255, 5159-5162.	6.1	8
82	Characterization of gaseous phase and nanoparticles produced in ultra-short pulsed laser ablation of transition metal borides. <i>Applied Surface Science</i> , 2011, 257, 5315-5318.	6.1	8
83	Thiophene-Based Oligomers Interacting with Silver Surfaces and the Role of a Condensed Benzene Ring. <i>Journal of Physical Chemistry C</i> , 2016, 120, 252-264.	3.1	8
84	Pulsed laser-deposited composite carbon-glass-ceramic films with improved hardness. <i>Journal of Materials Science</i> , 2017, 52, 9140-9150.	3.7	8
85	Effect of laser pulse duration on properties of metal and metal carbide nanoparticles obtained by laser in liquid synthesis. <i>Optics and Laser Technology</i> , 2021, 138, 106916.	4.6	7
86	FeV alloys deposition by pulsed laser ablation technique. <i>Applied Surface Science</i> , 1997, 119, 34-40.	6.1	6
87	Femtosecond pulsed laser ablation of molybdenum carbide: Nanoparticles and thin film characteristics. <i>Applied Surface Science</i> , 2013, 278, 321-324.	6.1	6
88	Electronic structure modifications induced by increased molecular complexity: from triphenylamine to m-MTDATA. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 17959-17970.	2.8	6
89	Characterisation of ultrashort pulse laser ablation of SmBaCuO. <i>Applied Surface Science</i> , 2005, 248, 295-298.	6.1	5
90	Ultrashort pulsed laser vaporisation of icosahedral Al-Pd-Mn. <i>Applied Surface Science</i> , 2005, 248, 304-308.	6.1	5

#	ARTICLE	IF	CITATIONS
91	Nanostructured molybdenum carbide thin films obtained by femtosecond pulsed laser deposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 2370-2373.	0.8	5
92	Two-phase zirconium boride thin film obtained by ultra-short pulsed laser ablation of a ZrB12 target. <i>Applied Surface Science</i> , 2013, 283, 715-721.	6.1	5
93	Synthesis and Photophysical Properties of Some Dithienylbenzo[c]thiophene Derivatives. <i>Heterocycles</i> , 2015, 91, 313.	0.7	5
94	Inverse Calibration Free fs-LIBS of Copper-Based Alloys. <i>Zeitschrift Fur Physikalische Chemie</i> , 2016, 230, 1201-1217.	2.8	5
95	Plasmonic angular tunability of gold nanoparticles generated by fs laser ablation. <i>Applied Surface Science</i> , 2016, 374, 397-402.	6.1	5
96	Pulsed laser ablation and deposition of niobium carbide. <i>Applied Surface Science</i> , 2016, 374, 112-116.	6.1	5
97	Electronic Structure Characterization of a Thiophene Benzo-Annulated Series of Common Building Blocks for Donor and Acceptor Compounds Studied by Gas Phase Photoelectron and Photoabsorption Synchrotron Spectroscopies. <i>Journal of Physical Chemistry A</i> , 2018, 122, 8745-8761.	2.5	4
98	Femtosecond Pulsed Laser Deposition of Chromium Diboride-Rich Thin Films. <i>Coatings</i> , 2019, 9, 777.	2.6	4
99	Production of clusters and thin films of nitrides, oxides and carbides by pulsed laser ablation and deposition. <i>International Journal of Photoenergy</i> , 2004, 6, 23-28.	2.5	3
100	Space and time resolved emission spectroscopy of Sr <sub>2</sub> FeMoO <sub>6</sub> laser induced plasma. <i>Applied Surface Science</i> , 2005, 248, 19-23.	6.1	3
101	Femtosecond/Nanosecond dual-pulse orthogonal geometry plasma plume reheating for compositional analysis of ancient copper-based-alloy artworks. <i>Journal of Physics: Conference Series</i> , 2007, 59, 585-590.	0.4	3
102	Nanosecond and femtosecond laser spectroscopy of molecules of biological interest. <i>Applied Surface Science</i> , 2007, 253, 7783-7786.	6.1	3
103	Synthetic Approach to and Characterization of a Fullerene-DTBT-Fullerene Triad. <i>Synlett</i> , 2013, 24, 943-946.	1.8	3
104	Optical characterization of magnesium diboride plasma plume induced by pulsed laser ablation. <i>Applied Surface Science</i> , 2003, 208-209, 96-100.	6.1	2
105	Pulsed laser ablation of Nd and Pr carbides. <i>Applied Surface Science</i> , 2003, 208-209, 119-124.	6.1	2
106	Time-resolved stimulated emission spectroscopy in the ultrashort domain through pump-probe experiments. <i>Applied Surface Science</i> , 2007, 254, 859-862.	6.1	2
107	Single And Double Pulse Irradiation And Comparison With Experimental Results. , 2009, , .		2
108	Structural, chemical, and electrical characterization of indium nitride produced by pulsed laser ablation. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2012, 9, 993-996.	0.8	2

#	ARTICLE	IF	CITATIONS
109	Ultrashort Pulsed Laser Ablation of Magnesium Diboride: Plasma Characterization and Thin Films Deposition. Journal of Nanomaterials, 2015, 2015, 1-9.	2.7	2
110	Thin films of fe-v deposited by pulsed laser ablation. Surface and Coatings Technology, 1996, 80, 221-223.	4.8	1
111	<title>Study of laser produced plasma in Cu-based alloys</title>. , 2005, , .		1
112	Ultra-short pulsed laser deposition of gallium arsenide: a comprehensive study. Applied Physics A: Materials Science and Processing, 2014, 117, 275-280.	2.3	1
113	Silica Xerogel Obtained by Ultrashort Laser Irradiation of Tetraethyl Orthosilicate. ChemPhysChem, 2017, 18, 1140-1145.	2.1	1
114	<title>Pulsed laser ablation and deposition of quasicrystals</title>. , 2003, , .		1
115	<title>Laser ablated Sr<math>\text{Sr}_2\text{FeMoO}_6</math> plasma studied by optical emission spectroscopy</title>. , 2005, , .		0
116	<title>Ultrashort pulsed laser deposition of ITO thin films</title>. , 2006, , .		0