Florence Garrelie

List of Publications by Year
in descending order

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62 papers	1,757 citations	279487 23 h-index	288905 40 g-index
62 all docs	62 docs citations	62 times ranked	1783 citing authors

#	Article	IF	Citations
1	Evidence of surface plasmon resonance in ultrafast laser-induced ripples. Optics Express, 2011, 19, 9035.	1.7	217
2	Growth Twinning and Generation of High-Frequency Surface Nanostructures in Ultrafast Laser-Induced Transient Melting and Resolidification. ACS Nano, 2016, 10, 6995-7007.	7.3	90
3	Review of Graphene Growth From a Solid Carbon Source by Pulsed Laser Deposition (PLD). Frontiers in Chemistry, 2018, 6, 572.	1.8	78
4	Nano-Architecture of nitrogen-doped graphene films synthesized from a solid CN source. Scientific Reports, 2018, 8, 3247.	1.6	72
5	Raman study of the substrate influence on graphene synthesis using a solid carbon source via rapid thermal annealing. Journal of Raman Spectroscopy, 2019, 50, 1630-1641.	1.2	57
6	Single- and multi-pulse formation of surface structures under static femtosecond irradiation. Applied Surface Science, 2007, 253, 8075-8079.	3.1	56
7	Self-organization of surfaces on the nanoscale by topography-mediated selection of quasi-cylindrical and plasmonic waves. Nanophotonics, 2019, 8, 459-465.	2.9	53
8	Nickel-incorporated amorphous carbon film deposited by femtosecond pulsed laser ablation. Thin Solid Films, 2005, 482, 287-292.	0.8	50
9	Electrochemical performances of B doped and undoped diamond-like carbon (DLC) films deposited by femtosecond pulsed laser ablation for heavy metal detection using square wave anodic stripping voltammetric (SWASV) technique. Sensors and Actuators B: Chemical, 2011, 155, 120-125.	4.0	50
10	Robust Electrografting on Self-Organized 3D Graphene Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 1424-1433.	4.0	50
11	Amplification and regulation of periodic nanostructures in multipulse ultrashort laser-induced surface evolution by electromagnetic-hydrodynamic simulations. Physical Review B, 2019, 99, .	1.1	50
12	Monte Carlo simulation of the laser-induced plasma plume expansion under vacuum: Comparison with experiments. Journal of Applied Physics, 1998, 83, 5075-5082.	1.1	49
13	Study by a Monte Carlo simulation of the influence of a background gas on the expansion dynamics of a laser-induced plasma plume. Applied Physics A: Materials Science and Processing, 1999, 69, 45-50.	1.1	45
14	Self-Arranged Periodic Nanovoids by Ultrafast Laser-Induced Near-Field Enhancement. ACS Photonics, 2018, 5, 1418-1426.	3.2	45
15	Light absorption by surface nanoholes and nanobumps. Applied Surface Science, 2019, 470, 228-233.	3.1	45
16	Influence of crystal orientation on the formation of femtosecond laser-induced periodic surface structures and lattice defects accumulation. Applied Physics Letters, 2014, 104, .	1.5	44
17	Electrochemical Boron-Doped Diamond Film Microcells Micromachined with Femtosecond Laser: Application to the Determination of Water Framework Directive Metals. Analytical Chemistry, 2012, 84, 4805-4811.	3.2	42
18	Mechanical and tribological characterization of tetrahedral diamond-like carbon deposited by femtosecond pulsed laser deposition on pre-treated orthopaedic biomaterials. Applied Surface Science, 2005, 247, 225-231.	3.1	39

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19	Structure of diamondlike carbon films deposited by femtosecond and nanosecond pulsed laser ablation. Journal of Applied Physics, 2010, 108, .	1.1	39
20	Optical properties of high-density amorphous carbon films grown by nanosecond and femtosecond pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2005, 81, 471-476.	1.1	32
21	Dynamics of carbon diffusion and segregation through nickel catalyst, investigated by in-situ XPS, during the growth of nitrogen-doped graphene. Carbon, 2019, 155, 410-420.	5.4	31
22	Adaptive control of femtosecond laser ablation plasma emission. Applied Surface Science, 2009, 255, 5163-5166.	3.1	29
23	Sub-100 nm 2D nanopatterning on a large scale by ultrafast laser energy regulation. Nanoscale, 2020, 12, 6609-6616.	2.8	24
24	Nanostructured coatings of metal containing diamond-like carbon films deposited by femtosecond pulsed laser ablation. Surface and Coatings Technology, 2006, 200, 6272-6278.	2.2	23
25	Characterization of different diamond-like carbon electrodes for biosensor design. Talanta, 2007, 72, 310-314.	2.9	22
26	Nanocomposite tantalumâ€“carbon-based films deposited by femtosecond pulsed laser ablation. Thin Solid Films, 2006, 494, 98-104.	0.8	21
27	Control of the Graphite Femtosecond Ablation Plume Kinetics by Temporal Laser Pulse Shaping: Effects on Pulsed Laser Deposition of Diamond-Like Carbon. Journal of Physical Chemistry C, 2014, 118, 4377-4385.	1.5	21
28	Self-Organization Regimes Induced by Ultrafast Laser on Surfaces in the Tens of Nanometer Scales. Nanomaterials, 2021, 11, 1020.	1.9	21
29	Mixing periodic topographies and structural patterns on silicon surfaces mediated by ultrafast photoexcited charge carriers. Physical Review Research, 2020, 2, .	1.3	21
30	Electrical properties of boron-doped diamond-like carbon thin films deposited by femtosecond pulsed laser ablation. Applied Physics A: Materials Science and Processing, 2009, 94, 105-109.	1.1	20
31	Electron backscatter diffraction characterization of laser-induced periodic surface structures on nickel surface. Applied Surface Science, 2014, 302, 114-117.	3.1	19
32	[INVITED] Control of femtosecond pulsed laser ablation and deposition by temporal pulse shaping. Optics and Laser Technology, 2016, 78, 42-51.	2.2	19
33	Plasmonic and Hydrodynamic Effects in Ultrafast Laser-Induced Periodic Surface Structures on Metals. Journal of Laser Micro Nanoengineering, 2012, 7, 362-368.	0.4	19
34	Effect of boron incorporation on the structure and electrical properties of diamond-like carbon films deposited by femtosecond and nanosecond pulsed laser ablation. Thin Solid Films, 2009, 518, 1470-1474.	0.8	18
35	Study of different carbon materials for amperometric enzyme biosensor development. Materials Science and Engineering C, 2006, 26, 564-567.	3.8	17
36	Surface enhanced Raman spectroscopy platform based on graphene with one-year stability. Thin Solid Films, 2016, 604, 74-80.	0.8	17

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37	On the Insignificant Role of the Oxidation Process on Ultrafast High-Spatial-Frequency LIPSS Formation on Tungsten. Nanomaterials, 2021, 11, 1069.	1.9	15
38	Expansion dynamics of the plasma plume created by laser ablation in a background gas. Applied Physics A: Materials Science and Processing, 1999, 69, S55-S58.	1.1	13
39	Temporal pulse shaping effects on aluminium and boron ablation plumes generated by ultrashort pulsed laser ablation and analyzed by time- and space-resolved optical spectroscopy. Applied Surface Science, 2012, 258, 9374-9378.	3.1	13
40	Nanoscale Imaging of Ultrafast Light Coupling to Self-Organized Nanostructures. ACS Photonics, 2019, 6, 2287-2294.	3.2	13
41	Graphene synthesis on SiO2 using pulsed laser deposition with bilayer predominance. Materials Chemistry and Physics, 2019, 238, 121905.	2.0	13
42	Electroanalytical Performance of Nitrogen-Doped Graphene Films Processed in One Step by Pulsed Laser Deposition Directly Coupled with Thermal Annealing. Materials, 2019, 12, 666.	1.3	13
43	Tuning spectral properties of ultrafast laser ablation plasmas from brass using adaptive temporal pulse shaping. Optics Express, 2010, 18, 11159.	1.7	12
44	Effect of nitrogen surrounding gas and plasma assistance on nitrogen incorporation in a-C:N films by femtosecond pulsed laser deposition. Applied Surface Science, 2016, 374, 104-111.	3.1	11
45	Initial Morphology and Feedback Effects on Laser-Induced Periodic Nanostructuring of Thin-Film Metallic Glasses. Nanomaterials, 2021, 11, 1076.	1.9	11
46	Boosted Spontaneous Formation of Highâ€Aspect Ratio Nanopeaks on Ultrafast Laserâ€Irradiated Ni Surface. Advanced Science, 2022, 9, .	5.6	11
47	Hopping current density in amorphous carbon/crystalline silicon heterojunctions. Journal of Non-Crystalline Solids, 2006, 352, 1421-1424.	1.5	10
48	In situ diagnostic of the size distribution of nanoparticles generated by ultrashort pulsed laser ablation in vacuum. Applied Physics Letters, 2014, 104, 104101.	1.5	10
49	High N-content a-C:N films elaborated by femtosecond PLD with plasma assistance. Applied Surface Science, 2015, 332, 346-353.	3.1	10
50	Transfer-free graphene synthesis by nickel catalyst dewetting using rapid thermal annealing. Applied Surface Science, 2021, 555, 149492.	3.1	10
51	Structure, electrochemical properties and functionalization of amorphous CN films deposited by femtosecond pulsed laser ablation. Diamond and Related Materials, 2016, 65, 17-25.	1.8	9
52	Diamond-like carbon deposited by femtosecond pulsed-laser ablation: evidence of nanocrystalline diamond. , 2002, , .		8
53	Synthesis of vanadium oxides by pulsed laser deposition and rapid thermal annealing. Applied Surface Science, 2020, 521, 146267.	3.1	8
54	High-Density Nanowells Formation in Ultrafast Laser-Irradiated Thin Film Metallic Glass. Nano-Micro Letters, 2022, 14, 103.	14.4	8

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55	Boron doped graphene synthesis using pulsed laser deposition and its electrochemical characterization. Diamond and Related Materials, 2021, 115, 108382.	1.8	7
56	Depth-dependence of electrical conductivity of diamondlike carbon films. Applied Physics Letters, 2010, 96, .	1.5	5
57	Laser induced densification of cerium gadolinium oxide: Application to single-chamber solid oxide fuel cells. Applied Surface Science, 2016, 374, 370-374.	3.1	2
58	<title>Laser-induced plasma plume expansion under vacuum by Monte Carlo simulation</title>. , 1998, , .		0
59	Response to â€œComment on â€˜Monte Carlo simulation of the laser-induced plasma plume expansion under vacuum: Comparison with experimentsâ€™â€Šâ€•[J. Appl. Phys. 86, 4709 (1999)]. Journal of Applied Physics, 1999, 86, 4711-4712.	1.1	0
60	Simulation Monte-Carlo du transport sous vide et sous gaz ambiant d'un panache plasma crÃ©Ã© par ablation laser. International Journal of Thermal Sciences, 1999, 38, 452-459.	2.6	0
61	Femtosecond lasers: powerful tools for clean material processing. , 2002, , .		0
62	Simulation of nanosecond IR laser annealing of cerium gadolinium oxide. Journal of the European Ceramic Society, 2018, 38, 3875-3880.	2.8	0