Thibault J-Y Derrien

List of Publications by Year
in descending order

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28	1,242	687363 13	677142 22
papers	citations	h-index	g-index

28	28	28	1059
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Photoionization and transient Wannier-Stark ladder in silicon: First-principles simulations versus Keldysh theory. Physical Review B, 2021, 104, .	3.2	7
2	Periodic surface functional group density on graphene via laser-induced substrate patterning at Si/SiO2 interface. Nano Research, 2020, 13, 2332-2339.	10.4	14
3	Periodic Surface Functional Group Density on Graphene Induced by Pulsed Laser Patterning of SiO2/Si Substrate. , 2020, , .		0
4	LIPSS on thin metallic films: New insights from multiplicity of laser-excited electromagnetic modes and efficiency of metal oxidation. Applied Surface Science, 2019, 491, 650-658.	6.1	50
5	Multiplicity of Laser-Excited Electromagnetic Modes and their Roles in LIPSS Formation on Thin Metallic Films. , 2019, , .		0
6	MODELING THE MELTING THRESHOLD OF MO FILMS UPON ULTRASHORT LASER IRRADIATION. MM Science Journal, 2019, 2019, 3585-3593.	0.4	2
7	Insights into Laser-Materials Interaction Through Modeling on Atomic and Macroscopic Scales. Springer Series in Materials Science, 2018, , 107-148.	0.6	12
8	The evidence of the role of surface plasmon polaritons in formation of femtosecond highly-regular laser-induced periodic structures on Cr films. Journal of Physics: Conference Series, 2018, 1092, 012025.	0.4	3
9	Femtosecond Laser-Induced Periodic Surface Structures on Fused Silica: The Impact of the Initial Substrate Temperature. Materials, 2018, 11, 1340.	2.9	40
10	Wavelength dependence of picosecond laser-induced periodic surface structures on copper. Applied Surface Science, 2017, 417, 88-92.	6.1	29
11	Modeling of silicon in femtosecond laser-induced modification regimes: accounting for ambipolar diffusion. , 2017, , .		6
12	High-speed manufacturing of highly regular femtosecond laser-induced periodic surface structures: physical origin of regularity. Scientific Reports, 2017, 7, 8485.	3.3	251
13	Fundamentals of ultrafast laserâ€“material interaction. MRS Bulletin, 2016, 41, 960-968.	3.5	185
14	Properties of surface plasmon polaritons on lossy materials: lifetimes, periods and excitation conditions. Journal of Optics (United Kingdom), 2016, 18, 115007.	2.2	48
15	Relaxation dynamics of femtosecond-laser-induced temperature modulation on the surfaces of metals and semiconductors. Applied Surface Science, 2016, 374, 157-164.	6.1	72
16	How to optimize ultrashort pulse laser interaction with glass surfaces in cutting regimes?. Applied Surface Science, 2015, 336, 364-374.	6.1	35
17	Plasmonic formation mechanism of periodic 100-nm-structures upon femtosecond laser irradiation of silicon in water. Journal of Applied Physics, 2014, 116, .	2.5	104
18	Rippled area formed by surface plasmon polaritons upon femtosecond laser double-pulse irradiation of silicon: the role of carrier generation and relaxation processes. Applied Physics A: Materials Science and Processing, 2014, 117, 77-81.	2.3	67

#	Article	IF	Citations
19	Large area laser surface micro/nanopatterning by contact microsphere lens arrays. Applied Physics A: Materials Science and Processing, 2013, 111, 701-709.	2.3	9
20	Possible surface plasmon polariton excitation under femtosecond laser irradiation of silicon. Journal of Applied Physics, 2013, 114, .	2.5	136
21	Rippled area formed by surface plasmon polaritons upon femtosecond laser double-pulse irradiation of silicon. Optics Express, 2013, 21, 29643.	3.4	86
22	Femtosecond laser interactions with semiconductor and dielectric materials. , 2012, , .		4
23	Laser surface micro-/nano-structuring by a simple transportable micro-sphere lens array. Journal of Applied Physics, 2012, 112, 103111.	2.5	13
24	Formation of femtosecond laser induced surface structures on silicon: Insights from numerical modeling and single pulse experiments. Applied Surface Science, 2012, 258, 9487-9490.	6.1	40
25	Laser-ablative nanostructuring of surfaces. International Journal of Nanotechnology, 2012, 9, 230.	0.2	10
26	Study On Laser-Induced Periodic Structures And Photovoltaic Application. , 2010, , .		11
27	Laser Applications for Nanotechnology : Insights From Numerical Modeling. AIP Conference Proceedings, 2010, , .	0.4	7
28	Evaluation of luminosity reduction in the ilc head-on scheme from parasitic collisions. , 2007, , .		1