Rebeca de Nalda

List of Publications by Year
in descending order

88	2,154	186254	243610
papers	citations	28 h-index	44 g-index

90	90	90	1675
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Synthesis of smooth amorphous thin films of silicon carbide with controlled properties through pulsed laser deposition. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	2.3	3
2	Femtosecond XUVâ€“IR induced photodynamics in the methyl iodide cation. New Journal of Physics, 2021, 23, 073023.	2.9	4
3	Emission characteristics and dynamics of neutral, ionic and molecular species in a laser produced CaF2 plasma. Journal of Quantitative Spectroscopy and Radiative Transfer, 2021, 276, 107924.	2.3	3
4	Femtosecond Double-Pulse Laser Ablation and Deposition of Co-Doped ZnS Thin Films. Nanomaterials, 2020, 10, 2229.	4.1	10
5	Optical diagnostics of gold plasmas produced by infrared laser ablation. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 256, 107308.	2.3	7
6	Spatiotemporally resolved optical emission spectroscopy and harmonic generation in Cu plasmas. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2020, 174, 106001.	2.9	2
7	Femtochemistry under scrutiny: Clocking state-resolved channels in the photodissociation of CH3I in the A-band. Journal of Chemical Physics, 2020, 152, 014304.	3.0	12
8	Imaging spectroscopy of Ag plasmas produced by infrared nanosecond laser ablation. Journal of Analytical Atomic Spectrometry, 2019, 34, 489-497.	3.0	12
9	Coulomb Explosion Imaging for the Visualization of a Conical Intersection. Journal of Physical Chemistry Letters, 2019, 10, 138-143.	4.6	44
10	Nonlinear Optics in Laser Ablation Plasmas. Springer Series in Materials Science, 2018, , 361-385.	0.6	0
11	Observation of middle-sized metal clusters in femtosecond laser ablation plasmas through nonlinear optics. Physical Chemistry Chemical Physics, 2018, 20, 16956-16965.	2.8	22
12	Multidimensional Analysis of Time-Resolved Charged Particle Imaging Experiments. Applied Sciences (Switzerland), 2018, 8, 1227.	2.5	3
13	Strong laser field control of fragment spatial distributions from a photodissociation reaction. Nature Communications, 2017, 8, 1345.	12.8	28
14	Harmonic generation by atomic and nanoparticle precursors in a ZnS laser ablation plasma. Applied Surface Science, 2017, 392, 572-580.	6.1	19
15	Femtosecond Time-Resolved Photofragment Rotational Angular Momentum Alignment in Electronic Predissociation Dynamics. Journal of Physical Chemistry Letters, 2016, 7, 4458-4463.	4.6	11
16	Ablation dynamics of Co/ZnS targets under double pulse femtosecond laser irradiation. Physical Chemistry Chemical Physics, 2016, 18, 3522-3529.	2.8	7
17	Femtosecond predissociation dynamics of the methyl radical from the 3p_z Rydberg state. Physical Chemistry Chemical Physics, 2016, 18, 110-118.	2.8	18
18	Imaging the predissociation dynamics of the methyl radical from the 3pz Rydberg state. Journal of Physics: Conference Series, 2015, 635, 112032.	0.4	0

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19	Low-order harmonic generation in a ZnS laser ablation plasma. Journal of Physics: Conference Series, 2015, 635, 122002.	0.4	1
20	Comparing the electronic relaxation dynamics of aniline and d₇-aniline following excitation at 272â€“238 nm. Physical Chemistry Chemical Physics, 2015, 17, 16270-16276.	2.8	32
21	Frequency mixing in boron carbide laser ablation plasmas. Applied Surface Science, 2015, 336, 53-58.	6.1	8
22	Strong field laser control of photochemistry. Physical Chemistry Chemical Physics, 2015, 17, 13183-13200.	2.8	53
23	Structural dynamics effects on the ultrafast chemical bond cleavage of a photodissociation reaction. Physical Chemistry Chemical Physics, 2014, 16, 8812.	2.8	47
24	Pulse shaping control of CH3I multiphoton ionization at 540 nm. Journal of Modern Optics, 2014, 61, 864-871.	1.3	3
25	Femtosecond Photodissociation Dynamics by Velocity Map Imaging. The Methyl Iodide Case. Springer Series in Chemical Physics, 2014, , 61-97.	0.2	2
26	Control of ultrafast molecular photodissociation by laser-field-induced potentials. Nature Chemistry, 2014, 6, 785-790.	13.6	151
27	Fresnel phase retrieval method using an annular lens array on an SLM. Applied Physics B: Lasers and Optics, 2014, 117, 67-73.	2.2	6
28	Characterization of laser-induced plasmas of nucleobases: Uracil and thymine. Applied Surface Science, 2014, 302, 299-302.	6.1	9
29	Strong field control of predissociation dynamics. Faraday Discussions, 2013, 163, 447.	3.2	10
30	Single diffractive optical element pulse shaper. , 2013, , .		0
31	Dynamic Stark shift of the³R₁Rydberg state of CH₃I. EPJ Web of Conferences, 2013, 41, 02035.	0.3	5
32	Programmable quasi-direct space-to-time pulse shaper with active wavefront correction. Optics Letters, 2012, 37, 5067.	3.3	4
33	Experimental Demonstration of the Quasi-Direct Space-to-Time Pulse Shaping Principle. IEEE Photonics Technology Letters, 2012, 24, 273-275.	2.5	5
34	A femtosecond velocity map imaging study on B-band predissociation in CH3I. II. The $2_0^1$21 and $3_0^1$31 vibronic levels. Journal of Chemical Physics, 2012, 136, 074303.	3.0	31
35	Generation of low-order harmonics in laser ablation plasmas. Molecular Physics, 2012, 110, 1651-1657.	1.7	12
36	Velocity Map Imaging and Theoretical Study of the Coulomb Explosion of CH₃I under Intense Femtosecond IR Pulses. Journal of Physical Chemistry A, 2012, 116, 2669-2677.	2.5	62

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37	The primary step in the ultrafast photodissociation of the methyl iodide dimer. Physical Chemistry Chemical Physics, 2011, 13, 13295.	2.8	8
38	Harmonic generation in ablation plasmas of wide bandgap semiconductors. Physical Chemistry Chemical Physics, 2011, 13, 10755.	2.8	35
39	Cross-correlation with spatial resolution of a quasi-direct space-to-time (QDST) pulse shaper in the far field. , 2011, , .		1
40	Ultrafast Laser Ablation and Deposition of Wide Band Gap Semiconductors. Journal of Physical Chemistry C, 2011, 115, 3203-3211.	3.1	37
41	Laser ablation and deposition of wide bandgap semiconductors: plasma and nanostructure of deposits diagnosis. Journal of Nanoparticle Research, 2011, 13, 6621-6631.	1.9	20
42	A 4D wave packet study of the CH3I photodissociation in the A-band. Comparison with femtosecond velocity map imaging experiments. Journal of Chemical Physics, 2011, 135, 154306.	3.0	23
43	Wavelength Effects In Femtosecond Pulsed Laser Ablation And Deposition. , 2010, , .		2
44	CaF<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>ablation plumes as a source of CaF molecules for harmonic generation. Physical Review A, 2010, 81, .	2.5	35
45	A femtosecond velocity map imaging study on B-band predissociation in CH3I. I. The band origin. Journal of Chemical Physics, 2010, 132, 234313.	3.0	33
46	Femtosecond Pulsed Laser Deposition of Nanostructured CdS Films. Journal of Physical Chemistry C, 2010, 114, 4864-4868.	3.1	34
47	Femtosecond time-resolved photophysics and photodissociation dynamics of 1-iodonaphthalene. Physical Chemistry Chemical Physics, 2010, 12, 7988.	2.8	4
48	Diffractive control of femtosecond pulses. , 2010, , .		0
49	Imaging transient species in the femtosecond A-band photodissociation of CH3I. Journal of Chemical Physics, 2009, 131, 134311.	3.0	34
50	Modeling the dynamics of one laser pulse surface nanofoaming ofÂbiopolymers. Applied Physics A: Materials Science and Processing, 2009, 94, 719-729.	2.3	21
51	Generation of CdS clusters using laser ablation: the role ofÂwavelength and fluence. Applied Physics A: Materials Science and Processing, 2009, 95, 681-687.	2.3	11
52	Femtosecond pulsed laser deposition of nanostructured TiO2 films. Applied Surface Science, 2009, 255, 5206-5210.	6.1	35
53	CdS plume composition and dynamics of neutral species upon ablation with 532Ânm laser light. Applied Physics A: Materials Science and Processing, 2008, 92, 831-836.	2.3	2
54	Nanofoaming dynamics in biopolymers by femtosecond laser irradiation. Applied Physics A: Materials Science and Processing, 2008, 93, 209-213.	2.3	18

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55	Femtosecond Transitionâ€State Imaging of the Aâ€Band CH₃I Photodissociation. ChemPhysChem, 2008, 9, 1245-1249.	2.1	23
56	A detailed experimental and theoretical study of the femtosecond A-band photodissociation of CH3I. Journal of Chemical Physics, 2008, 128, 244309.	3.0	91
57	Measurement of electronic structure from high harmonic generation in non-adiabatically aligned polyatomic molecules. New Journal of Physics, 2008, 10, 025008.	2.9	23
58	Probing Orbital Structure of Polyatomic Molecules by High-Order Harmonic Generation. Physical Review Letters, 2007, 98, 203007.	7.8	137
59	Publisherâ€™s Note: Probing Orbital Structure of Polyatomic Molecules by High-Order Harmonic Generation [Phys. Rev. Lett.98, 203007 (2007)]. Physical Review Letters, 2007, 98, .	7.8	0
60	Femtosecond multichannel photodissociation dynamics of CH3I from the A band by velocity map imaging. Journal of Chemical Physics, 2007, 126, 021101.	3.0	57
61	Pulse shaping control of alignment dynamics in N2. Journal of Raman Spectroscopy, 2007, 38, 543-550.	2.5	24
62	Mechanism of ablation of CdS at laser wavelengths in the visible and in the UV. Applied Surface Science, 2007, 253, 6339-6342.	6.1	6
63	Nanofoaming in the surface of biopolymers by femtosecond pulsed laser irradiation. Applied Surface Science, 2007, 254, 1179-1184.	6.1	32
64	Submicron foaming in gelatine by nanosecond and femtosecond pulsed laser irradiation. Applied Surface Science, 2007, 253, 6420-6424.	6.1	28
65	Adaptive control of molecular alignment. Physical Review A, 2006, 73, .	2.5	81
66	Dynamics of laser-induced molecular alignment in the impulsive and adiabatic regimes: A direct comparison. Physical Review A, 2005, 72, .	2.5	102
67	Signatures of molecular structure in the strong-field response of aligned molecules. Journal of Modern Optics, 2005, 52, 465-478.	1.3	34
68	Role of orbital symmetry in high-order harmonic generation from aligned molecules. Physical Review A, 2004, 69, .	2.5	97
69	Role of atomic coherence effects in four-wave mixing using autoionizing resonances. Physical Review A, 2003, 68, .	2.5	2
70	Investigations of electron wave-packet dynamics and high-order harmonic generation in laser-aligned molecules. Journal of Modern Optics, 2003, 50, 561-577.	1.3	11
71	Investigations of electron wave-packet dynamics and high-order harmonic generation in laser-aligned molecules. Journal of Modern Optics, 2003, 50, 561-577.	1.3	1
72	High-order harmonic generation in laser-aligned molecules. Physical Review A, 2002, 65, .	2.5	78

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73	Anisotropic Distributions of Ion Fragments Produced by Dissociative Ionization of Halogenated Ethylenes in Intense Laser Fields. Journal of Physical Chemistry A, 2002, 106, 2838-2843.	2.5	9
74	Limits to the determination of the nonlinear refractive index by the Z-scan method. Journal of the Optical Society of America B: Optical Physics, 2002, 19, 289.	2.1	99
75	Dissociative ionization of halogenated ethylenes in intense femtosecond laser pulses. Chemical Physics Letters, 2002, 353, 295-303.	2.6	15
76	Large enhancement of the third-order optical susceptibility in Cu-silica composites produced by low-energy high-current ion implantation. Journal of Applied Physics, 2001, 90, 1064-1066.	2.5	57
77	High-order harmonic generation from organic molecules in ultra-short pulses. European Physical Journal D, 2001, 14, 231-240.	1.3	26
78	Induced HSiCl emission in the UV photodissociation of 2-chloroethenylsilane. Chemical Physics Letters, 2000, 316, 449-454.	2.6	11
79	Near UV multiphoton dissociation of organosilanes with picosecond and nanosecond laser pulses. Journal of Photochemistry and Photobiology A: Chemistry, 2000, 133, 39-44.	3.9	0
80	High-order harmonic generation in cyclic organic molecules. Physical Review A, 2000, 61, .	2.5	34
81	Pulse-length dependence of high-order harmonic generation in dissociating cyclic organic molecules. Physical Review A, 2000, 62, .	2.5	38
82	Multiphoton Ionization and Fragmentation of CS₂ Under Intense Short Pulse Laser Radiation. Laser Chemistry, 1999, 18, 129-142.	0.5	2
83	Nanosecond Versus, Picosecond Molecular Multiphoton Fragmentation of Ketene and Cyclohexane. Laser Chemistry, 1998, 18, 51-62.	0.5	3
84	IR and UV laser-induced photolysis of 2-chloroethenylsilane. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 110, 107-113.	3.9	8
85	Nanosecond versus picosecond near UV multiphoton dissociation of ketene. Chemical Physics Letters, 1997, 268, 465-470.	2.6	7
86	Multiphoton Dissociation of Phenylsilane Upon Excitation at 212.5 NM. Laser Chemistry, 1996, 16, 157-166.	0.5	6
87	HCL(B1â^'+) and HBr(B1â^'+) Emission From the Ultraviolet Multiphoton Dissociation of Vinyl Chloride and Bromide. Laser Chemistry, 1996, 16, 207-218.	0.5	3
88	Photodissociation of ketene with a narrow-band tunable laser around 212.5 nm. Chemical Physics Letters, 1995, 237, 367-372.	2.6	10