George Rodriguez

List of Publications by Year
in descending order

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116 papers	3,675 citations	159585 30 h-index	128289 60 g-index
118 all docs	118 docs citations	118 times ranked	3131 citing authors

#	Article	IF	Citations
1	Magnetoelastic standing waves induced in UO ₂ by microsecond magnetic field pulses. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	3
2	Ultrafast photonic systems for FBG sensing in detonation and shock wave experiments. Proceedings of SPIE, 2017, , .	0.8	1
3	Closure of the Mott gap and formation of a superthermal metal in the FrÃ¶hlich-type nonequilibrium polaron Bose-Einstein condensate in UO2+x. Physical Review B, 2017, 96, .	3.2	5
4	Fiber Bragg Grating Dilatometry in Extreme Magnetic Field and Cryogenic Conditions. Sensors, 2017, 17, 2572.	3.8	24
5	Ultrafast Fiber Bragg Grating Interrogation for Sensing in Detonation and Shock Wave Experiments. Sensors, 2017, 17, 248.	3.8	19
6	Embedded fiber Bragg grating pressure measurement during thermal ignition of a high explosive. Applied Physics Letters, 2016, 109, .	3.3	9
7	Ultrafast fiber grating sensor systems for velocity, position, pressure, and temperature measurements. Proceedings of SPIE, 2016, , .	0.8	4
8	Ultrafast X-Ray Probe of Dynamics in Chromium. , 2016, , .		0
9	Possible Demonstration of a Polaronic Bose-Einstein(-Mott) Condensate in UO2(+x) by Ultrafast THz Spectroscopy and Microwave Dissipation. Scientific Reports, 2015, 5, 15278.	3.3	13
10	Quasiparticle dynamics across the full Brillouin zone of Bi2Sr2CaCu2O8+Î´ traced with ultrafast time and angle-resolved photoemission spectroscopy. Structural Dynamics, 2015, 2, 054501.	2.3	9
11	Insight into fiber Bragg sensor response at 100-MHz interrogation rates under various dynamic loading conditions. Proceedings of SPIE, 2015, , .	0.8	1
12	Coherent pulse interrogation system for fiber Bragg grating sensing of strain and pressure in dynamic extremes of materials. Optics Express, 2015, 23, 14219.	3.4	28
13	Detection of high explosive detonation across material interfaces with chirped fiber Bragg gratings. Applied Optics, 2015, 54, 3849.	1.8	18
14	Fiber Bragg sensing of high explosive detonation experiments at Los Alamos National Laboratory. Journal of Physics: Conference Series, 2014, 500, 142030.	0.4	7
15	Ultrafast Photoemission Spectroscopy of the Uranium Dioxide<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>UO</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> Insulator: Evidence for a Robust Energy Gap Structure. Physical Review Letters, 2014, 112, .	7.8	24
16	Damage growth and recollection in aluminum under axisymmetric convergence using a helical flux compression generator. Journal of Applied Physics, 2014, 115, 023516.	2.5	9
17	High pressure sensing and dynamics using high speed fiber Bragg grating interrogation systems. Proceedings of SPIE, 2014, , .	0.8	8
18	Embedded optical probes for simultaneous pressure and temperature measurement of materials in extreme conditions. Journal of Physics: Conference Series, 2014, 500, 142031.	0.4	9

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19	Rheology studies of aluminum with the use of explosive magnetic generators. Doklady Physics, 2013, 58, 20-23.	0.7	0
20	Specificity and Heterogeneity of Terahertz Radiation Effect on Gene Expression in Mouse Mesenchymal Stem Cells. Scientific Reports, 2013, 3, 1184.	3.3	78
21	Fiber Bragg grating sensing of detonation and shock experiments at Los Alamos National Laboratory. Proceedings of SPIE, 2013, , .	0.8	13
22	Chirped fiber Bragg grating detonation velocity sensing. Review of Scientific Instruments, 2013, 84, 015003.	1.3	28
23	Possible Bose-condensate behavior in a quantum phase originating in a collective excitation in the chemically and optically doped Mott-Hubbard system UO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn><mml:mo>+</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>. Physical Review B, 2013, 88, .	3.2	39
24	A simple machine for isentropic compression experiments (ICE). , 2012, , .		2
25	Direct measurement of quasiparticle lifetimes in graphene using time-resolved photoemission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, 03D116.	1.2	6
26	Nondestructive Calibration of Chirped Fiber Bragg Grating Sensors using a Fiber-Based Ultrafast Laser. , 2012, , .		2
27	Tracing Ultrafast Separation and Coalescence of Carrier Distributions in Graphene with Time-Resolved Photoemission. Journal of Physical Chemistry Letters, 2012, 3, 64-68.	4.6	42
28	High-Power Broadband Terahertz Generation via Two-Color Photoionization in Gases. IEEE Journal of Quantum Electronics, 2012, 48, 797-805.	1.9	76
29	Guest Editorial Special Issue in Honor of Professor J. Gary Eden on the Occasion of his 60th Birthday. IEEE Journal of Quantum Electronics, 2012, 48, 737-740.	1.9	0
30	Fiber-Based Ultrafast Laser Fabrication System with Application to Chirped Fiber Bragg Grating Sensors. , 2012, , .		1
31	Non-thermal effects of terahertz radiation on gene expression in mouse stem cells. Biomedical Optics Express, 2011, 2, 2679.	2.9	73
32	Pump-probe reflectivity study of ultrafast dynamics of strongly correlated 5f electrons in UO₂. Journal of Physics: Conference Series, 2011, 273, 012144.	0.4	1
33	Anomalous femtosecond quasiparticle dynamics of hidden order state in URu<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>Si<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow />	3.2	40
34	Ultrafast Hopping Dynamics of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mn>5</mml:mn><mml:mi>f</mml:mi></mml:math>Electrons in the Mott Insulator<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>UO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>Studied by Femtosecond Pump-Probe Spectroscopy. Physical Review Letters, 2011, 106, 207402.	7.8	38
35	Isentropic compression studies at the Los Alamos National High Magnetic Field Laboratory. , 2011, , .		1
36	Mammalian Stem Cells Reprogramming in Response to Terahertz Radiation. PLoS ONE, 2010, 5, e15806.	2.5	109

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37	Tunable ultrafast extreme ultraviolet source for time- and angle-resolved photoemission spectroscopy. Review of Scientific Instruments, 2010, 81, 073108.	1.3	62
38	Scaling behavior of ultrafast two-color terahertz generation in plasma gas targets: energy and pressure dependence. Optics Express, 2010, 18, 15130.	3.4	81
39	Parametric studies of two-color ultrafast terahertz generation in gas plasma filaments. , 2010, , .		0
40	DAMAGE EXPERIMENTS IN CYLINDRICAL GEOMETRY UPDATE. , 2009, , .		0
41	Measurements of Terahertz Electrical Conductivity of Intense Laser-Heated Dense Aluminum Plasmas. Physical Review Letters, 2008, 100, 135002.	7.8	40
42	Coherent control of terahertz supercontinuum generation in ultrafast laserâ€“gas interactions. Nature Photonics, 2008, 2, 605-609.	31.4	707
43	Pulsed-Power Hydrodynamics: An Application of Pulsed-Power and High Magnetic Fields to the Exploration of Material Properties and Problems in Experimental Hydrodynamics. IEEE Transactions on Plasma Science, 2008, 36, 112-124.	1.3	8
44	Intense Broadband Terahertz Radiation via Quantum Coherent Control. Optics and Photonics News, 2008, 19, 49.	0.5	0
45	Nanoscale topography of dynamic surfaces with ultrafast time resolution. Applied Optics, 2008, 47, 5082.	2.1	1
46	In-line holographic imaging and electron density extraction of ultrafast ionized air filaments. Journal of the Optical Society of America B: Optical Physics, 2008, 25, 1988.	2.1	58
47	Intense THz supercontinuum generation in femtosecond laser-gas interactions. , 2008, , .		0
48	Dynamic friction experiments at the Atlas Pulsed Power Facility. , 2007, , .		1
49	Optically based velocity and topographic measurement systems in the nano-scale for developing optical initiation. Proceedings of SPIE, 2007, , .	0.8	0
50	Photonic Doppler velocimetry of laser-ablated ultrathin metals. Review of Scientific Instruments, 2007, 78, 013101.	1.3	30
51	Single-shot terahertz pulse characterization via two-dimensional electro-optic imaging with dual echelons. Optics Letters, 2007, 32, 1968.	3.3	78
52	Details of electro-optic terahertz detection with a chirped probe pulse. Optics Express, 2007, 15, 1376.	3.4	21
53	Terahertz emission from ultrafast ionizing air in symmetry-broken laser fields. Optics Express, 2007, 15, 4577.	3.4	651
54	Pulsed Power Hydrodynamics: Atlas results and future perspectives. , 2007, , .		0

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55	Electrical conductivity measurements of warm dense matter with time-resolved terahertz spectroscopy. , 2007, , .		0
56	Experimental series on behavior of post-damage recollected material. , 2007, , .		1
57	Single-shot, High-resolution, THz Field Reconstruction using Phase-retrieval. Springer Series in Chemical Physics, 2007, , 796-798.	0.2	0
58	Spall and Damage in Convergent Geometry Using Pulsed Power. , 2006, , .		0
59	Single-shot, interferometric, high-resolution, terahertz field diagnostic. Applied Physics Letters, 2006, 88, 041123.	3.3	41
60	Topographic imaging and velocity measurements of surface expansion during laser ablation of a metal layer on glass. , 2006, , .		3
61	Single-shot, high-resolution, THz field reconstruction using phase-retrieval. , 2006, , TuH10.		0
62	Terahertz-frequency electrical conductivity measurements of ultrashort laser-ablated plasmas. , 2006, , .		2
63	Terahertz time-resolved reflection spectroscopy for electrical conductivity measurements in the femtosecond laser-induced ablation dynamics. , 2006, , .		0
64	Algorithm for high-resolution single-shot THz measurement using in-line spectral interferometry with chirped pulses. Applied Physics Letters, 2005, 87, 211109.	3.3	43
65	Atlas Line-Imaging ORVIS Diagnostic. , 2005, , .		3
66	Interferometric diagnostic suite for ultrafast laser ablation of metals. , 2004, , .		0
67	Laser shadowgraph measurements of electromagnetically-driven cylindrical shock-wave implosions in water. Journal of Applied Physics, 2003, 93, 1791-1797.	2.5	15
68	Design, fabrication, and operation of a high-energy liner implosion experiment at 16 megamperes. IEEE Transactions on Plasma Science, 2002, 30, 1777-1788.	1.3	18
69	Nonequilibrium superconductivity and quasiparticle dynamics inYBa2Cu3O7â^'Î´. Physical Review B, 2001, 63, .	3.2	106
70	Ultrafast Dynamics of Electron Thermalization in Gold. Physical Review Letters, 2001, 86, 1638-1641.	7.8	72
71	Watching Really Hot Electrons Relax. Optics and Photonics News, 2001, 12, 68.	0.5	0
72	Coherent ultrafast MI-FROG spectroscopy of optical field ionization in molecular H/sub 2/, N/sub 2/, and O/sub 2/. IEEE Journal of Selected Topics in Quantum Electronics, 2001, 7, 579-591.	2.9	31

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73	The Atlas High-Energy Density Physics Project*. Japanese Journal of Applied Physics, 2001, 40, 930-934.	1.5	8
74	High speed laser shadowgraphy for electromagnetically driven cylindrical implosions. Review of Scientific Instruments, 2001, 72, 3230-3236.	1.3	7
75	Measurement of Ultrafast Ionization Dynamics of Gases by Multipulse Interferometric Frequency-Resolved Optical Gating. Physical Review Letters, 2001, 87, 263002.	7.8	35
76	Influence of electronic temperature and distribution on the second-order surface nonlinear susceptibility of metals. Applied Physics Letters, 2001, 78, 3211-3213.	3.3	4
77	Resolving Ultrafast Dynamics of Electron Thermalization in Gold using Surface SHG. Springer Series in Chemical Physics, 2001, , 413-415.	0.2	0
78	Structural Phase Transition of Aluminum Induced by Electronic Excitation. Physical Review Letters, 2000, 84, 4493-4496.	7.8	119
79	Conductivity artifacts in optical-pump THz-probe measurements of YBa_2Cu_3O_7. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 327.	2.1	55
80	Ultrafast, dynamical imaging of surfaces by use of a scanning tunneling microscope with a photoexcited, low-temperature-grown GaAs tip. Journal of the Optical Society of America B: Optical Physics, 2000, 17, 1077.	2.1	18
81	<title>Using dynamic radiography to determine the volume of an imploding cylinder</title>. , 1999, 3769, 106.		0
82	Measurement of cross-phase modulation in optical materials through the direct measurement of the optical phase change. Optics Letters, 1998, 23, 858.	3.3	12
83	Ultrafast scanning tunneling microscopy using a photoexcited low-temperature-grown GaAs tip. , 1998, , .		0
84	Ultrafast field dynamics in large-aperture photoconductors. Optics Letters, 1997, 22, 715.	3.3	13
85	Simultaneous measurement of two ultrashort laser pulses from a single spectrogram in a single shot. Journal of the Optical Society of America B: Optical Physics, 1997, 14, 935.	2.1	96
86	Screening of the bias field in terahertz generation from photoconductors. Optics Letters, 1996, 21, 1046.	3.3	64
87	Determination of n_2 by direct measurement of the optical phase. Optics Letters, 1996, 21, 1812.	3.3	83
88	Photodissociation of PbI_2 in the ultraviolet: analysis of the A â† X band of PbI. Journal of the Optical Society of America B: Optical Physics, 1996, 13, 1362.	2.1	6
89	Scaling of terahertz radiation via optical rectification in electroâ€optic crystals. Applied Physics Letters, 1995, 66, 121-123.	3.3	79
90	Vibrational wave packets in the Câ€‰1Îu state of Cs2: Two color pumpâ€“probe experiments. Journal of Chemical Physics, 1995, 103, 10473-10483.	3.0	30

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91	Generation of terahertz radiation using electroâ€optic crystal mosaics. Applied Physics Letters, 1995, 66, 10-12.	3.3	37
92	Ultraviolet ultrafast pumpâ€“probe laser based on a Ti:sapphire laser system. Optics Letters, 1994, 19, 1146.	3.3	21
93	Modeling of terahertz radiation from biased photoconductors: transient velocity effects. Optics Letters, 1994, 19, 1994.	3.3	31
94	<title>Ti:sapphire-based ultrafast pump-probe laser source in the violet and ultraviolet</title>. , 1994, 2116, 219.		1
95	Dynamics of vibrational wave packets in the C1Îu state of Cs2. Chemical Physics Letters, 1993, 205, 371-379.	2.6	26
96	Volume holographic pulse shaping. Optics Letters, 1992, 17, 610.	3.3	39
97	Boundâ†'free emission spectra and photoassociation of 114Cd2 and 64Zn2. Journal of Chemical Physics, 1991, 95, 5539-5552.	3.0	40
98	Overview of the Atlas project. , 0, , .		5
99	Rayleigh-Taylor mix experiment on Pegasus. , 0, , .		1
100	Pegasus II experiments and plans for the Atlas pulsed power facility. , 0, , .		5
101	Development of an high pressure diagnostic based on optical Raman backscatter measurements in diamond. , 0, , .		2
102	Pegasus liner stability experiments: diagnostics and experimental results. , 0, , .		0
103	Overview of the Pegasus-II experimental program. , 0, , .		0
104	High-energy density experiments for Atlas. , 0, , .		0
105	Diagnostic development for the Atlas pulsed power facility. , 0, , .		0
106	Nonequilibrium superconductivity and quasiparticle dynamics in YBa/sub 2/Cu/sub 3/O/sub 7-Î´/. , 0, , .		0
107	RANCHERO explosive pulsed power experiments. , 0, , .		12
108	Liner velocity, current, and symmetry measurements on the 32 megamp flux compression generator experiment ALT-1. , 0, , .		0

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109	Using pulsed power for hydrodynamic code validation. , 0, , .		3
110	Design and operation of high energy liner implosions at 16 MA for studies of converging shocks. , 0, , .		1
111	Development and fielding of high-speed laser shadowgraphy for electro-magnetically driven cylindrical implosions. , 0, , .		1
112	Direct observation of ultrafast dynamics of electron thermalization in gold using surface SHG. , 0, , .		0
113	Development and fielding of high speed laser shadowgraphy for electro-magnetically driven cylindrical implosions. , 0, , .		3
114	Liner velocity, current, and symmetry measurements on the 32 MA flux compression generator experiment ALT-1. , 0, , .		0
115	Spall experiments in convergent geometry using the Atlas pulsed power facility. , 0, , .		0
116	Design and operation of high energy liner implosions at 16 MA for studies of converging shocks. , 0, , .		2