## **Emmanouil Benis**

List of Publications by Year in descending order

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93 papers 1,340 citations

394390 19 h-index 35 g-index

96 all docs 96 docs citations 96 times ranked 849 citing authors

#	Article	IF	CITATIONS
1	Improving a high-power laser-based relativistic electron source: the role of laser pulse contrast and gas jet density profile. Plasma Physics and Controlled Fusion, 2022, 64, 044007.	2.1	6
2	Single and double <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>K</mml:mi></mml:math> -shell vacancy production in slow <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi>Xe</mml:mi><td>2.5 nrow&gt;<mn< td=""><td>5 nl:mrow&gt;<m< td=""></m<></td></mn<></td></mml:mrow></mml:msup></mml:math>	2.5 nrow> <mn< td=""><td>5 nl:mrow&gt;<m< td=""></m<></td></mn<>	5 nl:mrow> <m< td=""></m<>
3	Subshell contributions to electron capture into the continuum in MeV/u collisions of deuterons with multielectron targets. Physical Review A, 2022, 105, .	2.5	5
4	Polymer-Gel Radiation Dosimetry of Laser-Based Relativistic Electron Sources for Biomedical Applications: First Qualitative Results and Experimental Challenges. Frontiers in Physics, 2022, 10, .	2.1	2
5	Spectral and Divergence Characteristics of Plateau High-Order Harmonics Generated by Femtosecond Chirped Laser Pulses in a Semi-Infinite Gas Cell. Atoms, 2022, 10, 53. State-resolved differential cross sectionsÂof single-electron capture in swift collisions of mml:math	1.6	4
6	xmlns:mml="http://www.w3.org/1998/Math/MathML"> <mml:mrow><mml:msup><mml:mrow><mml:mi mathvariant="normal">C</mml:mi></mml:mrow><mml:mrow><mml:mn>4</mml:mn>&lt;<mml:mo>+</mml:mo><td>mml:mrow</td><td>&gt;</td></mml:mrow></mml:msup></mml:mrow>	mml:mrow	>

#	Article	IF	CITATIONS
19	Innovative education and training in high power laser plasmas (PowerLaPs) for plasma physics, high power laser matter interactions and high energy density physics: experimental diagnostics and simulations $\hat{a} \in \text{CORRIGENDUM}$ . High Power Laser Science and Engineering, 2020, 8, .	4.6	1
20	Pointing Characteristics of X-rays Generated by Relativistic Electron Acceleration via 45 TW fs Laser-He Plasma 1., 2020, , .		3
21	Innovative Education and Training in high power laser plasmas (PowerLaPs) for plasma physics, high power laser–matter interactions and high energy density physics – theory and experiments. High Power Laser Science and Engineering, 2019, 7, .	4.6	7
22	Method for determining the lifetimes of the long-lived 1s2s2p 4PJ state J-levels. AIP Conference Proceedings, 2019, , .	0.4	1
23	Experimental determination of the effective solid angle of long-lived projectile states in zero-degree Auger projectile spectroscopy. Journal of Electron Spectroscopy and Related Phenomena, 2018, 222, 31-39.	1.7	4
24	Mixed-State Ionic Beams: An Effective Tool for Collision Dynamics Investigations. Atoms, 2018, 6, 66. Radiative transition rates of 1828 (3 S) 3p levels for Li-like ions with same math	1.6	6
25	xmins:mmi="http://www.w3.org/1998/Math/Math/Math/Math/Math/Math/Math/Math	1.4	2
26	Effective solid angle correction factors for long-lived Auger states populated in low-Z ion collisions with gas targets. Journal of Physics: Conference Series, 2017, 875, 092007.	0.4	0
27	Determination of the $1s2\{ell \}^{ell }^{prime }$ state production ratios $\{\{\}^{4}P\}^{o}/\{\}^{2}P$ , $\{\{\}^{2}D/\{\}^{2}P\}$ and $\{\{\}^{2}P\}_{+}/\{\{\}^{2}P\}_{-}\}$ from fast $\{1\{s\}^{2},1s2s,\{\}^{3}S\}$ ) mixed-state He-like ion beams in collisions with $1sub>2$ sub>targets. Journal of Physics B: Atomic, Molecular and Optical Physics. 2016, 49, 235202.	1.5	9
28	Evidence for the non-statistical population of the 1s2s2p 4P metastable state by electron capture in 4MeV collisions of B3+(1s2s 3S) with H2 targets. Nuclear Instruments & Methods in Physics Research B, 2016, 369, 83-86.	1.4	6
29	Energy levels, transition rates and lifetimes for Li-like ions withZ≠10 in the 1s2s(3S)3â,," states. Journal of Physics: Conference Series, 2015, 635, 052060.	0.4	0
30	Use of Gas and Foil strippers for the production of He-like ionic beams in both pure ground state (1s2) and mixed states (1s2, 1s2s) for zero-degree Auger Projectile Electron Spectroscopy. Journal of Physics: Conference Series, 2015, 635, 052062.	0.4	0
31	Separation and solid angle correction of the metastable 1s2s2p <sup>4</sup> P Auger yield produced in ion-atom collisions using the biased gas cell technique: A tool for the determination of the population mechanisms. Journal of Physics: Conference Series, 2015, 635, 052082.	0.4	1
32	Investigation of the dependence of the energy resolution of a hemispherical deflection analyzer on the distance of the position sensitive detector from the focal plane. Journal of Physics: Conference Series, 2015, 635, 052063.	0.4	1
33	Evaluation of the effective solid angle of a hemispherical deflector analyser with injection lens for metastable Auger projectile states. Nuclear Instruments & Methods in Physics Research B, 2015, 365, 457-461.	1.4	7
34	Determination of the solid angle and response function of a hemispherical spectrograph with injection lens for Auger electrons emitted from long lived projectile states. Review of Scientific Instruments, 2015, 86, 043111.	1.3	14
35	Atomic Physics with Accelerators: Projectile Electron Spectroscopy (APAPES). Journal of Physics: Conference Series, 2015, 583, 012014.	0.4	17
36	Role of broadband-laser-pulse temporal extent in H2+photodissociation. Physical Review A, 2012, 86, .	2.5	7

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37	Carbon K-shell photoionization of CO: Molecular frame angular distributions of normal and conjugate shakeup satellites. Journal of Electron Spectroscopy and Related Phenomena, 2011, 183, 48-52.	1.7	11
38	Realization of time-resolved two-vacuum-ultraviolet-photon ionization. Physical Review A, 2009, 79, .	2.5	26
39	Generation of intense coherent continuum XUV radiation by manycycle laser fields., 2009,,.		0
40	Four-dimensional investigation of the 2nd order volume autocorrelation technique. Applied Physics B: Lasers and Optics, 2009, 97, 505-510.	2.2	18
41	Attosecond Scale Multi-XUV-Photon Processes. Springer Series in Chemical Physics, 2009, , 133-158.	0.2	0
42	The hemispherical deflector analyser revisited. Journal of Electron Spectroscopy and Related Phenomena, 2008, 163, 28-39.	1.7	35
43	Exploring intense attosecond pulses. New Journal of Physics, 2008, 10, 025018.	2.9	55
44	Full temporal reconstruction of a lower order harmonic superposition. New Journal of Physics, 2007, 9, 232-232.	2.9	3
45	Laser-induced field-free alignment of the OCS molecule. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 2503-2510.	1.5	25
46	Single Photon-Induced Symmetry Breaking of H2 Dissociation. Science, 2007, 315, 629-633.	12.6	185
47	Generation of intense continuum extreme-ultraviolet radiation by many-cycle laser fields. Nature Physics, 2007, 3, 846-850.	16.7	120
48	Frequency-resolved photoelectron spectra of two-photon ionization of He by an attosecond pulse train. New Journal of Physics, 2006, 8, 92-92.	2.9	19
49	Spectral Phase Distribution Retrieval through Coherent Control of Harmonic Generation. Physical Review Letters, 2006, 96, 163901.	7.8	4
50	Two-photon double ionization of rare gases by a superposition of harmonics. Physical Review A, 2006, 74, .	2.5	40
51	Comment on "Photoionization of helium atoms irradiated with intense vacuum ultraviolet free-electron laser light. Part I. Experimental study of multiphoton and single-photon processes― Physical Review A, 2006, 74, .	2.5	7
52	ON THE SECOND ORDER AUTOCORRELATION OF AN XUV ATTOSECOND PULSE TRAIN. , 2006, , .		0
53	Investigation of triply excited states of Li-like ions in fast ion-atom collisions by zero-degree Auger projectile electron spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2005, 233, 161-171.	1.4	2
54	Optimization of the energy resolution of an ideal ESCA-type hemispherical analyzer. Nuclear Instruments & Methods in Physics Research B, 2005, 235, 535-539.	1.4	6

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55	The attosecond-science frontiers: generation, metrology and paths to applications. Journal of Electron Spectroscopy and Related Phenomena, 2005, 144-147, 1129-1135.	1.7	2
56	Second Order Autocorrelation of an XUV Attosecond Pulse Train. Physical Review Letters, 2005, 94, 113905.	7.8	46
57	Optimal energy resolution of a hemispherical analyzer with virtual entry. Applied Physics Letters, 2005, 86, 094105.	3.3	20
58	Ionization suppression of Cl2molecules in intense laser fields. Physical Review A, 2004, 70, .	2.5	36
59	Vibrationally ResolvedK-shell Photoionization of CO with Circularly Polarized Light. Physical Review Letters, 2004, 93, 083002.	7.8	63
60	Elastic resonant and nonresonant differential scattering of quasifree electrons from B4+(1s) and B3+(1s2) ions. Physical Review A, 2004, 69, .	2.5	30
61	Extending fs pulse metrology to attosecond XUV pulses. , 2004, , .		0
62	Electron Correlation in the Formation of Hollow Li-Like Ions. Physica Scripta, 2004, 110, 137.	2.5	0
63	Large-angle elastic resonant and nonresonant scattering of electrons fromB3+(1s2)andB4+(1s)ions: Comparison of experiment and theory. Physical Review A, 2003, 68, .	2.5	17
64	Differential electron scattering from positive ions measured by zero-degree ion–atom spectroscopy. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 508-516.	1.4	8
65	Comparison of two experimental techniques for the determination of the 1s2s 3 S metastable beam fraction in energetic B 3+ ions. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 517-521.	1.4	5
66	Absolute measurements and calculation of triple electron capture cross sections in fast 0.5–1.1 MeV/u C 6+ on Ar collisions. Nuclear Instruments & Methods in Physics Research B, 2003, 205, 522-527.	1.4	0
67	Rescattering Double Ionization of D2 and H2 by Intense Laser Pulses. Physical Review Letters, 2003, 91, 163002.	7.8	114
68	Publisher's Note: Rescattering Double Ionization ofD2andH2by Intense Laser Pulses [Phys. Rev. Lett.91, 163002 (2003)]. Physical Review Letters, 2003, 91, .	7.8	1
69	Experimental observation and theoretical calculations of triply excited2s2p22Se,2,4Pe,2Deand2p32Po,2Dostates of fluorine. Physical Review A, 2003, 67, .	2.5	5
70	Resonant (RTE) and Non Resonant (NTE) Transfer Excitation in 4 MeV B4+ collisions with H2, He and Ar studied by zero-degree Auger projectile electron spectroscopy. AIP Conference Proceedings, 2003, , .	0.4	0
71	Electron Correlation Leading to Double-K-Shell Vacancy Production in Li-Like Ions Colliding with Helium. AIP Conference Proceedings, 2003, , .	0.4	0
72	Production of the 2s2p2 2De triply excited state in collisions of quasi-free electrons with He-like B3+, C4+, N5+, O6+, and F7+ ions. AIP Conference Proceedings, 2003, , .	0.4	0

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73	Doubly-Excited KLL States Formed in Triple Electron Capture. AIP Conference Proceedings, 2003, , .	0.4	0
74	Isoelectronic study of triply excited Li-like states. Journal of Physics B: Atomic, Molecular and Optical Physics, 2003, 36, L341-L348.	1.5	8
75	Triple electron capture in fast 0.5–1.1 MeV/uC6+on Ar collisions. Physical Review A, 2002, 66, .	2.5	4
76	Fraction of metastable1s2s3Sions in fast He-like beams(Z=5–9)produced in collisions with carbon foils. Physical Review A, 2002, 65, .	2.5	16
77	Technique for the determination of the $1s2s3S$ metastable fraction in two-electron ion beams. Physical Review A, 2002, 65, .	2.5	20
78	Absolute cross sections and decay rates for the triply excitedB2+(2s2p22D)resonance in electron–metastable-ion collisions. Physical Review A, 2002, 65, .	2.5	14
79	The hemispherical deflector analyser revisited. I. Motion in the ideal 1/r potential, generalized entry conditions, Kepler orbits and spectrometer basic equation. Journal of Electron Spectroscopy and Related Phenomena, 2002, 125, 221-248.	1.7	46
80	Stripping energy dependence of a B[sup 3+](1s[sup 2] [sup 1]S,1s2s [sup 3]S) beam metastable fraction. Conference Proceedings, 2001, , .	AIP 0.4	1
81	Charged particle trajectories in an ideal paracentric hemispherical deflection analyzer. AIP Conference Proceedings, 2001, , .	0.4	O
82	Energy dependence of the metastable fraction in B3+(1s21S,1s2s3S) beams produced in collisions with thin-foil and gas targets. Physical Review A, 2001, 64, .	2.5	21
83	Improving the energy resolution of a hemispherical spectrograph using a paracentric entry at a non-zero potential. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2000, 440, 462-465.	1.6	34
84	High resolution RTE measurements at $0\hat{A}^\circ$ using a hemispherical analyser with lens and 2-D PSD. Nuclear Instruments & Methods in Physics Research B, 1999, 154, 276-280.	1.4	14
85	Hemispherical Analyser with 2-D PSD for Zero-degree Auger Projectile Spectroscopy. Physica Scripta, 1999, T80, 529.	2.5	15
86	A new hemispherical analyser with 2-D PSD and focusing lens for use in $0\hat{A}^{\circ}$ electron spectroscopy. Nuclear Instruments & Methods in Physics Research B, 1998, 146, 120-125.	1.4	27
87	Search for inelastic electrons scattered off ions in energetic ion-atom collisions. Nuclear Instruments & Methods in Physics Research B, 1995, 98, 371-374.	1.4	2
88	APAPES - Atomic Physics with Accelerators: Projectile Electron Spectroscopy. HNPS Advances in Nuclear Physics, 0, 21, 153.	0.0	0
89	Atomic Physics at the 5 MV Tandem at Demokritos: the UoC APAPES project. HNPS Advances in Nuclear Physics, 0, 23, 65.	0.0	O
90	Zero-degree Auger Projectile Electron Spectroscopy of Li-like Ions obtained in Collisions of 1s2s 3S He-like Ions with Gaseous Targets. HNPS Advances in Nuclear Physics, 0, 24, 1.	0.0	0

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91	Production of C4+ (2s2p 3,1P) hollow states in collisions of 6-18 MeV C4+ (1s2, 1s2s 3S) mixed-state beams with gas targets. HNPS Advances in Nuclear Physics, 0, 26, 133.	0.0	0
92	Investigation of the C3+ Auger KLL spectrum obtained in collisions of 6-15 MeV C4+ (1s2, 1s2s 3S) with gas targets. HNPS Advances in Nuclear Physics, 0, 26, 125.	0.0	0
93	Installation of a gas terminal stripper and a gas/foil post stripper system at the 5.5 MV Demokritos Tandem Van de Graaff accelerator. HNPS Advances in Nuclear Physics, 0, 24, 266.	0.0	0