## **Emmanouil Benis**

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/5059570/publications.pdf

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93 papers 1,340 citations

394421 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<br/>nrow&gt;<mn< td=""><td>5<br/>nl:mrow&gt;<m< td=""></m<></td></mn<></td></mml:mrow></mml:msup></mml:math> | 2.5<br>nrow> <mn< td=""><td>5<br/>nl:mrow&gt;<m< td=""></m<></td></mn<> | 5<br>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  | >                             |
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|----|--|-----|-----------|
| 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 L-like ions with small 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 $1s2\{ell\}^{\{ell$ | 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≤0 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―<br>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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| 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<br>0.4 | 1         |
| 81 | Charged particle trajectories in an ideal paracentric hemispherical deflection analyzer. AIP<br>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<br>Tandem Van de Graaff accelerator. HNPS Advances in Nuclear Physics, 0, 24, 266. | 0.0 | 0         |