













## Work Package 10: Dissemination of Results

### A. Articles published in International Journals:

1. *Experimental energy resolution of a paracentric hemispherical deflector analyzer for different entry positions and bias*, M. Dogan, M. Ulu, G. G. Gennarakis, T. J.M. Zouros, [Review of Scientific Instruments](#) **84** (2013) 043105 
2. *Determination of the solid angle and response function of a hemispherical spectrograph with injection lens for Auger electrons emitted from long lived projectile states*, S. Doukas, I. Madesis, A. Dimitriou, A. Laoutaris, T. J. M. Zouros and E. P. Benis, [Review of Scientific Instruments](#) **86** (2015) 043111 
3. *Position, energy and transit time distributions in a hemispherical deflector analyzer with position sensitive detector*, Omer Sise and T. J.M. Zouros, [Journal of Spectroscopy](#) #153513 (2015) 

### B. Articles published in International Journals submitted as Conference Proceedings:

1. *Atomic Physics with Accelerators: Projectile Electron Spectroscopy (APAPES)*, I. Madesis, [A. Dimitriou](#), A. Lagoyannis, M. Axiotis, T. Mertzimekis, M. Andrianis, S. Harissopoulos, E.P. Benis, B. Sulik, I. Valastyán, T. J.M. Zouros, Proceedings of [HCI 2014 - 17th International Conferences on the Physics of Highly Charged Ions](#), Aug 31 - Sep 8, 2014, Bariloche, Argentina, [Journal of Physics: Conference Series](#) **583** (2015) 012014 
2. *The Optimization of a 4-Element Input Lens on a Hemispherical Deflector Analyzer Using SIMION*, [T. J.M. Zouros](#), A. Kanellakopoulos, I. Madesis, A. Dimitriou, M. Fernandez-Martin, G. Martinez and T.J. Mertzimekis, Proceedings of [CPO9 9th International Conference on Charged Particle Optics](#), Aug. 31 -Sep 5, 2014, Brno, Czech Republic, [Microscopy and Microanalysis](#) **21** (suppl. 4) pp. 148-153 (2015)  
(doi:10.1017/S143192761501329X). 
3. *Evidence for the non-statistical population of the  $1s2s2p^4P$  metastable state by electron capture in 4 MeV collisions of  $B^{3+}(1s2s^3S)$  with  $H_2$  targets*, S. Doukas, [E.P. Benis](#), T. J.M. Zouros, Proceedings of [PIPAMON 2015: Photon and fast Ion induced Processes in Atoms, MOlecules and Nanostructures](#), Mar 24-26, Debrecen, Hungary. [Nuclear Instruments and Methods in Physics Research B](#) xxx (2015) xxxx 

4. *Transit time spreads in biased paracentric hemispherical deflection analyzers*, Omer Sise and T. J.M. Zouros, Proceedings of [PIPAMON 2015: Photon and fast Ion induced Processes in Atoms, MOlecules and Nanostructures](#), Mar 24-26, 2015, Debrecen, Hungary, [Nuclear Instruments and Methods in Physics Research B xxx \(2015\) xxxx](#) 
5. *Voltage optimization of a 4-element Injection Lens on a hemispherical spectrograph with virtual entry aperture*, G. Martinez, M. Fernandez-Martin, O. Sise, I. Madesis, A. Dimitriou, A. Laoutaris and T. J.M. Zouros, Proceedings of [PIPAMON 2015: Photon and fast Ion induced Processes in Atoms, MOlecules and Nanostructures](#), Mar 24-26, 2015, Debrecen, Hungary [Nuclear Instruments and Methods in Physics Research B xxx \(2015\) xxxx](#) 
6. *Evaluation of the effective solid angle of a hemispherical deflector analyser with injection lens for metastable Auger projectile states*, E.P. Benis, S. Doukas, T. J.M. Zouros, F. Parente, C. Martins, J. P. Marques and J. P. Santos, [Nuclear Instruments and Methods in Physics Research B 365 \(2015\) 457-461](#) 
7. *Energy levels, transition rates and lifetimes for Li-like ions with  $Z \leq 10$  in the  $1s2s(^3S)3l$  states*, J. P. Santos, J. P. Marques, M. C. Martins, P. Indelicato, E. P. Benis, T. J. M. Zouros and F. Parente, Proceedings of XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC2015), [J. of Physics: Conference Series 635 \(2015\) 052060](#). 
8. *Use of Gas and Foil strippers for the production of He-like ionic beams in both pure ground state ( $1s^2$ ) and mixed states ( $1s^2, 1s2s$ ) for zero-degree Auger Projectile Electron Spectroscopy*, A. Laoutaris, I. Madesis, A. Dimitriou, A. Lagoyannis, M. Axiotis, E. P. Benis and T. J. M. Zouros, Proceedings of XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC2015), [J. of Physics: Conference Series 635\(2015\) 052062](#). 
9. *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*, C. Nounis, A. Laoutaris, I. Madesis, A. Dimitriou, O. Sise, E.P. Benis, T. J.M. Zouros, Proceedings of XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC2015), [J. of Physics: Conference Series 635 \(2015\) 052063](#). 
10. *Separation and solid angle correction of the metastable  $1s2s2p^4P$  Auger yield produced in ion-atom collisions using the biased as cell technique: A tool for the determination of the population*

*mechanisms*, I. Madesis, A. Laoutaris, S. Doukas, A. Dimitriou, E.P. Benis, T. J.M. Zouros, Proceedings of XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC2015), *J. of Physics: Conference Series* **635** (2015)

052082.



11. *Optimal operation of a 4-element injection lens in a hemispherical spectrograph: FDM/BEM simulation and experimental demonstration*, G. Martinez, I. Madesis, A. Dimitriou, A Laoutaris, O Sise and T J M Zouros, Proceedings of XXIX International Conference on Photonic, Electronic, and Atomic Collisions (ICPEAC2015), *J. of Physics: Conference Series* **635** (2015)

052083.



### C. Articles published in Conference Proceedings

1. *Monte Carlo Calculations of the Detection Solid Angle of electrons emitted from slowly decaying projectile ion Auger states*, S. Doukas, N. Angelinos, A. Kanellakopoulos, I. Madesis, A. Dimitriou, E.P. Benis, and T. J.M. Zouros, *Conference Proceedings of the 6th IC-SCCE* (2014)

p. 282-288



2. *High Resolution Auger Projectile Electron Spectroscopy of Li-like Ions Produced by Electron Capture in collision of He-like ions with Gaseous targets*, A. Dimitriou, A. Laoutaris, I. Madesis, S. Doukas, E. P. Benis, B. Sulik, I. Valastyán, A. Lagoyannis, M. Axiotis, T. J. M. Zouros, Proceedings of **CDAMOP 2015**: 4th International Conference on Current Developments in Atomic and Optical Physics with Applications, Mar 11-

14, Delhi, India *Proceedings*



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