

University of Groningen

Radium Ion Spectroscopy

Giri, Gouri Shankar

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2011

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Giri, G. S. (2011). *Radium Ion Spectroscopy: Towards Atomic Parity Violation in a single trapped Ion*. [Thesis fully internal (DIV), University of Groningen]. s.n.

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

List of Publications

1. *Isotope shifts of $6d^2D_{3/2} - 7p^2P_{1/2}$ transition in trapped short-lived $^{209-214}\text{Ra}^+$,*
G.S. Giri, O.O. Versolato, J.E. van den Berg, O. Böll, U. Dammalapati, D.J. van der Hoek, K. Jungmann, W. Kruithof, S. Müller, M. Nuñez Portela, C.J.G. Onderwater, B. Santra, R.G.E. Timmermans, L.W. Wansbeek, L. Willmann, H.W. Wilschut,
<http://arxiv.org/abs/1108.0795>, Accepted for Phys. Rev. A(R).
2. *Hyperfine structure of the $6d^2D_{3/2}$ level in trapped short-lived $^{211,209}\text{Ra}^+$ ions,*
O.O. Versolato, **G.S. Giri**, J.E. van den Berg, O. Böll, U. Dammalapati, D.J. van der Hoek, S. Hoekstra, K. Jungmann, W. Kruithof, S. Müller, M. Nuñez Portela, C.J.G. Onderwater, B. Santra, R.G.E. Timmermans, L.W. Wansbeek, L. Willmann, H.W. Wilschut,
Phys. Lett. A **375**(35), 3130 (2011), DOI: 10.1016/j.physleta.2011.07.002.
3. *Atomic parity violation in a single trapped radium ion,*
O.O. Versolato, L.W. Wansbeek, **G.S. Giri**, J.E. van den Berg, D.J. van der Hoek, K. Jungmann, W.L. Kruithof, C.J.G. Onderwater, B.K. Sahoo, B. Santra, P.D. Shidling, R.G.E. Timmermans, L. Willmann, and H.W. Wilschut,
Hyperfine Interact, DOI: 10.1007/s10751-011-0296-6 (2011).
4. *Precision spectroscopy of trapped radioactive radium ions,*
G.S. Giri, O.O. Versolato, L.W. Wansbeek, J.E. van den Berg, D.J. van der Hoek, K. Jungmann, W.L. Kruithof, C.J.G. Onderwater, B.K. Sahoo, B. Santra, P.D. Shidling, R.G.E. Timmermans, L. Willmann, and H.W. Wilschut,
Can. J. Phys. **89**(1), 69 (2011), DOI: 10.1139/P10-089.
5. *Atomic parity violation in a single trapped radium ion,*
O.O. Versolato, L.W. Wansbeek, **G.S. Giri**, J.E. van den Berg, D.J. van

- der Hoek, K. Jungmann, W.L. Kruithof, C.J.G. Onderwater, B.K. Sahoo, B. Santra, P.D. Shidling, R.G.E. Timmermans, L. Willmann, and H.W. Wilschut,
Can. J. Phys. **89**(1), 65 (2011), DOI: 10.1139/P10-051.
6. *Thermalization of different alkali and alkali-earth elements at the TRI μ P facility*,
P.D. Shidling, **G.S. Giri**, D.J. van der Hoek, K. Jungmann, W. Kruithof, C.J.G. Onderwater, B. Santra, M. Sohani, O.O. Versolato, L. Willmann, H.W. Wilschut,
Nucl. Instr. and Meth. A **622**, 11 (2010), DOI: 10.1016/j.nima.2010.07.048.
7. *Laser spectroscopy of trapped short-lived Ra⁺ ions*,
O.O. Versolato, **G.S. Giri**, L.W. Wansbeek, J.E. van den Berg, D.J. van der Hoek, K. Jungmann, W.L. Kruithof, C.J.G. Onderwater, B.K. Sahoo, B. Santra, P.D. Shidling, R.G.E. Timmermans, L. Willmann, H.W. Wilschut,
Phys. Rev. A **82**, 010501(R) (2010), DOI: 10.1103/PhysRevA.82.010501.
8. *Production of short lived radioactive beams of radium*,
P.D. Shidling, **G.S. Giri**, D.J. van der Hoek, K. Jungmann, W. Kruithof, C.J.G. Onderwater, M. Sohani, O.O. Versolato, L. Willmann, H.W. Wilschut,
Nucl. Instr. and Meth. A **606**, 305 (2009), DOI: 10.1016/j.nima.2009.05.007.