

## Ari Olafsson

### Publication list. International

1. Routes to chaotic emission in a cw He-Ne laser  
Phys. Rev. **A 28**, 892–895 (1983)  
Coauthors: C. O. Weiss and A. Godone
2. A versatile, low-cost pyroelectric laser power monitor for the 1mW to 50W range.  
J. Phys. E: Sci. Instrum. **21**, 80–83 (1988)  
Coauthor: M. Hammerich
- 2a. A versatile ...  
Selected for reprint in Engineering Optics **1**, may (1988)
3. A study of the methanol laser with a 500MHz tunable CO<sub>2</sub> pump laser.  
Appl. Phys. **B 47**, 47–54 (1988)  
Coauthors: F. Tang and J.O. Henningsen
4. Photoacoustic detection of NH<sub>3</sub> in power plant emission with a CO<sub>2</sub> laser.  
Appl. Phys. **B 49**, 91–97, (1989)  
Coauthors: M. Hammerich, J. Bülow and J. Henningsen
5. Spectrally resolved laser photoacoustic monitoring of NH<sub>3</sub> in power plant emission.  
In J.C. Murphy, J.W. Maclachlan Spicer, L.C. Aamodt and B.S.H. Royce editors, *Photoacoustic and Photothermal Phenomena II*. Springer Series in Optical Sciences **62**, Springer Verlag (1990)  
Coauthors: M. Hammerich and J. Henningsen
6. Trace gas detection with infrared gas lasers.  
In M. Inguscio and W. Demtröder editors, *Applied Laser Spectroscopy*, 403–416, Plenum NATO ASI series, Plenum Press (1990).  
Coauthors: J. Henningsen and M. Hammerich
7. Mode structure of hollow dielectric waveguide lasers.  
Appl. Phys. **B 51**, 272–284, (1990)  
Coauthors: J. Henningsen and M. Hammerich
8. Photoacoustic molecular spectroscopy with tunable waveguide CO<sub>2</sub> lasers. Ph.D. thesis, Ph.D. series 1990–1 ISSN 0906–0286 Copenhagen University (1990).
9. Photoacoustic NH<sub>3</sub> monitoring with waveguide CO<sub>2</sub> lasers.  
In S. Martellucci and A. N. Chester editors, *Optoelectronics for Environmental Science*, 123–127, Physical Sciences **54** Plenum Press (1991).  
Coauthors: M. Hammerich and J. Henningsen
10. Photoacoustic Spectra of Chlorinated Ethylenes at CO<sub>2</sub> Laser Frequencies.  
In D. Bicanic editor, *Photoacoustic and Photothermal Phenomena III*, 9–11. Springer Series in Optical Sciences **69**, Springer Verlag (1992)  
Coauthors: M. Hammerich and J. Henningsen
11. Photoacoustic Spectroscopy of C<sub>2</sub>H<sub>4</sub> with a Tunable Waveguide CO<sub>2</sub> Laser.  
Appl. Opt. **31**, 2657–2668 (1992)  
Coauthors: M. Hammerich and J. Henningsen
12. Photoacoustic Study of Kinetic Cooling.  
Chemical Physics **163**, 173–178 (1992)  
Coauthors: J. Henningsen and M. Hammerich
13. Photoacoustic Spectroscopy of O<sub>3</sub> with a 450MHz Tunable Waveguide CO<sub>2</sub> Laser.  
J. Mol. Spectrosc. **152**, 420–433 (1992)  
Coauthors: N. Sokabe, M. Hammerich, Th. Pedersen and J. Henningsen

14. Intraline Tunable CO<sub>2</sub> Waveguide Lasers and Applications in High Resolution Spectroscopy. (Invited paper)  
Infrared Physics & Technology **36**, 309–319, (1995)  
Coauthor: J. Henningsen
15. Spectroscopy – Fighting Interferences in Environmental Monitoring. (Invited paper)  
Physica Scripta **T58**, 94–99, (1995)  
Coauthor: J. Henningsen
16. Magnetic shielding with eddy currents; Magnetic flux linkage.  
29<sup>th</sup> International Physics Olympiad, Reykjavík 2–10 juli, (1998). Practical Examination set presented and accepted at the Olympiad Council meeting 5. juli '98  
[www.hi.is/ipho/](http://www.hi.is/ipho/) Coauthors: J.T. Guðmundsson and P. Theodórsson.
17. FTIR Photoacoustic Trace Gas Detection.  
In F. Scudieri and M. Bertolotti editors, *Photoacoustic and Photothermal Phenomena*, 208–210. American Institute of Physics, CP **463**, (1999)  
Coauthors: G.I. Hansen, A.S. Loftsdóttir and S. Jakobsson.
18. High Resolution Laser Photoacoustic Spectroscopy of OCS in the 12000 – 13000 cm<sup>-1</sup> Region.  
J. Mol. Spectrosc. **196**, 265–273 (1999)  
Coauthors: S. Tranchart, I. Hadj Bachir, T.R. Huet, J.-L. Destombes, S. Naïm and A. Fayt.
19. Cavity enhanced absorption spectroscopy in the 10 $\mu$ m region using a waveguide CO<sub>2</sub> laser.  
Chem. Phys. Lett. **337/4-6**, 231-236 2001.  
Coauthors: R. Peeters, G. Berden, L.J.J. Laarhoven and G. Meijer.

## Publication list. National

1. Kaos fyrir byrjendur (in Icelandic) {Chaos for beginners}  
*Fréttabréf Eðlisfræðifélags Íslands* **4**, mars '85.
2. Monitoring med CO<sub>2</sub> laser (in Danish)  
*DOPS-nyt* **2**, 17–21, Dansk Optisk Selskap (1990).  
Coauthors: M. Hammerich and J. Henningsen
3. Eigintíðni og sveifluhættir leisa (in Icelandic)  
In Þ. Vilhjálmsson and L. Kristjánsson editors, *Eðlisfræði á Íslandi* **V** 11–21, Háskólaútgáfan, Reykjavík, (1991).
4. Tíðnihliðrun og kvörðun á CO<sub>2</sub> leisi (in Icelandic)  
In G. Björnsson editor, *Eðlisfræði á Íslandi* **VI**, 81–87, Háskólaútgáfan, Reykjavík, (1992).
5. Fotoakustiskur gasnemi (in Icelandic)  
In G. Björnsson editor, *Eðlisfræði á Íslandi* **VI**, 217–223, Háskólaútgáfan, Reykjavík, (1992).
6. Leit að CF<sub>4</sub> í útblæstri álvers. (in Icelandic)  
In Þ. Arason editor, *Eðlisfræði á Íslandi* **VII**, 185–191, Háskólaútgáfan, Reykjavík, (1994).  
Coauthors: Ragnar Ásmundsson, Halldór Örn Ólafsson, Arvydas Ruseckas and Guðmundur H. Guðmundsson.
7. Ljósómun með FTIR greini. (in Icelandic)  
In H. Tulinius editor, *Eðlisfræði á Íslandi* **VIII**, 141–147, Eðlisfræðifélag Íslands, Reykjavík, (1996).  
Coauthors: Ágústa S. Loftsdóttir and Sigurður Jakobsson.
8. Gegnskin varmageislunar í andrúmslofti. (in Icelandic)  
In A. Ólafsson editor, *Eðlisfræði á Íslandi* **IX**, p 93–104, Eðlisfræðifélag Íslands, Reykjavík, (1999).  
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Coauthors: Guðjón I. Guðjónsson and Marteinn Sverrisson.
10. Hljóðmögnum með hitastigli. (in Icelandic)  
In Ari Ólafsson editor, *Eðlisfræði á Íslandi* **X**, p. 189–196 (2002).  
Coauthor: Martin Swift.
11. Þurrís sem slökkviefni. (in Icelandic)  
In Ari Ólafsson editor, *Eðlisfræði á Íslandi* **X** p. 213–217 (2002).
12. Tilraunahúsið: úrræði fyrir náttúrufræðikennslu í grunnskólum. (in Icelandic)  
*RAUST, Tímarit um raunvísindi og stærðfræði*, 2. h 2004, p 3–7.  
<http://www.raust.is/2004/2/01/raust2004-2-01.pdf>
13. Foucault-pendúll. (in Icelandic)  
*RAUST, Tímarit um raunvísindi og stærðfræði*, 1.h 2005/2006, p 59–68.  
<http://www.raust.is/2005/1/05/raust2005-1-05.pdf>
14. Eðlisfræði gróðurhúsahrifa. (in Icelandic)  
*RAUST, Tímarit um raunvísindi og stærðfræði*, 1.h 2007.  
<http://www.raust.is/2007/1/11/raust2007-1-11.pdf>
15. Verklegar æfingar í náttúrufræði, 5.–7. bekkur. Publisher: Námsgagnastofnun, 2008, 145 pages.  
ISBN 978-9979-0-1311-2.  
Coauthors: Kristjana Skúladóttir and María Sophusdóttir.