

ORDER YOUR COPY NOW...

Cavity Ring-Down Spectroscopy Techniques and Applications

Giel Berden FOM Institute for Plasma Physics 'Rijnhuizen',
Nieuwegein, The Netherlands

Richard Engeln Eindhoven University of Technology, The
Netherlands

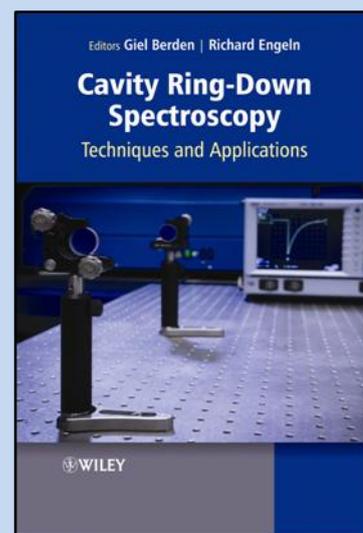
Cavity ring-down spectroscopy (CRDS) is a simple, highly sensitive direct absorption technique based on the rate of absorption of light circulating in an optical cavity. CRDS can be used to study atoms and molecules in the gas and condensed phase, and is especially powerful for measuring strong absorptions of species present in trace amounts or weak absorptions of abundant species. The technique can be applied in physical, atmospheric, environmental and analytical chemistry, also combustion science, physics, medical diagnostics and biology.

Cavity Ring-Down Spectroscopy: Techniques and Applications provides a practical overview of this valuable analytical tool, explaining the fundamental concepts and experimental methods, and illustrating important applications.

The book presents a complete and methodical approach to the topic and describes;

- Introductory concepts and basic experimental techniques,
- Useful variants such as continuous wave, phase shift, and broadband CRDS
- Recent developments in the field, and key applications, for example, spectroscopic studies of transient molecules, monitoring trace amounts of atmospheric species, analysis of exhaled breath in clinical diagnostics, and CRDS under extreme conditions.

Designed as both an introductory text and a reference source, this book is relevant for scientists unfamiliar with CRDS who are interested in using the technique in their research, as well as experienced users.



Hardback · 352 pages
September 2009
ISBN: 978-1-4051-7688-0
£80.00 / \$130.00 / €99.90

1 - An introduction to cavity ring-down spectroscopy (Kevin K. Lehmann, Giel Berden and Richard Engeln)

2 - Cavity enhanced techniques using continuous wave lasers (J. H. van Helden, R. Peverall and G. A. D. Ritchie)

3 - Broadband cavity ring-down spectroscopy (Stephen Ball and Roderic Jones)

4 - Cavity ring-down spectroscopy in analytical chemistry (L. van der Sneppen, C. Gooijer, W. Ubachs and F. Ariese)

5 - Cavity ring-down spectroscopy using waveguides (Hans-Peter Loock)

6 - Cavity ring down spectroscopy of molecular transients of astrophysical interest (Harold Linnartz)

7 - Applications of cavity ring-down spectroscopy in atmospheric chemistry (Gus Hancock and Andrew J. Orr-Ewing)

8 - Cavity ring-down spectroscopy for medical applications (Manfred Mürtz and Peter Hering)

9: Studies into the growth mechanism of a-Si:H using in situ cavity ring-down techniques (M.C.M. van de Sanden, R. Engeln and W.M.M. Kessels)

10 - Cavity ring down spectroscopy for combustion studies (X. Mercier and P. Desgroux)

www.wiley.com

 **WILEY-BLACKWELL**

HOW TO ORDER

All customers from Europe, Middle East and Africa (excluding Germany, Austria, Switzerland)

PHONE your credit card order:
FREE PHONE (UK only) 0800 243407 or
(for overseas orders) +44 (0)1243 843-294

FAX your completed order form to:
+44 (0)1243 843-296

POST your completed order form to:
John Wiley & Sons Ltd., 1 Oldlands Way,
Bognor Regis, West Sussex, PO22 9SA, UK

EMAIL: cs-books@wiley.co.uk

INTERNET: www.wiley.com

Postage rates
(Amounts shown for the total order)

- UK £3.60
Europe Surface mail £5.20/€7.00
 Air mail £12.45/€16.80
Outside Europe Surface mail £7.75
 Air mail £14.95

Delivery will be arranged
by John Wiley & Sons Ltd.
on your behalf via Wiley
Distribution Services Ltd.
Alternatively you may collect
your order by prior arrange-
ment. We can also quote for
delivery by courier. Please
e-mail cs-books@wiley.co.uk
for details. Please allow 21
days for delivery.

MONEY BACK GUARANTEE
If you are not completely satis-
fied we will refund your payment
without question, if books are
returned in a resaleable condition
within 30 days of receipt.

Sub Total _____
Postage _____
TOTAL _____

PAYMENT METHODS

- Cheque enclosed, payable to John Wiley & Sons Ltd
Credit/charge card: Maestro Mastercard
 Visa American Express

Card number _____

Start date _____ Expiry date _____

Maestro issue number _____ Card security code: _____

Cardholder's signature _____

Cardholder's name _____

Cardholder's registered address _____

Postcode _____

Country _____

Invoice for prepayment
Purchase order number _____ enclosed

EU customers please include your VAT number _____

Customers from Germany, Austria and Switzerland

PHONE +49 (0)6201 606-400

FAX your completed order form to:
+49 (0)6201 606-184

POST your completed order form to:
Wiley-VCH, Customer Service Department,
P.O. Box 10 11 61, 69451 Weinheim, Germany

EMAIL: service@wiley-vch.de

INTERNET: www.wiley-vch.de

TERMS OF PAYMENT:

Please send me an invoice

Cheque is enclosed

Please charge my credit card:

Mastercard Visa Amex

In EU countries the local VAT is effective for books and journals. Postage will be charged. Whilst every effort is made to ensure that the contents of this leaflet are accurate, all information is subject to change without notice. Our standard terms and delivery conditions apply.

Card Number _____

Expiry Date _____

Date, Signature _____

Customers from the Rest of the World

PHONE +1 877 762-2974 (toll free)

FAX +1 800 597-3299

MAIL your completed order form to:
John Wiley & Sons, Inc., 10475 Crosspoint Blvd,
Indianapolis, IN 46256 USA

EMAIL: custserv@wiley.com

INTERNET: www.wiley.com

METHOD OF PAYMENT:

Payment enclosed. Total amount enclosed:

_____ (Make checks or money orders payable to
John Wiley & Sons, Inc.)

Please note that all prices are correct at time of going to press but are subject to change without notice.

Please charge my credit card:

Mastercard Visa Amex Discover

Acct.# _____ Expiry Date _____

Signature (Credit card orders invalid unless signed) _____

Yes, I would like to order

Please send me _____ copies
of:

**BERDEN & ENGELN / Cavity
Ring-Down Spectroscopy:
Techniques and
Applications**

Hardback • 352 pages

September 2009

ISBN: 978-1-4051-7688-0

£80.00 / \$130.00 / €99.90

Send my order to

Title & Name _____

Job Title/Department _____

Company/University _____

Address _____

Town/City _____

Post/Zip Code _____

Country _____

Daytime Tel./Fax _____

Yes! Please place me on the Wiley

Email list. My E-mail address is

YOUR PERSONAL DATA

We, John Wiley & Sons Ltd, will use the information you have provided to
fulfil your request. In addition, we would like to:

1. Use your information to keep you informed by post of titles and offers
of interest to you and available from us or other Wiley Group companies
worldwide, and may supply your details to members of the Wiley Group
for this purpose.

Please tick the box if you do not wish to receive this information

2. Share your information with other carefully selected companies so that
they may contact you by post with details of titles and offers that may be
of interest to you.

Please tick the box if you do not wish to receive this information.

If, at any time, you wish to stop receiving information, please contact The
Database Marketing Dept (databasegroup@wiley.co.uk) at John Wiley &
Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex. PO19 8SQ, UK.

01134

OnlineBooks™

Supporting your research in Chemical Sciences

Streamline your research with access to over **2,000 Chemistry books online**
in an instant – providing you with a dynamic desktop library.

- Target the information you need, down to chapter level
- No waiting! Instant access to the leading research
- Read and print PDF files of book chapters when and where you want

**FREE
Monthly
Downloads
Available**

ONLINE NOW



WILEY **WILEY-VCH**

Find out more at www.wiley.com/go/chemistryonlinebooks and contact your library to ensure you have access.

01134