

VU Research Portal

Acoustic Force Spectroscopy (AFS)

Kamsma, D.

2018

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Kamsma, D. (2018). *Acoustic Force Spectroscopy (AFS): From single molecules to single cells*.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

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.

E-mail address:

vuresearchportal.ub@vu.nl

Acoustic Force Spectroscopy (AFS)

From single molecules to single cells

This thesis was reviewed by:

prof. dr. Davide Iannuzzi	Vrije Universiteit, Amsterdam Amsterdam, The Netherlands
dr. Leo J. van IJzendoorn	Technische Universiteit Eindhoven Eindhoven, The Netherlands
prof.dr. Anders Kristensen	Technical University of Denmark Lyngby, Denmark
prof.dr. Daisuke Mizuno	Kyushu University Fukuoka, Japan
prof.dr. Claire Wyman	Erasmus University Rotterdam, The Netherlands

ISBN: 978-94-028-1009-7

© 2018, Douwe Kamsma. All rights reserved. No part of this thesis may be reproduced or transmitted in any form or by any means without permission from the author.

I gratefully acknowledge a contribution to print this thesis by:
LUMICKS B.V.

Printed by Ipskamp Printing, The Netherlands

A digital version of this thesis is available at www.ubvu.vu.nl.

The research in this thesis was performed in the Physics of Living Systems section of the Department of Physics and Astronomy and LaserLaB at VU University Amsterdam.

VRIJE UNIVERSITEIT

Acoustic Force Spectroscopy (AFS)
From single molecules to single cells

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. V. Subramaniam,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de Faculteit der Bètawetenschappen
op donderdag 17 mei 2018 om 13.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door

Douwe Kamsma

geboren te Amsterdam

promotoren: prof.dr.ir. E.J.G. Peterman
prof.dr.ir. G.J.L. Wuite