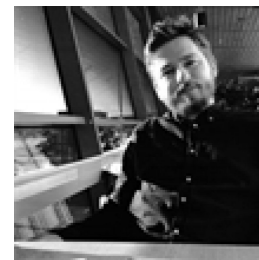


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Ultrathin compound semiconductor on insulator layers for high-performance nanoscale transistors

Ko, H., Takei, K., Kapadia, R., Chuang, S., Fang, H., Leu, P. W., Ganapathi, K., Plis, E., Kim, H. S., Chen, S.-Y., Madsen, M., Ford, A. C., Chueh, Y.-L., Krishna, S., Salahuddin, S. & Javey, A., 11. Nov 2010, In: Nature. 468, p. 286-289 4 p.

Electrical properties of *in-situ* grown and transferred organic nanofibers

Oliveira Hansen, R. M. D., Madsen, M., Kjelstrup-Hansen, J., Pedersen, R. H., Gadegaard, N. & Rubahn, H.-G., 27. Aug 2010, In: Proceedings of SPIE, the International Society for Optical Engineering. 7764, 77640L, 8 p.

In situ-Directed Growth of Organic Nanofibers and Nanoflakes: Electrical and Morphological Properties

Oliveira Hansen, R. M. D., Madsen, M., Kjelstrup-Hansen, J. & Rubahn, H.-G., 2010, In: Nanoscale Research Letters. 6, 11, p. 11

The surface microstructure controlled growth of organic nanofibres

Madsen, M., Kjelstrup-Hansen, J. & Rubahn, H.-G., 24. Feb 2009, In: Nanotechnology. 20, 11, p. 115601 5 p.

Controlled growth of organic nanofibers on nano- and micro-structured gold surfaces

Madsen, M., Oliveira, R. M. D., Kjelstrup-Hansen, J. & Rubahn, H.-G., 2009, In: Proceedings of SPIE, the International Society for Optical Engineering. 7406, p. 74060R 8 p.

Para-hexaphenyl nanofiber growth on Au-coated porous alumina templates

Rubahn, H.-G., Madsen, M., Kartopu, G. & Es-Souni, M., 2009, In: Applied Physics A. 96, p. 591-594 5 p.

Scanning electron microscopy of semiconducting nanowires at low voltages

Tamulevicius, T., Šileikaite, A., Tamulevicius, S., Madsen, M. & Rubahn, H.-G., 2009, In: MATERIALS SCIENCE (MEDŽIAGOTYRA). 15, 1, p. 86-90 5 p.

Light scattering from an ordered array of needle-shaped organic nanoaggregates: Evidence for optical mode launching

Fiutowski, J., Bordo, V. G., Jozefowski, L., Madsen, M. & Rubahn, H.-G., 19. Feb 2008, In: Applied Physics Letters. 92, 7, p. 073302 3 p.

Bottom-up tailoring of photonic nanofibers

Balzer, F., Madsen, M., Frese, R., Schiek, M., Tamulevicius, T., Tamulevicius, S. & Rubahn, H.-G., 2008, In: Proceedings of SPIE, the International Society for Optical Engineering. p. 68830T

Periodic structures modified with silver nanoparticles for novel plasmonic application

Šileikaite, A., Tamulevicius, T., Tamulevicius, S., Andrulevicius, M., Puišo, J., Guobiene, A., Prosycevas, I., Madsen, M., Maibohm, C. & Rubahn, H.-G., 2008, In: Proceedings of SPIE, the International Society for Optical Engineering. p. 69881Q-69881Q-11

UV-Laser Treatment in the Nanodomain: Forming of Organic Nanofibers

Balzer, F., Madsen, M., Frese, R., Thilsing-Hansen, K. & Rubahn, H.-G., 2006, In: Journal of Laser Micro / Nanoengineering. 1, 3, p. 275-280

Projects

Bitten & Mads Clausen Foundation - Development of Smart Materials: From research to production

Madsen, M. (Project participant)
01/05/2019 → 31/12/2022

DFF FTP - Large scale integration of nanowire based solar cells

Madsen, M. (PI)
01/02/2010 → 31/01/2011

DFF FTP - Reactively sputtered metal oxides for high performance photovoltaics (React-PV)

Madsen, M. (PI)
01/10/2018 → 31/03/2023

DFF FTP - Tuning the Photostability of Organic Photovoltaics Components

Madsen, M. (Project participant)

01/07/2020 → 30/06/2024

Fabrikant Mads Clausen Foundation - High Efficiency Solar Cells for PV Units

Madsen, M. (PI)

01/01/2013 → 31/12/2013

FP7 Marie Curie ITN - Thin-film Hybrid Interfaces: a training initiative for the design of next-generation energy devices (THINFACE)

Madsen, M. (PI)

01/09/2013 → 31/08/2017

InnovationsFonden - High-efficiency solar cells by spectral transformation using nano-optical enhancement (SunTune)

Madsen, M. (Co-PI)

01/03/2015 → 31/12/2019

Interreg5A - RollFlex – An innovation project center for Roll-to-Roll processed flexible devices

Madsen, M. (Head coordinator)

01/04/2016 → 31/12/2020

Molecules for Electro- and Photo-chemical for Power-to-X Conversion (MEP4P2XC)

Mckenzie, C. J. (Project participant), Wegeberg, C. (Project participant), Bähring, S. (Project participant), Madsen, M. (Project participant) & Engmann, V. (Project participant)

19/04/2024 → 18/10/2024

Optimisation of small-scale OPV device fabrication

Greenbank, W. (Head coordinator) & Madsen, M. (Supervisor)

01/06/2018 → 31/05/2019

Perovskite solar cell stabilization via tuned ion and charge transport kinetics at new metal oxide/perovskite interfaces

Rubahn, H.-G. (PI), Madsen, M. (Project participant), Le Corre, V. (Project participant) & Srivastava, P. (Postdoc)

01/02/2023 → 30/06/2025

Porphyrin materials for OPV applications

Greenbank, W. (Col), Madsen, M. (Head coordinator) & Bähring, S. (Head coordinator)

19/02/2019 → 31/05/2019

SDU2020 - Production of next-generation energy devices

Madsen, M. (Co-PI)

01/01/2014 → 30/06/2017

Simulation and X-ray analysis of high efficiency OPV active layers

Greenbank, W. (Col), Madsen, M. (Head coordinator), Andreasen, J. W. (Head coordinator), Prete, M. (PhD student) & Engmann, V. (Col)

28/01/2019 → ...

UFM - Structures of Materials in Real Time

Madsen, M. (Project participant)

15/12/2019 → 14/12/2022

Villum Fonden - Mechanical and photochemical stabilization of flexible organic solar cells (Compliant-PV)

Engmann, V. (Co-PI) & Madsen, M. (PI)

01/01/2017 → 31/05/2020

Teaching and supervision

Advanced Topics in Renewable Energy Technologies

Madsen, M.
01/10/2012 → 01/02/2013

ENPHYS (Guest Lecturer)

Madsen, M.
01/09/2018 → 30/11/2018

Experts in Teams

Madsen, M.
01/09/2018 → 21/01/2019

Master and Bachelor projects

Madsen, M.
01/02/2011 → ...

Mechanics 1: Statics (MECH1)

Madsen, M.
01/09/2015 → ...

Mechatronics Design and Build 2

Madsen, M.
01/09/2011 → 31/01/2012

Micro- and Nanofabrication 2 (Guest Lecturer)

Madsen, M.
01/09/2011 → 30/11/2017

Nanofabrication Technology (NFAB)

Madsen, M. & Mishra, Y. K.
01/02/2021 → 30/06/2021

Nanofabrication Technology (NFAB)

Mishra, Y. K. & Madsen, M.
04/02/2022 → 27/05/2022

Nanofabrication Technology (NFAB)

Mishra, Y. K. & Madsen, M.
07/02/2023 → 27/06/2023

Nano Project

Madsen, M.
01/02/2011 → 31/01/2015

Optoelectronic Device Project (ODPRO)

Madsen, M.
01/02/2011 → ...

Optoelectronic Device Technology (ODT)

Madsen, M.
01/02/2011 → ...

Pædagogisk grundsyn

Madsen, M.
01/02/2011 → ...

PhD André Cauduro

Madsen, M.
01/10/2012 → 01/10/2016

PhD Arkadiusz Goszczak

Madsen, M.
25/02/2013 → 25/02/2016

PhD Bhushan Patil

Madsen, M.
01/10/2014 → 01/10/2017

PhD Golnaz Sherafatipour

Madsen, M.
01/11/2014 → 01/06/2018

PhD Le Lena Maria Nguyen

Madsen, M.
01/06/2020 → ...

PhD Mariam Ahmad

Madsen, M.
15/12/2019 → ...

PhD Mehrad Ahmadpour

Madsen, M.
01/10/2014 → 01/10/2017

PhD Michal Radziwon

Madsen, M.
01/02/2011 → 25/03/2013

PhD Michela Prete

Madsen, M.
01/01/2018 → ...

PhD Mina Mirsafaei

Madsen, M.
01/10/2014 → 01/02/2018

Sustainable Materials in Product Creation

Ricard, L. M.
01/02/2020 → ...

Employment

Postdoc

University of California, Berkeley
Berkeley, United States
1. Feb 2010 → 31. Jan 2011

Qualifications

Functional Materials and Nanotechnology, PhD, Directed growth of organic nanofibers, University of Southern Denmark
Award Date: 15. Sept 2009

Prizes

BHJ Foundation Research Prize 2016

Madsen, M. (Recipient), 1. Feb 2016

DFF FTP - Large scale integration of nanowire based solar cells

Madsen, M. (Recipient), 1. Feb 2010