



DIFFER



APPENDIX
2017

WE ARE DIFFER. **SCIENCE FOR FUTURE ENERGY**

This appendix to the DIFFER annual report 2017 lists the scientific output at DIFFER in 2017 and gives an overview of the employees in the institute's groups.

The annual report and appendices can be found at www.differ.nl/about-us/annual-reports

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appendix **A**

Personnel

Management team

Director, theme leader solar fuels
Institute manager
Theme leader fusion

M.C.M. van de Sanden
W.R. Koppers
M.R. de Baar

Fusion Energy theme

Theme leader
Advisor
Guest researchers
RHSC collaboration

M.R. de Baar
A.J.H. Donné, A.W. Kleijn
J.P. Goedbloed, F.C. Schuller
D. Smedinga

Computational Plasma Physics and chemistry

Program leader
PhD students
MSc student
BSc student
Guest researcher

P. Diomedé
R. Chandra, L. Vialetto, V. Yadav
G. Capriglia
T. Slendebroek
S. Longo

Fusion Facilities and Instrumentation

Program leader
Research engineers

BSc student
Guest researchers

H.J.N. van Eck
R.S. Al, S. Alonso van der Westen, M.A. van den Berg, S. Brons,
M.J. van de Pol, D.M.S. Ronden, J. Scholten, J.W.M. Vernimmen, E.G.P. Vos
R. de Groot, R. van Wijk
W.M. Arnold Bik

Integrated Modelling and MHD

Program leader
Advisor
CCER Tenure Trackers
Research assistant
PhD student
Guest researchers
MSc student

E. Westerhof
J.P. Goedbloed
S. Er, S. Tao
R.H.J. Westermann
M. Battilana, Q. Zhang
T.P.C. Klaver, J.L. Pratt, J. Resende de Andrade Lopes
S.Y.F. Cats

Integrated Modelling and Transport

Program leader
Senior scientists
Postdoc
PhD students

J. Citrin
H.J. de Blank
M. van Berkel
A. Ho, M. Marin, B. Vanovac

MSc student
Junior researcher
Guest researchers

V.I Dagnelie, O. Linder, J.A. Staps, R. Chandra, K. Blondino, Z. Liu
K.L. van de Plassche
N. Chennakeshava, G.M.D. Hogeweij, M. Machielsen

Plasma Edge Physics and Diagnostics

Program leader
Postdocs
PhD students
MSc student
BSc student
Guest researchers

I.G.J. Classen
G. Ronchi, W.A.J. Vijvers
G.R.A. Akkermans, A. Perek, R. Perillo, T. Ravensbergen
R. Barrois
J.K. Sadhoe
J. van Oosterhout, R. van de Logt

Plasma Material Interactions

Program leader
Senior scientist
PhD students

MSc students
Guest researchers

T.W. Morgan
H.J. van der Meiden
D.U.B. Aussems, G.G. van Eden, K. Jesko, V. Kvon, M. Laki,
Y. Li, C.K. Onwudinanti, W. Ou, S. Wang
M.Koumans, J.A. Rosas Saad
Y. Li, T.W.C. Neelis, M. Riepen, P. Rindt, W.C.J.N. Slot, J. Wang, M. Zibrov

Solar Fuels theme

Theme leader solar fuels
Advisor
Guest researcher
Lector

M.C.M. van de Sanden
A.P.H. Goede, A.W. Kleijn
R.F. Rumphorst
P.C. Thüne

Atmospheric Plasma Processing for Functional Films

Program leader
PhD students
MSc student

H.W. de Vries
F. Elam, Y. Liu, A. Meshkova
M.J.M. Smolders, K.C. van 't Veer

Catalytic and Electrochemical Processes for Energy Applications

Program leader
Postdoc
PhD student
BSc student
Guest researchers

M. Tsampas
V. Kyriakou, H.C. Patel, T.S. Stoll,
G. Zafeiropoulos
B.R.J. Haenen, J. Zhou
V. Di Palma, I. Dôgan

Electrochemical Materials and Interfaces

Program leader
Postdoc
PhD students
MSc student
BSc student
Guest researcher

A. Bieberle
A.C. Bronneberg, X. Zhang
K. George, R. Sinha
Q. Xue
T. Bijsterbosch, S. Laugs, T. Rijkers
M. Grofulovic, Q. Liang, Q. Xue, Y. Zhao

Materials and Surface Science

Program leader
Postdoc
PhD student
Guest researcher

M.A. Gleeson
A.J. Walsh
T.T. Belete, D. Garcia Rodriguez, D. Sharma
J.M. Gracia, R. van Lent

Molecular Solar Energy (DIFFER-TUe group)

Program leader

R. Janssen

Nanomaterials for Energy Applications

Program leader
Postdoc
PhD student
MSc student
BSc student

A. Baldi
G. Kumari
R. Kamarudheen, M. Parente
R.F. Hamans
R.M.C. Verbroekken

Nonequilibrium Fuel Conversion

Program leader
Postdoc
PhD student
MSc student
Guest researcher

G.J. van Rooij
T.D. Butterworth, S. Ponduri
D.C.M. van den Bekerom, N. Gatti, T. Minea, Q. Ong
G.W. Castellanos Gonzales, D.A.C.M. Hage
K.J. Nordheden, J.J. Mil

Photonics for Energy

Program leader
Postdocs
PhD students
Research engineer
MSc student
Assistant
Guest researcher
Guest research engineer (TU/e)
MSc student
BSc student

J. Gómez Rivas
A. Halpin, Q. Le Van, S. Wang
A.M. Berghuis, N.J.J. van Hoof, M. Ramezani
P. Stroobach
S.E.T. ter Huurne
L. van de Beek
A. Dolatabady, M. Escriba Gelonch, A. Gonzalez Curto, S.M. de Vega Esteban
R.M. Hjelmgart, P.J. van Veldhoven
S. Eizagirre Barker.
B. Lont, L.E. Spiering

Plasma Solar Fuels Devices

Program leader
Postdocs
PhD student
MSc student

W.A. Bongers
J. Gao, H.J.L. Hendrickx, F.J.J. Peeters, T. Verreycken, S. Wang
A.J. Wolf
J. Toonen

Solar Fuels Facilities & Instrumentation

Program leader
Research engineers

Assistant
MSc student
BSc student

S. Welzel
B.M.E. Bos, B.S.Q. Elzendoorn, M.F. Graswinckel,
B. van Hemert, P. Sallé, C.J.M.S. Stoyana, E. Zoethout
B.N. Neissl
Y. de la Fuente
M. Doudouh

Support facilities and staff

Division head

W.R. Koppers

Communication

Group leader

F.T.M.E. de Vries

Personnel

A.P. Visser

Electronics & ICT

Group leader

A. Broekema

Personnel

M.T. Breugem, J.W. Genuit, P.W.C. Groen, G.W. Hendriks, G. Kaas, J.J. Kamp, B.J.M. Krijger, G. Land, W. Melissen, A.J. Poelman, J.J.B. Stakenborg, C.J. Theunissen, J.W. Wahlbrinck, F. Wijnoltz

Facility Management

Group leader

J.E. Kragten

Personnel

J.F. Alberts, F.F. Hekkenberg, I.J. Jorissen, J.C. Maarsseveen, S. van Schaik, P. Stekelenburg, J.B. Uwland, L.M. van de Ven

Financial Administration

Group leader

M.P.M. Schoonen

Personnel

A.W.G. van den Heuvel-Vermeer, W. Mensink, D. Nguyen

Management Support

Group leader

W.R. Koppers

Personnel

M.J. van den Akker, E. Langereis, A.A.M. Oomens, P.H.M. Smeets, J.G. Stroet, C.M. Visser, M.D. van der Vlis, E.C.M. van Wijk

Mechanical Techniques

Group leader

F.J. van Amerongen

Personnel

G. van der Bijl, A.G.M. van den Bogaard, P.W.J. de Laat, J. Lagerweij, B. Lamers, S. Oostering, L.W.E.G Römers, A. Tamminga, C.R. Wolbeer, P.M. Wortman

Apprentice

J.H. Offringa, J.K.D. Oumorou

Occupational Health & Safety

Responsible officer

A.M.M. Arends

Personnel & Organization

Group leader

H.J. Tamsma

Personnel

J.M. van Achthoven

Technical Facilities

Group leader

K.T. Grootkarzijn

Personnel

H.P.L. Smeets, L.W.E.G Römers, A. Tamminga, C.R. Wolbeer, P.M. Wortman

appendix **B**

Output

DIFFER

Positions: 1

1. *W.R. Koppers, Member of the Fusion for Energy (F4E) Governing Board (since 2014)*

Public events: 2

1. *DIFFER Open Day, 2017/08/08, DIFFER, Eindhoven, open doors day for 800 members of the general public with outreach talks, lab visits, workshops and Q&A session*
2. *6th Fusion Days, Antwerp University, 2017/11/16, Antwerp, Belgium, E. Langereis, A.P. Visser, F.T.M.E. de Vries, Fusion Road Show and Energy Quiz, live demonstrations about fusion energy and interactive quiz about the energy transition*

Fusion Energy theme

PhD theses: 2

1. *H. Boessenkool, Haptic assistance for teleoperated maintenance of fusion plants : task analysis, design and evaluation, PhD thesis at the Eindhoven University of Technology, 2017/06/22, Promotor: M. Steinbuch, M.R. de Baar*
2. *B. Maljaars, Model predictive profile control and actuator management in tokamaks, PhD thesis at the Eindhoven University of Technology, 2017/05/04, Promotor: M.R. de Baar, M. Steinbuch*

BSc theses: 5

1. *R. de Groot, (HBO scriptie Fontys Hogeschool, Eindhoven:) Magnetic shielding for ion beam analysis, 2017, Mentor: M. van den Berg*
2. *M. Koumans, (HBO scriptie Fontys Hogeschool, Eindhoven:) Het meten van de elektronentemperatuur en -dichtheid in BABE: een glimontladingsopstelling, 2017, Mentor: H.J. van der Meiden*
3. *T. Slendebroek, (HBO scriptie Fontys Hogeschool, Eindhoven:) CO₂ plasma chemical kinetics modeling, 2017, Mentor: P. Diomedea*
4. *J. Toonen, (HBO scriptie Fontys Hogeschool, Eindhoven:) Electron density measurements in a CO₂ microwave plasma using microwave phase shift technique, 2017, Mentor: W.A. Bongers, A.J. Wolf*
5. *R. van Wijk, (HBO scriptie Fontys Hogeschool, Eindhoven:) Effect of a superconducting magnet on Nuclear Reaction Analysis measurements, 2017, Mentor: M. van den Berg, H.J.N. van Eck*

Publications in peer-reviewed scientific journals: 60

1. M. de Angeli, P. Toliás, S. Ratynskaia, D. Ripamonti, G. Riva, S. Bardin, T. Morgan, G. De Temmerman, Remobilization of tungsten dust from castellated plasma-facing components, *Nucl. Mater. Energy* 12 (2017) 536-540
2. D.U.B. Aussems, K. Bystrov, I. Dogan, C. Arnas, M. Cabié, T. Neisius, M. Rasinski, E. Zoethout, P. Lipman, M.C.M. van de Sanden et al., Fast nanostructured carbon microparticle synthesis by one-step high-flux plasma processing, *Carbon* 124 (2017) 403-414
3. D. Aussems, K.M. Bal, T.W. Morgan, M.C.M. van de Sanden, E. Neyts, Atomistic simulations of graphite etching at realistic time scales, *Chem. Sci.* 8 (2017) 7160-7168
4. D.U.B. Aussems, S.A. Khrapak, I. Dogan, M.C.M. van de Sanden, T.W. Morgan, An analytical force balance model for dust particles with size up to several Debye lengths, *Phys. Plasmas* 24 (2017) 113702
5. M. Balden, S. Elgeti, M. Zibrov, K. Bystrov, T.W. Morgan, Effect of the surface temperature on surface morphology, deuterium retention and erosion of EUROFER steel exposed to low-energy, high-flux deuterium plasma, *Nucl. Mater. Energy* 12 (2017) 289-296
6. M. van Berkel, H.J. Zwart, G.M.D. Hogeweij, M.R. de Baar, Technical note on the linearity and power dependence of the diffusion coefficient in W7-AS, *Plasma Phys. Control. Fusion* 59 (2017) 062001
7. M. van Berkel, T. Kobayashi, H. Igami, G. Vandersteen, G.M.D. Hogeweij, K. Tanaka, N. Tamura, H.J. Zwart, S. Kubo, S. Ito et al., New evidence and impact of electron transport non-linearities based on new perturbative inter-modulation analysis, *Nucl. Fusion* 57 (2017) 126036
8. S. Brezinsek, J.W. Coenen, T. Schwartz-Selinger, K. Schmid, A. Kirschner, A. Hakola, F.L. Tabares, H.J. van der Meiden, T.W. Morgan, J.W.M. Vernimmen et al., Plasma-wall interaction studies within the EUROfusion consortium: progress on plasma-facing components development and qualification, *Nucl. Fusion* 57 (2017) 116041
9. F. Brochard, A. Shalpegin, S. Bardin, T. Lunt, V. Rohde, J.L. Briançon, G. Pautasso, C. Vorpahl, R. Neu, ASDEX Upgrade team, Video analysis of dust events in full-tungsten ASDEX Upgrade, *Nucl. Fusion* 57 (2017) 036002
10. L. Buzi, G. De Temmerman, D. Matveev, M. Reinhart, T. Schwartz-Selinger, M. Rasinski, B. Unterberg, C. Linsmeier, G. van Oost, Surface modifications and deuterium retention in polycrystalline and single crystal tungsten as a function of particle flux and temperature, *J. Nucl. Mater.* 495 (2017) 211-219
11. L. Buzi, G. De Temmerman, A.E. Huisman, S. Bardin, T.W. Morgan, M. Rasinski, R.A. Pitts, G. van Oost, Response of tungsten surfaces to helium and hydrogen plasma exposure under ITER relevant steady state and repetitive transient conditions, *Nucl. Fusion* 57 (2017) 126009
12. G. De Temmerman, T.W. Morgan, T. Schwartz-Selinger, Y. Yuan, H.B. Zhou, B. Wang, Y. Zhang, G.H. Lu, Mitigated blistering and deuterium retention in tungsten exposed to high-flux deuterium-neon mixed plasmas, *Nucl. Fusion* 57 (2017) 046028
13. J. Citrin, H. Arnichand, J. Bernardo, C. Bourdelle, X. Garbet, F. Jenko, S. Hacquin, M.J. Püschel, R. Sabot, Comparison between measured and predicted turbulence frequency spectra in ITG and TEM regimes, *Plasma Phys. Control. Fusion* 59 (2017) 064010
14. J. Citrin, C. Bourdelle, F.J. Casson, C. Angioni, N. Bonanomi, Y. Camenen, X. Garbet, L. Garzotti, T. Görler, O.D. Gurcan et al., Tractable flux-driven temperature, density, and rotation profile evolution with the quasilinear gyrokinetic transport model QuaLiKiz, *Plasma Phys. Control. Fusion* 59 (2017) 124005
15. S. Coda, J. Ahn, R. Albanese, S. Alberti, E. Alessi, J. Citrin, D. Hogeweij, W.A.J. Vijvers, EUROfusion MST1 Team, et al., Overview of the TCV tokamak program: scientific progress and facility upgrades, *Nucl. Fusion* 57 (2017) 102011
16. P. Diomede, B. Bruneau, S. Longo, E. Johnson, J.P. Booth, Capacitively coupled hydrogen plasmas sustained by tailored voltage waveforms: vibrational kinetics and negative ions control, *Plasma Sources Sci. Technol.* 26 (2017) 075007
17. P. Diomede, M.C.M. van de Sanden, S. Longo, Insight into CO₂ Dissociation in Plasmas from Numerical Solution of a Vibrational Diffusion Equation, *J. Phys. Chem. C* 121 (2017) 19568-19576
18. A.J.H. Donné, G. Federici, X. Litaudon, D.C. McDonald, Scientific and technical challenges on the road towards fusion electricity, *J. Instrum.* 12 (2017) C10008
19. A. Dubinko, D. Terentyev, A. Bakaeva, T. Pardoen, M. Zibrov, T.W. Morgan, Effect of high flux plasma exposure on the micro-structural and -mechanical properties of ITER specification tungsten, *Nucl. Instr. Meth. Phys. Res. B* 393 (2017) 155-159
20. G.G. van Eden, V. Kvon, M.C.M. van de Sanden, T.W. Morgan, Oscillatory vapour shielding of liquid metal walls in nuclear fusion devices, *Nat. Commun.* 8 (2017) 192
21. L. Frassinetti, M.G. Dunne, M. Beurskens, E. Wolfrum, A. Bogomolov, D. Carralero, M. Cavedon, R. Fischer, F.M. Laggner, R.M. McDermott et al., ELM behavior in ASDEX Upgrade with and without nitrogen seeding, *Nucl. Fusion* 57 (2017) 022004

22. J.R. Harrison, W.A.J. Vijvers, C. Theiler, B.P. Duval, S. Elmore, B. Labit, B. Lipschultz, S.H.M. van Limpt, S.W. Lisgo, C.K. Tsui et al., Detachment evolution on the TCV tokamak, *Nucl. Mater. Energy* 12 (2017) 1071-1076
23. V. Igochine, I. Classen, M. Dunne, A. Gude, S. Günter, K. Lackner, R.M. McDermott, M. Sertoli, D. Vezinet, M. Willensdorfer et al., Tearing mode formation induced by internal crash events at different β_N , *Nucl. Fusion* 57 (2017) 036015
24. V. Igochine, P. Piovesan, I.G.J. Classen, M. Dunne, A. Gude, P. Lauber, Y. Liu, M. Maraschek, L. Marrelli, R. McDermott et al., MHD limits and plasma response in high-beta hybrid operations in ASDEX Upgrade, *Nucl. Fusion* 57 (2017) 116027
25. K. Jesko, H.J. van der Meiden, J.P. Gunn, J.W.M. Vernimmen, G. De Temmerman, Plasma pressure and particle loss studies in the Pilot-PSI high flux linear plasma generator, *Nucl. Mater. Energy* 12 (2017) 1088-1093
26. Y.Z. Jia, W. Liu, B. Xu, S.L. Qu, T.W. Morgan, Surface damage of W exposed to combined stationary D plasma and ELMs-like pulsed plasma, *J. Nucl. Mater.* 487 (2017) 68-74
27. Y.Z. Jia, W. Liu, B. Xu, S.L. Qu, L.Q. Shi, T.W. Morgan, Subsurface deuterium bubble formation in W due to low-energy high flux deuterium plasma exposure, *Nucl. Fusion* 57 (2017) 034003
28. E. Joffrin, P. Tainin, E. Belonohy, H. Bufferand, P. Buratti, C.D. Challis, E. Delabie, P. Drewelow, D. Dodt, M. Tsalas et al., Impact of divertor geometry on H-mode confinement in the JET metallic wall, *Nucl. Fusion* 57 (2017) 086025
29. S. Kajita, T. Tsujihara, M. Aramaki, H. van der Meiden, H. Oshima, N. Ohno, H. Tanaka, R. Yasuhara, T. Akiyama, K. Fujii et al., Behavior of 2 3S metastable state He atoms in low-temperature recombining plasmas, *Phys. Plasmas* 24 (2017) 073301
30. A. Kallenbach, ASDEX Upgrade team, EUROfusion MST1 Team, Overview of ASDEX Upgrade results, *Nucl. Fusion* 57 (2017) 102015
31. M. Kelemen, A. Zaloznik, P. Vavpetic, M. Pecovnik, P. Pelicon, A. Hakola, A. Lahtinen, J. Karhunen, K. Piip, H.J. van der Meiden et al., Micro-NRA and micro-3HIXE with ^3He microbeam on samples exposed in ASDEX Upgrade and Pilot-PSI machines, *Nucl. Instr. Meth. Phys. Res. B* 404 (2017) 179-184
32. T.P.C. Klaver, S. Zhang, K. Nordlund, MD and BCA simulations of He and H bombardment of fuz in bcc elements, *J. Nucl. Mater.* 492 (2017) 113-121
33. V. Kvon, E. Oyarzabal, E. Zoethout, A.B. Martin-Rojo, T.W. Morgan, F.L. Tabares, Secondary electron emission of tin and tin-lithium under low energy helium plasma exposure, *Nucl. Mater. Energy* 13 (2017) 21-27
34. V. Kvon, R. Al, K. Bystrov, F.J.J. Peeters, M.C.M. van de Sanden, T.W. Morgan, Tin re-deposition and erosion measured by cavity-ring-down-spectroscopy under a high flux plasma beam, *Nucl. Fusion* 57 (2017) 086040
35. B. Labit, G.P. Canal, N. Christen, B.P. Duval, B. Lipschultz, T. Lunt, F. Nespola, H. Reimerdes, U. Sheikh, C. Theiler et al., Experimental studies of the snowflake divertor in TCV, *Nucl. Mater. Energy* 12 (2017) 1015-1019
36. N. Leuthold, W. Suttrop, R. Fischer, A. Kappatou, A. Kirk, R. McDermott, A. Mlynek, M. Valovic, M. Willensdorfer, Parameter dependence of ELM loss reduction by magnetic perturbations at low pedestal density and collisionality in ASDEX upgrade, *Plasma Phys. Controlled Fusion* 59 (2017) 055004
37. X. Litaudon, S. Abduallev, J. Citrin, N. den Harder, G.M.D. Hogewei, F. Jaulmes, A. Shumack, M. Tsalas, G.J. van Rooij, T. Donne et al., Overview of the JET results in support to ITER, *Nucl. Fusion* 57 (2017) 102001
38. B. Maljaars, F. Felici, T.C. Blanken, C. Galperti, O. Sauter, M.R. de Baar, F. Carpanese, T.P. Goodman, D. Kim, S.H. Kim et al., Profile control simulations and experiments on TCV: a controller test environment and results using a model-based predictive controller, *Nucl. Fusion* 57 (2017) 126063
39. A.B. Martin-Rojo, E. Oyarzabal, T.W. Morgan, F.L. Tabares, Exposure of liquid lithium confined in a capillary structure to high plasma fluxes in PILOT-PSI - Influence of temperature on D retention, *Fusion Eng. Des.* 117 (2017) 222-225
40. J. Matejcek, V. Weinzettl, M. Vilémová, T.W. Morgan, G. De Temmerman, M. Dimitrova, J. Cavalier, J. Adamek, J. Seidl, A. Jäger, ELM-induced arcing on tungsten fuz in the COMPASS divertor region, *J. Nucl. Mater.* 492 (2017) 204-212
41. H. Meyer, T. Eich, J. Citrin, I. Classen, D. Hogewei, F. Jaulmes, A. Kappatou, H. van den Brand, B. Vanovac, W.A.J. Vijvers et al., Overview of progress in European medium sized tokamaks towards an integrated plasma-edge/wall solution, *Nucl. Fusion* 57 (2017) 102014
42. T.W. Morgan, A. Vertkov, K. Bystrov, I. Lyublinski, J.W. Genuit, G. Mazzitelli, Power handling of a liquid-metal based CPS structure under high steady-state heat and particle fluxes, *Nucl. Mater. Energy* 12 (2017) 210-215
43. T.W. Morgan, M.A. van den Berg, G. De Temmerman, S. Bardin, D. Aussems, R.A. Pitts, Power deposition on misaligned castellated tungsten blocks in the Magnum-PSI and Pilot-PSI linear devices, *Nucl. Fusion* 57 (2017) 126025
44. K. Piip, H.J. van der Meiden, K. Bystrov, L. Hämarik, J. Karhunen, M. Aints, M. Laan, P. Paris, H. Seemen, A. Hakola et al., Loading of deuterium and helium by Pilot-PSI plasma and their detection by in-situ LIBS, *Nucl. Mater. Energy* 12 (2017) 694-698

45. K. Piip, H.J. van der Meiden, L. Hamarika, J. Karhunen, A. Hakola, M. Laan, P. Paris, M. Aints, J. Likonen, K. Bystrov et al., LIBS detection of erosion/deposition and deuterium retention resulting from exposure to Pilot-PSI plasmas, *J. Nucl. Mater.* 489 (2017) 129-136
46. P. Piovesan, V. Igochine, F. Turco, D.A. Ryan, M.R. Cianciosa, Y.Q. Liu, L. Marrelli, D. Terranova, R.S. Wilcox, A. Wingen et al., Impact of ideal MHD stability limits on high-beta hybrid operation, *Plasma Phys. Control. Fusion* 59 (2017) 014027
47. R.A. Pitts, S. Bardin, B. Bazylev, M.A. van den Berg, P. Bunting, S. Carpentier, J.W. Coenen, Y. Corre, R. Dejarnac, F. Escourbiac et al., Physics conclusions in support of ITER W divertor monoblock shaping, *Nucl. Mater. Energy* 12 (2017) 60-74
48. S. Ratynskaia, P. Talias, M. de Angeli, V. Weinzettl, J. Matejicek, I. Bykov, D.L. Rudakov, L. Vignitchouk, E. Thorén, G. Riva et al., Tungsten dust remobilization under steady-state and transient plasma conditions, *Nucl. Mater. Energy* 12 (2017) 569-574
49. H. Reimerdes, B.P. Duval, J.R. Harrison, B. Labit, B. Lipschultz, T. Lunt, C. Theiler, C.K. Tsui, K. Verhaegh, W.A.J. Vijvers et al., TCV experiments towards the development of a plasma exhaust solution, *Nucl. Fusion* 57 (2017) 126007
50. S.A. Silburn, G.F. Matthews, C.D. Challis, D. Frigione, J.P. Graves, M.J. Mantsinen, E. Belonohy, J. Hobirk, D. Iglesias, D.L. Keeling et al., Mitigation of divertor heat loads by strike point sweeping in high power JET discharges, *Phys. Scr.* 2017 (2017) 014040
51. C. Theiler, B. Lipschultz, J. Harrison, B. Labit, H. Reimerdes, C. Tsui, W.A.J. Vijvers, J.A. Boedo, B.P. Duval, S. Elmore et al., Results from recent detachment experiments in alternative divertor configurations on TCV, *Nucl. Fusion* 57 (2017) 072008
52. P. Talias, S. Ratynskaia, A. Shalpegin, L. Vignitchouk, F. Brochard, M. de Angeli, H. van der Meiden, Experimental validation of the analytical model for tungsten dust - wall mechanical impacts incorporated in the MIGRAINE dust dynamics code, *Nucl. Mater. Energy* 12 (2017) 524-529
53. K. Verhaegh, B. Lipschultz, B.P. Duval, J.R. Harrison, H. Reimerdes, C. Theiler, B. Labit, R. Maurizio, C. Marini, F. Nespoli et al., Spectroscopic investigations of divertor detachment in TCV, *Nucl. Mater. Energy* 12 (2017) 1112-1117
54. N. Vianello, C. Tsui, C. Theiler, S. Allan, J. Boedo, B. Labit, H. Reimerdes, K. Verhaegh, W.A.J. Vijvers, N. Walkden et al., Modification of SOL profiles and fluctuations with line-average density and divertor flux expansion in TCV, *Nucl. Fusion* 57 (2017) 116014
55. W.A.J. Vijvers, R.T. Mumgaard, Y. Andrebe, I.G.J. Classen, B.P. Duval, B. Lipschultz, Conceptual design and proof-of-principle testing of the real-time multispectral imaging system MANTIS, *J. Instrum.* 12 (2017) C12058
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57. M. Willensdorfer, T.B. Cote, C. Hegna, W. Suttrop, H. Zohm, M. Dunne, E. Strumberger, G. Birkenmeier, S.S. Denk, B. Vanovac et al., Field-Line Localized Destabilization of Ballooning Modes in Three-Dimensional Tokamaks, *Phys. Rev. Lett.* 119 (2017) 085002
58. Y. Zayachuk, D.E.J. Armstrong, K. Bystrov, S. van Boxel, T. Morgan, S.G. Roberts, Nanoindentation study of the combined effects of crystallography, heat treatment and exposure to high-flux deuterium plasma in tungsten, *J. Nucl. Mater.* 486 (2017) 183-190
59. M. Zibrov, K. Bystrov, M. Mayer, T.W. Morgan, H. Kurishita, The high-flux effect on deuterium retention in TiC and TaC doped tungsten at high temperatures, *J. Nucl. Mater.* 494 (2017) 211-218
60. M. Zibrov, M. Balden, T.W. Morgan, M. Mayer, Deuterium trapping and surface modification of polycrystalline tungsten exposed to a high-flux plasma at high fluences, *Nucl. Fusion* 57 (2017) 046004

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1. D.U.B. Aussems, K.M. Bal, T.W. Morgan, M.C.M. van de Sanden, E. Neyts, Atomistic simulations of graphite etching at realistic time scales, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 197-200 4.

Invited lectures at conferences and meetings: 23

1. *25th European Fusion Programme Workshop 2017, 2017/11/26 - 2017/11/29, Dubrovnik, Croatia, J. Citrin, C. Bourdelle, C. Angioni, S. Breton, F.J. Casson, F. Felici, X. Garbet, O. Gurcan, L. Garzotti, A. Ho et al., Predict first: a pathway to fast full device modelling by combining validated reduced models and machine learning*
2. *2nd IAEA Technical Meeting on Fusion Data Processing, Validation and Analysis 2017, 2017/05/30 - 2017/06/02, Cambridge, MA, USA, J. Citrin, T. Aniel, C. Bourdelle, Y. Camenen, V. Dagnelie, H. Doerk, F. Felici, A. Ho, D. Hogeweij, R. Nouailletas et al., Realtime capable first principle transport modelling for tokamak prediction and control*
3. *Symposium on the occasion of the 10th anniversary of the Chinese Domestic Agency for ITER, 2017/11/29, Beijing, China, A.J.H. Donné, The next 40 years of European fusion research in a nutshell*
4. *Deutsches ITER Industrie Forum, 2017/11/22, Berlin, Germany, A.J.H. Donné, Challenges on the European Roadmap towards Fusion Electricity*
5. *18th International Symposium on Laser-Aided Plasma Diagnostics (LAPD 2017), 2017/09/24 - 2017/09/28, Prague, Czech Republic, A.J.H. Donné, G. Federici, X. Litaudon, D.C. McDonald, Scientific and technical challenges on the road towards fusion electricity (Honorary Akazaki Lecture)*
6. *Nuclear Energy for New Europe (NENE 2017), 2017/09/11 - 2017/09/14, Bled, Slovenia, A.J.H. Donné, M. Coleman, The European Roadmap towards fusion electricity*
7. *World Expo The Future of Energy, Nuclear fusion from science fiction to science fact, 2017/07/25, Astana, Kazakhstan, A.J.H. Donné, Challenges along the road towards Fusion Electricity*
8. *Conference of the Užitkovnikow KDM, 2017/05/23 - 2017/05/24, Poznan, Poland, A.J.H. Donné, Computational Challenges on the Roadmap towards Fusion Electricity*
9. *International School on Fusion Reactors Technology: Diagnostics, 2017/04/28 - 2017/05/04, Erice, Italy, A.J.H. Donné, Historical diagnostic developments in view of ITER and DEMO*
10. *Spring Meeting of the Deutsche Physikalische Gesellschaft, 2017/03/27, Munster, Germany, A.J.H. Donné, Fusion Research - Recent Progress and Perspectives*
11. *Meeting of the EURATOM Science and Technology Committee (STC), 2017/02/09, Brussels, Belgium, A.J.H. Donné, Fusion Roadmap v2.0*
12. *The promise of fusion - innovation and the role of industry, 2017/01/14, Paris, France, A.J.H. Donné, R. Brown, G. Federici, Industrial involvement in the early stage of DEMO*
13. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, H. Goedbloed, MHD instabilities in astrophysical plasmas: very different from MHD instabilities in tokamaks!, I2.405*
14. *16th International Workshop on Plasma Edge Theory in Fusion Devices (PET 2017), 2017/09/27 - 2017/09/29, Marseille, France, M. Hoelzl, F. Orain, G.T.A. Huijsmans, S. Pamela, J. Artola Such, M. Bécoulet, A. Lessig, F. Liu, S. Futatani, B. Vanovac et al., What non linear simulations can teach about ELM Physics, I-03*
15. *Seminar Consorzio RFX, 2017/06/06, Padua, Italy, S. Longo, P. Diomede, Control of negative ions in electric discharges in hydrogen excited by tailored voltage waveforms*
16. *2nd EPS Conference on Plasma Diagnostics (ECPD 2017), 2017/04/18 - 2017/04/21, Bordeaux, France, H.J. van der Meiden, J. Vernimmen, K. Bystrov, K. Jesko, M. Kantor, G. De Temmerman, T.W. Morgan, Incoherent and collective Thomson scattering for determination of electron and ion properties in high density, low-temperature plasma, TU-1*
17. *9th International Symposium on Advanced Plasma Science and its Applications for Nitrides and Nanomaterials ISPlasma2017 / IC-PLANTS 2017, 2017/03/01 - 2017/03/05, Aichi, Japan, H.J. van der Meiden, J.W.M. Vernimmen, K. Bystrov, K. Jesko, M.Y. Kantor, G. De Temmerman, T.W. Morgan, Incoherent and Collective Thomson Scattering for the Determination Of Electron and Ion Properties in High Density, Low-temperature Plasma*
18. *2017 Source Workshop, EUV Litho, 2017/11/06 - 2017/11/08, Dublin, Ireland, T.W. Morgan, G.G. van Eden, D.U.B. Aussems, V. Kvon, M.A. van den Berg, K. Bystrov, M.C.M. van de Sanden, Vapour shielding of tin under intense plasma bombardment*
19. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, T.W. Morgan, Magnum PSI team, Liquid metals for DEMO divertor applications explored using linear plasma devices, I5.119*

20. 20th International Summer School on Vacuum, Electron and Ion Technologies VEIT, 2017/09/25 - 2017/09/29, Sozopol, Bulgaria, M.C.M. van de Sanden, S. Longo, P. Diomede, Diffusion model for carbon dioxide vibrational kinetics in low-temperature plasmas, PR-17
21. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, S.E. Sharapov, M. Garcia-Munoz, M.A. van Zeeland, V. Bobkov, I.G.J. Classen, J. Ferreira, A. Figueiredo, M. Fitzgerald, J. Galdon-Quiroga, D. Gallart et al., The effects of electron cyclotron heating and current drive on toroidal Alfvén eigenmodes in tokamak plasmas, I4.117
22. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, S.A. Silburn, C.D. Challis, D. Frigione, J.P. Graves, M.J. Mantinen, D. Iglesias, G.F. Matthews, E. Belonohy, J. Hobirk, D.L. Keeling et al., Mitigation of Divertor Heat Loads by Strike Point Sweeping in High Power JET Discharges, I12
23. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, C. Theiler, B. Duval, O. Fevrier, J. Harrison, P. Innocente, B. Labit, B. Lipschultz, R. Maurizio, H. Reimerdes, W.A.J. Vijvers et al., Detachment in alternative divertor geometries on TCV, I5.120

Other oral and poster presentations at (international) conferences and meetings: 91

1. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, D.U.B. Aussems, K. Bal, T. Morgan, M.C.M. van de Sanden, E. Neyts, Atomistic simulations of graphite etching at realistic time scales, Oral, R-1-2
2. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, D. Aussems, I. Dogan, M.C.M. van de Sanden, T.W. Morgan, Force balance model for dust particles exceeding the Debye length, Oral, O1
3. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, D. Aussems, E. Neyts, K. Bal, T. Morgan, M.C.M. van de Sanden, Realistic time-scale simulation of graphite etching using collective variable-driven hyperdynamics, Oral, PW6.4
4. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, R. Barrois, W.A.J. Vijvers, I.G.J. Classen, R.A.H. Engeln, R.J.E. Jaspers, Experimental Validation of the Yacora Collisional-Radiative Model for MANTIS on Magnum-PSI, Poster, A2
5. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, M. van den Berg, R. de Groot, W. Arnold Bik, H. van Eck, Design and commissioning of an ion beam facility for material research in DIFFER, Poster, P5.038
6. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, M. van Berkel, H. Igami, G. Vandersteen, G.M.D. Hogeweij, K. Tanaka, N. Tamura, M.R. de Baar, H.J. Zwart, S. Kubo, S. Ito et al., New evidence and impact of electron transport non-linearities based on new perturbative inter-modulation analysis applied at the Large Helical Device, Poster, P4.164
7. 36th Benelux Meeting on Systems and Control, 2017/03/28 - 2017/03/30, Spa, Belgium, M. van Berkel, G. Vandersteen, H.J. Zwart, Frequency domain estimation of parabolic partial differential equations with spatially varying transport coefficients, Oral, TuE02-4
8. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, M. van Berkel, D. Hogeweij, G. Vandersteen, H. Zwart, Systematic optimization of perturbative heat transport experiments in fusion devices, Poster, P8.012
9. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, H. de Blank, Control of bifurcations in fusion plasma turbulence, Poster, P8.019
10. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, N. Bonanomi, P. Mantica, J. Citrin, T. Görler, JET Contributors, Role of small-scale turbulence and multi-scale interactions in electron heat transport in JET, Poster, P4.168
11. 2017 ITPA Transport & Confinement Topical Group Meeting, 2017/05/01 - 2017/05/03, Princeton, NJ, USA, N. Bonanomi, P. Mantica, J. Citrin, et al., Update on light impurity transport studies on JET, Oral
12. 2017 ITPA Transport & Confinement Topical Group Fall Meeting, 2017/09/01 - 2017/09/03, Helsinki, Finland, C. Bourdelle, J. Citrin, F.J. Casson, S. Breton, J.F. Artaud, Y. Camenen, G. Corrigan, L. Garzotti, F. Köchl, JET Contributors, QuaLiKiz temperature predictions towards the LCFS, Oral
13. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, C. Bourdelle, J. Citrin, F.J. Casson, J.F. Artaud, Y. Camenen, S. Breton, G. Corrigan, L. Garzotti, F. Köchl, JET Contributors, Quasilinear flux-driven gyrokinetic LOC-SOC transition, Poster, P4.167
14. Joint EU-US Transport Task Force Meeting (TTF 2017), 2017/04/25 - 2017/04/28, Williamsburg, VA, USA, C. Bourdelle, J. Citrin, F.J. Casson, S. Breton, J.F. Artaud, Y. Camenen, F. Felici, L. Garzotti, A. Ho, F. Köchl et al., Towards "Predict First" with QuaLiKiz in JETTO on JET pulses, Oral

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16. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, S. Breton, F.J. Casson, C. Bourdelle, J. Citrin, Y. Baranov, C. Challis, J. Garcia, G. Corrigan, L. Garzotti, S. Henderson et al., Integrated modelling of multi-channel transport including Tungsten in JET, Oral, O4.124*
17. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, R. Chandra, P. Rindt, H.J. de Blank, Simulation of Li neutrals in Magnum-PSI, Poster, A6*
18. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, J. Citrin, F. Felici, A. Teplukhina, C. Bourdelle, S. Breton, F. Imbeaux, J. Redondo, O. Sauter, First multi-channel core transport simulations with RAPTOR using a neural network transport model, Poster, P5.160*
19. *2017 ITPA Transport & Confinement Topical Group Meeting, 2017/05/01 - 2017/05/03, Princeton, NJ, USA, J. Citrin, H. Arnichand, J. Bernardo, C. Bourdelle, X. Garbet, S. Hacquin, M.J. Püschel, R. Sabot, Comparison between measured and predicted turbulence frequency spectra in ITG and TEM regimes, Oral*
20. *2017 ITPA Transport & Confinement Topical Group Meeting, 2017/05/01 - 2017/05/03, Princeton, NJ, USA, J. Citrin, T. Aniel, C. Bourdelle, Y. Camenen, F. Casson, H. Doerk, D. Hogeweij, F. Felici, A. Ho, K. van de Plassche et al., Update on neural network emulation of quasilinear turbulent transport models, Oral*
21. *Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, J. Citrin, C. Bourdelle, C. Angioni, F.J. Casson, X. Garbet, O. Gurcan, L. Garzotti, F. Koechl, F. Imbeaux, P. Strand et al., Tokamak transport simulations with a quasilinear gyrokinetic turbulence model, Oral, PW6.7*
22. *59th Annual Meeting of the APS Division of Plasma Physics, 2017/10/23 - 2017/10/27, Milwaukee, WI, USA, I. Classen, R. Perillo, W.A.J. Vijvers, R. Barrois, G. Akkermans, R. van de Logt, H.J. van der Meiden, H. van Eck, T.W. Morgan, Detachment studies in the Magnum-PSI linear device, Poster, PP11.77*
23. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, V.I. Dagnelie, J. Citrin, F. Jenko, M.J. Püschel, T. Görler, D. Told, H. Doerk, Dynamics and decomposition of linear ITG modes with flow shear in ballooning space, Poster, P5.183*
24. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, S.S. Denk, R. Fischer, J. Decker, O. Maj, S.K. Nielsen, E. Poli, M. Stejner, J. Stober, B. Vanovac, E. Westerhof et al., Interpretation of electron cyclotron emission with electron cyclotron radiation transport modeling, Poster, P1.108*
25. *2017 ITPA Transport & Confinement Topical Group Fall Meeting, 2017/09/01 - 2017/09/03, Helsinki, Finland, A. Di Siena, T. Görler, H. Doerk, R. Bilato, J. Citrin, T. Johnson, M. Schneider, E. Poli, JET Contributors, Non-Maxwellian fast particle effects on (electromagnetic) GENE turbulence simulations, Oral*
26. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, A. Di Siena, T. Görler, H. Doerk, J. Citrin, T. Johnson, M. Schneider, E. Poli, Non-Maxwellian fast particle effects in gyrokinetic GENE turbulence simulations, Poster, P2.159*
27. *CIP 2017 21st International Colloquium on Plasma Processes, 2017/06/27 - 2017/06/30, Nice, France, P. Diomede, M.C.M. van de Sanden, S. Longo, Diffusion model for carbon dioxide vibrational kinetics in low temperature plasmas, Oral, S02.1-30049*
28. *6th International Workshop on Plasma Material Interaction Facilities for Fusion Research (PMIF), 2017/11/01 - 2017/11/03, Tsukuba, Japan, H.J.N. van Eck, S. Alonso van der Westen, M.A. van den Berg, S. Brons, H.J. van der Meiden, T.W. Morgan, M.J. van de Pol, J. Scholten, J.W.M. Vernimmen, E.G.P. Vos et al., The superconducting high flux plasma generator Magnum-PSI, Oral*
29. *25th International Conference on Magnet Technology (MT-25), 2017/08/27 - 2017/09/01, Amsterdam, Netherlands, H.J.N. van Eck, H.H.J. Ten Kate, A.V. Dudarev, T. Mulder, A. Hervé, A 2.5 T, 1.25 m free bore superconducting magnet for the Magnum-PSI linear plasma generator, Oral*
30. *5th International Symposium on Liquid Metals Applications for Fusion (ISLA-2017), 2017/09/25 - 2017/09/27, Moscow, Russia, G.G. van Eden, P. Rindt, T.W. Morgan, Performance of Tin and Lithium CPS Targets in Response to High Heat-Flux Plasmas in Pilot-PSI and Magnum-PSI, Poster*
31. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, G.G. van Eden, M.L. Reinke, S. Brons, T.W. Morgan, Design and synthetic imaging of a resistive bolometer for Magnum-PSI, Poster, A12*
32. *Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, S. van Eden, V. Kvon, K. Bystrov, M.C.M. van de Sanden, T. Morgan, Oscillatory vapor shielding by liquid tin, Poster, P8.004*

33. Shell CSER Meet-up Event, 2017/11/02, Eindhoven, Netherlands, S. Er, Computer-driven materials discovery, Oral
34. Shell CSER Activation Day at TU/e, 2017/02/03, Eindhoven, Netherlands, S. Er, Virtual materials discovery, Oral
35. NanoInside Workshop Nanomaterials for Solar Energy, 2017/02/02, Utrecht, Netherlands, S. Er, Accelerating materials discovery for all-inorganic perovskite solar cells, Oral
36. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, F. Felici, O. Kudlacek, T. Ravensbergen, W. Treutterer, T. Blanken, A. Teplukhina, O. Sauter, B. Geiger, L. Giannone, M. Reich et al., Model-based design, simulation and testing of an electron temperature profile controller on ASDEX-Upgrade, Poster, P1.151
37. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, A. Ho, J. Citrin, C. Bourdelle, Y. Camenen, F. Felici, M. Maslov, K. van de Plassche, H. Weisen, Applying neural networks for tokamak plasma turbulence predictions, Poster, P5.173
38. 2nd IAEA Technical Meeting on Fusion Data Processing, Validation and Analysis 2017, 2017/05/30 - 2017/06/02, Cambridge, MA, USA, A. Ho, J. Citrin, C. Bourdelle, Y. Camenen, F. Felici, M. Maslov, K.L. van de Plassche, H. Weisen, JET Contributors, Tokamak profile database construction incorporating Gaussian process regression, Oral
39. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, A. Ho, J. Citrin, C. Bourdelle, F. Felici, K. van de Plassche, Accelerating Tokamak Plasma Turbulence Predictions Through the Use of Neural Networks, Poster, A16
40. 17th European Fusion Theory Conference (EFTC 2017), 2017/10/09 - 2017/10/12, Athens, Greece, G.M.D. Hogewei, F. Felici, M. Kong, O. Sauter, TCV team, MST1 Team, Separating the effects of heating and current drive on NTM evolution in TCV, Poster
41. Annual Meeting Eurofusion Plasma Facing Components work package, 2017/11/20 - 2017/11/23, Ljubljana, Slovenia, K. Jesko, H. Bufferand, Y. Marandet, J.P. Gunn, H.J. van der Meiden, G. Ciraolo, SolEdge2D-Eirene simulations of Pilot-PSI plasmas and comparison with experimental results, Oral
42. 16th International Workshop on Plasma Edge Theory in Fusion Devices (PET 2017), 2017/09/27 - 2017/09/29, Marseille, France, K. Jesko, H. Bufferand, Y. Marandet, J.P. Gunn, H.J. van der Meiden, G. Ciraolo, SolEdge2D-Eirene simulations of linear plasma devices Pilot-PSI and Magnum-PSI - a comparison with experimental data, Poster, P1-13
43. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, K. Jesko, H. Bufferand, Y. Marandet, M. Valentinuzzi, J.P. Gunn, H.J. van der Meiden, G. Ciraolo, SolEdge2D-Eirene simulations of Pilot-PSI plasmas, Poster, P2.113
44. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, A. Kappatou, C. Angioni, A.C.C. Sips, E. Lerche, T. Pütterich, M. Dunne, R. Neu, C. Giroud, C. Challis, M. Tsalias, The effect of helium on plasma performance at ASDEX Upgrade and JET, Oral, O3.111
45. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, P. Klaver, S. Zhang, K. Nordlund, BCA and MD simulations of plasma bombardment of fuzz structures, Poster, P8.008
46. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, M. Kong, O. Sauter, T.C. Blanken, F. Felici, C. Galperti, T.P. Goodman, D. Hogewei, D. Kim, S. Kim, B. Maljaars et al., Real-time control of neoclassical tearing modes and its integration with multiple controllers in the TCV tokamak, Poster, P4.152
47. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, V. Kvon, E. Oyarzabal, A.B. Martin-Rojo, F.L. Tabares, T.W. Morgan, Comparison of secondary electron emission yield of tin-lithium and tin, Poster, P1-63
48. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, V. Kvon, E. Oyarzabal, A. Martin-Rojo, F.L. Tabares, T. Morgan, Comparison of secondary electron emission yield of tin-lithium and tin, Poster, P8.010
49. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, Y. Li, T.W. Morgan, Mapping deuterium-vacancy complexes in low-energy high flux plasmaloaded tungsten surfaces, Poster, P1-67
50. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, O. Linder, G.M.D. Hogewei, J. Citrin, C. Bourdelle, F.J. Casson, F. Köchl, M. Sertoli, EUROfusion MST1 Team, ASDEX Upgrade team, Gyrokinetic study of ASDEX Upgrade discharges with QuaLiKiz, Poster, P2.169
51. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, W. Lu, H.J. de Blank, Plasma exhaust modeling: from linear machine to tokamak divertor, Poster, B2
52. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, W. Lu, H.J. de Blank, Plasma exhaust modeling: from linear machine to tokamak divertor, Poster, P8.007

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54. Joint EU-US Transport Task Force Meeting (TTF 2017), 2017/04/25 - 2017/04/28, Williamsburg, VA, USA, P. Mantica, N. Bonanomi, J. Citrin, E. Fable, T. Görler, A. Stäbler, JET Contributors, Validation of TGLF and QuaLiKiz against JET data and GENE gyro-kinetic simulations, Poster
55. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, M.J. Mantsinen, D. Gallart, E. Belonohy, C. Challis, A. Czarnecka, J. Eriksson, D. Frigione, J. Graves, M. Goniche, M. Tsalas et al., Optimising the use of ICRF waves in JET hybrid plasmas for high fusion yield, Oral, O3.110
56. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, R. Maurizio, B.P. Duval, O. Fevrier, J. Harrison, B. Labit, B. Lipschultz, H. Reimerdes, C. Theiler, K. Verhaegh, W. Vijvers et al., Divertor heat flux characterisation during detachment experiments in TCV, Poster, P5.116
57. Annual Meeting Eurofusion Plasma Facing Components work package, 2017/11/20 - 2017/11/23, Ljubljana, Slovenia, H.J. van der Meiden, SP 7: Plasma characterization and Quantification of LIBS, Oral
58. Annual Meeting Eurofusion Plasma Facing Components work package, 2017/11/20 - 2017/11/23, Ljubljana, Slovenia, T.W. Morgan, Y. Li, E. Zoethout, J.P.M. Hoefnagels, D. Terentyev, ELM loading with different seeding impurities, Oral
59. Annual Meeting Eurofusion Plasma Facing Components work package, 2017/11/20 - 2017/11/23, Ljubljana, Slovenia, T.W. Morgan, Workpackage Liquid Metal Divertor, Oral
60. 5th International Symposium on Liquid Metals Applications for Fusion (ISLA-2017), 2017/09/25 - 2017/09/27, Moscow, Russia, T.W. Morgan, G.G. van Eden, V. Kvon, P. Rindt, W. Ou, Understanding the performance limits of liquid metal based plasma facing components for power plant divertors using linear plasma devices, Poster
61. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, T. Morgan, Magnum PSI team, High flux and high fluence capabilities achieved at the Magnum-PSI linear device, Poster, P1-77
62. 59th Annual Meeting of the APS Division of Plasma Physics, 2017/10/23 - 2017/10/27, Milwaukee, WI, USA, A.L. Neff, J.P. Allain, T.W. Morgan, Investigation of the helium effects on deuterium retention in thin film lithium coatings on tungsten substrates, Poster, BP11.72
63. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, A.L. Neff, J.P. Allain, K. Bystrov, T.W. Morgan, Interactions of Lithium and Tungsten Nano-Structured "Fuzz" Under Ion Irradiation, Poster, P2-50
64. Computational Sciences for Future Energy conference 2017, 2017/09/19 - 2017/09/20, Eindhoven, Netherlands, C. Onwudinanti, T.W. Morgan, Atomistic modelling of optical material behaviour under hydrogen and tin plasma loading, Poster
65. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, F. Orain, M. Hoelzl, A. Lessig, S. Günter, E. Viezzer, M. Dunne, M. Bécoulet, G.T.A. Huijsmans, M. Willensdorfer, B. Vanovac et al., Modeling edge MHD instabilities and their interaction with magnetic perturbations in ASDEX Upgrade, Oral, O4.127
66. 5th International Symposium on Liquid Metals Applications for Fusion (ISLA-2017), 2017/09/25 - 2017/09/27, Moscow, Russia, W. Ou, N.J. Lopes Cardozo, R.S. Al, J.W.M. Vernimmen, T.W. Morgan, Surface instability of liquid tin and gallium due to the formation and decomposition of volatile metal hydrides, Poster
67. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, W. Ou, N.J. Lopes Cardozo, J.W.M. Vernimmen, R.S. Al, T.W. Morgan, Deuterium solubility and retention in liquid tin, Poster, P1-83
68. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, R. Perillo, I.G.J. Classen, T.W. Morgan, W.A.J. Vijvers, H.J.N. van Eck, W. Lu, R. Chandra, R. Barrois, M.R. de Baar, Understanding the influence of N₂ in a semi-detached ITER divertor-relevant hydrogen plasma by means of Magnum-PSI and numerical simulations, Poster, P5.118
69. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, R. Perillo, I.G.J. Classen, T.W. Morgan, W. Vijvers, M.R. de Baar, Modelling plasma chemistry in divertor-relevant hydrogen plasma in the presence of nitrogen, Poster, B9
70. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, R. Perillo, I. Classen, W. Vijvers, M. de Baar, Modelling divertor-relevant high-density low-temperature hydrogen plasma in the presence of Nitrogen, Poster, P8.003

71. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, K.L. van de Plassche, J. Citrin, C. Bourdelle, V. Dagnelie, A. Ho, *Realtime capable quasilinear gyrokinetic modelling using neural networks*, Poster, P2.182
72. 13th International Symposium on Fusion Nuclear Technology ISFNT-13, 2017/09/25 - 2017/09/29, Kyoto, Japan, M.J. van de Pol, S. Alonso van der Westen, D.U.B. Aussems, M.A. van den Berg, S. Brons, H.J.N. van Eck, G.G. van Eden, J.W. Genuit, H.J. van der Meiden, T.W. Morgan et al., *Operational characteristics of the superconducting high flux plasma generator Magnum-PSI*, Poster, P1-008
73. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, T. Ravensbergen, F. Felici, H. Reimerdes, R. Sinha, *A control-oriented model for breakdown and burn-through in TCV and its application*, Poster, P1.155
74. 36th Benelux Meeting on Systems and Control, 2017/03/28 - 2017/03/30, Spa, Belgium, T. Ravensbergen, F. Felici, *Control-oriented modeling of plasma start-up in tokamaks and its application*, Oral, TuP04-1
75. 5th International Symposium on Liquid Metals Applications for Fusion (ISLA-2017), 2017/09/25 - 2017/09/27, Moscow, Russia, P. Rindt, T.W. Morgan, M.A. Jaworski, G.G. van Eden, N.J. Lopes Cardozo, *Test Of A Pre-Loaded Liquid Lithium Divertor Target On Magnum-PSI*, Poster
76. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, P. Rindt, T.W. Morgan, M.A. Jaworski, N.J. Lopes Cardozo, *Testing of a Pre-Loaded Liquid Lithium Divertor Target on Magnum-PSI*, Poster, P2-75
77. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, P. Rindt, T. Morgan, R. Perillo, N.J. Lopes Cardozo, *Liquid lithium shield against extreme heat fluxes*, Poster, P8.001
78. 59th Annual Meeting of the APS Division of Plasma Physics, 2017/10/23 - 2017/10/27, Milwaukee, WI, USA, G. Snoep, O. Meneghini, B.A. Grierson, A. Ashourvan, E. Belli, J. Candy, P.B. Snyder, G. Staebler, J. Citrin, R.J.E. Jaspers, *Coupled core-pedestal simulations with self-consistent transport of impurities*, Poster, GP11.91
79. 13th International Symposium on Fusion Nuclear Technology ISFNT-13, 2017/09/25 - 2017/09/29, Kyoto, Japan, P. Spaeh, G. Aiello, R. Chavan, M. Gagliardi, G. Grossetti, C.J.M. Heemskerck, J.D. Landis, A. Meier, J. Pacheco, D. Ronden et al., *Status of the Final Design of the Structural System for the ITER EC H&CD Upper Launcher*, Poster, P2-099
80. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, F.L. Tabares, E. Oyarzabal, A.B. Martin-Rojo, D. Tafalla, A. de Castro, V. Kvon, J. Loureiro, H. Fernandes, M. Suchonova, P. Veis et al., *Comparative studies in TJ-II of Li and LiSn alloys in a Capillary Porous System as potential liquid metals for the Divertor target in a Fusion Reactor*, Oral, O19
81. 16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, D. Terentyev, A. Bakaeva, A. Dubinko, M. Mayoral, G. De Temmerman, B. Unterberg, K. Verbeken, T.W. Morgan, *Recent progress in the understanding of high flux plasma impact on surface microstructure of commercial grade and single crystal pure tungsten*, Oral, O8
82. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, E. Trier, E. Wolfrum, M. Willensdorfer, Q. Yu, F. Ryter, C. Angioni, M. Dunne, S.S. Denk, R. Fischer, B. Vanovac et al., *ELM-induced cold pulses propagation in ASDEX Upgrade*, Poster
83. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, M. Tsalas, *Advances in the development of DIS_tool and first analysis on TCVdisruptions*, Poster, P2.134
84. 16th International Workshop on H-mode Physics and Transport Barriers (HMWS-2017), 2017/09/13 - 2017/09/15, St. Petersburg, Russia, B. Vanovac, E. Wolfrum, F. Mink, S.S. Denk, G. Harrer, P. Manz, F.M. Laggner, M. Cavedon, G. Birkenmeier, E. Viezzer et al., *ECEI and magnetic measurements during inter-ELM modes*, Poster
85. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, B. Vanovac, E. Wolfrum, S.S. Denk, F. Mink, F.M. Laggner, G. Birkenmeier, S.J. Freethy, E. Viezzer, M.G. Dunne, M. Hoelzl et al., *Effects of strong density fluctuations at the plasma edge on ECEI measurements*, Poster, P4.122
86. 44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, K. Verhaegh, B. Lipschultz, B.P. Duval, J. Harrison, B. Labit, B. Lomanowski, R. Maurizio, C. Marini, H. Reimerdes, W.A.J. Vijvers et al., *Spectroscopic investigation of ion sinks/sources during TCV detachment*, Poster, P4.123
87. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, J. Vernimmen, H. van der Meiden, G. De Temmerman, T. Morgan, H. van Eck, *Collective Thomson scattering system for direct determination of ion properties in Magnum-PSI*, Poster, P8.022

88. *2nd EPS Conference on Plasma Diagnostics (ECPD 2017), 2017/04/18 - 2017/04/21, Bordeaux, France, W. Vijvers, B. Mumgaard, Y. Andrebe, B. Duval, J. Harrison, I. Classen, S. Elmore, B. Labit, S. van Limpt, B. Lipschultz et al., Multi-spectral imaging of tokamak edge and divertor plasmas, Poster, P-79*
89. *Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, W. Vijvers, J. Harrison, S. van Limpt, H. Reimerdes, C. Theiler, B. Lipschultz, K. Verhaegh, C. Tsui, B. Duval, B. Labit et al., Advanced diagnosis of plasma detachment in the TCV tokamak, Oral, PW6.8*
90. *16th International Workshop on H-mode Physics and Transport Barriers (HMWS-2017), 2017/09/13 - 2017/09/15, St. Petersburg, Russia, M. Willensdorfer, T.B. Cote, C. Hegna, W. Suttrop, H. Zohm, G. Birkenmeier, D. Brida, B. Vanovac, S.S. Denk, M. Dunne et al., Impact of non-axisymmetric magnetic perturbations on plasma boundary and local edge stability, Poster*
91. *16th International Conference on Plasma-Facing Materials and Components for Fusion Applications 2017, 2017/05/16 - 2017/05/19, Neuss / Dusseldorf, Germany, M. Zibrov, A. Bakaeva, M. Balden, A. Dubinko, J. Heikinheimo, A. Manhard, M. Mayer, J. Räisänen, D. Terentyev, F. Tuomisto et al., Investigation of deuterium interaction with lattice defects in tungsten, Poster, P2-35*

Seminars: 6

1. *Seminar University of Cyprus, 2017/12/04, Nicosia, Cyprus, A.J.H. Donné, Fusion Research Recent Progress and Perspectives*
2. *Colloquium University of Twente IMS department, 2017/06/28, Enschede, Netherlands, S. Er, Virtual materials modeling and discovery*
3. *Seminar Institute Laue-Langevin, 2017/11/03, Grenoble, France, A.J.H. Donné, The European Fusion Roadmap*
4. *Seminar National Research Centre Kurchatov Institute, 2017/07/27, Kurchatov City, Kazakhstan, A.J.H. Donné, Recent progress in European fusion research*
5. *Seminar Atomic Energy Organisation Iran, 2017/07/03, Tehran, Iran, A.J.H. Donné, The European roadmap towards fusion electricity*
6. *Seminar Nagoya University, Department of Energy Engineering and Science, 2017/03/01, Nagoya, Japan, H.J. van der Meiden, Incoherent and collective Thomson scattering for determination of electron and ion properties in high density, low-temperature plasma*

Public events & industry contacts: 4

1. *TU/e Strategic Area Energy, 2017/05/22, Eindhoven, Netherlands, M.R. de Baar, Panel Member in Energy Panel Discussion: Nuclear Fusion*
2. *TU/e Strategic Area Energy, 2017/01/13, Eindhoven, Netherlands, J. Citrin, Unprecedented acceleration of turbulence modelling in fusion reactors using machine learning techniques*
3. *World Expo The Future of Energy, Nuclear fusion from science fiction to science fact, 2017/07/26, Astana, Kazakhstan, A.J.H. Donné, Making a career in big science*
4. *Team Energy TU/e, 2017/02/08, Eindhoven, Netherlands, T. Morgan, E. Langereis, Energy Cafe - Fusion energy: dream or reality?*

Positions: 28

1. *M.R. de Baar, A.J.H. Donné, Member of the EUROfusion General Assembly, 2017*
2. *M.R. de Baar, Professor at Eindhoven University of Technology (since 2012), 2017*
3. *M.R. de Baar, Leader ITER-NL work package 2: ITER Upper port Electron Cyclotron Current Drive launcher (since 2007), 2017*
4. *M.R. de Baar, Member Executive Board of ITER-NL consortium (since 2014), 2017*
5. *M.R. de Baar, Member of the EUROfusion Bureau, 2017*
6. *M.R. de Baar, Member of the EUROfusion Plasma Exhaust Advisory Committee, 2017*
7. *J. Citrin, Chair ITPA Topical Group on Transport & Confinement (since 2017), 2017*
8. *P. Diomedé, Discussion leader CCER (Computational Center for Energy Research) brainstorm meeting for the Computational Transport and Dynamics session, Low temperature plasmas, DIFFER, Eindhoven, Netherlands, 10 April, 2017, 2017*
9. *P. Diomedé, Leader of the 'Fundamentals, Theory and Modeling' session at the 29th Symposium on Plasma Physics and Radiation Technology, Lunteren, The Netherlands, 7-8 March, 2017, 2017*
10. *A.J.H. Donné, Member International Scientific Committee of the AAPPS-DPP Conference (Association of Asia Pacific Physical Societies) (since 2017), 2017*

11. A.J.H. Donné, Member of Coordinating Committee of the International Tokamak Physics Activity (ITPA-CC) (since 2014), 2017
12. A.J.H. Donné, Member of the International Scientific Advisory Board (Fachbeirat) of the Max-Planck-Institut for Plasma Physics (since 2014), 2017
13. A.J.H. Donné, Chair Mini-course on "New Directions in Plasma Diagnostics for High Energy Density and Burning Plasmas", Denver, Colorado, June 2018 (since 2017), 2017
14. A.J.H. Donné, Appointed EUROfusion Consortium Programme Manager (since 2014), 2017
15. A.J.H. Donné, Member of the International Advisory Committee of EAST (Hefei, China) (since 2015), 2017
16. A.J.H. Donné, Member ITER Science and Technology Advisory Committee (since 2016), 2017
17. A.J.H. Donné, Chair IEA Technology Collaboration Programmes for Co-operation on Tokamak Programmes (since 2017), 2017
18. A.J.H. Donné, Member of the EIROforum Council (since 2014), 2017
19. A.J.H. Donné, Member of the Editorial Board of Nuclear Fusion (since 2011), Editorship, 2017
20. A.J.H. Donné, Chair Marconi-Fusion High Performance Computer Project Committee (since 2016), 2017
21. A.J.H. Donné, Member of the Wendelstein 7-X Programme Committee (since 2016), 2017
22. S. Er, Guest Editor for Batteries Journal Special Issue on 'Material Design and Development for Redox Flow Batteries', Editorship, 2017
23. G.M.D. Hogewij, Member of the Organisational Committee of the Annual Dutch Symposium on Plasma Physics & Radiation Technology, Lunteren, 2017
24. G.M.D. Hogewij, Member of the Scientific Committee of the European Fusion Theory Conference 2017, Athens, Greece, 2017
25. W.R. Koppers, Member of the Fusion for Energy (F4E) Governing Board (since 2014), 2017
26. T.W. Morgan, Member Programme Committee Physics Veldhoven 2018, Netherlands, 2017
27. T.W. Morgan, Leader Eurofusion Work Package on Liquid Metal Divertors (2017-2019), 2017
28. E. Westerhof, sub-Chair for Magnetic Confinement Fusion in the Programme Committee of the 44th EPS Conference on Plasma Physics, 26-30 June 2017, Belfast, UK, 2017

Media: 21

1. Ingenieurs aan zet bij kernfusie, *De Ingenieur*, 2017/12/01, Interview with: M.R. de Baar
2. Opinie-interview kernfusie met Marco de Baar, *New Scientist NL*, 2017/10/25, Interview with: M.R. de Baar
3. Nederlandse uitvinding brengt kernfusie dichterbij, 2017/08/07, Interview with: M.R. de Baar, G.G. van Eden
4. Kernfusie dichterbij dankzij Eindhovense wetenschappers, *Eindhovens Dagblad*, 2017/08/09, Interview with: G.G. van Eden
5. Fusiereactor krijgt 'vloeibare' wand, *NRC Handelsblad*, 2017/08/09, Interview with: G.G. van Eden
6. Vloeibaar metaal beschermt wanden kernfusiereactor, *Bits & Chips*, 2017/08/09, Interview with: G.G. van Eden
7. Reactorwand van vloeibaar metaal, *Technisch Weekblad*, 2017/08/08, Interview with: G.G. van Eden
8. Eindhovens onderzoeksinstituut Differ brengt kernfusie dichterbij, *Studio040*, 2017/08/08, Interview with: G.G. van Eden
9. Doorbraak: wand fusiereactor kan worden beschermd met dun laagje vloeibaar metaal, *de Volkskrant*, 2017/08/07, Interview with: G.G. van Eden, M.R. de Baar
10. Doorbraak: wand kernreactor kan worden beschermd met dun laagje vloeibaar metaal, *De Morgen*, 2017/08/07, Interview with: G.G. van Eden, M.R. de Baar
11. Vloeibaar metaal beschermt wand fusiereactor, *De Ingenieur*, 2017/08/07, Interview with: G.G. van Eden
12. Eindhovense DIFFER publiceert doorbraak in kernfusie, *e52.nl*, 2017/08/07, Interview with: G.G. van Eden
13. Metal clouds to protect fusion reactor walls from heat flux, *Breitbart*, 2017/08/07, Interview with: G.G. van Eden
14. Metal cloud to protect fusion reactor walls, *Phys.org*, 2017/08/07, Interview with: G.G. van Eden
15. Wetenschappers uit Eindhoven brengen kernfusie stapje dichterbij, *Omroep Brabant*, 2017/08/07, Interview with: G.G. van Eden
16. Eindhovense uitvinding brengt kernfusie een stapje dichterbij, *MSN.com*, 2017/08/07, Interview with: G.G. van Eden
17. Nederlandse uitvinding brengt kernfusie dichterbij, *NOS.nl*, 2017/08/07, Interview with: G.G. van Eden, M.R. de Baar
18. Metal clouds to protect fusion reactor walls from heat flux, *UPI*, 2017/08/07, Interview with: G.G. van Eden
19. Wetenschappers ontwikkelen bescherming voor reactorwand bij kernfusie, *Tweakers.net*, 2017/08/07, Interview with: G.G. van Eden
20. Een doucheputje van vloeibaar tin, *De Ingenieur*, 2017/07/10, Interview with: G.G. van Eden
21. Is kernenergie op te wekken bij kamertemperatuur?, *KIJK*, 2017/07/20, Interview with: M.C.M. van de Sanden, H.J. de Blank

Solar Fuels theme

PhD theses: 1

1. A. Bhattacharya, *Terahertz Micro-resonators Investigated in the Near- and Far-field*, PhD thesis at the Eindhoven University of Technology, 2017/05/30, Promotor: J. Gomez Rivas, A. Fiore

MSc theses: 2

1. R. Hamans, (Master thesis Eindhoven University:) *Super-resolution mapping of plasmonic hot electrons*, 2017, Mentor: A. Baldi, M. Parente
2. S. ter Huurne, (Master thesis Eindhoven University:) *Terahertz resonances and photo-conductivity investigated in the near-field*, 2017, Mentor: N. van Hoof, A. Halpin

BSc theses: 1

1. M. Vennik, (Bachelor thesis Eindhoven University:) *Terahertz Spectroscopy And Near-Field Micro-Spectroscopy on a Monolayer of Graphene*, 2017, Mentor: A. Bhattacharya, A. Halpin

Publications in peer-reviewed scientific journals: 40

1. I. Adamovich, S.D. Baalrud, A. Bogaerts, P.J. Bruggeman, M. Cappelli, V. Colombo, U. Czarnetzki, U. Ebert, J.G. Eden, M.C.M. van de Sanden et al., *The 2017 Plasma Roadmap: Low temperature plasma science and technology*, *J. Phys. D: Appl. Phys.* 50 (2017) 323001
2. M. Aghaee, A. Perrotta, S.A. Starostin, H.W. de Vries, M.C.M. van de Sanden, W.M.M. Kessels, M. Creatore, *On the synergistic effect of inorganic/inorganic barrier layers: An ellipsometric porosimetry investigation*, *Plasma Processes Polym.* 14 (2017) 1700012
3. A. Bieberle, I. Tanyeli, R. Lavrijsen, B. Koopmans, R. Sinha, M.C.M. van de Sanden, *Nanostructuring of iron thin films by high flux low energy helium plasma*, *Thin Solid Films* 631 (2017) 50-56
4. W. Bongers, H. Bouwmeester, B. Wolf, F. Peeters, S. Welzel, D. van den Bekerom, N. den Harder, A. Goede, M. Graswinckel, P.W. Groen et al., *Plasma-driven dissociation of CO₂ for fuel synthesis*, *Plasma Process. Polym.* 14 (2017) 1600126
5. B. Bruhn, B.J.M. Brenny, S. Dekker, I. Dogan, P. Schall, K. Dohnalova, *Multi-chromatic silicon nanocrystals*, *Light Sci. Appl.* 6 (2017) e17007
6. T. Butterworth, R.W.K. Allen, *Plasma-catalyst interaction studied in a single pellet DBD reactor: dielectric constant effect on plasma dynamics*, *Plasma Sources Sci. Technol.* 26 (2017) 065008
7. C. Cochard, T. Spielmann, N. Bahlawane, A. Halpin, T. Granzow, *Broadband characterization of congruent lithium niobate from mHz to optical frequencies*, *J. Phys. D: Appl. Phys.* 50 (2017) 36LT01
8. F.J.M. Colberts, M.M. Wienk, R.A.J. Janssen, *Aqueous nanoparticle polymer solar cells: Effects of surfactant concentration and processing on device performance*, *ACS Appl. Mater. Interfaces* 9 (2017) 13380-13389
9. D. Di Carlo Rasi, K.H. Hendriks, M.M. Wienk, R.A.J. Janssen, *Accurate Characterization of Triple-Junction Polymer Solar Cells*, *Adv. Energy Mater.* 7 (2017) 1701664
10. C. Duan, G. Zango, M.G. Iglesias, F.J.M. Colberts, M.M. Wienk, M.V. Martinez-Diaz, R.A.J. Janssen, T. Torres, *The role of the axial substituent in subphthalocyanine acceptors for bulk-heterojunction solar cells*, *Angew. Chem. Int. Ed.* 56 (2017) 148-152
11. C. Duan, K. Gao, F.J.M. Colberts, F. Liu, S.C.J. Meskers, M.M. Wienk, R.A.J. Janssen, *Thiophene Rings Improve the Device Performance of Conjugated Polymers in Polymer Solar Cells with Thick Active Layers*, *Adv. Energy Mater.* 7 (2017) 1700519
12. F.M. Elam, B.C.A.M. van der Velden-Schuermans, S.A. Starostin, M.C.M. van de Sanden, H.W. de Vries, *Control of the intrinsic microstructure in AP-PECVD synthesised amorphous silica thin films*, *RSC Adv.* 7 (2017) 52274-52282

13. F.M. Elam, S.A. Starostin, A.S. Meshkova, B.C.A.M. van der Velden-Schuermans, J.B. Bouwstra, M.C.M. van de Sanden, H.W. de Vries, Atmospheric pressure roll-to-roll plasma enhanced CVD of high quality silica-like bilayer encapsulation films, *Plasma Process. Polym.* 14 (2017) 1600143
14. F.M. Elam, S.A. Starostin, A.S. Meshkova, B.C.A.M. van der Velden, M.C.M. van de Sanden, H.W. de Vries, Defect prevention in silica thin films synthesized using AP-PECVD for flexible electronic encapsulation, *J. Phys. D: Appl. Phys.* 50 (2017) 25LT01
15. S. Espinho, S. Hofmann, J.M. Palomares, S. Nijdam, The influence of the Ar/O₂ ratio on the electron density and electron temperature in microwave discharges, *Plasma Sources Sci. Technol.* 26 (2017) 105008
16. J.J. van Franeker, K.H. Hendriks, B.J. Bruijnaers, M.W.G.M. Verhoeven, M.M. Wienk, R.A.J. Janssen, Monitoring thermal annealing of perovskite solar cells with in-situ photoluminescence, *Adv. Energy Mater.* 7 (2017) 1601822
17. J.J. van Franeker, D. Hermida-Merino, C. Gommès, K. Arapov, J.J. Michels, R.A.J. Janssen, G. Portale, Sub-micrometer structure formation during spin coating revealed by time-resolved in situ laser and X-ray scattering, *Adv. Funct. Mater.* 27 (2017) 1702516
18. G. Georgiou, N.H. Shen, J. Gomez Rivas, T. Koschny, C.M. Soukoulis, Photo-imprinted Controllable Fano Resonance in the Terahertz Regime, *ACS Photonics* 4 (2017) 1785–1789
19. Y. Hajar, V. di Palma, V. Kyriakou, M.A. Verheijen, E.A. Baranova, P. Vernoux, W.M.M. Kessels, M. Creatore, M.C.M. van de Sanden, M.N. Tsampas, Atomic layer deposition of highly dispersed Pt nanoparticles on a high surface area electrode backbone for electrochemical promotion of catalysis, *Electrochem. Commun.* 84 (2017) 40-44
20. A. Halpin, C. Mennes, A. Bhattacharya, J. Gomez Rivas, Visualizing near-field coupling in terahertz dolmens, *Appl. Phys. Lett.* 110 (2017) 101105
21. A. Halpin, N. van Hoof, A. Bhattacharya, C. Mennes, J. Gomez Rivas, Terahertz diffraction enhanced transparency probed in the near field, *Phys. Rev. B* 96 (2017) 085110
22. N. den Harder, D.C.M. van den Bekerom, R.S. Al, M.F. Graswinckel, J.M. Palomares, F.J.J. Peeters, S. Ponduri, T. Minea, W.A. Bongers, M.C.M. van de Sanden et al., Homogeneous CO₂ conversion by microwave plasma: Wave propagation and diagnostics, *Plasma Process. Polym.* 14 (2017) 1600120
23. G.H.L. Heintges, P.J. Leenaers, R.A.J. Janssen, The effect of side-chain substitution and hot processing on diketopyrrolopyrrole-based polymers for organic solar cells, *J. Mater. Chem. A* 5 (2017) 13748-13756
24. K.H. Hendriks, J.J. van Franeker, B.J. Bruijnaers, J.A. Anta, M.M. Wienk, R.A.J. Janssen, 2-Methoxyethanol as a new solvent for the processing of methyl ammonium lead halide perovskite solar cells, *J. Mater. Chem. A* 5 (2017) 2346-2354
25. R. Heuvel, J.J. van Franeker, R.A.J. Janssen, Energy Level Tuning of Poly(phenylene-alt-dithienobenzothiadiazole)s for Low Photon Energy Loss Solar Cells, *Macromol. Chem. Phys.* 218 (2017) 1600502
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32. F.J.J. Peeters, J. Zheng, I.M.P. Aarts, A.C.R. Pipino, W.M.M. Kessels, M.C.M. van de Sanden, Atomic hydrogen induced defect kinetics in amorphous silicon, *J. Vac. Sci. Technol. A* 35 (2017) 05C307
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37. T. Stoll, G. Zafeiropoulos, I. Dogan, H. Genuit, R. Lavrijsen, B. Koopmans, M.N. Tsampas, *Visible-light-promoted gas-phase water splitting using porous $\text{WO}_3/\text{BiVO}_4$ photoanodes*, *Electrochem. Commun.* 82 (2017) 47-51
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2. T. Butterworth, R. Allen, *The Single Pellet Reactor for studying plasma-catalyst interaction: Dielectric effect and electrical characterisation*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 32-35
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4. C. Cochard, T. Spielmann, A. Halpin, T. Granzow, *Broadband characterization of LiNbO_3 : Influence of Mg doping*, *2017 42nd International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz)* (2017) MD.7
5. N. Gatti, S. Ponduri, F.J.J. Peeters, D.C.M. van den Bekerom, T. Minea, T. Butterworth, Q. Ong, W.A. Bongers, G.J. van Rooij, *Assessing the non-equilibrium: vibrational and rotational temperature profiles in N_2 and N_2/CO_2 microwave plasma from laser Raman scattering*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 279-282
6. P.W.C. Groen, A.J. Wolf, M.C.M. van de Sanden, W.A. Bongers, *Numerical determination of plasma electron density and reduced electric field by the principle of impedance matching*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 105-108
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8. B.L.M. Klarenaar, R. Engeln, M.A. Damen, M.C.M. van de Sanden, A.S. Morillo, P. Auvray, O. Guaitella, *Measuring vibrational excitation of CO_2 in a pulsed glow discharge*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 39-41
9. A.S. Meshkova, Y. Liu, F.M. Elam, S.A. Starostin, M.C.M. van de Sanden, H.W. de Vries, *The impact of the gas flow on SiO_2 film depth profile in a roll-to-roll AP PECVD reactor*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 509-511
10. T. Minea, F.J.J. Peeters, D.C.M. van den Bekerom, N. Gatti, E. Zoethout, M.F. Graswinckel, S. Ponduri, M.C.M. van de Sanden, A.H.G. Cents, L. Lefferts et al., *Methyl production in methane microwave plasma probed by REMPI*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 17-20
11. T. Nozaki, A. Bogaerts, X. Tu, M.C.M. van de Sanden, *Special issue: Plasma Conversion, Plasma Processes and Polymers* 14 (2017) 1790061
12. F.J.J. Peeters, H.J.L. Hendrickx, A.J. Wolf, M.C.M. van de Sanden, W.A. Bongers, *Continuum emission as a diagnostic tool in CO_2 microwave plasma*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 101-104
13. T. Verreycken, F. D'Isa, M.C.M. van de Sanden, E. Carbone, W.A. Bongers, *Time resolved optical emission spectroscopy of a pulsed CO_2 microwave discharge*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 175-178
14. H.W. de Vries, S.A. Starostin, W. van Baak, M.C.M. van de Sanden, *Plasma polymerisation of 4-vinylpyridine in a roll-to-roll atmospheric plasma reactor*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 570-573
15. A.J. Wolf, J. Toonen, S. Ponduri, G.J. van Rooij, M.C.M. van de Sanden, W.A. Bongers, *Implementation of microwave phase-shift as a diagnostic for electron density measurements in a reactive CO_2 microwave plasma*, *ISPC 2017, 23rd International Symposium on Plasma Chemistry* (2017) 154-157

Invited lectures at conferences and meetings: 33

1. *Caltech Applied Physics Seminar, 2017/04/28, Pasadena, CA, USA, A. Baldi, Plasmonics for Chemistry: Sensing and controlling chemical reactions using plasmons*
2. *NextGenChem NL 2017 symposium, 2017/03/28, Utrecht, Netherlands, A. Baldi, Plasmonics for Chemistry: sensing and controlling chemical reactions using plasmons*
3. *E-MRS Fall Meeting 2017, 2017/09/18 - 2017/09/21, Warsaw, Poland, A. Bieberle, R. Sinha, I. Tanyeli, R. Lavrijsen, M.C.M. van de Sanden, High Ion Flux Plasma Nanostructuring: The solution for high performing electrochemical energy applications?*
4. *Joint EPS-SIF International School on Energy 2017, 2017/07/21 - 2017/07/26, Varenna, Italy, A.P.H. Goede, CO₂ Neutral Fuels*
5. *4th Microwave and Terahertz Science and Applications MTSA 2017, 2017/11/19 - 2017/11/23, Okayama, Japan, J. Gomez Rivas, A close view to THz Fano resonances, diffraction induced transparency and mode hybridization in resonators and metasurfaces*
6. *Mini -Symposium on Strong Coupling, 2017/09/15, Strasbourg, France, J. Gomez Rivas, Nanostructured surfaces for solid state lighting and strong light-matter coupling*
7. *Plasmonica 2017, 2017/07/05 - 2017/07/07, Lecce, Italy, J. Gomez Rivas, Plasmonic surfaces for solid state lighting, strong light-matter coupling and polariton lasing*
8. *Blue Sky Research for Energy Technology, 2017/06/14 - 2017/06/15, Birmingham, UK, J. Gomez Rivas, Bringing Nanotechnology into LEDs*
9. *20th Conference on Microscopy of Semi Conducting Materials (MSM XX) 2017, 2017/04/09 - 2017/04/13, Oxford, UK, J. Gomez Rivas, Semiconductor and metal nanoantennas: Directional emitters and absorbers of polarized light probed by Fourier microscopy*
10. *HRSMC Symposium 2017, 2017/11/16, Amsterdam, Netherlands, R.A.J. Janssen, Organic and hybrid solar cells*
11. *Bosche Chemische Kring, 2017/11/14, Den Bosch, Netherlands, R.A.J. Janssen, Organische en hybride zonnecellen*
12. *Leading the south 2017, 2017/11/03, Eindhoven, Netherlands, R.A.J. Janssen, Organische en hybride zonnecellen*
13. *7th Organic Chemistry Day at UAM, 2017/10/13, Madrid, Spain, R.A.J. Janssen, Material and device design for efficient organic solar cells*
14. *Politechnika Slaska Tutorial, 2017/06/20, Gliwice, Poland, R.A.J. Janssen, Organic Solar Cells*
15. *E-MRS Spring Meeting 2017, 2017/05/22 - 2017/05/26, Strasbourg, France, R.A.J. Janssen, How can we understand morphology formation in polymer solar cells? and some issues on photon energy loss*
16. *HOPV, 2017/05/21, Lausanne, Switzerland, R.A.J. Janssen, Material design toward practical useful polymers for efficient polymer solar cells*
17. *ORZEL Winter School Advanced characterization of structure of transport properties of organic semiconductors, 2017/01/30 - 2017/02/01, Szczyrk, Poland, R.A.J. Janssen, Polymer and Organic Solar Cells*
18. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, L.M. Martini, N. Gatti, G. Dilecce, M. Scotoni, P. Tosi, Laser induced fluorescence in nanosecond discharges for CO₂ conversion, I4.313*
19. *AVS 64th Annual International Symposium and Exhibition, 2017/10/29 - 2017/11/03, Tampa, FL, USA, R. Mohan Sankaran, M.C.M. van de Sanden, History and Legacy of the Coburn and Winters Paper, PS+SS-TuA1*
20. *20th International Summer School on Vacuum, Electron and Ion Technologies VEIT, 2017/09/25 - 2017/09/29, Sozopol, Bulgaria, G.J. van Rooij, Electrification of chemical industry: a key role for plasma chemistry, TTR-2*
21. *44th EPS Conference on Plasma Physics, 2017/06/26 - 2017/06/30, Belfast, UK, G.J. van Rooij, Electrification of chemical industry: a key role for plasma chemistry, I2.306*
22. *Tweede KNAW Domeinmiddag NTW (Natuur en Techniek Wetenschappen), 2017/10/02, Amsterdam, Netherlands, M.C.M. van de Sanden, Energievoorziening in de toekomst*
23. *16th International Conference on Microwave and High Frequency Heating: AMPERE 2017, 2017/09/18 - 2017/09/21, Delft, Netherlands, M.C.M. van de Sanden, The use of nonequilibrium plasma chemistry to improve kinetics and selectivity of chemical transformations. The electrified Future: A key role for plasma chemistry?, Plenary 21 Sept*
24. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, M.C.M. van de Sanden, The Electrified Future: A Key Role for Plasma Chemistry?, Plenary II*
25. *ISPC Summerschool 2017 (International Plasma Chemistry Society), 2017/07/28 - 2017/07/29, Montreal, Canada, M.C.M. van de Sanden, Electrification of the Industry: Challenges and Opportunities for Plasma Science and Technology*
26. *17th International Conference On Plasma Physics And Applications 2017, 2017/06/15 - 2017/06/20, Bucharest, Romania, M.C.M. van de Sanden, Plasma non-equilibrium at work: key to success of energy technologies?, I-09*

27. *Beijing University College of Chemistry and Molecular Engineering Xing Da Lecture 516, 2017/04/28, Beijing, China, M.C.M. van de Sanden, Non-thermal chemistry: a novel pathway for renewable energy driven chemistry*
28. *TU/e Minisymposium Polymer membranes for a sustainable world, 2017/04/07, Eindhoven, Netherlands, M.C.M. van de Sanden, Dutch Institute for Fundamental Energy Research: the Solar Fuels program*
29. *KNAW Expert Meeting Het Misverstand Wetenschap, 2017/03/20, Amsterdam, Netherlands, M.C.M. van de Sanden, Waarderen van wetenschap*
30. *AVS 64th Annual International Symposium and Exhibition, 2017/10/29 - 2017/11/03, Tampa, FL, USA, V. Vandalon, M.C.M. van de Sanden, W.M.M. Kessels, Surface science aspects of (plasma) ALD reactions, PS+SS-TuA4*
31. *Energy Now, 2017/05/30, Eindhoven, Netherlands, H.W. de Vries, Towards industrial manufacturing of sustainable products*
32. *Deutsche Gesellschaft für Plasmatechnologie, 2017/02/20 - 2017/02/22, Goettingen, Germany, H.W. de Vries, High current DBD assisted CVD of moisture barrier films: how to control film properties?*
33. *18th International Symposium on Laser-Aided Plasma Diagnostics (LAPD 2017), 2017/09/24 - 2017/09/28, Prague, Czech Republic, S. Welzel, F.K. Brehmer, A.J. Wolf, R. Engeln, G.J. van Rooij, W.A. Bongers, M.C.M. van de Sanden, Polydiagnostic studies on CO₂ plasmas at elevated pressures*

Other oral and poster presentations at (international) conferences and meetings: 104

1. *HRSMC Symposium 2017, 2017/11/16, Amsterdam, Netherlands, S.V. Auras, R.G. Farber, R. van Lent, D. Killelea, L.B.F. Juurlink, CO₂ Adsorption on a curved Pt crystal, Poster*
2. *Dutch SPM (Scanning Probe Microscopy) Day 2017, 2017/11/16, Leiden, Netherlands, S.V. Auras, R.G. Farber, R. van Lent, D. Killelea, L.B.F. Juurlink, CO₂ Adsorption on a curved Pt crystal, Poster*
3. *Reedijk symposium, 2017/10/27, Leiden, Netherlands, S.V. Auras, R.G. Farber, R. van Lent, D. Killelea, L.B.F. Juurlink, CO₂ Adsorption on a curved Pt crystal, Poster*
4. *AVS Prairie Chapter meeting, 2017/09/07, Chicago, IL, US, S.V. Auras, R. van Lent, R. Spierenburg, D.L. Bashlakov, L.B.F. Juurlink, Surface Structure Dependent Trapping of CO₂, Poster*
5. *Gordon research conference: Dynamics at Surfaces, 2017/08/09 - 2017/08/14, Newport, RI, US, S.V. Auras, R. van Lent, R. Spierenburg, D.L. Bashlakov, L.B.F. Juurlink, Surface Structure Dependent Trapping of CO₂, Poster*
6. *Gordon research seminar: Dynamics at Surfaces, 2017/07/29 - 2017/07/30, Newport, RI, US, S.V. Auras, R. van Lent, R. Spierenburg, D.L. Bashlakov, L.B.F. Juurlink, Surface Structure Dependent Trapping of CO₂, Poster*
7. *NEVAC Day 2017, 2017/05/12, Eindhoven, The Netherlands, A. Baldi, In-situ transmission electron microscopy study of battery nano-materials, Oral*
8. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, D. van den Bekerom, J.M. Palomares-Linares, T. Verreycken, N. Gatti, T. Minea, S. Ponduri, Q. Ong, W. Bongers, M.C.M. van de Sanden, G.J. van Rooij, Gas temperature dynamics in pulsed CO₂ microwave plasma: unravelling quenching of vibrational excitation, Oral, S-6-1*
9. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, D.C.M. van den Bekerom, S. Ponduri, Q. Ong, G. Berden, W.A. Bongers, R. Engeln, E.M. van Veldhuizen, A. Sobota, M.C.M. van de Sanden, G.J. van Rooij, In-situ analysis of vibrational excitation and CO-production in a CO₂ microwave plasma, Poster, A4*
10. *2nd Public SCARLET Workshop, 2017/03/23, Darmstadt, Germany, T. Belete, G. Giammaria, L. Lefferts, M.C.M. van de Sanden, M.A. Gleeson, Direct production of CO during CaCO₃ calcination, Oral*
11. *11th EERA JP AMPEA Steering Committee & workshop Photo- and Electro- Catalysis in Energy Conversion 2017, 2017/11/20 - 2017/11/21, Prague, Czech Republic, A. Bieberle, Simulation of Oxygen Evolution at Hematite Surfaces: the Impact of Structure and Local Chemistry, Oral*
12. *21st International Conference on Solid State Ionics, 2017, 2017/06/18 - 2017/06/23, Padua, Italy, A. Bieberle, R. Sinha, I. Tanyeli, R. Lavrijsen, B. Koopmans, M.C.M. van de Sanden, High Ion Flux Plasma Nanostructures for Electrochemical Applications, Oral*
13. *Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, A. Bieberle, Better Photo-Electrodes by Combining Experiments and Modeling, Oral*
14. *EERA AMPEA 9th steering committee Workshop, 2017/02/07 - 2017/02/08, Oslo, Norway, A. Bieberle, High Ion Flux Plasma Nanostructures for Electrochemical Applications, Oral*

15. *DIPC school: Photoelectrocatalysis at the atomic scale, 2017/06/27 - 2017/06/30, San Sebastian, Spain, A. Bronneberg, M.C.M. van de Sanden, A. Bieberle, An approach to elucidate the water photo-oxidation mechanism by infrared spectroscopy, Poster*
16. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, T. Butterworth, R.W.K. Allen, The Single Pellet Reactor for studying plasma-catalyst interaction: Dielectric effect and electrical characterisation, Oral, S-5-1*
17. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, T. Butterworth, J.J.J.T. Smits, S. van Bavel, F.J.J. Peeters, S. Ponduri, N. Gatti, D.C.M. van den Bekerom, Q. Ong, G.J. van Rooij, Changing the fate of methyl radicals in methane microwave plasmas, Poster, A5*
18. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, R. Chaudhary, G.J. van Rooij, V. Hessel, Direct CO₂ hydrogenation to synthesize methanol in a dielectric barrier discharge (DBD) reactor by plasma-catalytic process, Oral, V-2-8*
19. *AVS 64th Annual International Symposium and Exhibition, 2017/10/29 - 2017/11/03, Tampa, FL, USA, F. Elam, A. Meshkova, B.C.A.M. van der Velden-Schuermans, S.A. Starostin, M.C.M. van de Sanden, H.W. de Vries, Controlling the Thin Film Properties of Silica Synthesised by Atmospheric Pressure-Plasma Enhanced CVD, Oral, PS+SS+TF-WeA3*
20. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, F.M. Elam, A. Meshkova, B.C.A.M. van der Velden-Schuermans, S. Starostin, M.C.M. van de Sanden, H. de Vries, Roll-to-roll atmospheric pressure PECVD of silica-like encapsulation films, Oral, B-1-5*
21. *Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, F. Elam, A. Meshkova, S. Starostin, J.B. Bouwstra, M.C.M. van de Sanden, H. de Vries, Atmospheric pressure plasma enhanced CVD of high quality silica-like bilayer encapsulation films, Poster, P8.002*
22. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, N. Gatti, S. Ponduri, F. Peeters, D. van den Bekerom, T. Minea, T. Butterworth, Q. Ong, W. Bongers, G. van Rooij, Assessing the non-equilibrium: vibrational and rotational temperature profiles in N₂ and N₂-CO₂ microwave plasma from laser Raman scattering, Oral, S-2-1*
23. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, N. Gatti, F.J.J. Peeters, D.C.M. van den Bekerom, T. Minea, S. Ponduri, T. Butterworth, Q. Ong, G.J. van Rooij, Investigation of a N₂-O₂ microwave plasma for NO production by means of laser scattering, Oral, O12*
24. *Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, N. Gatti, F. Peeters, D. van den Bekerom, T. Minea, G. van Rooij, Electron temperature in CO₂ plasma by Thomson scattering and optical emission spectroscopy, Poster, P8.020*
25. *CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, K. George, X. Zhang, A. Bieberle, Enhanced Oxygen Evolution Reaction performance of NiOOH-hematite photoanodes: A DFT study, Poster*
26. *Computational Sciences for Future Energy conference 2017, 2017/09/19 - 2017/09/20, Eindhoven, Netherlands, K. George, X.Q. Zhang, A. Bieberle, Origin of enhanced Oxygen Evolution Reaction performance of NiOOH-hematite photoanodes: A DFT study, Oral*
27. *Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, K. George, X.Q. Zhang, M. van Berkel, A. Bieberle, New method of Modeling Oxygen Evolution in Solar Water Splitting: Density Functional Theory based State-Space Modeling, Poster*
28. *ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, P.W.C. Groen, A.J. Wolf, M.C.M. van de Sanden, W.A. Bongers, Numerical determination of plasma electron density and reduced electric field by the principle of impedance matching, Poster, P1-26-1*
29. *29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, P.W.C. Groen, W.A. Bongers, J. Toonen, T. Verreycken, A.J. Wolf, M.C.M. van de Sanden, Modelling electron density in the DIFFER microwave plasma reactor using impedance matching, Poster, A15*
30. *41st Annual Meeting NNV AMO (Division of Atomic, Molecular, and Optical Physics) 2017, 2017/10/10 - 2017/10/11, Lunteren, Netherlands, A. Halpin, N. van Hoof, A. Bhattacharya, C. Mennes, J. Gomez Rivas, Near-field Microscopy of Electromagnetically Induced Transparency in Terahertz Dolmens, Poster, P32*
31. *CLEO/Europe-EQEC 2017 Lasers and Electro-optics - European Quantum Electronics Conference, 2017/06/25 - 2017/06/29, Munich, Germany, A. Halpin, N. van Hoof, A. Bhattacharya, C. Mennes, J. Gomez Rivas, Near-field Microscopy of Electromagnetically Induced Transparency in Terahertz Dolmens, Poster, CC-P.5*
32. *Optical Terahertz Science and Technology OTST 2017, 2017/04/02 - 2017/04/07, London, UK, A. Halpin, N. van Hoof, A. Bhattacharya, C. Mennes, J. Gomez Rivas, Near-field Microscopy of Electromagnetically Induced Transparency in Terahertz Dolmens, Poster*

33. 4th International Conference on Advanced Electromaterials ICAE 2017, 2017/11/21 - 2017/11/24, Jeju, South Korea, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, Diffraction enhanced transparency (DET) using frequency detuned and displaced resonant rods, Oral
34. 41th Annual Meeting NNV AMO (Division of Atomic, Molecular, and Optical Physics) 2017, 2017/10/10 - 2017/10/11, Lunteren, The Netherlands, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, Lattice of detuned resonators induces diffraction enhanced transparency (DET), Oral, O14
35. 2017 42nd International Conference on Infrared, Millimeter, and Terahertz waves (IRMMW-THz), 2017/08/27 - 2017/09/01, Cancun, Mexico, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, Diffraction enhanced transparency (DET) using frequency detuned and displaced resonant rods, Oral
36. CLEO/Europe-EQEC 2017 Lasers and Electro-optics - European Quantum Electronics Conference, 2017/06/25 - 2017/06/29, Munich, Germany, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, Diffraction enhanced transparency (DET) using frequency detuned and displaced resonant rods, Oral, CC-5.5
37. Optical Terahertz Science and Technology OTST 2017, 2017/04/02 - 2017/04/07, London, UK, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, Diffraction enhanced transparency (DET) using frequency detuned and displaced resonant rods, Oral
38. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, N. van Hoof, A. Bhattacharya, A. Halpin, J. Gomez Rivas, THz near-field time-domain spectroscopy of resonant structures and materials, Poster, P1.010
39. MRS Fall Meeting 2017, 2017/11/26 - 2017/12/01, Boston, MA, USA, R. Kamarudheen, A. Baldi, Plasmon Induced Synthesis of Au@Ag core@shell Nanostructures, Oral
40. 20th Workshop on the Exploration of Low-Temperature Plasma Physics (WELTPP-20), 2017/11/30 - 2017/12/01, Kerkrade, The Netherlands, B.L.M. Klarenaar, M. Grofulovic, A.S. Morillo, M.A. Damen, D.C.M. van den Bekerom, M.C.M. van de Sanden, O. Guaitella, R. Engeln, Vibrational excitation kinetics of CO₂ in a pulsed glow discharge, Oral, O10
41. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, B. Klarenaar, R. Engeln, M.A. Damen, M.C.M. van de Sanden, A.S. Morillo, P. Auvray, O. Guaitella, Measuring vibrational excitation of CO₂ in a pulsed glow discharge, Oral, S-3-1
42. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, D. Klarenaar, R. Engeln, M.A. Damen, M.C.M. van de Sanden, A.S. Morillo, P. Auvray, O. Guaitella, Vibrationally exciting CO₂ for solar fuel production, Oral, O10
43. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, B. Klarenaar, R. Engeln, M.C.M. van de Sanden, P. Auvray, O. Guaitella, Vibrationally exciting CO₂ for renewable energy storage, Oral, PW6.1
44. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, V. Kyriakou, V. di Palma, Y. Hajar, M.A. Verheijen, E.A. Baranova, P. Vernoux, W.M.M. Kessels, M. Creatore, M.C.M. van de Sanden, M. Tsampas, Atomic layer deposition of Pt-nanoparticles for electrochemical promotion of catalysis, Poster
45. Gordon research conference: Dynamics at Surfaces, 2017/08/09 - 2017/08/14, Newport, RI, US, R. van Lent, M.C.M. van de Sanden, Resolving the simplest of reactions: low energy D₂ dissociation on Pt, Poster
46. Gordon research seminar: Dynamics at Surfaces, 2017/07/29 - 2017/07/30, Newport, RI, US, R. van Lent, M.C.M. van de Sanden, Resolving the simplest of reactions: low energy D₂ dissociation on Pt, Oral
47. International Symposium on Molecular Beams 2017, 2017/06/25 - 2017/06/30, Nijmegen, Netherlands, R. van Lent, S.V. Auras, A.J. Walsh, K. Cao, R. Spierenburg, M.A. Gleeson, L.B.F. Juurlink, Curved single crystals resolve gas-surface dynamics dependencies on surface defects, Oral
48. 20th Workshop on the Exploration of Low-Temperature Plasma Physics (WELTPP-20), 2017/11/30 - 2017/12/01, Kerkrade, The Netherlands, Y. Liu, F.J.J. Peeters, S.A. Starostin, M.C.M. van de Sanden, H.W. de Vries, Improving uniformity of atmospheric-pressure dielectric barrier discharges using dual frequency excitation, Oral, O17
49. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, A. Meshkova, Y. Liu, F. Elam, S.A. Starostin, M.C.M. van de Sanden, H. de Vries, The impact of the gas flow rate on SiO₂ moisture barrier film depth profile in a roll-to-roll AP PECVD reactor, Poster & PosterPitch, P1-53-5
50. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, T. Minea, F.J.J. Peeters, D.C.M. van den Bekerom, N. Gatti, E. Zoethout, M.F. Graswinckel, M.C.M. van de Sanden, A.H.G. Cents, L. Lefferts, G.J. van Rooij, Methyl production in methane microwave plasma probed by REMPI, Oral, S-1-1

51. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, T. Minea, F.J.J. Peeters, N. Gatti, D.C.M. van den Bekerom, S. Ponduri, E. Zoethout, M.F. Graswinckel, M.C.M. van de Sanden, A.H.G. Cents, L. Lefferts et al., 2+1 REMPI probe detection of methyl radicals from a methane microwave plasma, Poster, B6
52. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions, Poster
53. 21th International School on "Low Temperature Plasma Physics: Basics and Applications", 2017/10/07 - 2017/10/12, Bad Honnef, Germany, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions, Poster
54. 21th International Low Temperature Plasma School Master Class "New approaches for plasma/surface interaction studies", 2017/10/07 - 2017/10/12, Bad Honnef, Germany, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions, Poster
55. NEVAC Day 2017, 2017/05/12, Eindhoven, The Netherlands, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions for the Reverse Water Gas Shift Reaction, Poster
56. Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, The Netherlands, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions for the Reverse Water Gas Shift Reaction, Poster
57. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, Q. Ong, D.C.M. van den Bekerom, M.A. Gleeson, S. Ponduri, K.J. Westrate, G.J. van Rooij, Plasma Catalysis as Vibrational Activation of Surface Interactions for the Reverse Water Gas Shift Reaction, Poster, B8
58. 17th International Conference on Atomic Layer Deposition (ALD 2017), 2017/07/15 - 2017/07/18, Denver, CO, USA, V. di Palma, M.A. Verheijen, R. Sinha, G. Zafeiropoulos, A. Bieberle, M.N. Tsampas, W.M.M. Kessels, M. Creatore, Atomic Layer Deposition of metal oxides and metals for improving the electrode performance in photoelectrochemical applications, Oral
59. Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, V. di Palma, M.A. Verheijen, R. Sinha, G. Zafeiropoulos, A. Bieberle, M.N. Tsampas, W.M.M. Kessels, M. Creatore, Atomic Layer Deposition of metal oxides and metals for improving the electrode performance in photoelectrochemical applications, Poster
60. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, V. di Palma, M.A. Verheijen, G. Zafeiropoulos, M.N. Tsampas, W.M.M. Kessels, M. Creatore, Atomic layer deposition for the functionalization of mesoporous substrates by platinum nanoparticles, Poster, P3.042
61. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, M. Parente, A. Baldi, Photogenerated charge equilibration in core@shell metal@semiconductor nanoparticles, Poster
62. MRS Fall Meeting 2017, 2017/11/26 - 2017/12/01, Boston, MA, USA, M. Parente, A. Baldi, Photogenerated charge equilibration in core@shell metal@semiconductor nanoparticles, Poster
63. Molecular Machines Nobel Prize Conference 2017, 2017/11/19 - 2017/11/22, Groningen, Netherlands, M. Parente, A. Baldi, J.A. Berrocal, Plasmonic sensing of conformational changes in a catenane switch, Poster, 79
64. Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, M. Parente, A. Baldi, Photochemistry of metal@semiconductor core@shell nanoparticles: steps forward, Poster
65. AVS 64th Annual International Symposium and Exhibition, 2017/10/29 - 2017/11/03, Tampa, FL, USA, F.J.J. Peeters, J. Zheng, I.G.M. Aarts, A.C.R. Pipino, W.M.M. Kessels, M.C.M. van de Sanden, H-induced Defect Kinetics in a-Si:H: Obtaining Kinetic Parameters from Temperature-Dependent Data, Oral, PS+SS-TuA10
66. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, F.J.J. Peeters, H. Hendrickx, A.J. Wolf, M.C.M. van de Sanden, W.A. Bongers, Continuum emission as a diagnostic tool in CO₂ microwave plasma, Poster, P1-25-1
67. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, S. Ponduri, F.J.J. Peeters, E. Zoethout, D.C.M. van den Bekerom, T. Minea, N. Gatti, T. Butterworth, Q. Ong, M.C.M. van de Sanden, G.J. van Rooij, Chemical process intensification using Microwave plasmas: A case study of Nitrogen fixation for fertilizer production, Poster, B11
68. CLEO/Europe-EQEC 2017 Lasers and Electro-optics - European Quantum Electronics Conference, 2017/06/25 - 2017/06/29, Munich, Germany, M. Ramezani, A. Halpin, A. Fernandez, J. Feist, S.R.K. Rodriguez, F.J. Garcia-Vidal, J. Gomez Rivas, Plasmon Exciton Polariton Lasing, Oral, CK-8.5

69. *Quantum Nanophotonics 2017*, 2017/02/26 - 2017/03/03, Benasque, Spain, M. Ramezani, A. Halpin, J. Feist, A. Fernandez, F.J. Garcia-Vidal, J. Gomez Rivas, M. di Giorgi, F. Todisco, D. Sanvitto, *Plasmon-Exciton-Polaritons lasing*, Oral
70. *Physics@FOM Veldhoven 2017*, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, M. Ramezani, A. Halpin, A. Fernandez, J. Feist, S. Rahimzadeh-Kalaleh, F.J. Garcia-Vidal, J. Gomez Rivas, *Plasmon-exciton-polariton lasing*, Oral, PW1.6
71. *CHAINS: Chemistry matters for the future*, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, M.C.M. van de Sanden, F. Mulder, *The Energy Transition A key role for renewable energy driven non-thermal chemistry*, Oral, 56 (Focus session *Vision and Trends in Process Technology*, Hoogewerff Foundation)
72. *1st International Conference of Electrolysis 2017*, 2017/06/12 - 2017/06/15, Copenhagen, Denmark, F.M. Sapountzi, M.N. Tsampas, H.O.A. Fredriksson, J.M. Garcia, J.W. Niemantsverdriet, *Hydrogen production from short-chain alcohols using polymeric proton conductors*, Poster
73. *Material and Device Innovations for the Practical Implementation of Solar Fuels (SolarFuel17)*, 2017/09/04 - 2017/09/08, Barcelona, Spain, R. Sinha, V. di Palma, R. Lavrijsen, M. Creatore, A. Bieberle, *Improvement In The Water Splitting Activity Of Hematite Thin Films with ZnO Underlayer*, Poster
74. *21st Topical meeting of the International Society of Electrochemistry 2017*, 2017/04/23 - 2017/04/26, Szeged, Hungary, R. Sinha, I. Tanyeli, R. Lavrijsen, B. Koopmans, M.C.M. van de Sanden, A. Bieberle, *Electrochemistry of High Ion Flux Helium Plasma - exposed Iron Oxide Thin Films*, Oral, Mon s5
75. *Renewable Energy Driven Chemistry Workshop*, 2017/04/05, Eindhoven, Netherlands, R. Sinha, I. Tanyeli, R. Lavrijsen, B. Koopmans, M.C.M. van de Sanden, A. Bieberle, *The Electrochemistry of High Ion Flux Helium Plasma-exposed Iron Oxide Films*, Poster
76. *Physics@FOM Veldhoven 2017*, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, R. Sinha, I. Tanyeli, R. Lavrijsen, M.C.M. van de Sanden, A. Bieberle, *High ion flux plasma exposure effect on the OER activity of hematite thin films*, Poster, P3.106
77. *EERA AMPEA 9th steering committee Workshop*, 2017/02/07 - 2017/02/08, Oslo, Norway, T. Stoll, G. Zafeiropoulos, H. Genuit, M.N. Tsampas, *Towards visible light activated porous photoanodes in conjunction with polymeric electrolyte photoelectrochemical cells with gaseous reactants*, Oral
78. *Physics@FOM Veldhoven 2017*, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, T. Stoll, G. Zafeiropoulos, M.N. Tsampas, *Towards visible light activated porous electrodes*, Poster, P3.072
79. *11th EERA JP AMPEA Steering Committee & workshop Photo- and Electro- Catalysis in Energy Conversion 2017*, 2017/11/20 - 2017/11/21, Prague, Czech Republic, M.N. Tsampas, T. Stoll, G. Zafeiropoulos, I. Dogan, J.W. Genuit, *Solid state photoelectrochemical cells for hydrogen production*, Oral
80. *1st International Conference of Electrolysis 2017*, 2017/06/12 - 2017/06/15, Copenhagen, Denmark, M.N. Tsampas, T. Stoll, G. Zafeiropoulos, I. Dogan, H. Genuit, *Innovative photoelectrochemical cells based on polymeric membrane electrolytes (PEM-PEC) and suitable porous photoanodes*, Poster
81. *21st Topical meeting of the International Society of Electrochemistry 2017*, 2017/04/23 - 2017/04/26, Szeged, Hungary, M.N. Tsampas, T. Stoll, H. Genuit, B. Koopmans, R. Lavrijsen, G. Zafeiropoulos, *Innovative photoelectrochemical cells based on polymeric membrane electrolytes and suitable porous photoanodes*, Oral, Wed s5
82. *Renewable Energy Driven Chemistry Workshop*, 2017/04/05, Eindhoven, Netherlands, M.N. Tsampas, T. Stoll, G. Zafeiropoulos, *Valorization of H₂O and CO₂ in novel photoelectrochemical cells*, Oral
83. *Renewable Energy Driven Chemistry Workshop*, 2017/04/05, Eindhoven, Netherlands, M.N. Tsampas, *Vibrationally stimulated electro-fuelproduction (VISEP)*, Oral
84. *ISPC 2017, 23rd International Symposium on Plasma Chemistry*, 2017/07/30 - 2017/08/04, Montreal, Canada, T. Verreycken, F. D'Isa, M.C.M. van de Sanden, E. Carbone, W. Bongers, *Time resolved optical emission spectroscopy of a pulsed CO₂ microwave discharge*, Poster, P1-30-1
85. *Physics@FOM Veldhoven 2017*, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, T. Verreycken, D.C.M. van den Bekerom, P.M.J. Koelman, J. van Dijk, G.J. van Rooij, W.A. Bongers, M.C.M. van de Sanden, *Investigation of a pulsed CO₂ microwave discharge by time resolved optical emission spectroscopy*, Poster, P8.017
86. *ISPC 2017, 23rd International Symposium on Plasma Chemistry*, 2017/07/30 - 2017/08/04, Montreal, Canada, H.W. de Vries, S.A. Starostin, W. van Baak, M.C.M. van de Sanden, *Plasma polymerisation of 4-vinylpyridine in a roll-to-roll atmospheric plasma reactor*, Poster, P1-79-5

87. 41th Annual Meeting NNV AMO (Division of Atomic, Molecular, and Optical Physics) 2017, 2017/10/10 - 2017/10/11, Lunteren, Netherlands, S. Wang, Q. Le Van, M. Ramezani, N. van Hoof, J. Gomez Rivas, Luminescent detector assisted by plasmonic nanoantenna arrays for free space opticalcommunication, Poster, P67
88. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, S. Wang, Q. Le Van, M. Ramezani, A. Halpin, J. Gomez Rivas, Enhanced strong light-matter coupling with plasmonic arrays, Poster, P1.016
89. 20th Workshop on the Exploration of Low-Temperature Plasma Physics (WELTPP-20), 2017/11/30 - 2017/12/01, Kerkrade, The Netherlands, A.J. Wolf, M.C.M. van de Sanden, Validation of He-H₂O Global Model with experiment, Poster, P19
90. ISPC 2017, 23rd International Symposium on Plasma Chemistry, 2017/07/30 - 2017/08/04, Montreal, Canada, A.J. Wolf, S. Ponduri, G. van Rooij, M.C.M. van de Sanden, W.A. Bongers, Implementation of microwave phase-shift as a diagnostic for electron density measurements in a reactive CO₂ microwave plasma, Poster and Poster Pitch, P1-14-1
91. 29th Symposium Plasma Physics and Radiation Technology, 2017/03/07 - 2017/03/08, Lunteren, The Netherlands, A.J. Wolf, J. Toonen, S. Ponduri, M.C.M. van de Sanden, W.A. Bongers, Application of 140 GHz microwave interferometry to electron density diagnostics in a microwave plasma, Poster, B19
92. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, A.J. Wolf, W. Bongers, T. Verreycken, M.C.M. van de Sanden, Effect of flow dynamics on CO₂ dissociation in a microwave plasma, Oral, PW6.2
93. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, G. Zafeiropoulos, T. Stoll, I. Dogan, J.W. Genuit, M.N. Tsampas, Solid state photoelectrochemical cells for hydrogen production, Poster
94. CO₂ Capture and Utilisation Workshop 2017, 2017/02/05 - 2017/02/08, Kuala Lumpur, Malaysia, G. Zafeiropoulos, T. Stoll, M.N. Tsampas, CO₂ electroreduction in a novel photoelectrochemical Cell, Oral
95. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, G. Zafeiropoulos, T. Stoll, M.N. Tsampas, Polymeric electrolyte photoelectrochemical cell for solar fuels, Poster, P3.070
96. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, X. Zhang, A. Bieberle, Optimizing Photoelectrodes for Water Oxidation by Density Functional Theory, Oral, 80
97. Computational Sciences for Future Energy conference 2017, 2017/09/19 - 2017/09/20, Eindhoven, Netherlands, X.Q. Zhang, M.C.M. van de Sanden, E.J. Meijer, D. Sun, A. Bieberle, Computational Design of Efficient Photoelectrode for Water Oxidation, Oral
98. 68th annual meeting of the International Society of Electrochemistry 2017, 2017/08/27 - 2017/09/01, Providence, RI, USA, X.Q. Zhang, A. Bieberle, Computational Design of Efficient Photoelectrode for Water Oxidation, Oral
99. E-MRS Spring Meeting 2017, 2017/05/22 - 2017/05/26, Strasbourg, France, X.Q. Zhang, M.C.M. van de Sanden, A. Bieberle, Simulation of Oxygen Evolution at Hematite Surfaces: the Impact of Structure and Local Chemistry, Oral
100. Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, X.Q. Zhang, M.C.M. van de Sanden, A. Bieberle, Simulations of Water Oxidation at Hematite Surfaces, Poster
101. Physics@FOM Veldhoven 2017, 2017/01/17 - 2017/01/18, Veldhoven, Netherlands, X.D. Zhang, M.C.M. van de Sanden, A. Bieberle, Towards computational design of hematite photoelectrodes for water oxidation, Oral, PT5.4
102. CHAINS: Chemistry matters for the future, 2017/12/05 - 2017/12/07, Veldhoven, Netherlands, Y. Zhao, H. Genuit, S. Balasubramanyam, E. Zoethout, R. Lavrijsen, A.A. Bol, A. Bieberle, Understanding of n+ Si/WO₃ Heterojunction in PEC Water Splitting, Poster
103. Material and Device Innovations for the Practical Implementation of Solar Fuels (SolarFuel17), 2017/09/04 - 2017/09/08, Barcelona, Spain, Y. Zhao, S. Balasubramanyam, A.A. Bol, A. Bieberle, WO₃ Thin Films Fabricated by Radio Frequency Sputtering and by Atomic Layer Deposition for Water Splitting, Oral
104. Renewable Energy Driven Chemistry Workshop, 2017/04/05, Eindhoven, Netherlands, Y. Zhao, R. Sinha, M.C.M. van de Sanden, A. Bieberle, Structural and Photo-electrochemical Properties of WO₃ Thin Films Fabricated in Diverse Partial Pressures of Oxygen, Poster

Lectures and courses: 2

1. TU/e course Nanophotonics, 2016/03/29, Eindhoven, Netherlands, A. Baldi, Plasmonics for Chemistry 1. Fontys lecture, 2017/05/12, Eindhoven, Netherlands, A. Baldi, Plasmonic Metal Nanoparticles
2. TU/e course Nanophotonics, 2017/03/28, Eindhoven, Netherlands, A. Baldi, Plasmonics for Chemistry

Seminars: 9

1. *Seminar University of Twente, 2017/07/12, Enschede, Netherlands, A. Baldi, Plasmonics for Chemistry: sensing and controlling chemical reactions using plasmons*
2. *High Tech Campus (English spoken) Open Lecture, 2017/09/12, Eindhoven, Netherlands, J. Gomez Rivas, Nanostructured surfaces for solid state lighting and strong light-matter coupling*
3. *Seminar AMOLF, 2017/02/06, Amsterdam, Netherlands, R.A.J. Janssen, Organic and hybrid thin film solar cells*
4. *Seminar Karlstads Universitet, 2017/02/03, Karlstad, Sweden, R.A.J. Janssen, Introduction lecture: Materials and device engineering for efficient and stable polymer solar cells*
5. *Seminar Brightlands Chemelot Campus, 2017/01/25, Geleen, Netherlands, R.A.J. Janssen, Organic and hybrid thin film solar cells*
6. *Beijing University SynCat/Synfuels Seminar, 2017/04/27, Beijing, China, M.C.M. van de Sanden, Dutch Institute for Fundamental Energy Research*
7. *Physics Colloquium, Eindhoven University of Technology, 2017/01/26, Eindhoven, Netherlands, M.C.M. van de Sanden, Plasma non-equilibrium at work: key to success of energy technologies?*
8. *Seminar Harvard University, Computational Physics and Materials Theory Group, 2017/08/28, Cambridge, MA, USA, X.Q. Zhang, M.C.M. van de Sanden, A. Bieberle, Modeling Oxygen Evolution at Hematite Surfaces*
9. *Seminar Laboratory For Electrochemical Interfaces, Massachusetts Institute of Technology, 2017/08/14, Cambridge, MA, USA, X.Q. Zhang, M.C.M. van de Sanden, A. Bieberle, Computational Design of Hematite Photoelectrode for Water Oxidation*

Public events & industry contacts: 11

1. *TU/e Docentendag Scheikundige Technologie, 2017/02/01, Eindhoven, Netherlands, A. Baldi, Plasmonics for Chemistry*
2. *Themadag Elektrochemische Conversie Materialen, Dutch Ministry of Economic Affairs, 2017/01/27, The Hague, Netherlands, M.A. Gleeson, CO₂ neutral fuels*
3. *Young Brainport Summer School, 2017/08/22, Eindhoven, Netherlands, R.A.J. Janssen, Solar cells: how do they work?*
4. *Kon. Vereniging voor Natuurkunde Diligentia, 2017/01/09, Den Haag, Netherlands, R.A.J. Janssen, Organische en hybride zonnecellen*
5. *VoltaChem annual event (Electrification of the Chemical Industry), 2017/11/09, Vlaardingen, Netherlands, E. Langereis, Future perspectives: Upcoming disruptive technologies, Break-out session chair*
6. *Presentation on 2nd Groene Netwerkborel of Waalre Energie Lokaal (WEL), 2017/10/25, Waalre, Netherlands, E. Langereis, The Energy Transition - The role of CO₂-neutral fuels and chemicals*
7. *Lecture for high school teachers, Preparations 6th Fusion Days, Antwerp University, 2017/09/27, Antwerp, Belgium, E. Langereis, Dutch Institute for Fundamental Energy Research - Shaping Future Energy*
8. *TU/e Masterclass Fusion Energy, 2017/06/12, Eindhoven, Netherlands, E. Langereis, The Energy Transition - the role of CO₂-neutral fuels*
9. *Citizen's debate by Wij in de Stad on 'Duurzaamheid in de stad', 2017/04/05, Eindhoven, Netherlands, E. Langereis, De urgentie van de energietransitie*
10. *Lecture for lectors, Preparations 6th Fusion Days, Antwerp University, 2017/09/27, Antwerp, Belgium, G. van Rooij, "Efficiëntie is de uitdaging!"*
11. *Dutch Parliament Members visit Brabant/Eindhoven on Energy Transition, 2017/10/23, Eindhoven, Netherlands, M.C.M. van de Sanden, Recent Developments in Energy Technology*

Awards: 2

1. *I. Dogan, Jan Terlouw Ambition Prize 2017 for NaSTOR project to develop sodium-based batteries, 2017*
2. *A. Meshkova, Best Poster Pitch Award at the 23rd International Symposium on Plasma Chemistry ISPC 2017, Montreal, Canada, 30 July-4 August, 2017*

Positions: 49

1. A. Bieberle, M.N. Tsampas, W. Bongers, E. Langereis, M.C.M. van de Sanden, Member Organisational Committee of Renewable Energy Driven Chemistry workshop, April 5th, 2017, DIFFER, Eindhoven, Netherlands, 2017
2. A.P.H. Goede, Member Advisory Board of the EC Horizon 2020 ECRJA project BALANCE (since 2017), 2017
3. A.P.H. Goede, Member of the Editorial Board of Euro Physics News (since 2010), Editorship, 2017
4. A.P.H. Goede, Coordinator European EERA Joint Programme Energy Storage, Subprogram 2 Chemical Energy Storage (since 2017), 2017
5. A.P.H. Goede, Member of the Science Advisory Board of the German BMBF KOPERNIKUS 10 year Programme P2X (since 2016), 2017
6. A.P.H. Goede, Fellow of European Physical Society (since 2011), 2017
7. J. Gomez Rivas, Member Programme Committee CLEO 2017 Conference on Lasers and Electro-optics, Munich, Germany, 2017
8. J. Gomez Rivas, Management team member of the TU/e research school COBRA, 2017
9. J. Gomez Rivas, Member scientific committee E-MRS Fall meeting 2017, Warsaw, Poland, 2017
10. J. Gomez Rivas, Associate Editor of the Journal of Applied Physics (since 2015), Editorship, 2017
11. E. Langereis, Secretary of the NWA Route Energy Transition to input the Dutch Science Policy, 2017
12. E. Langereis, G.J. van Rooij, Member of the Editorial Board of Nederlands Tijdschrift voor de Natuurkunde, Editorship, 2017
13. E. Langereis, Co-organizer TU/e Energy Days (since 2013), 2017
14. E. Langereis, Member of NERA working group (Netherlands Energy Research Alliance), 2017
15. G.J. van Rooij, International Scientific Advisory Committee International Summer School on Vacuum, Electron and Ion Technologies VEIT (since 2015), 2017
16. G.J. van Rooij, Member of the Organisational Committee of the Annual Dutch Symposium on Plasma Physics & Radiation Technology, Lunteren, 2017
17. G.J. van Rooij, Lecturer Course series Plasma Surface Interactions at Eindhoven University of Technology (since 2009), 2017
18. M.C.M. van de Sanden, KNAW committee member Large research infrastructure (since 2015), 2017
19. M.C.M. van de Sanden, Member Advisory Committee of International Conference on Reactive Plasmas (ICRP) (since 2014), 2017
20. M.C.M. van de Sanden, Delegation Leader Innovation Mission Industrial Electrification and Power-2-X to North Rhein Westfalia, Germany, 13-15 Sep, 2017, 2017
21. M.C.M. van de Sanden, Chair Advisory Committee ECCM (Elektrochemische Conversie & Materialen) of Dutch Top Research Sections Energy, Chemistry and HTSM, 2017
22. M.C.M. van de Sanden, Parttime professorship in the Department of Applied Physics (since 2011 after fulltime since 2000), 2017
23. M.C.M. van de Sanden, KNAW committee member Jury new members Science Division (since 2014), 2017
24. M.C.M. van de Sanden, Member of the Scientific Advisory Council (SAC) of the Helmholtz Zentrum Berlin für Materialien und Energie (2011-2018), 2017
25. M.C.M. van de Sanden, Member Advisory Board SAIAMC South African Institute for Advanced Materials Chemistry (since 2015), 2017
26. M.C.M. van de Sanden, KNAW committee chair on advice Impact in kaart (2017-2018), 2017
27. M.C.M. van de Sanden, Board member TKI Gas, Groningen (since 2014), 2017
28. M.C.M. van de Sanden, Senior Advisory Board Member of Plasma Sources: Science and Technology (since 2005, Senior since 2014), 2017
29. M.C.M. van de Sanden, Chair STT-Advisory committee Dutch policy report Electrochemical Conversion and Materials ECCM, 2017
30. M.C.M. van de Sanden, KNAW committee member Raad voor Natuur- en Technische Wetenschappen (RNTW) (since 2017), 2017
31. M.C.M. van de Sanden, Nederlandse Natuurkundige Vereniging (NNV) vertegenwoordigend lid in de EPS divisie Energie, 2017
32. M.C.M. van de Sanden, Member of the Editorial Board of the Journal "Applied Sciences" (since 2016), Editorship, 2017
33. M.C.M. van de Sanden, KNAW committee member Evaluation elections new members (since 2014), 2017
34. M.C.M. van de Sanden, Member of the Euratom Programme Committee (Fusion) (since 2014), 2017
35. M.C.M. van de Sanden, Fellow of the International Plasma Chemistry Society (since 2017), 2017
36. M.C.M. van de Sanden, International Advisory Board for the journal Plasma Processes and Polymers (since 2002), 2017
37. M.C.M. van de Sanden, G.J. van Rooij, Member International Advisory Committee Summer school on Vacuum, electron and ion technologies, Sozopol, Bulgaria (in 2017), 2017

38. *M.C.M. van de Sanden, Member International Scientific Committee 17th Conference on Plasma Physics and Applications (17th CPPA), June 15-20, 2017, Bucharest, Romania (since 2017), 2017*
39. *M.C.M. van de Sanden, Organizer AVS Conference - Program: Plasma Science and Technology division (since 2012), 2017*
40. *M.C.M. van de Sanden, Member WEST Governance Board in France (since 2014), 2017*
41. *M.C.M. van de Sanden, Scientific Advisory Board member Nanolab@TU/e TU Eindhoven (since 2013), 2017*
42. *M.C.M. van de Sanden, S. Welzel, Consultants to PREMIERE Project - CO₂ Plasmas: a fRiEndly MEdium for Renewable Energy (since 2016), 2017*
43. *M.C.M. van de Sanden, Member of the EASAC Energy Steering Panel (European Academies) (since 2014), 2017*
44. *M.C.M. van de Sanden, Chair of the Summer school on Vacuum, electron and ion technologies, Sozopol, Bulgaria (since 2013), 2017*
45. *M.C.M. van de Sanden, Chairman Scientific Board Netherlands Energy Research Alliance (NERA) (since 2017), 2017*
46. *M.C.M. van de Sanden, Member of the Royal Netherlands Academy of Arts and Sciences (KNAW) (since 2013), 2017*
47. *M.C.M. van de Sanden, Member Koninklijke Hollandsche Maatschappij der Wetenschappen (since 2010), 2017*
48. *S. Welzel, Lecturer Course series Plasma Processing Science and Technology at Eindhoven University of Technology: Infrared Absorption Spectroscopy: Theory, techniques & applications (since 2014), Oral, 2017*
49. *S. Welzel, Member of the Organizing Committee of the Workshop on the Exploration of Low Temperature Plasma Physics, Kerkrade, Netherlands (since 2012), 2017*

Media: 8

1. *Photonics expert Jaime Gómez Rivas (DIFFER) wins prestigious Vici grant, e52.nl, 2017/02/18, Interview with: J. Gomez Rivas*
2. *Photonics-expert Jaime Gómez Rivas krijgt Vici-beurs, TU/e Cursor, 2017/02/17, Interview with: J. Gomez Rivas*
3. *Eindhovens energie-instituut ontvangt beurs van 1,5 miljoen euro, Eindhovens Dagblad, 2017/02/17, Interview with: J. Gomez Rivas*
4. *Photonics specialist Jaime Gómez Rivas wins major research grant, photondelta.eu, 2017/02/17, Interview with: J. Gomez Rivas*
5. *Eindhovense onderzoekers maken nano-laser, 2017/07/16, Interview with: M. Ramezani, J. Gomez Rivas*
6. *Onderzoekers maken laser op nanoschaal bij kamertemperatuur, EngineersOnline.nl, 2017/01/16, Interview with: M. Ramezani, J. Gomez Rivas*
7. *Sommige Duitse huishoudens rijden niet alleen op waterstof, ze koken en stoken er ook op, Quest, 2017/10/25, Interview with: M.C.M. van de Sanden*
8. *Nuttig CO₂, NEMO Kennislink, 2017/05/23, Interview with: M.C.M. van de Sanden*