List of Publications - Peter Stallinga

Updated: 18-VIII-2011

I: Books (monographs):

Monograph: **Electronic Instrumentation**, *Peter Stallinga*, Lulu (2012).

Monograph: **De Mythe van Klimaatsveranderingen (Dutch)**, *Peter Stallinga*, Lulu (2010).
ISBN: 978-1-4461-3493-1.

Monograph: **Electrical Characterization of Organic Electronic Materials and Devices**, *Peter Stallinga*, Wiley (2009).
ISBN: 978-0470750094.

II: Refereed Publications:

Article	*Impact Factor**
Gold-active-layer Transistor Circuits, J. Bastos and P. Stallinga, J. Act. Passive Electr. Dev. (2013).	?
Trap levels in the atomic layer deposition-ZnO/GaN heterojunction-Thermal admittance spectroscopy studies, Tomasz A. Krajewski, *Peter Stallinga*, Eunika Zielony, Krzysztof Goscinski, Piotr Kruszewski, Lukasz Wachnicki, Timo Aschenbrenner, Detlef Hommel, Elzbieta Guziewicz, Marek Godlewski, J. Appl. Phys 113, 194504 (2013). doi: 10.1063/1.4805655.	2.168
Electronic Transport in Organic Materials: Comparison of Band Theory with Percolation/(Variable Range) Hopping Theory, *P. Stallinga*, Adv. Mater. **23**, 3356 (2011). doi: 10.1002/adma.201101129.	10.857
Resistive switching in nanostructured thin films, H. Silva, H. L. Gomes, Yu. G. Pogorelov, *P. Stallinga*, D. M. de Leeuw, J. P. Araujo, J. B. Sousa, S. C. J. Meskers, G. Kakazei, S. Cardoso, P. P. Freitas, Appl. Phys. Lett. **94**, 202107 (2009). doi: 10.1063/1.3134484.	4.308

Determining carrier mobility with a metal-insulator-semiconductor structure, *P. Stallinga*, A. R. V. Benvenho, E. C. P. Smits, S. G. J. Mathijssen, M. Cölle, H. L. Gomes, D. M. de Leeuw, Org. Electron. **9**, 735 (2008). doi: 10.1016/j.orgel.2008.05.007.	4.308
Piezoelectric biosensors assisted with electroacoustic impedance spectroscopy: A tool for accurate quantitative molecular recognition analysis, João M. Encarnação, *Peter Stallinga*, Guilherme N. M. Ferreira, J. Molec. Recognit. 22, 129 (2009). doi: 10.1002/jmr.907	3.712
Metal-insulator-metal transistor, *P. Stallinga*, V. A. L. Roy, Z.-X. Xu, C.-M. Che, Adv. Mater. **20**, 2120 (2008). doi: 10.1002/adma.200702525.	9.11
Space-separated quantum cutting with Si nanocrystals for photovoltaic applications, D. Timmerman, I. Izeddin, *P. Stallinga*, I.N. Yassievich, T. Gregorkiewicz, Nature Photonics **2**, 105 (2008). doi: 10.1038/nphoton.2007.279.	24.982
Switching in polymeric resistance random-access memories (RRAMS), H. L. Gomes, A. R. V. Benvenho, D. M. de Leeuw, M. Cölle, *P. Stallinga*, F. Verbakel. D. M. Taylor, Org. Electron. **9**, 119 (2008). doi:10.1016/j.orgel.2007.10.002.	3.636
Nanocomposite field effect transistors based on zinc oxide/polymer blends, Zong-Xiang Xu, V. A. L. Roy, *Peter Stallinga*, Michele Muccini, Chi-Ming Che, Appl. Phys. Lett. **90**, 223509 (2007).	4.308
Metal contacts in thin-film transistors, *P. Stallinga*, H. L. Gomes, Org. Electron. **8**, 300 (2007).	3.636
Thin-film field-effect transistors: the effects of traps on the bias and temperature dependence of mobility, including the Meyer-Neldel rule, *P. Stallinga*, H. L. Gomes, Organic Electronics **7**, 592 (2006).	3.636
Modeling electrical characteristics of thin-film field-effect transistors. I: Trap-free materials, *P. Stallinga*, H. L. Gomes, Synthetic Metals **156**, 1305 (2006).	1.278
Modeling electrical characteristics of thin-film field-effect transistors. II: Effects of traps and impurities, *P. Stallinga*, H. L. Gomes, Synthetic Metals **156**, 1316 (2006).	1.278

Influence of electrolytes in the QCM response: Discrimination and quantification of the interference to correct microgravimetric data, João M. Encarnação, *Peter Stallinga*, Guilherme N. M. Ferreira, Biosensors and Bioelectronics 22, 1351 (2007).	3.251
Electrical instabilities in organic semiconductors caused by trapped supercooled water, H. L. Gomes, *P. Stallinga*, M. Cölle, D. M. de Leeuw, and F. Biscarini, Appl. Phys. Lett. **88**, 082101 (2006).	4.308
Trap states as an explanation for the Meyer-Neldel rule in organic semiconductors, *P. Stallinga*, H. L. Gomes, Organic Electronics **6**, 137 (2005).	3.636
Tetracene-based organic light-emitting transistors: optoelectronic properties and electron injection mechanism, C. Santato, R. Capelli, M. A. Loi, M. Murgia, F. Cicoira, V. A. L. Roy, *P. Stallinga*, R. Zamboni, C. Rost, S. F. Karg and M. Muccini, Synthetic Metals **146**, 329 (2004).	1.278
Bias-Induced threshold voltages shift in thin-film organic transistors, H. L. Gomes, *P. Stallinga*, F. Dinelli, M. Murgia, F. Biscarini, D. M. De Leeuw, T. Muck, J. Geurts, L. W. Molenkamp, V. Wagner, Appl. Phys. Lett. **84**, 3184 (2004).	4.308
Electronic transport in field-effect transistors of sexithiophene, *P. Stallinga*, H. L. Gomes, F. Biscarini, M. Murgia, D. M. De Leeuw, J. Appl. Phys. **96**, 5277 (2004).	2.255
Silicon vacancy containing two hydrogen atoms studied with electron paramagnetic resonance and infrared absorption spectroscopy, P. Johannesen, R. Jakobsen, *P. Stallinga*, B. B. Nielsen, J. R. Byberg, Phys. Rev. B **66**, 235201 (2002).	3.075
Interface state mapping in a Schottky barrier of the organic semiconductor terrylene, *P. Stallinga*, H. L. Gomes, M. Murgia, K. Müllen, Org. Electr. **3**, 43 (2002).	3.636
Minority-carrier effects in poly-phenylenevinylene as studied by electrical characterization, *P. Stallinga*, H. L. Gomes, H. Rost, A. B. Holmes, M. G. Harrison, and R. H. Friend, J. Appl. Phys. **89**, 1713 (2001).	2.255
Analysis of deep levels in a phenylenevinylene polymer by transient capacitance methods, H. L. Gomes, *P. Stallinga*, H. Rost, A. B. Holmes, M. G. Harrison, and R. H. Friend, Appl. Phys. Lett. **74**, 1144 (1999).	4.308

Electron Paramagnetic Resonance Study of Hydrogen-Vacancy Defects in Crystalline Silicon, *P. Stallinga*, P. Johannesen, S. Herstrøm, K. Bonde Nielsen, B. Bech Nielsen, and J. R. Byberg, Phys. Rev. B **58**, 3842 (1998).	3.075
Origin of the Magnetic Circular Dichroism of Absorption of the Arsenic Antisite in GaAs and $Al_xGa_{1-x}As$, A. Prasad, *P. Stallinga*, X. Liu, E.R. Weber, Rapid Comm. of Phys. Rev. **B 57**, R4214 (1998).	3.075
Comment on "Microscopic Identification and Electronic Structure of a Di-Hydrogen-Vacancy Complex in Silicon by Optical Detection of Magnetic Resonance", *P. Stallinga*, B. B. Nielsen, Phys. Rev. Lett. **80**, 422 (1998).	7.218
Identification of the Silicon Vacancy Containing a Single Hydrogen Atom by EPR, B. B. Nielsen, P. Johannesen, *P. Stallinga*, K. B. Nielsen, and J. R. Byberg, Phys. Rev. Lett. **79**, 1507 (1997).	7.218
Electron-paramagnetic-resonance Study of Se-Doped AlSb: Evidence for Negative-U of the DX Center, *P. Stallinga*, W. Walukiewicz, E. R. Weber, P. Becla, and J. Lagowski, Rapid Comm. of Phys. Rev. **B 52**, R8609 (1995).	3.075
Investigation Of Selected Paramagnetic Centers In Semiconductors, Academisch Proefschrift (PhD Thesis), *Peter Stallinga*, University of Amsterdam (14-VII-1994).	-
Electron Paramagnetic Resonance of Molecular Hydrogen in Silicon, *P. Stallinga*, T. Gregorkiewicz, C. A. J. Ammerlaan, and Yu. V. Gorelkinskii, Phys. Rev. Lett. **71**, 117 (1993).	7.218
Electron Paramagnetic Resonance Study of the NL51 Spectrum in Hydrogen Implanted Silicon, *P. Stallinga*, T. Gregorkiewicz, C. A. J. Ammerlaan, and Yu. V. Gorelkinskii, Solid State Commun. **90**, 401 (1994). doi:10.1016/0038-1098(94)90808-7	1.523
K. L. Brower, S. M. Myers, A. H. Edwards, N. M. Johnson, *P. Stallinga*, T. Gregorkiewicz, and C. A. J. Ammerlaan, Phys. Rev. Lett. **73**, 1456 (1994).	7.218
Magnetic Resonance Study of Tellurium-Doped $Al_xGa_{1-x}As$, M. Surma, Z. R. Żytkiewicz, K. Fronc, *P. Stallinga*, and M. Godlewski, Phys. Rev. B **50**, 2645 (1994).	3.075

III: International conferences with refereed publications:

Electrical characterization of organic (amorphous) electronic materials, *Peter Stallinga*, Phys. Stat. Sol. (2013).	
Climate Change Policies for the XXIst Century: Mechanisms, Predictions and Recommendations, I. Khmelinskii, *P. Stallinga*, Int. J. Energy Environ. **4**, 237 (2010).	
Spatially-Resolved Photocapacitance Measurements to Study Defects in a-Si:H Based p-i-n Particle Detectors, C. Casteleiro, R. Schwarz, A. Maçarico, J. Martins, M. Vieira, F. Wuensch, M. Kunst, E. Morgado, *P. Stallinga*, H. Gomes, Thin Solid Films **516**, 5118 (2008). doi: 10.1016/j.tsf.2008.01.012	
Study of trap states in zinc oxide (ZnO) thin films for electronic applications , C. Casteleiro, H. L. Gomes, *P. Stallinga*, L. Bentes, R. Ayouchi, R. Schwarz, J. Non-Crystal. Solids **354**, 2519 (2008). doi: 10.1016/j.jnoncrysol.2007.10.059	
Photocapacitance measurements in irradiated a-Si : H based detectors, R. Schwarz, U. Mardolcar, Y. Vygranenko, M. Vieira, C. Casteleiro, *P. Stallinga*, H. L. Gomes, L. Bentes, R. Ayouchi, , J. Non-Crystal. Solids **354**, 2176 (2008). doi: 10.1016/j.jnoncrysol.2007.09.049	
Nanocomposite field effect transistors based on Zinc oxide/polymer blends, Vellaisamy A. L. Roy, Zong-Xiang Xu, *Peter Stallinga*, Hai-Feng Xiang, Beiping Yan and Chi-Ming Che, , Microprocesses and Nanotechnology, 2007 Digest of papers, 104 (2007). doi: 10.1109/IMNC.2007.4456126	
The effect of water related traps on the reliability of organic based transistors, H. L. Gomes, *P. Stallinga*, M. Colle, F. Biscarini, and D. M. de Leeuw, J. Non-Crystalline Solids **352**, 1761 (2006). doi: 10.1016/j.jnoncrysol.2005.10.069	1.264
Organic Materials for Active Layers in Transistors: Study of the Electrical Stability Properties, H. L. Gomes, *P. Stallinga*, and D. M. de Leeuw, Mat. Sci. Forum **514-516**, 33 (2006).	0.498
Light-emitting thin-film field-effect transistors, *P. Stallinga*, H. L. Gomes, Optica Applicata **36**, 373 (2006).	0.308
Meta-stability effects in organic based transistors, H. L. Gomes, *P. Stallinga*, F. Dinnelli, M. Murgia, F. Biscarini, D. M. De Leeuw, Proceedings of the Intern. Symposium "Technologies of Polymer Electronics TPE 04", Rudolstadt/Germany, 28.-30.09.2004, P 105-110.	-

Explanation of the Meyer-Neldel Rule, *P. Stallinga* and H. L. Gomes, TProceedings of the Intern. Symposium "Technologies of Polymer Electronics TPE 04", Rudolstadt/Germany, 28.-30.09.2004, P 125-129.	-
A microelectrode impedance method to measure interaction of cells, H. L. Gomes, R. B. Leite, R. Afonso, *P. Stallinga* and M. L. Cancela, Proceedings of IEEE Sensors 2004, p. 1011-1013 (2004). doi: 10.1109/ICSENS.2004.1426344	?
Detection of explosive vapors using organic thin-film transistors, E. Bentes, H. L. Gomes, *P. Stallinga*, Proceedings of IEEE Sensors 2004, p. 766-769 (2004). doi: 10.1109/ICSENS.2004.1426281	?
TNT sensor using thin film transistors, E. Bentes, R. Luis, H. L. Gomes, *P. Stallinga*, L. Moura, submitted for publication, 8th Portuguese-Spanish Congress in Electrical Engineering (2003).	-
Electrical characterization of organic-based transistors: stability issues, invited talk PAT conference, H. L. Gomes, *P. Stallinga*, F. Dinelli, M. Murgia, F. Biscarini, D. M. de Leeuw, M. Muccini, K. Müllen, Polymers for Adv. Technol. **16**, 227 (2005).	1.083
Electrical characterization of pn-junctions of PPV and silicon, *P. Stallinga*, H. L. Gomes, A. Charas, J. Morgado, and L. Alcácer, Synth. Metals **121**, 1535 (2001).	1.278
Electrical characterization of CVD diamond-n+ silicon junctions, A. M. Rodrigues, *P. Stallinga*, L. Pereira, E. Pereira, Diamond and Relat. Mater. **10**, 858 (2001).	1.670
Determination of deep and shallow levels in conjugated polymers by electrical methods, *Peter Stallinga*, H. L. Gomes, H. Rost, A. B. Holmes, M. G. Harrison, R. H. Friend, F. Biscarini, C. Taliani, G. W. Jones, D. M. Taylor, Physica B **274**, 923 (1999).	0.679
Electronic levels in MEH-PPV, *P. Stallinga*, H. L. Gomes, H. Rost, A. B. Holmes, M. G. Harrison, and R. H. Friend, Synthetic Metals **111**, 535 (2000).	1.278
Electrical Study of Impurity States in Conjugated Polymers, *P. Stallinga*, H. L. Gomes, G. W. Jones and D. M. Taylor, Synthetic Metals **101**, 496 (1999).	1.278
Electrical Characterization of Semiconducting Polymers, *P. Stallinga*, H. L. Gomes, G. W. Jones, and D. M. Taylor, Acta Phys. Pol. A **94**, 545 (1998).	0.495

A Study of the Di-Hydrogen-Monovacancy defect in Silicon, *P. Stallinga* and B. B. Nielsen, Acta Phys. Pol. A **92**, 989 (1997).	0.495
Identification of VH in Silicon by EPR, P. Johannesen, J. R. Byberg, Brian Bech Nielsen, *Peter Stallinga*, and K. Bonde Nielsen, Mat. Sci. Forum **258-263**, 515 (1997).	0.498
Electron Paramagnetic Resonance Study of Hydrogen-Implanted Silicon, *P. Stallinga*, P. Johannesen, B.B. Nielsen, K.B. Nielsen, and J.R. Byberg. Proceedings of the 23rd International Conference on The Physics of Semiconductors, ed. by M. Scheffler and R. Zimmermann, p. 2589, (World Scientific, Singapore 1996).	-
Magnetic Circular Dichroism of Low-Temperature-Grown $\mathbf{Al_xGa_{1-x}As}$, A. Prasad, X. Liu, *P. Stallinga*, E. R. Weber, A. K. Verma, and J. S. Smith, Materials Research Soc. Symp. Proc. **378**, 207 (1995).	-
Electron-paramagnetic-resonance Study of Se-Doped AlSb: Evidence for Negative-U of the DX Center, *P. Stallinga*, W. Walukiewicz, E. R. Weber, P. Becla, and J. Lagowski, the XXIV International School on Physics in Semiconducting Compounds, Jaszowiec, Poland (1995), Acta Phys. Pol. **A 88**, 1043 (1995).	0.495
Investigation of a Possible Relation Between the Silicon-Interface Pb and Molecular Hydrogen, *P. Stallinga*, T. Gregorkiewicz, and C. A. J. Ammerlaan, oral presentation at the 22nd ICPS, Vancouver, Canada (1994). Conference Proceedings, vol. **3**, p. 2235.	-
EPR Identification of Hydrogen Molecules in Bulk Silicon, *P. Stallinga*, T. Gregorkiewicz, C. A. J. Ammerlaan, and Yu. V. Gorelkinskii, invited talk at ICDS-17, Gmunden 1993, Materials Science Forum **143-147**, 853 (1994).	0.498
Trapping of Molecular Hydrogen in Porous Silicon and at $\mathbf{Si/SiO_2}$ Interfaces and a possible reinterpretation of the P_b Center, *Peter Stallinga*, T. Gregorkiewicz, and C. A. J. Ammerlaan, Mat. Res. Soc. Symp. Proc. 324, **385** (1994).	-
Photo-ESR Study of the DX Shallow Donor Conversion in Te Doped $\mathbf{Al_xGa_{1-x}As}$, M. Surma, Z. R. Zytkiewicz, K. Fronc, *P. Stallinga*, and M. Godlewski, Acta Physica Polonica **A 84**, 757 (1993).	0.495
Electron Paramagnetic Resonance Study of New Centers in SiC, *P. Stallinga*, T. Gregorkiewicz, and C. A. J. Ammerlaan, Materials Science and Engineering **B 11**, 35 (1992).	0.924

* Impact Factor source: Web of Knowledge, Journal Citation Reports visited May 2006.

IV: Unrefereed publications:

Phase relation between global temperature and atmospheric carbon dioxide, *Peter Stallinga*, Igor Khmelinskii, arXiv:1311.2165 [physics.ao-ph]

Mathematical Analysis of Money in the Scope of Austerity, *Peter Stallinga*, arXiv:1305.5373 [q-fin.GN]

V: Work in progress:

Book (monographs): **Electronic Instrumentation**, *Peter Stallinga*

Article: **Rapid and reliable stress-evaluation tool**, *Peter Stallinga*