

Lijst van Publicaties van V.O. de Haan

1. 'Fast sound in a helium-neon mixture determined by neutron scattering', W. Montfrooij, P. Westerhuijs, V.O. de Haan and I.M. de Schepper, Phys. Rev. Lett. **63** (1989) 544-546.
2. 'Testing a multilayer mirror system in use for polarized neutrons', V.O. de Haan, W.H. Kraan and A.A. van Well, Nucl. Instrum. Methods in Phys. Res. A **289** (1990) 17-29.
3. 'The average number of reflections in a curved neutron guide', A.A. van Well, V.O. de Haan, D.F.R. Mildner, Nucl. Instrum. Methods in Phys. Res. A **309** (1991) 284-286.
4. 'Stacked neutron guides at IRI, Delft', A.A. van Well, V.O. de Haan and M.Th. Rekveldt, Neutron News **2 no. 3** (1991) 28-30.
5. 'Performance of an area scintillator detector', V.O. de Haan and A.A. van Well, SPIE **1737** (1992) 264-275.
6. 'A quasi-elastic neutron scattering study of the ammonium ions in CsNH₄-Y zeolite', W.P.J.H. Jacobs, V.O. de Haan, R.A. van Santen and L.A. de Graaf, J. Phys. Chem. **98** (1994) 2180-2184.
7. 'Genetic algorithms used in model finding and fitting for neutron reflection experiments', V.O. de Haan and G.G. Drijkoningen, Physica B **198** (1994) 24-26.
8. 'ROG, the new neutron reflectometer at IRI, Delft', A.A. van Well, V.O. de Haan and H. Fredrikze, Physica B **198** (1994) 217-219.
9. 'Comparison between a time-of-flight and a monochromatic neutron reflectometer at a continuous source', V.O. de Haan and A.A. van Well, J. Neutron Research **3** (1996) 63-68.
10. 'ROG, the neutron reflectometer at IRI, Delft', V.O. de Haan, J. de Blois, P. van der Ende, H. Fredrikze, A. van der Graaf, M.N. Schipper, A.A. van Well and J. van der Zanden, Nucl. Instrum. Methods in Phys. Res. A **362** (1995) 434-453.
11. 'Retrieval of phase information in neutron reflectivity', V.O. de Haan, A.A. van Well, S. Adenwalla and G.P. Felcher, Phys. Rev. B **52** no 15, (1995) 10831-10833.
12. 'Tethered Adsorbing Chains: Neutron Reflectivity and Surface pressure of spread diblock copolymer Monolayers', H.D. Bijsterbosch, V.O. de Haan, A.W. de Graaf, M. Mellema, F.A.M. Leermakers, M.A. Cohen Stuart and A.A. van Well, Langmuir **11** (1995) 4467-4473.
13. 'Zeeman splitting of surface-scattered neutrons', G.P. Felcher, S. Adenwalla, V.O. de Haan and A.A. van Well, Nature **377** (1995) 409-410
14. 'Observation of the Zeeman splitting for neutron reflected by magnetic layers', G.P. Felcher, S. Adenwalla, V.O. de Haan, A.A. van Well, Physica B **221** (1996) 494-499.
15. 'Toward the solution of the inverse problem in neutron reflectometry', V.O. de Haan, A.A. van Well, P.E. Sacks, S. Adenwalla and G.P. Felcher, Physica B **221** (1996) 524-532.
16. 'On the use of a multilayer monochromator in neutron reflectometry', A.A. van Well, V.O. de Haan, H. Fredrikze and D. Clemens, Physica B **283** (2000) 282-284,
17. 'A new method to determine in situ the transmission of a neutron-guide system at a reactor source', V.O. de Haan, H.P.M. Gibcus, R.M. Gommers, F. Labohm, A.A. van Well, P.F.A. de Leege, A. Schebetov, V. Pusenkov, Nuclear Instruments and Methods in Physics Research A **484** (2002) 451-458.
18. 'Numerical calculation of neutron fluxes at the exit of a complex neutron-guide system at IRI, Delft', V.M. Pusenkov, A. Schebetov, H.P.M. Gibcus, R.M. Gommers, F. Labohm, V.O. de Haan, A.A. van Well, , Nuclear Instruments and Methods in Physics Research A **492** (2002) 105-116.

19. ‘Proposal for enhanced spatial resolution and efficiency of a fast-neutron scintillator detector by use of a parabolic mirror’, V.O. de Haan, T.H.J.J. van der Hagen, Nuclear Instruments and Methods in Physics Research A **515/3** (2003) 881-885.
20. ‘Optimisation of fast-neutron detection efficiency and spatial resolution for a radiographic imaging system’, V.O. de Haan, T.H.J.J. van der Hagen, Nuclear Instruments and Methods in Physics Research A **515/3** (2003) 886-891.
21. ‘Optimisation of fast-neutron radiography by use of a new imaging quality concept’, T.H.J.J. van der Hagen, V.O. de Haan, Nuclear Instruments and Methods in Physics Research A **517** (2004) 264-268.
22. ‘Analytical expressions for transient induction voltage in a receiving coil due to a coaxial transmitting coil over a conducting plate’, V.O. de Haan and P.A. de Jong, IEEE Transactions on magnetics **40/2** (2004) 371-378.
23. ‘Conceptual design of a novel high frame rate fast-neutron radiography facility’, V.O. de Haan, T.H.J.J. van der Hagen, A. Federov, A. van Veen, P.F.A. de Leege, Nuclear Instruments and Methods in Physics Research A **539** (2005) 321-334.
24. ‘Electrostatic force measurements in positive unipolar wire-to-plane corona discharges in air’, V.O. de Haan, European Physical Journal Applied Physics **30** (2005) 117-123.
25. ‘Performance of Magnetic Pulsed-Eddy-Current System Using High Dynamic and High Linearity Improved Giant MagnetoResistance Magnetometer’, C. P. Dolabdjian, L. Perez, V.O. de Haan, P.A. de Jong, IEEE Sensors Journal **6** (6) (2006) 1511-1517.
26. ‘Phase-object approximation in small-angle neutron scattering experiments on silicon gratings’, V.O. de Haan, J. Plomp, W.G. Bouwman, M. Trinker, M. Th. Rekveldt, C.P. Duif, E. Jericha, H. Rauch and A.A. van Well, Journal of Applied Crystallography **40** (2007) 151-157.
27. ‘Neutron refraction by cylindrical wires’, J. Plomp, J. G. Barker, V.O. de Haan, W.G. Bouwman and A.A. van Well, Nuclear Instruments and Methods in Physics Research A **574** (2007) 342-329.
28. ‘Neutron spin-echo labelling at OffSpec, an ISIS second target station project’, J. Plomp, V.O. de Haan, R.M. Dalglish, S. Langridge and A.A. van Well, Thin Solid Films **515** (2007) 5732-5735
29. ‘Time-of-Flight Spin-Echo Small-Angle Neutron Measurements’, J. Plomp, V.O. de Haan, R.M. Dalglish, S. Langridge and A. A. van Well, Physica B **397** (2007) 76-78
30. ‘Broad bandpass spin polarizers for the ISIS second target station’, R.M. Dalglish, A.A. van Well, S. Boag, T.R. Charlton, C.D. Frost, V.O. de Haan, S. Parnell, J. Plomp, Physica B **397** (2007) 176-178
31. ‘Real-space neutron scattering methods’, W.G. Bouwman, J. Plomp, V.O. de Haan, W.H. Kraan, A.A. van Well, K. Habicht, T. Keller and M.Th. Rekveldt, Nuclear Instruments and Methods in Physics Research A **586** (2008) 9–14
32. ‘Real space form factor of spherical particles in kinematic and dynamic scattering’, V.O. de Haan, J. Plomp and A.A. van Well, Journal of Applied Crystallography **40** (2007) 756–760
33. ‘Coherence approach to neutron polarization propagation in instruments’, V.O. de Haan, A.A. van Well and J. Plomp, Physical Review B **77** (2008) 104121-1 – 104212-18
34. ‘Development of the Neutron Reflectometer OffSpec at the Delft University of Technology’, A. A. van Well, J. Plomp, V.O. de Haan, R. M. Dalglish, S. Langridge, W.H. Kraan, W.G. Bouwman, M. Th. Rekveldt, Neutron News **19** (4) (2008) p22-25
35. ‘Mach-Zehnder fiber interferometer test of the anisotropy of the speed of light’, V.O. de Haan, Canadian Journal of Physics **87** (9) (2009) p999-1008

36. ‘Asymmetric Mach-Zehnder fiber interferometer test of the anisotropy of the speed of light’, V.O. de Haan, Canadian Journal of Physics **87** (10) (2009) p1073-1078
37. ‘Observation of the Goos-Hänchen Shift with Neutrons’, V.O. de Haan, J. Plomp, T. M. Rekveldt, W. H. Kraan, A. A. van Well, R. M. Dalgliesh, S. Langridge, Physical Review Letters **104** (1) (2010) p010401-010404
38. ‘Coherence approach in neutron, X-ray and neutron spin-echo reflectometry’, V.O. de Haan, J. Plomp, M. Th. Rekveldt, A.A. van Well, R. Dalgliesh, S. Langridge, A. J. Böttger and R. Hendrikx, Physical Review B **81** (2010) 094112-1 – 094112-15
39. ‘de Haan et al. Reply:’, V.O. de Haan, J. Plomp, T. M. Rekveldt, W. H. Kraan, A. A. van Well, R. M. Dalgliesh, S. Langridge, Physical Review Letters **105** (1) (2010) p018902
40. ‘First-order ether drift experiment with a Mach-Zehnder fiber interferometer’, V.O. de Haan, Physics of Wave Phenomena **18** (3) (2010) p164-166
41. ‘Offspec, the ISIS spin-echo reflectometer’, R.M. Dalgliesh, S. Langridge, J. Plomp, V.O. de Haan, A.A. van Well, Physica B **406** (2011) 2346–2349
42. ‘Spin-echo length calibration of OffSpec’, J. Plomp, V.O. de Haan, R.M. Dalgliesh, S. Langridge, A.A. van Well, Physica B **406** (2011) 2354–2356
43. ‘Proposal for the realization of Santilli’s comparative test on the gravity of electrons and positrons via a horizontal supercooled vacuum tube’, V.O. de Haan, Proceedings of the third international conference of Lie-admissible treatment of irreversible processes (ICLATIP-3) Kathmandu University, Nepal (2011) 57-68 also: arXiv:1101.2063v1
44. ‘Fibre-Optic Interferometer Anomalies’, V.O. de Haan, in: ‘Should the laws of gravitation be reconsidered? The Scientific Legacy of Maurice Allais’, H. A. Múnera, ed. (Montreal: Apeiron 2011) (2011) 317-324
45. ‘Standing Waves in Fiber Optic Interferometers’, V.O. de Haan, R. Santbergen, M. Tijssen and M. Zeman, Applied Optics **50** (29) (2011) p5674-5687
46. ‘Comparison of dynamical theory and phase-object approximation for neutron scattering from periodic structures’, R. Ashkar, V. O. de Haan, A. A. van Well, R. Dalgliesh, J. Plomp, M. R. Fitzsimmons, W. L. Schaich and R. Pynn, Journal of Applied Crystallography **44** (2011) p958-965
47. ‘Possible Experiments to test Einstein’s Special Relativity Theory’, V.O. de Haan , Journal of Computational Methods in Sciences and Engineering 13 (2013) p51–57 (arXiv:1109.2681v1)
48. ‘Schwinger term of neutron Hamiltonian measurable by polarization change in a spin-echo spectrometer’, V.O. de Haan (2011) arXiv:1111.0211v1
49. ‘Dynamical theory: Application to spin-echo resolved grazing incidence scattering from periodic structures’, R. Ashkar, W. L. Schaich, V. O. de Haan, A. A. van Well, R. Dalgliesh, J. Plomp, and R. Pynn, Journal of Applied Physics **110** (2011) p102201-1-6
50. ‘Responses of simple optical standing wave sensors’, V.O. de Haan, R. Santbergen, M. Tijssen and M. Zeman, Applied Optics **51** (16) (2012) p3109-3113
51. ‘Fully and Partly Divergence and Rotation Free Interpolation of Magnetic Fields’, V.O. de Haan, Journal of Electromagnetic Analysis and Applications **5** (2013) p281-287
52. ‘Measurement of gravitation-induced quantum interference for neutrons in a spin-echo spectrometer’, V.O. de Haan, J. Plomp, A. A. van Well, M. Th. Rekveldt, Y. H. Hasegawa, R. M. Dalgliesh and N.-J. Steinke, Physical Review A **89** (2014) 063611-1 – 063611-9
53. ‘Mach-Zehnder interferometer with absorbing Fabry-Pérot cavities’, V.O. de Haan (2015) arXiv:1504.00798

54. ‘*A high performance neutron moderator design*’, V.O. de Haan, Nuclear Instruments and Methods in Physics Research A **794** (2015) p122–126
55. ‘*Experiments to test special relativity*’. V.O. de Haan, Physical Interpretation of Relativity Theory: Proceedings of International Meeting. Bauman Moscow State Technical University, Moscow, 29 June-02 July, 2015. - Moscow: BMSTU (2015) p131-139
56. ‘*Possibilities for the Detection of Santilli Neutroids and Pseudo-protons*’, V.O. de Haan, American Journal of Physics **5**(2-1) (2016) p131-136
57. ‘*Thermodynamic calculations of a two-phase thermosyphon loop for cold neutron sources*’, V.O. de Haan, R Gommers, J.M. Rowe, Cryogenics **85** (2017) p30-43
58. ‘*Application of a two-phase thermosyphon loop calculation method to a cold neutron source*’, V.O. de Haan, K. D. Knudsen, Cryogenics **97** (2019) p55-62.
59. ‘*Unveiling contextual realities by microscopically entangling a neutron*’, J. Shen, S.J. Kuhn, R.M. Dalgliesh, V.O. de Haan, N. Geerits, A.A.M. Irfan, F. Li, S. Lu, S.R. Parnell, J. Plomp, A.A. van Well, A. Washington, D.V. Baxter, G. Ortiz, W.M. Snow, R. Pynn, Nature Communications 11, 930 (2020).
60. ‘*Search for exotic spin-dependent couplings of the neutron with matter using spin-echo based neutron interferometry*’, S.R. Parnell, A.A. van Well, J. Plomp, R.M. Dalgliesh, N.-J. Steineke, J.F.K. Cooper, N. Geerits, K.E. Steffen, W.M. Snow and V.O. de Haan, Physical Review D 101 (2020) 122002.