

Publikationsliste

Reinhart Job

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99 Artikel in wissenschaftlichen Journalen	S. 21
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125 Artikel in Konferenz-'Proceedings':

1. *"Development Process for MEMS Pressure Sensors for Standardized CMOS Read-Out Circuitry"*
W. Schreiber-Prillwitz, R. Job;
29th Symposium on Integrated Circuits and Systems Design (SBCCI), 29.8.-3.9.2016,
Belo Horizonte, Brazil, IEEE Conf. Publ., DOI: 10.1109/SBCCI.2016.7724037 (2016)
(Tutorial, eingeladen)
2. *"Metastable Defects in Proton Implanted and Annealed Silicon"*
M. Jelinek, J. G. Laven, N. Ganagona, R. Job, W. Schustereder, H.-J. Schulze,
M. Rommel, L. Frey;
Proceedings "GADEST 2015, 16th International Autumn Meeting", 20. – 25.9.2015, Bad
Staffelstein, Germany, Trans Tech Publications Ltd., Zürich, Switzerland (2016), p. 169
(siehe auch: Solid State Phenomena 242, 169 (2016))
3. *"Comparison of BO Regeneration dynamics in PERC and Al-BSF solar cells"*
A. Herguth, R. Horbelt, S. Wilking, R. Job, G. Hahn;
Proceedings "5th International Conference on Silicon Photovoltaics, SiliconPV 2015",
23.-25.3.2015, Konstanz, Germany, Editor: Giso Hahn, Elsevier (2015),
DOI: 10.1016/j.egypro.2015.07.012
(siehe auch: Energy Procedia 77, 75 (2015))
4. *"Morphology and Hydrogen in Passivating Amorphous Silicon Layers"*
S. Gerke, H.-W. Becker, D. Rogalla, G. Hahn, R. Job, B. Terheiden;
Proceedings "5th International Conference on Silicon Photovoltaics, SiliconPV 2015",
23.-25.3.2015, Konstanz, Germany, Editor: Giso Hahn, Elsevier (2015),
DOI: 10.1016/j.egypro.2015.07.112
(siehe auch: Energy Procedia 77, 791 (2015))
5. *"Deep-Level Defects in High-Dose Proton Implanted and High-Temperature Annealed Silicon"*
M. Jelinek, J. G. Laven, M. Rommel, W. Schustereder, H.-J. Schulze, L. Frey, R. Job;
in: "High Purity Silicon XIII", Editors: E. Simoen, C. Claeys, O. Kakatsuka, R. Falster,
C. Mazure, (the 226th Meeting of the Electrochemical Society, Oct. 5th – 10th, 2014,
Cancun, Mexico), ECS Transactions 64 (11), 173 (2014)
6. *"A New Method to Increase the Doping Efficiency of Proton Implantation in a High-Dose Regime"*
M. Jelinek, J. G. Laven, R. Job, W. Schustereder, H.-J. Schulze, M. Rommel, L. Frey;
in: "High Purity Silicon XIII", Editors: E. Simoen, C. Claeys, O. Kakatsuka, R. Falster,
C. Mazure (the 226th Meeting of the Electrochemical Society, Oct. 5th – 10th, 2014,
Cancun, Mexico), ECS Transactions 64 (11), 199 (2014)
7. *"Temperature Dependence of Void Formation in PERC Cells and their Spatially Resolved Detection by Combining Scanning Acoustic Microscopy and Electroluminescence Measurements"*
R. Horbelt, A. Herguth, G. Hahn, R. Job, B. Terheiden;
29th European Photovoltaic Solar Energy Conference and Exhibition (EU-PVSEC),
Sept. 22nd – 26th, 2014, Amsterdam, The Netherlands, p. 427 (2014)
DOI 10.4229/EUPVSEC20142014-2BO.2.5

8. *"Investigation of Hydrogen Dependent Long-Time Thermal Characteristics of PECV-Deposited Intrinsic Amorphous Layers of Different Morphologies"*
S. Gerke, H.-W. Becker, D. Rogalla, G. Hahn, R. Job, B. Terheiden;
29th European Photovoltaic Solar Energy Conference and Exhibition (EU-PVSEC),
Sept. 22nd – 26th, 2014, Amsterdam, The Netherlands, p. 9 (2014)
DOI 10.4229/EUPVSEC20142014-1AO.1.1
9. *"Evaluation of Capacitance-Voltage Spectroscopy by Correlation with Minority Carrier Lifetime Measurements of PECVD-Deposited Intrinsic Amorphous Layers"*
S. Gerke, A. Herguth, N. Brinkmann, G. Hahn, R. Job
"28th European Photovoltaic Solar Energy Conference and Exhibition (EU-PVSEC)",
Sept. 30th – 4th, 2013, Paris, France, p. 2600 (2013),
DOI 10.4229/28thEUPVSEC2013-3CV.1.61
10. *"Designing MEMS Pressure Sensors with Integrated Circuitry on Silicon for Miscellaneous Applications"*
W. Schreiber-Prillwitz, R. Job
Proceedings "2013 IEEE Fourth Latin American Symposium on Circuits and Systems (LASCAS)", Feb. 27th – Mar. 1st, 2013, Cusco, Peru, IEEE (2013),
DOI 10.1109/LASCAS.2013.6519006
11. *"The Thermal Budget of Hydrogen-related Donor Profiles: Diffusion-limited Activation and Thermal Dissociation"*
J. G. Laven, R. Job, H.-J. Schulze, F.-J. Niedernostheide, W. Schustereder, L. Frey;
in: "High Purity Silicon 12", Editors: E. Simoen, C. L. Claeys, P. Stallhofer, R. Falster,
C. Mazuré (the 222nd Meeting of the Electrochemical Society, Oct. 7th – 12th, 2012,
Honolulu, USA), ECS Transactions 50 (5), 161 (2012)
(eingeladen)
12. *"Investigation of Doping Type Conversion and Diffusion Length Extraction of Proton Implanted Silicon by EBIC"*
S. Kirnstötter, M. Faccinelli, P. Hadley, R. Job, W. Schustereder, J. G. Laven,
H.-J. Schulze;
in: "High Purity Silicon 12", Editors: E. Simoen, C. L. Claeys, P. Stallhofer, R. Falster,
C. Mazuré (the 222nd Meeting of the Electrochemical Society, Oct. 7th – 12th, 2012,
Honolulu, USA), ECS Transactions 50 (5), 115 (2012)
13. *"Improvement of Integrated Pressure Sensor Systems Fabricated by a Combined CMOS- and MEMS-Technology with regard to Low Pressure Ranges"*
W. Schreiber-Prillwitz, R. Job;
in: "Microelectronics Technology and Devices – SBMicro 2012", Editors:
G. Wirth, N. Morimoto, D. Vasileska (the 27th Symposium on Microelectronics
Technology and Devices, Aug. 30th – Sept. 2nd, 2012, Brasília, Brazil), ECS Transactions
49 (1), 417 (2012)
14. *"Imaging Superjunctions in CoolMOSTM Devices using Electron Beam Induced Current"*
S. Kirnstötter, M. Faccinelli, P. Hadley, R. Job, W. Schustereder, J. G. Laven, H.-J.
Schulze;
in: "Microelectronics Technology and Devices – SBMicro 2012", Editors:
G. Wirth, N. Morimoto, D. Vasileska, (the 27th Symposium on Microelectronics
Technology and Devices, Aug. 30th – Sept. 2nd, 2012, Brasília, Brazil), ECS Transactions
49 (1), 475 (2012)

15. *"Conversion Efficiency of Radiation Damage Profiles into Hydrogen-Related Donor Profiles"*
J. G. Laven, R. Job, W. Schustereder, H.-J. Schulze, F.-J. Niedernostheide, H. Schulze, L. Frey;
Proceedings "GADEST 2011, 14th International Autumn Meeting", 25. – 30.9.2011, Fürstentfeld, Austria, Trans Tech Publications Ltd., Zürich, Switzerland (2011), p. 375 (siehe auch: Diffusion and Defect Data Part B (Solid State Phenomena) 178-179, 375 (2011))
16. *"Technical and Commercial Aspects of Battery Systems for Electric Mobility"*
J. Jargstorf, R. Job;
Proceedings "3rd European Conference Smart Grids and E-Mobility 2011", 17. – 18.10.2011, München-Dornach, Ostbayerisches Technologie-Transfer-Institut (OTTI) e.V. (2011)
17. *"Development of a Robust Design for Wet Etched Cointegrated Pressure Sensor Systems"*
W. Schreiber-Prillwitz, M. Saukoski, G. Chmiel, R. Job;
in: "Microelectromechanical Systems – Materials and Devices IV", Editors: F. W. DelRio, C. Eberl, M. P. de Boer, E. P. Gusev, MRS Symposium Proceedings Series, Vol. 1299 (the 2010 MRS Fall Meeting, Boston, USA), 1299-S06-03, p. 129 (2011)
18. *"Design Approach and Realization of Integrated Silicon Piezoresistive Pressure Sensors for Wide Application Ranges"*
W. Schreiber-Prillwitz, M. Saukoski, G. Chmiel, R. Job;
in: "Chemical Sensors 9: Chemical and Biological Sensors and Analytical Systems – and – Microfabricated and Nanofabricated Systems for MEMS/NEMS 9", Editors: G. Hunter, P. J. Hesketh, Z. Aguilar, M. Carter, J. Li, A. Simonian, J. L. Davidson, A. Longdergan, S. Shoji, P. Srinivasan, K. B. Sundaram, P. Vanýsek (the 218th Meeting of the Electrochemical Society, Oct. 10th – 15th, 2010, Las Vegas, USA), ECS Transactions 33 (8), 327 (2010)
19. *"The Impact of Helium Co-Implantation on Hydrogen Induced Donor Profiles in Float Zone Silicon"*
J. G. Laven, R. Job, H.-J. Schulze, F.-J. Niedernostheide, V. Häublein, H. Schulze, W. Schustereder, H. Ryssel, L. Frey;
in: "High Purity Silicon XI", Editors: E. Simoen, C. L. Claeys, R. Falster, C. Mazure, P. Stallhofer (the 218th Meeting of the Electrochemical Society, Oct. 10th – 15th, 2010, Las Vegas, USA), ECS Transactions 33 (11), 51 (2010)
20. *"Distribution of Hydrogen- and Vacancy-Related Donor and Acceptor States in Helium Implanted and Plasma Hydrogenated Float Zone Silicon"*
R. Job, F.-J. Niedernostheide, H.-J. Schulze, H. Schulze;
in "Reliability and Materials Issues of Semiconductor Optical and Electrical Devices and Materials", Editors: O. Ueda, M. Fukuda, S. Pearton, E. Piner, P. Montanegro, MRS Symposium Proceedings Series, Vol. 1195 (the 2009 MRS Fall Meeting, Boston, USA), 1195-B11-02, p. 291 (2010)

21. *"Detection of Vacancy Distributions by Decoration with Hydrogen"*
R. Job, F.-J. Niedernostheide, H.-J. Schulze, H. Schulze;
in: "Analytical Techniques for Semiconductor Materials and Process Characterization VI (ALTEC)", Editors: B. O. Kolbesen, C. L. Claeys, C. Fabry, M. Bersani, D. Giubertoni, G. Pepponi (the 216th Meeting of the Electrochemical Society, Oct. 4th – 9th, 2009, Vienna, Austria), ECS Transactions 25 (3), 35 (2009)
(eingeladen)
22. *"Formation of Doping Profiles in Float Zone Silicon by Helium Implantation and Plasma Hydrogenation"*
R. Job, F.-J. Niedernostheide, H.-J. Schulze, H. Schulze;
in "Performance and Reliability of Semiconductor Devices", Editors: M. Mastro, J. LaRoche, F. Ren, J.-I. Chyi, J. Kim, MRS Symposium Proceedings Series, Vol. 1108 (the 2008 MRS Fall Meeting, Boston, USA), 1108-A12-03, p. 237 (2009)
23. *"Formation and Annihilation of Hydrogen Related Donor States in Proton Implanted and Subsequently Plasma Hydrogenated N-Type Float Zone Silicon"*
R. Job, F.-J. Niedernostheide, H.-J. Schulze, H. Schulze;
in: "High Purity Silicon X", Editors: C. L. Claeys, R. Falster, M. Watanabe, P. Stallhofer (the 214th Meeting of the Electrochemical Society, PRiME 2008, Oct. 12th – 17th, 2008, Honolulu, USA), ECS Transactions 16 (6), 151 (2008)
24. *"Formation of Hydrogen Related Defects and Nano-Voids in Plasma Hydrogenated ZnO"*
R. Job;
in: "Semiconductor Defect Engineering—Materials, Synthetic Structures and Devices II", Editors: S. Ashok, P. Kiesel, J. Chevallier, T. Ogino, MRS Symposium Proceedings Series, Vol. 994 (the 2007 MRS Spring Meeting, San Francisco, USA), 0994-F02-09, p.61 (2007)
25. *"Germanium Layer Exfoliation by Ion-Cut Processes"*
R. Job, W. Dungen;
in: "Semiconductor Defect Engineering—Materials, Synthetic Structures and Devices II", Editors: S. Ashok, P. Kiesel, J. Chevallier, T. Ogino, MRS Symposium Proceedings Series, Vol. 994 (the 2007 MRS Spring Meeting, San Francisco, USA), 0994-F09-05, p. 257 (2007)
26. *"Crystalline Silicon Surface Passivation by PECV-Deposited hydrogenated Amorphous Silicon Oxide Films [a-SiO_x:H]"*
T. Mueller, W. Duengen, R. Job, M. Scherff, W. R. Fahrner;
in: "Amorphous and Polycrystalline Thin-Film Silicon Science and Technology – 2007", Editors: V. Chu, S. Miyazaki, A. Nathan, J. Yang, H. W. Zan, MRS Symposium Proceedings Series, Vol. 989 (the 2007 MRS Spring Meeting, San Francisco, USA), 0989-A05-02 (2007)
27. *"The Impact of Hydrogen Plasma Treatments at Moderate Temperatures on Sintered Zinc Oxide Samples – Evidence for Hydrogen Induced Nano-Void Formation"*
R. Job
in: "Zinc Oxide and Related Materials", Editors: J. Christen, C. Jagadish, D. C. Look, T. Yao, MRS Symposium Proceedings Series, Vol. 957 (the 2006 MRS Fall Meeting, Boston, USA), 0957-K10-40, p. 391 (2007)

28. *"Hydrogen-related Donor Formation: Fabrication Techniques, Characterization, and Application to High-Voltage Superjunction Transistors"*
H.-J. Schulze, M. Buzzo, F.-J. Niedernostheide, M. Rüb, H. Schulze, R. Job;
in: "High Purity Silicon IX", Editors: C. L. Claeys, P. Stallhofer, R. Falster,
M. Watanabe (the 210th Meeting of the Electrochemical Society, Oct. 29th - 3rd, 2006,
Cancun, Mexico), ECS Transactions 3 (4), 135 (2006)
(eingeladen)
29. *"Hydrogen Gettering and Platelet Formation in Implanted and Hydrogenated Silicon"*
W. Dungen, R. Job, Y. Ma, W. R. Fahrner, L. O. Keller, J. T. Horstmann, H. Fiedler;
in: "High Purity Silicon IX", Editors: C. L. Claeys, P. Stallhofer, R. Falster,
M. Watanabe (the 210th Meeting of the Electrochemical Society, Oct. 29th - 3rd, 2006,
Cancun, Mexico), ECS Transactions 3 (4), 147 (2006)
30. *"From Smart-Cut® to Soft-Cut: Mechanisms of Hydrogen Plasma Supported Layer Exfoliation in Silicon"*
R. Job, W. Dungen, Y. Ma, J. T. Horstmann;
in: "High Purity Silicon IX", Editors: C. L. Claeys, P. Stallhofer, R. Falster,
M. Watanabe (the 210th Meeting of the Electrochemical Society, Oct. 29th - 3rd, 2006,
Cancun, Mexico), ECS Transactions 3 (4), 417 (2006)
31. *"The Ultrastructure of Brachiopod Shells – A Mechanically Optimized Material with Hierarchical Architecture"*
E. Griesshaber, K. Kelm, M. Knieps, W. W. Schmahl, R. Job, W. Mader;
in: "Mechanical Behavior of Biological and Biomimetic Materials", Editors:
A. J. Bushby, V. L. Ferguson, C.-C. Ko, M. L. Oye, MRS Symposium Proceedings
Series, Vol. 898E (the 2005 MRS Fall Meeting, Boston, USA), 0898-L12-01 (2006)
32. *"Chemical Structuring and Materials Design in the Shell of Modern Brachiopods"*
E. Griesshaber, R. Job, W. W. Schmahl, R. D. Neuser;
in: "Mechanical Behavior of Biological and Biomimetic Materials", Editors:
A. J. Bushby, V. L. Ferguson, C.-C. Ko, M. L. Oye, MRS Symposium Proceedings
Series, Vol. 898E (the 2005 MRS Fall Meeting, Boston, USA), 0898-L12-04 (2006)
33. *"Micro-Raman Analysis of Ion Implanted and Plasma Hydrogenated Czochralski Silicon Wafers"*
R. Job, W. Dungen, Y. Ma, Y. L. Huang, J. T. Horstmann;
Proceedings of the XIIIth International Workshop on the Physics of Semiconductor
Devices (IWPSD '2005), Dec. 13th – 17th, 2005, Delhi, India, p. 1176 (2005)
(eingeladen)
34. *"Hydrogen Related Defects in Czochralski Silicon Close to the Wafer Surface: Defect Analysis and Technological Prospects"*
R. Job;
in: "Microelectronics Technology and Devices (SBMicro 2005)", Editors: C. L. Claeys, J.
W. Swart, N. I. Morimoto, P. Verdonck, Electrochemical Society Proceedings, Vol.
2005-08 (the 20th Symposium on Microelectronics Technology and Devices, Sept. 4th –
7th, 2005, Florianopolis, Brazil), p. 106 (2005)
(Tutorial, eingeladen)

35. *"Micro-Raman Analysis of Hydrogen Related Defects in Czochralski Silicon"*
R. Job, W. Dungen, Y. Ma, Y. L. Huang, J. T. Horstmann;
in: "Microelectronics Technology and Devices (SBMicro 2005)", Editors: C. L. Claeys, J. W. Swart, N. I. Morimoto, P. Verdonck, Electrochemical Society Proceedings, Vol. 2005-08 (the 20th Symposium on Microelectronics Technology and Devices, Sept. 4th – 7th, 2005, Florianopolis, Brazil), p. 90 (2005)
(eingeladen)
36. *" μ -Raman Investigations on Hydrogen Gettering in Hydrogen Implanted and Hydrogen Plasma Treated Czochralski Silicon"*
W. Dungen, R. Job, Y. Ma, Y. L. Huang, W. R. Fahrner, L. O. Keller, J. T. Horstmann;
Proceedings "GADEST 2005, 11th International Autumn Meeting", 25. – 30.9.2005, Giens, France, Trans Tech Publications Ltd., Zürich, Switzerland (2005), p. 91
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 91 (2005))
37. *"Evolution of Hydrogen Related Defects in Plasma Hydrogenated Crystalline Silicon under Thermal and Laser Annealing"*
Y. Ma, Y. L. Huang, R. Job, W. Dungen, W. R. Fahrner;
Proceedings "GADEST 2005, 11th International Autumn Meeting", 25. – 30.9.2005, Giens, France, Trans Tech Publications Ltd., Zürich, Switzerland (2005), p. 211
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 211 (2005))
38. *"DLTS Study on Deep Levels Formed in Plasma Hydrogenated and Subsequently Annealed Silicon"*
Y. L. Huang, E. Simoen, C. Claeys, R. Job, Y. Ma, W. Dungen, W. R. Fahrner, J. Versluys, P. Clauws;
Proceedings "GADEST 2005, 11th International Autumn Meeting", 25. – 30.9.2005, Giens, France, Trans Tech Publications Ltd., Zürich, Switzerland (2005), p. 547
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 547 (2005))
39. *"Micro-Raman Spectra Analysis of the Evolution of Hydrogen Related Defects and Void Formation in the Silicon Ion-Cut Process"*
W. Dungen, R. Job, Y. Ma, Y. L. Huang, W. R. Fahrner, L. O. Keller, A. Wiggershaus, J. T. Horstmann;
in: "Semiconductor Defect Engineering – Materials, Synthetic Structures, and Devices", Editors: S. Ashok, J. Chavallier, B. L. Sopori, M. Tabe, P. Kiesel, MRS Symposium Proceedings Series, Vol. 864 (the 2005 MRS Spring Meeting, San Francisco, USA), p. 503 (2005)
40. *"Void Formation in Hydrogen Implanted and Subsequently Plasma Hydrogenated and Annealed Czochralski Silicon"*
R. Job, W. Dungen, Y. Ma, Y. L. Huang, J. T. Horstmann;
in: "Semiconductor Defect Engineering – Materials, Synthetic Structures, and Devices", Editors: S. Ashok, J. Chavallier, B. L. Sopori, M. Tabe, P. Kiesel, MRS Symposium Proceedings Series, Vol. 864 (the 2005 MRS Spring Meeting, San Francisco, USA), p. 487 (2005)

41. *"PN-Junction Diodes Fabricated on the Basis of Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon"*
Y. L. Huang, E. Simoen, R. Job, C. Claeys, W. Dungen, Y. Ma, W. R. Fahrner, J. Versluys, P. Clauws;
in: "Semiconductor Defect Engineering – Materials, Synthetic Structures, and Devices", Editors: S. Ashok, J. Chavallier, B. L. Sopori, M. Tabe, P. Kiesel, MRS Symposium Proceedings Series, Vol. 864 (the 2005 MRS Spring Meeting, San Francisco, USA), p. 307 (2005)
42. *"Microstructure of Brachiopod Shells – An Inorganic/Organic Fibre Composite with Nanocrystalline Protective Layer"*
E. Griesshaber, W. Schmahl, R. Neuser, R. Job, M. Bluem, U. Brand;
in: "Mechanical Properties of Bio-Inspired and Biological Materials", Editors: K. Katti, F. J. Ulm, C. Hellmich, C. Viney, MRS Symposium Proceedings Series, Vol. 844 (the 2004 MRS Fall Meeting, Boston, USA), p. 99 (2005)
43. *"Micro-Scale Physical and Chemical Heterogeneities in Biogenic Materials – A Combined Micro-Raman, Chemical Composition and Microhardness Investigation"*
E. Griesshaber, R. Job, T. Pettke, W. W. Schmahl;
in: "Mechanical Properties of Bio-Inspired and Biological Materials", Editors: K. Katti, F. J. Ulm, C. Hellmich, C. Viney, MRS Symposium Proceedings Series, Vol. 844 (the 2004 MRS Fall Meeting, Boston, USA), p. 93 (2005)
44. *"Control of Stress in Surface Engineered Silicon"*
Y. Ma, R. Job, B. Zölgert, W. Dungen, Y. L. Huang, W. R. Fahrner;
in: "Surface Engineering – Fundamentals and Applications", Editors: J. E. Krzanowski, S. N. Basu, J. Patscheider, Y. Gogotsi, MRS Symposium Proceedings Series, Vol. 843 (the 2004 MRS Fall Meeting, Boston, USA), p. 99 (2005)
45. *"On the Formation Kinetics of Thin Nanopatterned Layers on Silicon Wafers Created by Hydrogen Plasma Exposure"*
R. Job, Y. L. Huang, Y. Ma, B. Zölgert, W. Dungen;
in: "Kinetics-Driven Nanopatterning on Surfaces", Editors: E. Chason, G. Gilmer, H. Huang, E. Wang, MRS Symposium Proceedings Series, Vol. 849 (the 2004 MRS Fall Meeting, Boston, USA), p. 103 (2005)
46. *"Thermal Evolution of Hydrogen Related Defects in Silicon Investigated by μ -Raman Spectroscopy"*
Y. Ma, Y. L. Huang, R. Job, W. R. Fahrner, M.-F. Beaufort, J.-F. Barbot;
in: "High Purity Silicon VIII", Editors: C. L. Claeys, M. Watanabe, R. Falster, P. Stallhofer, Electrochemical Society Proceedings, Vol. 2004-05 (the 206th Meeting of the Electrochemical Society, Oct. 3rd - 8th, 2004, Honolulu, USA), p. 385 (2004)
47. *"Morphology and Stress Investigations of Surface and Subsurface Regions of Plasma Hydrogenated and Annealed Czochralski Silicon"*
R. Job, Y. Ma, Y. L. Huang, W. Dungen;
in: "High Purity Silicon VIII", Editors: C. L. Claeys, M. Watanabe, R. Falster, P. Stallhofer, Electrochemical Society Proceedings, Vol. 2004-05 (the 206th Meeting of the Electrochemical Society, Oct. 3rd - 8th, 2004, Honolulu, USA), p. 407 (2004)

48. *"Hydrogen Diffusion Characterized by Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon at Temperatures between 350 and 450 °C"*
Y. L. Huang, Y. Ma, R. Job, W. R. Fahrner;
in: "High Purity Silicon VIII", Editors: C. L. Claeys, M. Watanabe, R. Falster, P. Stallhofer, Electrochemical Society Proceedings, Vol. 2004-05 (the 206th Meeting of the Electrochemical Society, Oct. 3rd - 8th, 2004, Honolulu, USA), p. 419 (2004)
49. *"Structuring of Silicon Wafer Surfaces on the sub-100 nm Scale by Hydrogen Plasma Treatments"*
R. Job, Y. Ma, A. G. Ulyashin;
in: "Continous Nanophase and Nanostructured Materials", Editors: S. Komarneni, J. Watkins, J. C. Parker, MRS Symposium Proceedings Series, Vol. 788 (the 2003 MRS Fall Meeting, Boston, USA), p. 571 (2004)
50. *"Structuring of Silicon Surface and Subsurface Layers by Plasma Hydrogenation - Defect Analysis and Technological Prospects"*
R. Job, Y. Ma, Y. L. Huang, A. G. Ulyashin;
Proceedings of the XIIth International Workshop on the Physics of Semiconductor Devices (IWPSD '2003), Dec. 16th - 20th, 2003, Chennai/Madras, India, p. 100 (2004) **(eingeladen)**
51. *"Depth Resolved Defect Analysis by Micro-Raman Investigations on Plasma Hydrogenated Czochralski Silicon Wafers"*
R. Job, Y. Ma, Y. L. Huang, A. G. Ulyashin, W. R. Fahrner, M.-F. Beaufort, J.-F. Barbot;
Proceedings "GADEST 2003, 10th International Autumn Meeting", 21.9. - 26.9.2003, Zeuthen, Germany, Trans Tech Publications Ltd., Zürich, Switzerland (2003), p. 141 (siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 95-96, 141 (2003))
52. *"Minority Carrier Lifetime Improvement in P-Type Silicon by Oxygen Related Centers Gettering at Low Temperatures: Application to the Heterojunction Solar Cell Processing"*
A. Ulyashin, R. Bilyalov, A. Bruck, M. Scherff, R. Job, W. Fahrner, J. Poortmans;
Proceedings of "3rd World Conference on Photovoltaic Energy Conversion", 12th-16th May, 2003, Osaka, Japan, Arisumi Printing Inc., vol. 2, p. 1088 (2003)
53. *"Effect of Electron Irradiation on Thermal Donors in Oxygen-Doped High-Resistive FZ Si"*
K. Takakura, H. Ohyama, T. Yoshida, H. Murakawa, J. M. Rafi, R. Job, A. Ulyashin, E. Simoen, C. Claeys;
Proceedings "GADEST 2003, 10th International Autumn Meeting", 21.9. - 26.9.2003, Zeuthen, Germany, Trans Tech Publications Ltd., Zürich, Switzerland (2003), p. 53 (siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 95-96, 53 (2003))
54. *"Analysis of Oxygen Thermal Donor Formation in n-Type Cz Silicon"*
J. M. Rafi, E. Simoen, C. Claeys, A. G. Ulyashin, R. Job, W. R. Fahrner, J. Versluys, P. Clauws, M. Lozano, F. Campabadal;
in: "Analytical and Diagnostic Techniques for Semiconductor Materials, Devices, and Processes", Editors: B. O. Kolbesen, C. Claeys, P. Stallhofer, F. Tardif, D. K. Schroder, T. J. Shaffner, M. Tajima, Electrochemical Society Proceedings, Vol. 2003-03 (joint proceedings of the symposia on ALTECH 2003, Analytical Techniques for Semiconductor Materials and Process Characterization IV, Apr. 27th - May 2nd, 2003, Paris, France, and 202nd Meeting of the Electrochemical Society, Oct. 20th - 25th, 2002, Salt Lake City, USA), p. 96 (2003)

55. *"Low Temperature Doping of Silicon by Hydrogen Plasma Treatments"*
R. Job, A. G. Ulyashin, Y. Ma, W. R. Fahrner, E. Simoen, J. M. Rafi, C. Claeys, F. J. Niedernostheide, H. J. Schulze;
in: "High Purity Silicon VI", Editors: C. L. Claeys, P. Rai-Choudhury, M. Watanabe, P. Stallhofer, Electrochemical Society Proceedings, Vol. 2002-20 (the 202nd Meeting of the Electrochemical Society, Oct. 20th - 25th, 2002, Salt Lake City, USA), p. 141 (2002) **(eingeladen)**
56. *"The Influence of Hydrogenation on the Effective Lifetime of Silicon Wafers: Peculiarities at Low-Temperature Treatments"*
A. G. Ulyashin, M. Scherff, A. Kozicki, R. Job, W. R. Fahrner, R. Bilyalov, Z. Matic, J. Poortmans;
Proceedings "PV in Europe, From PV Technology to Energy Solutions", Oct. 7th - 11th, 2002, Rome, Italy, p. 103 (2002)
57. *"Characterisation of Oxygen and Oxygen-related Defects in High- and Lowly-Doped Silicon"*
E. Simoen, C. Claeys, R. Loo, O. De Gryse, P. Clauws, R. Job, A. G. Ulyashin, W. R. Fahrner;
2002 E-MRS Spring Meeting, June 18th - 21th, Strasbourg, France
(siehe auch: Mater. Sci. Engineer. B 102, 207 (2003))
58. *"Computer Simulations of a Pin-Fin Heat Sink with Fluid Cooling for Semiconductor Modules"*
I. A. Khorunzhii, H. Gabor, R. Job, W. R. Fahrner, H. Baumann;
Proceedings "3rd International Conference on Thermal and Mechanical Simulation in (Micro) Electronics, EuroSIME 2002", Apr. 14th - 17th, 2002, Paris, France, p. 182 (2002)
59. *"Doping of Oxidized Float Zone Silicon by Thermal Donors - A Low Thermal Budget Doping Method for Device Applications?"*
R. Job, A. G. Ulyashin, Y. L. Huang, W. R. Fahrner, E. Simoen, C. Claeys, F. J. Niedernostheide, H. J. Schulze;
in: "Defect and Impurity Engineered Semiconductors and Devices III", Editors: S. Ashok, J. Chevallier, N. M. Johnson, B. L. Sopori, H. Okushi, MRS Symposium Proceedings Series, Vol. 719 (the 2002 MRS Spring Meeting, San Francisco, USA), p. 257 (2002)
60. *"Comparative Raman and Transmission Electron Microscopy Analysis of the Evolution of Platelet Defects in Plasma Hydrogenated and Annealed Czochralski Silicon"*
R. Job, M.-F. Beaufort, J.-F. Barbot, A. G. Ulyashin, W. R. Fahrner;
in: "Defect and Impurity Engineered Semiconductors and Devices III", Editors: S. Ashok, J. Chevallier, N. M. Johnson, B. L. Sopori, H. Okushi, MRS Symposium Proceedings Series, Vol. 719 (the 2002 MRS Spring Meeting, San Francisco, USA), p. 217 (2002)
61. *"The Behaviour of Oxygen in Oxygenated N-Type High-Resistive Float-Zone Silicon"*
E. Simoen, C. Claeys, R. Job, A. G. Ulyashin, W. R. Fahrner, G. Tonelli, O. Degryse, P. Clauws;
in "Proceedings of the 9th International Symposium on Silicon Materials Science and Technology", Editors: H. Huff, L. Fabry, S. Kishino, Electrochemical Society Proceedings, Vol. 2002-2 (the 201st Meeting of the Electrochemical Society, May 12th - 17th, 2002, Philadelphia, PA, USA), p. 912 (2002)

62. *"A Low Temperature Technology on the Base of Hydrogen Enhanced Thermal Donor Formation for Future High Voltage Applications"*
R. Job, A. G. Ulyashin, W. R. Fahrner, F. J. Niedernostheide, H. J. Schulze, E. Simoen, C. L. Claeys, G. Tonelli;
Proceedings of the XIth International Workshop on the Physics of Semiconductor Devices (IWPSD '2001), Dec. 10th - 15th, 2001, Delhi, India, p. 405 (2002)
(eingeladen)
63. *"Impurities and Defects in Multicrystalline Silicon for Solar Cells: Low-Temperature Photoluminescence Investigations"*
A. V. Mudryi, A. I. Patuk, I. A. Shakin, A. G. Ulyashin, R. Job, W. R. Fahrner, A. Fedotov, A. Mazanik, N. Drozdov;
2001 E-MRS Spring Meeting, June 5th - 8th, Strasbourg, France
(siehe auch: Solar Energy Materials and Solar Cells 72, 503 (2002))
64. *"The Influence of the Amorphous Silicon Deposition Temperature on the Efficiency of the ITO/a-Si:H/c-Si Heterojunction Solar Cells and Properties of Interfaces"*
A. G. Ulyashin, R. Job, M. Scherff, M. Gao, W. R. Fahrner, D. Lyebedyev, N. Roos, H. C. Scheer;
2001 E-MRS Spring Meeting, June 5th - 8th, Strasbourg, France
(siehe auch: Thin Solid Films 403-404, 359 (2002))
65. *"Positron Beam and Raman Analysis of Hydrogen Plasma Treated and Annealed Cz-Si"*
H. Schut, A. van Veen, S. W. H. Eijt, R. Job, A. G. Ulyashin, W. R. Fahrner;
2001 E-MRS Spring Meeting, June 5th - 8th, Strasbourg, France
(siehe auch: Nucl. Instr. and Meth. in Phys. Res. B 186, 94 (2002))
66. *"Thermal Donor Formation in Oxygen Enriched High Resistive Float-Zone Silicon Radiation Detector Substrates"*
R. Job, A. G. Ulyashin, W. R. Fahrner, E. Simoen, C. Claeys, G. Tonelli;
2001 E-MRS Spring Meeting, June 5th - 8th, Strasbourg, France
(siehe auch: Nucl. Instr. and Meth. in Phys. Res. B 186, 116 (2002))
67. *"Formation of Luminescent Structures on Cz-Silicon by Hydrogen Plasma Treatments and Oxidation"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
2001 E-MRS Spring Meeting, June 5th - 8th, Strasbourg, France
(siehe auch: Nucl. Instr. and Meth. in Phys. Res. B 186, 132 (2002))
68. *"Raman Spectroscopic Analysis of Hydrogen Plasma Treated Czochralski Silicon"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
Proceedings "GADEST 2001, 9th International Autumn Meeting", 30.9. - 4.10.2001, Catania, Italy, Trans Tech Publications Ltd., Zürich, Switzerland (2002), p.139
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 82-84, 139 (2002))
69. *"Hydrogen Redistribution and Voids Formation in Hydrogen Plasma Treated Czochralski Silicon"*
A. G. Ulyashin, R. Job, W. R. Fahrner, D. Grambole, F. Herrmann;
Proceedings "GADEST 2001, 9th International Autumn Meeting", 30.9. - 4.10.2001, Catania, Italy, Trans Tech Publications Ltd., Zürich, Switzerland (2002), p. 315
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 82-84, 315 (2002))

70. *"Low Temperature Drift Field Performance in the Base Region of Crystalline Silicon Solar Cells by Hydrogen Enhanced Thermal Donor Formation"*
A. G. Ulyashin, R. Job, M. Scherff, W. R. Fahrner;
17th European PV Solar Energy Conference, Oct. 22nd - 26th, 2001, München, Germany,
p. 1379 (2001)
71. *"Processing of a-Si:H (μ c-Si) / c-Si (mc-Si) / a-Si:H (μ c-Si) Heterojunction Solar Cells"*
A. G. Ulyashin, R. Job, M. Scherff, M. Gao, K. Meusinger, A. Brück, W. R. Fahrner;
17th European PV Solar Energy Conference, Oct. 22nd - 26th, 2001, München, Germany,
p. 1877 (2001)
72. *"Thinner SOI Using Plasma Hydrogenation"*
A. Y. Usenko, A. G. Ulyashin, W. N. Carr, W. R. Fahrner, A. V. Frantskevich, R. Job;
Proceedings of the 2001 International Conference on Solid State Devices and Materials,
Tokio, Japan, p. 244 (2001)
73. *"Low-Temperature Photoluminescence Characterization of Defects Formation in Hydrogen and Helium Implanted Silicon at Post-Implantation Annealing"*
A. V. Mudryi, F. P. Korshunov, A. I. Patuk, I. A. Shakin, T. P. Larionova,
A. G. Ulyashin, R. Job, W. R. Fahrner, V. V. Emtsev, V. Yu. Davydov, G. Oganessian;
Proceedings "21st International Conference on Defects in Semiconductors (XXI ICDS 2001)",
July 16-20, 2001, Gießen, Germany
(siehe auch: Physica B 308-310, 181 (2001))
74. *"Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon: Application to Low-Temperature Active Defect Engineering"*
A. G. Ulyashin, R. Job, I. A. Khorunzhii, W. R. Fahrner;
Proceedings "21st International Conference on Defects in Semiconductors (XXI ICDS 2001)",
July 16th - 20th, 2001, Gießen, Germany
(siehe auch: Physica B 308-310, 185 (2001))
75. *"The Structural Defects in Silicon Implanted by Hydrogen" (in russian)*
A. V. Mudry, A. I. Patuk, I. A. Shakin, T. P. Larionova, V. V. Emtsev, V. Y. Davydov,
A. G. Ulyashin, R. Job, W. R. Fahrner;
Proceedings of the 2001 International Conference "Interaction of Radiation with Solids",
Minsk, Belarus, p. 189 (2001)
76. *"Sensors and Smart Electronics in Harsh Environment Applications"*
W. R. Fahrner, R. Job, M. Werner;
Proceedings "Micro Materials, International Conference and Exhibition (Micro Mat. '2000)",
Dec. 17th - 19th, 2000, Berlin, Germany
(siehe auch: Microsystems Technologies 7, 138 (2001))
77. *"Raman Spectra Investigation for AlN Ceramics with Varying Thermal Conductivities"*
I. A. Khorunzhii, A. G. Ulyashin, R. Job, H. Gabor, W. R. Fahrner, D. Brunner,
U. Peschek;
Proceedings "7th THERMINIC Workshop (THERMal INvesitigations of ICs and Systems)",
Sept. 24th - 27th, 2001, Paris, France, p. 75 (2001)
78. *"Comparison of Multicrystalline Silicon Surfaces after Wet Chemical Etching and Hydrogen Plasma Treatment: Application for the Heterojunction Solar Cells"*
A. G. Ulyashin, M. Scherff, R. Hussein, R. Job, W. R. Fahrner;
Technical Digest "12th International Photovoltaic Science and Engineering Conference",
June 11th - 15th, 2001, Cheju Island, Korea, p. 209 (2001)

79. *"Formation of Nano-Structured Thin Silicon Layers by Hydrogen Plasma Treatment of Monocrystalline Silicon"*
W. R. Fahrner, R. Job, A. G. Ulyashin;
Proceedings of the 2001 1st IEEE-NANO Conference on Nanotechnology, Oct. 28th - 30th, 2001, Maui, Hawaii, USA, p. 282 (2001)
80. *"The Evolution of Hydrogen Molecule Formation in Hydrogen Plasma Treated Czochralski Silicon"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
2000 E-MRS Spring Meeting, May 30th - June 2nd, Strasbourg, France
(siehe auch: Mater. Sci. Semicond. Proc. 4, 257 (2001))
81. *"Low Temperature Photoluminescence Characterization of Hydrogen and Helium Implanted Czochralski Silicon"*
A. G. Ulyashin, A. V. Mudryi, A. I. Patuk, I. A. Shakin, R. Job, W. R. Fahrner;
2000 E-MRS Spring Meeting, May 30th - June 2nd, Strasbourg, France
(siehe auch: Mater. Sci. Semicond. Proc. 4, 297 (2001))
82. *"Atomic Hydrogen Catalysis for the Formation of Oxygen Related Nanoclusters in Silicon: Application to Low-Temperature Device Production"*
A. G. Ulyashin, R. Job, W. R. Fahrner;
Proceedings "26th Annual Conference of the IEEE Industrial Electronics Society (IECON 2000)", Oct. 22nd - 28th, 2000, Nagoya, Japan, p. 1889 (2000)
83. *"Nano-Degradation of Diamond Surfaces by the Thermochemical Polishing Technique"*
J. A. Weima, R. Job, W. R. Fahrner, N. Müller, T. Fries;
Proceedings "26th Annual Conference of the IEEE Industrial Electronics Society (IECON 2000)", Oct. 22nd - 28th, 2000, Nagoya, Japan, p. 1856 (2000)
84. *"Nano-Structuring of Silicon Surface Layers and Nano-Void Formation by Hydrogen Plasma Treatments"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
Proceedings "26th Annual Conference of the IEEE Industrial Electronics Society (IECON 2000)", Oct. 22nd - 28th, 2000, Nagoya, Japan, p. 1883 (2000)
85. *"Direct Proof of Argon Atoms Incorporation into High-Purity Silicon Single Crystals during Growth in Argon Gas Ambient"*
A. G. Ulyashin, R. Job, W. R. Fahrner, A. V. Mudryi, A. I. Patuk, I. A. Shakin;
in: "High Purity Silicon VI", Editors: C. L. Claeys, P. Rai-Choudhury, M. Watanabe, P. Stallhofer, H.J. Dawson, Electrochemical Society Proceedings, Vol. 2000-17 (the 198th Meeting of the Electrochemical Society, Oct. 22nd - 27th, 2000, Phoenix, USA), p. 66 (2000)
86. *"Bulk and Surface Properties of Cz-Silicon after Hydrogen Plasma Treatments"*
R. Job, A. G. Ulyashin, W. R. Fahrner, V. P. Markevich, L. I. Murin, J. L. Lindström, V. Raiko, J. Engemann;
in: "High Purity Silicon VI", Editors: C. L. Claeys, P. Rai-Choudhury, M. Watanabe, P. Stallhofer, H.J. Dawson, Electrochemical Society Proceedings, Vol. 2000-17 (the 198th Meeting of the Electrochemical Society, Oct. 22nd - 27th, 2000, Phoenix, USA), p. 209 (2000)

87. *"Nano-Polishing and Subsequent Optical Characterization of CVD Polycrystalline Diamond Films"*
J. A. Weima, A. M. Zaitsev, R. Job, G. Kosaca, F. Blum, G. Grabosch, W. R. Fahrner, J. Koop;
Proceedings "25th Annual Conference of the IEEE Industrial Electronics Society (IECON '99)", Nov. 29th - Dec. 3rd, 1999, San Jose, California, USA, p. 50 (1999)
88. *"A Concise Study on Luminescence of Dealuminated Faujasite and the Formation of Nanoclusters in the Zeolite Host Structure"*
R. Job, W. R. Fahrner, A. Yoshida;
Proceedings "25th Annual Conference of the IEEE Industrial Electronics Society (IECON '99)", Nov. 29th - Dec. 3rd, 1999, San Jose, California, USA, p. 68 (1999)
89. *"Rapid Low Temperature Diode Fabrication on the Base of Simple Hydrogen Enhanced Thermal Donor Formation Processes"*
R. Job, J. Weima, G. Grabosch, D. Borchert, W. R. Fahrner, V. Raiko, A. G. Ulyashin;
Proceedings "GADEST '99, 8th International Autumn Meeting", 25. - 28.10.1999, Höör, Sweden, Trans Tech Publications Ltd., Zürich, Switzerland (1999)
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 69-70, 551 (1999))
90. *"The Influence of Low-Energy Argon Implantation and Out-Diffusion Heat Treatments on Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon"*
A. G. Ulyashin, A. N. Petlitskii, R. Job, W. R. Fahrner, A. K. Fedotov, A. I. Stognii;
Proceedings "GADEST '99, 8th International Autumn Meeting", 25. - 28.10.1999, Höör, Sweden, Trans Tech Publications Ltd., Zürich, Switzerland (1999)
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 69-70, 409 (1999))
91. *"Electronic Device Fabrication by Simple Hydrogen Enhanced Thermal Donor Formation Processes in P-Type Cz-Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin;
1999 E-MRS Spring Meeting, June 1st - June 4th, Strasbourg, France
(siehe auch: Mater. Sci. Engineer. B 73, 197 (2000))
92. *"The Hydrogen Gettering at Post-Implantation Hydrogen Plasma Treatments of Helium and Hydrogen Implanted Czochralski Silicon"*
A. G. Ulyashin, A. I. Ivanov, R. Job, W. R. Fahrner, F. F. Komarov, A. V. Frantskevich;
1999 E-MRS Spring Meeting, June 1st - June 4th, Strasbourg, France
(siehe auch: Mater. Sci. Engineer. B 73, 64 (2000))
93. *"Characterization of the Oxygen Distribution in Czochralski Silicon by Electrical Measurements using Hydrogen Enhanced Thermal Donor Formation"*
A. G. Ulyashin, I. A. Khorunzhii, R. Job, W. R. Fahrner;
1999 E-MRS Spring Meeting, June 1st - June 4th, Strasbourg, France
(siehe auch: Mater. Sci. Engineer. B 73, 124 (2000))
94. *"Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon with Denuded Zone"*
A. G. Ulyashin, A. N. Petlitskii, R. Job, W. R. Fahrner;
in: "High Purity Silicon V", Editors: C.L. Claeys, P. Rai-Choudhury, M. Watanabe, P. Stallhofer, H.J. Dawson, Electrochemical Society Proceedings, Vol. 98-13 (the 194th Meeting of the Electrochemical Society, Nov. 1st - 6th, 1998, Boston, USA), p. 425 (1998)

95. *"Effect of Pressure Treatment on Electrical Properties of Hydrogen-Doped Silicon"*
B. Surma, A. Misiuk, J. Jun, M. Rozental, A. Wnuk, A. G. Ulyashin, I. V. Antonova,
V. P. Popov, R. Job;
Proceedings "ASDAM '98, 2nd International Conference on Advanced Semiconductor
Devices and Microsystems", Smolenice Castle, Slovakia, Oct. 5th - 7th, 1998, Editors:
J. Breza, D. Donoval, V. Drobný, F. Uherek, p. 47 (1998)
96. *"Nuclear Radiation Detectors on Various Type Diamonds"*
F. Blum, A. Denisenko, R. Job, D. Borchert, W. R. Fahrner, W. Weber, J. v. Borany,
U. Hilleringmann;
Proceedings "24th Annual Conference of the IEEE Industrial Electronics Society (IECON
'98)", Aug. 8th - Sept. 4th, 1998, Aachen, Germany, p. 2382 (1998)
97. *"Hydrogen Redistribution and Enhanced Thermal Donor Formation at Post-Implantation
Annealing of P-Type Hydrogen Implanted Czochralski Silicon"*
A. G. Ulyashin, A. I. Ivanov, I. A. Khorunzhii, R. Job, W. R. Fahrner, F. F. Komarov,
A. C. Kamyshan;
1998 E-MRS Spring Meeting, June 16th - June 19th, Strasbourg, France
(siehe auch: Mater. Sci. Engineer. B 58, 91 (1999))
98. *"The Comparison of Oxygen and Hydrogen Gettering at High-Temperature Post-
Implantation Annealing of Hydrogen and Helium Implanted Czochralski Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin, A. I. Ivanov, L. Palmetshofer;
in: "Defect and Impurity Engineered Semiconductors and Devices", Editors: S. Ashok,
J. Chevallier, W. Goetz, B. L. Sopori, MRS Symposium Proceedings Series, Vol. 510
(the 1998 MRS Spring Meeting, San Francisco, USA), p. 425 (1998)
99. *"A Two-Step Low-Temperature Process for a P-N Junction Formation due to Hydrogen
Enhanced Thermal Donor Formation in P-Type Czochralski Silicon"*
R. Job, W. R. Fahrner, N. M. Kazuchits, A. G. Ulyashin;
in: "Hydrogen in Semiconductors and Metals", Editors: N.H. Nickel, W.B. Jackson,
R.C. Bowman, R.G. Leisure, MRS Symposium Proceedings Series, Vol. 513 (the 1998
MRS Spring Meeting, San Francisco, USA), p. 337 (1998)
('Outstanding Poster Award')
100. *"Diamond Radiation Sensors for Medical Applications"*
F. Blum, A. Denisenko, R. Job, D. Borchert, W. R. Fahrner;
Proceedings "IEEE International Symposium on Industrial Electronics (ISIE '98)", July
7th - 10th, 1998, Pretoria, South Africa, p. 163 (1998)
101. *"LEDs on Diamond"*
W. R. Fahrner, A. M. Zaitsev, A. A. Melnikov, A. V. Denisenko, R. Job, S. T. Lee;
SPIE-Int. Soc. Opt. Eng. Proceedings of SPIE - the International Society for Optical
Engineering, vol. 3279, 113 (1998)
102. *"Characterization of Indium-Tin-Oxide Films by Means of Ion-Implanted Nuclear
Probes"*
H. Metzner, S. Habenicht, T. Hahn, M. Uhrmacher, K.-P. Lieb, D. Borchert, R. Job,
W. R. Fahrner;
Proceedings "10th International Conference on Thin Films, ICFT-10 / EVC-5", Sept.
1996, Salamanca, Spanien
(siehe auch: Thin Solid Films 317, 161 (1998))

103. *"Oxygen Gettering on Buried Layers at Post-Implantation Annealing of Hydrogen Implanted Czochralski Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin, Yu. A. Bumay, A. I. Ivanov, L. Palmetshofer;
Proceedings "GADEST '97, 7th International Autumn Meeting", 5. - 10.10.1997, Spa,
Belgien, Trans Tech Publications Ltd., Zürich, Switzerland (1997)
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 57-58, 91 (1997))
104. *"Low-Temperature Doping of P-Type Czochralski Silicon due to Hydrogen Plasma Enhanced Thermal Donor Formation"*
A. G. Ulyashin, Yu. A. Bumay, R. Job, G. Grabosch, D. Borchert, W. R. Fahrner,
A. Yu. Diduk;
Proceedings "GADEST '97, 7th International Autumn Meeting", 5. - 10.10.1997, Spa,
Belgien, Trans Tech Publications Ltd., Zürich, Switzerland (1997)
(siehe auch: Diffusion & Defect Data Pt. B: Solid State Phenomena 57-58, 189 (1997))
105. *"The 'Micro-Cooling-Systems' Joint Research Project"*
W. R. Fahrner, R. Job, M. Werner;
Proceedings "Micro Materials, International Conference and Exhibition (Micro Mat.
'97)", 16.- 18.4.1997, Berlin, Germany, Ed.: B. Michel, T. Winkler, DDP Goldenbogen
Verlag, Germany, p. 1149 (1997)
('Best Poster Award: 2nd Prize')
106. *"Optical Characterization of Electrical, Thermal, and Mechanical Properties of Wide Band Gap Superhard Semiconductors"*
A. M. Zaitsev, A. G. Zakharov, A. V. Denisenko, A. A. Melnikov, V. S. Varichenko,
R. Job, W. R. Fahrner;
Proceedings "Micro Materials, International Conference and Exhibition (Micro Mat.
'97)", 16.- 18.4.1997, Berlin, Germany, Ed.: B. Michel, T. Winkler, DDP Goldenbogen
Verlag, Dresden, Germany, p. 799 (1997)
107. *"Metallization of Diamond for Micro-System Applications"*
R. Job, M. Werner, A. Melnikov, W. R. Fahrner;
Proceedings "Micro Materials, International Conference and Exhibition (Micro Mat.
'97)", 16.- 18.4.1997, Berlin, Germany, Ed.: B. Michel, T. Winkler, DDP Goldenbogen
Verlag, Dresden, Germany, p. 1211 (1997)
108. *"Formation of Deep p-n-Junctions in p-Type Czochralski Silicon by Low Temperature Hydrogen Plasma Treatment and Its Characterization by Spreading Resistance and Capacitance-Voltage Measurements"*
A. G. Ulyashin, R. Job, Y. A. Bumay, G. Grabosch, D. Borchert, W. R. Fahrner;
Proceedings "Micro Materials, International Conference and Exhibition (Micro Mat.
'97)", 16.- 18.4.1997, Berlin, Germany, Ed.: B. Michel, T. Winkler, DDP Goldenbogen
Verlag, Dresden, Germany, p. 1180 (1997)
109. *"Oxygen Gettering and Thermal Donor Formation at Post-Implantation Annealing of Hydrogen Implanted Czochralski Silicon"*
A. G. Ulyashin, Y. A. Bumay, W. R. Fahrner, A. I. Ivanov, R. Job, L. Palmetshofer;
in: "Defects and Diffusion in Silicon Processing", Editors: S. Coffa, T. de la Rubia,
C. Rafferty, P. Stolk, MRS Symposium Proceedings Series, Vol. 469 (the 1997 MRS
Spring Meeting, San Francisco, USA), p. 95 (1997)

110. *"The Conversion of Czochralski Silicon from P-Type to N-Type by Hydrogen Plasma Enhanced Thermal Donor Formation"*
 R. Job, D. Borchert, Y. A. Bumay, W. R. Fahrner, G. Grabosch, I. A. Khorunzhii, A. G. Ulyashin;
 in: "Defects and Diffusion in Silicon Processing", Editors: S. Coffa, T. de la Rubia, C. Rafferty, P. Stolk, MRS Symposium Proceedings Series, Vol. 469 (the 1997 MRS Spring Meeting, San Francisco, USA), p. 101 (1997)
111. *"The Impact of the ^{13}C Isotope Content and the Grain Size on the Thermal Conductivity of Polycrystalline Diamond Films"*
 J. Bonhaus, A. V. Denisenko, W. R. Fahrner, R. Job, A. Podoba, M. Werner, A. M. Zaitsev;
 Proceedings "MICRO SYSTEM Technologies '96. The 5th Int. Conference and Exhibition on Micro, Opto, Mechanical Systems and Components (18. - 22.9.1996, Berlin)", Editors: H. Reichl, A. Heuberger, VDE-Verlag GmbH, Berlin & Offenbach, Germany, p. 768 (1996)
112. *"Radiation Response of P-I-P Diodes on Diamond Substrates of Various Types"*
 A. Denisenko, U. Strähle, W. R. Fahrner, H. Henschel, R. Job;
 Proceedings "IEEE Nuclear and Space Radiation Effects Conference (IEEE NSREC)", 15. - 19.7.1996, Stouffer Renaissance Esmeralda Resort, Indian Wells, CA, USA (siehe auch: IEEE Transact. on Nuclear Science 43, 3081 (1996))
113. *"High Sensitivity Thermal Sensors on Insulating Diamond"*
 R. Job, A. V. Denisenko, A. M. Zaitsev, A. A. Melnikov, M. Werner, W. R. Fahrner;
 Proceedings "International Conference on Metallurgical Coatings and Thin Films ICMCTF '96", 22. - 26.4.1996, San Diego, CA, USA (siehe auch: Thin Solid Films 290-291, 165 (1996))
114. *"Luminescence Characterization and Application of Diamond"*
 A. M. Zaitsev, A. A. Melnikov, A. V. Denisenko, V. S. Varichenko, R. Job, W. R. Fahrner;
 in: "Diamond for Electronic Applications", Editors: A. Collins, T. Humphreys, K. Das, P. E. Pehrson, MRS Symposium Proceedings Series, Vol. 416 (the 1995 MRS Fall Meeting, Boston, USA), p. 113 (1996)
115. *"Temperature Sensor on Boron Ion Implanted Diamond"*
 R. Job, M. Werner, A. V. Denisenko, A. M. Zaitsev, A. A. Melnikov, W. R. Fahrner;
 in: "Diamond for Electronic Applications", Editors: A. Collins, T. Humphreys, K. Das, P. E. Pehrson, MRS Symposium Proceedings Series, Vol. 416 (the 1995 MRS Fall Meeting, Boston, USA), p. 246 (1996)
116. *"How to Fabricate Low-Resistance Metal-Diamond Contacts"*
 M. Werner, R. Job, A. Denisenko, A. Zaitsev, W. R. Fahrner, C. Johnston, P. R. Chalker, I. M. Buckley-Golder;
 Proceedings "Diamond Films '95. The 6th European Conference on Diamond, Diamond-like and Related Materials", 10. - 15.09.1995, Barcelona, Spain, (siehe auch: Diamond and Related Mater. 5, 723 (1996))
117. *"Electrical Properties of Lithium Implanted Layers on Synthetic Diamond"*
 R. Job, M. Werner, A. Denisenko, A. Zaitsev, W. R. Fahrner;
 Proceedings "Diamond Films '95. The 6th European Conference on Diamond, Diamond-like and Related Materials", 10. - 15.09.1995, Barcelona, Spain, (siehe auch: Diamond and Related Mater. 5, 757 (1996))

118. *"Low Temperature Processing of ITO Films for the Application in a-Si/c-Si Heterojunction Solar Cells"*
D. Borchert, R. Job, G. Grabosch, C. Wolffersdorf, W. R. Fahrner;
Proceedings "13th European Photovoltaic Solar Energy Conference and Exhibition", 23. - 27.10.1995, Nizza, France, Vol. 1, p. 249 (1995)
119. *"Mößbauerspektroskopie und kernmagnetische Resonanz-Untersuchungen an HTSL"*
Th. Sinnemann, R. Job, R. Michalak, M. Mittag, R. Wernhardt, M. Rosenberg, H. Lütgemeier;
in: "Supraleitung und Tieftemperaturtechnik", Editor: VDI-Technologie-Zentrum, Physikalische Technologien, VDI-Verlag, Düsseldorf (1993)
120. *"Magnetische Phasendiagramme und Flußverankerungsmechanismen in Bi- und Tl-haltigen HTSL"*
R. Job, M. Mittag, R. Wernhardt, M. Rosenberg, B. Himmerich, H. Sabrowsky;
in: "Supraleitung und Tieftemperaturtechnik", Editor: VDI-Technologie-Zentrum, Physikalische Technologien, VDI-Verlag, Düsseldorf (1993)
121. *"Some comments on the magnetic phase diagrams of Bi- and Tl-containing high-T_c superconductors with critical temperatures above 100 K"*
R. Job;
Proceedings "18th Workshop on High Temperature Superconductivity", Editors: T. S. Hahn, S. Y. Lee, Z. G. Khim, Y. J. Park and K. Nahm; Yongpyung, Korea, Aug. 17 - 19, 1993, published by 'Korea Institute of Science and Technology', Cheongryang P.O. Box 131, Seoul, 130-650, Korea (1993)
(eingeladen)
122. *"Flußverankerung und elektrischer Widerstand in (Bi,Pb)-2223 und Tl-2223 Hochtemperatursupraleitern"*
M. Mittag, R. Job, R. Ivens, R. Wernhardt, M. Rosenberg, B. Himmerich, H. Sabrowsky;
in: "Supraleitung und Tieftemperaturtechnik", Editor: VDI-Technologie-Zentrum, Physikalische Technologien, VDI-Verlag, Düsseldorf, Germany (1991)
123. *"Präparation und magnetische Charakterisierung von Bi- und Tl-haltigen HTSL mit kritischen Temperaturen über 100 K"*
R. Job, Th. Sinnemann, H. Bach, M. Rosenberg, B. Himmerich, H. Sabrowsky;
in: "Supraleitung und Tieftemperaturtechnik", Editor: VDI-Technologie-Zentrum, Physikalische Technologien, VDI-Verlag, Düsseldorf, Germany (1991)
124. *"Synthesis and Superconducting Properties of Bi-Pb-Sr-Ca-Cu-O Ceramics"*
R. Job, M. Rosenberg, H. Bach;
in: "High-Temperature Superconductors. Materials Aspects", Proceedings "ICMC'90 Topical Conference on Materials Aspects of High-Temperature Superconductors", Editors: H. C. Freyhardt, R. Flükiger, M. Peuckert; DGM Informationsgesellschaft mbH - Verlag, Oberursel, Germany (1991)
125. *"Preparation and Magnetic Studies of Single Crystalline (Bi,Pb)SrCaCuO Superconductors"*
R. Job, M. Rosenberg, H. Bach;
in: "Physics and Materials Science of High Temperature Superconductors", Editors: R. Kossowsky, S. Methfessel, D. Wohlleben; NATO A.S.I. Series E, Kluwer Academic Publishers (1989)

99 Artikel in wissenschaftlichen Journalen:

1. *"Model based prediction of the trap limited diffusion of hydrogen in post-hydrogenated amorphous silicon"*
S. Gerke, H.-W. Becker, D. Rogalla, R. Job, B. Terheiden
physica status solidi (RRL), 1-5 (2016)
DOI 10.1002/pssr.201600303
2. *"Capacitance-voltage spectroscopy and analysis of dielectric intrinsic amorphous silicon thin films"*
S. Gerke, G. Micard, R. Job, G. Hahn, B. Terheiden;
physica status solidi (c), 1-5 (2016)
DOI 10.1002/pssc.201600019
3. *"Al-density variation as one driving force for void formation in PERC solar cells"*
R. Horbelt, S. Ebert, V. Ulbikaite, G. Hahn, R. Job, B. Terheiden;
physica status solidi (RRL), 1-5 (2016)
DOI 10.1002/pssr.20160007853
4. *"Characterization of local Al-contacts by light beam induced current measurements and their verification by 2D simulation using flexPDE"*
R. Horbelt, G. Micard, P. Keller, G. Hahn, R. Job, B. Terheiden;
physica status solidi (a) 213, 1317 (2016)
DOI 10.1002/pssa.201532753
5. *"Influence of post-hydrogenation upon electrical, optical and structural properties of hydrogen-less sputter-deposited amorphous silicon"*
S. Gerke, H.-W. Becker, D. Rogalla, F. Singer, N. Brinkmann, S. Fritz, A. Hammud,
P. Keller, D. Skoraka, D. Sommer, C. Weiß, S. Flege, G. Hahn, R. Job, B. Terheiden;
Thin Solid Films 598, 161 (2016),
DOI 10.1016/j.tsf.2015.11.063
6. *"Metastable Defects in Proton Implanted and Annealed Silicon"*
M. Jelinek, J. G. Laven, N. Ganagona, R. Job, W. Schustereder, H.-J. Schulze,
M. Rommel, L. Frey;
Solid State Phenomena 242, 169 (2016)
7. *"Void formation in PERC solar cells and their impact on the electrical cell parameters verified by luminescence and scanning acoustic microscope measurements"*
R. Horbelt, G. Hahn, R. Job, B. Terheiden;
Energy Procedia 84, 47 (2015)
8. *"About Nuclear Resonant Reaction Analysis for Hydrogen Investigations in Amorphous Silicon Layers"*
S. Gerke, H.-W. Becker, D. Rogalla, G. Hahn, R. Job, B. Terheiden;
Energy Procedia 84, 99 (2015)
9. *"Bias-plasma for RF magnetron sputter deposition of passivating amorphous silicon layers"*
S. Gerke, G. Hahn, R. Job, B. Terheiden;
Energy Procedia 84, 105 (2015)
10. *"Comparison of BO Regeneration dynamics in PERC and Al-BSF solar cells"*
A. Herguth, R. Horbelt, S. Wilking, R. Job, G. Hahn;
Energy Procedia 77, 75 (2015)

11. *"Morphology and Hydrogen in Passivating Amorphous Silicon Layers"*
S. Gerke, H.-W. Becker, D. Rogalla, G. Hahn, R. Job, B. Terheiden;
Energy Procedia 77, 791 (2015)
12. *"DLTS Characterization of Proton Implanted Silicon under Varying Annealing Conditions"*
J. G. Laven, M. Jelinek, R. Job, H.-J. Schulze, W. Schustereder, S. Kirnstötter,
M. Rommel, L. Frey;
phys. stat. solidi (b), 251, 2189 (2014)
13. *"Pressure Sensor Systems for Wide Pressure Ranges Integrated by a Combined CMOS- and MEMS-Technology"*
W. Schreiber-Prillwitz, R. Job;
Journal of Integrated Circuits and Systems 8(2), 83 (2013)
(eingeladen)
14. *"Activation and Dissociation of Proton-Induced Donor Profiles in Silicon"*
J. Laven, R. Job, H. -J. Schulze, F.-J. Niedernostheide, W. Schustereder, L. Frey;
ECS Journal of Solid State Science and Technology 2(9), P389 (2013)
15. *"Defect Engineering for Modern Power Devices"*
R. Job, J. G. Laven, F.-J. Niedernostheide, H.-J. Schulze, H. Schulze, W. Schustereder;
phys. stat. solidi (a), 209, 1940 (2012)
(eingeladen)
16. *"Conversion Efficiency of Radiation Damage Profiles into Hydrogen-Related Donor Profiles"*
J. G. Laven, R. Job, W. Schustereder, H.-J. Schulze, F.-J. Niedernostheide, H. Schulze,
L. Frey;
Diffusion and Defect Data Part B (Solid State Phenomena) 178-179, 375 (2011)
17. *"Thickness Dependence of Resistivity and Optical Reflectance of ITO Films"*
M. Z. Gao, R. Job, D. S. Xue, W. R. Fahrner;
Chin. Phys. Lett. 25, 1380 (2008)
18. *"Investigation of the Emitter Band Gap Widening of Heterojunction Solar Cells by use of Hydrogenated Amorphous Carbon Silicon Alloys"*
T. Mueller, W. Dungen, Y. Ma, R. Job, M. Scherff, W. R. Fahrner;
J. Appl. Phys. 102, 074505 (2007)
19. *"Blistering of Implanted Crystalline Silicon by Plasma Hydrogenation Investigated by Raman Scattering Spectroscopy"*
W. Dungen, R. Job, T. Mueller, Y. Ma, W. R. Fahrner, L. O. Keller, J. T. Horstmann,
H. Fiedler;
J. Appl. Phys. 100, 124906 (2006)
20. *"Hydrogen-Plasma-Induced Thermal Donors in High Resistivity N-Type Magnetic Czochralski-Grown Silicon"*
Y. L. Huang, E. Simoen, C. Claeys, J. M. Rafi, P. Clauws, R. Job, W. R. Fahrner;
Appl. Phys. Lett. 89, 031911 (2006)
21. *"Thermal Evolution of Hydrogen related Defects in Hydrogen Implanted Czochralski Silicon Investigated by Raman Spectroscopy and Atomic Force Microscopy"*
W. Dungen, R. Job, Y. Ma, Y. L. Huang, T. Mueller, W. R. Fahrner, L. O. Keller,
J. T. Horstmann, H. Fiedler;
J. Appl. Phys. 100, 034911 (2006)

22. *"Hydride Formation on the Platelet Inner Surface of Plasma-Hydrogenated Crystalline Silicon Investigated with Raman Spectroscopy"*
Y. Ma, Y. L. Huang, W. Dungen, R. Job, W. R. Fahrner;
Phys. Rev. B 72, 085321 (2005)
23. *"Silicon Pyramidal Texture Formed in Pure Hydrogen Plasma Exposure"*
Y. L. Huang, Y. Ma, R. Job, M. Scherff, W. R. Fahrner, H. G. Shi, D. S. Xue,
M. L. David;
J. Electrochem. Soc. 152, C600 (2005)
24. *"The Lower Boundary of the Hydrogen Concentration Required for Enhancing Oxygen Diffusion and Thermal Donor Formation in Czochralski Silicon"*
Y. L. Huang, Y. Ma, R. Job, W. R. Fahrner, E. Simoen, C. Claeys;
J. Appl. Phys. 98, 033511 (2005)
25. *"Trapping of Hydrogen in Argon-Implanted Crystalline Silicon"*
Y. Ma, R. Job, W. Dungen, Y. L. Huang, W. R. Fahrner, M.-F. Beaufort, S. Rousselet,
J. T. Horstmann;
Appl. Phys. Lett. 86, 252109 (2005)
26. *"Suppression of Hydrogen Diffusion at the Hydrogen-Induced Platelets in P-Type Czochralski Silicon"*
Y. L. Huang, Y. Ma, R. Job, W. R. Fahrner;
Appl. Phys. Lett. 86, 131911 (2005)
27. *"Dissociation, Transformation, and Recombination of Si-H Bonds in Hydrogenated Crystalline Silicon Determined by In Situ Micro-Raman Spectroscopy"*
Y. Ma, Y. L. Huang, R. Job, W. R. Fahrner;
Phys. Rev. B 71, 045206 (2005)
28. *"Impact of Direct Plasma Hydrogenation on Thermal Donor Formation in N-Type CZ Silicon"*
J. M. Rafi, E. Simoen, C. Claeys, Y. L. Huang, A. G. Ulyashin, R. Job, J. Versluys,
P. Clauws, M. Lozano, F. Campabadal;
J. Electrochem. Soc. 152, G16 (2005)
29. *"Substrate Dependence of Properties of Sputtered ITO Films"*
M. Z. Gao, H. G. Shi, R. Job, F. S. Li, W. R. Fahrner;
Chin. Phys. Lett. 22, 1228 (2005)
30. *" μ -Raman Investigations on Hydrogen Gettering in Hydrogen Implanted and Hydrogen Plasma Treated Czochralski Silicon"*
W. Dungen, R. Job, Y. Ma, Y. L. Huang, W. R. Fahrner, L. O. Keller, J. T. Horstmann;
Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 91 (2005)
31. *"Evolution of Hydrogen Related Defects in Plasma Hydrogenated Crystalline Silicon under Thermal and Laser Annealing"*
Y. Ma, Y. L. Huang, R. Job, W. Dungen, W. R. Fahrner;
Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 211 (2005)
32. *"DLTS Study on Deep Levels Formed in Plasma Hydrogenated and Subsequently Annealed Silicon"*
Y. L. Huang, E. Simoen, C. Claeys, R. Job, Y. Ma, W. Dungen, W. R. Fahrner,
J. Versluys, P. Clauws;
Diffusion & Defect Data Pt. B: Solid State Phenomena 108-109, 547 (2005)

33. *"Electron Irradiation Effect on Thermal Donors in CZ-Si"*
K. Takakura, H. Ohyama, H. Murakawa, T. Yoshida, J. M. Rafi, R. Job, A. Ulyashin, E. Simoen, C. Claeys;
The European Physical Journal - Applied Physics (EPJ AP) 27, 133 (2004)
34. *"Hydrogen Diffusion at Moderate Temperatures in P-Type Czochralski Silicon"*
Y. L. Huang, Y. Ma, R. Job, A. G. Ulyashin;
J. Appl. Phys. 96, 7080 (2004)
35. *"The Microstructure of the Fibrous Layer of Terebratulide Brachiopod Shell Calcite"*
W. W. Schmahl, E. Griesshaber, R. Neuser, A. Lenze, R. Job, U. Brand;
Eur. J. Mineral. 16, 693 (2004)
36. *"Three-Layer Structure of Hydrogenated Cz Silicon"*
Y. Ma, R. Job, Y.L. Huang, W. R. Fahrner, M.-F. Beaufort, J.-F. Barbot;
J. Electrochem. Soc. 151, G627 (2004)
37. *"Dependence of Hydrogen Diffusion on the Electric Field in P-Type Silicon"*
Y. L. Huang, B. Wdowiak, R. Job, Y. Ma, W. R. Fahrner;
J. Electrochem. Soc. 151, G564 (2004)
38. *"Comparison of Electron Irradiation Effect on Thermal Donors in Cz and Oxygen Doped FZ Silicon"*
K. Takakura, H. Ohyama, T. Yoshida, H. Murakawa, J. M. Rafi, R. Job, A. G. Ulyashin, E. Simoen, C. Claeys;
Physica B 340-342, 1022 (2003)
39. *"Magnetic Properties of Pure Fe-Al₂O₃ nanocomposites"*
D. S. Xue, Y. L. Huang, Y. Ma, P. H. Zhou, Z. P. Niu, F. S. Li, R. Job, W. R. Fahrner;
J. Mater. Sci. Lett. 22, 1817 (2003)
40. *"Modelling of a Pin-Fin Heat Converter with Fluid Cooling for Power Semiconductor Modules"*
I. Khorunzhii, H. Gabor, R. Job, W. R. Fahrner, H. Baumann;
Intern. J. of Energy Res. 27, 1015 (2003)
41. *"Characterisation of Oxygen and Oxygen-related Defects in High- and Lowly-Doped Silicon"*
E. Simoen, C. Claeys, R. Loo, O. De Gryse, P. Clauws, R. Job, A. G. Ulyashin, W. R. Fahrner;
Mater. Sci. Engineer. B 102, 207 (2003)
42. *"Deep Levels in Oxygenated N-Type High-Resistivity Float-Zone Silicon Before and After a Low Temperature Hydrogenation Step"*
E. Simoen, C. Claeys, R. Job, A. G. Ulyashin, W. R. Fahrner, G. Tonelli, O. De Gryse, P. Clauws;
J. Electrochem. Soc. 150, G520 (2003)
43. *"Depth Resolved Defect Analysis by Micro-Raman Investigations on Plasma Hydrogenated Czochralski Silicon Wafers"*
R. Job, Y. Ma, Y. L. Huang, A. G. Ulyashin, W. R. Fahrner, M.-F. Beaufort, J.-F. Barbot;
Diffusion & Defect Data Pt. B: Solid State Phenomena 95-96, 141 (2003)

44. *"Effect of Electron Irradiation on Thermal Donors in Oxygen-Doped High-Resistive FZ Si"*
K. Takakura, H. Ohyama, T. Yoshida, H. Murakawa, J. M. Rafi, R. Job, A. Ulyashin, E. Simoen, C. Claeys;
Diffusion & Defect Data Pt. B: Solid State Phenomena 95-96, 53 (2003)
45. *" μ -Raman Investigations of Plasma Hydrogenated Silicon"*
R. Job, A. G. Ulyashin, W. R. Fahrner, M.-F. Beaufort, J.-F. Barbot;
The European Physical Journal - Applied Physics (EPJ AP) 23, 25 (2003)
46. *"Role of Hydrogen in the Separation of a Porous Si Layer in a Layer Transfer Process"*
R. Bilyalov, C. S. Solanski, J. Poortmans, A. Ulyashin, R. Job, W. Fahrner;
phys. stat. solidi (a) 197(1), 128 (2003)
47. *"Computer Simulations of a Pin-Fin Heat Sink with Fluid Cooling for Semiconductor Modules"*
I. A. Khorunzhii, H. Gabor, R. Job, W. R. Fahrner, H. Baumann;
Sensors and Materials 14, 429 (2002)
48. *"Substrate Orientation, Doping and Plasma Frequency Dependencies of Structural Defect Formation in Hydrogen Plasma Treated Silicon"*
A. G. Ulyashin, R. Job, W. R. Fahrner, O. Richard, H. Bender, C. Claeys, E. Simoen, D. Grambole;
J. Phys.: Condensed Matter 14, 13037 (2002)
49. *"Comparison of Multicrystalline Silicon Surfaces After Wet Chemical Etching and Hydrogen Plasma Treatment: Application to Heterojunction Solar Cells"*
A. Ulyashin, M. Scherff, R. Hussein, M. Gao, R. Job, W. R. Fahrner;
Solar Energy Materials & Solar Cells 74, 195 (2002)
50. *"Steady-State Thermal Conductivity Measurements of Superhard Materials"*
I. Khorunzhii, H. Gabor, R. Job, W. R. Fahrner, A. Denisenko, D. Brunner, U. Peschek;
Measurement 32, 163 (2002)
51. *"Hydrogen Plasma-Enhanced Thermal Donor Formation in N-Type Oxygen-Doped High-Resistivity Float-Zone Silicon"*
E. Simoen, C. Claeys, R. Job, A. G. Ulyashin, W. R. Fahrner, O. De Gryse, P. Clauws;
Appl. Phys. Lett. 81, 1842 (2002)
52. *"Thermochemical Beveling of CVD Diamond Films Intended for Precision Cutting and Measurement Applications"*
J. A. Weima, R. Job, W. R. Fahrner;
Diamond and Related Mater. 11, 1537 (2002)
53. *"Impurities and Defects in Multicrystalline Silicon for Solar Cells: Low-Temperature Photoluminescence Investigations"*
A. V. Mudryi, A. I. Patuk, I. A. Shakin, A. G. Ulyashin, R. Job, W. R. Fahrner, A. Fedotov, A. Mazanik, N. Drozdov;
Solar Energy Materials and Solar Cells 72, 503 (2002)
54. *"The Influence of the Amorphous Silicon Deposition Temperature on the Efficiency of the ITO/a-Si:H/c-Si Heterojunction Solar Cells and Properties of Interfaces"*
A. G. Ulyashin, R. Job, M. Scherff, M. Gao, W. R. Fahrner, D. Lyebvedyev, N. Roos, H. C. Scheer;
Thin Solid Films 403-404, 359 (2002)

55. *"Positron Beam and Raman Analysis of Hydrogen Plasma Treated and Annealed Cz-Si"*
H. Schut, A. van Veen, S. W. H. Eijt, R. Job, A. G. Ulyashin, W. R. Fahrner;
Nucl. Instr. and Meth. in Phys. Res. B 186, 94 (2002)
56. *"Formation of Luminescent Structures on Cz-Silicon by Hydrogen Plasma Treatments and Oxydation"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
Nucl. Instr. and Meth. in Phys. Res. B 186, 132 (2002)
57. *"Thermal Donor Formation in Oxygen Enriched High-Resistive Float-Zone Silicon Radiation Detector Substrates"*
R. Job, A. G. Ulyashin, W. R. Fahrner, E. Simoen, C. Claeys, G. Tonelli;
Nucl. Instr. and Meth. in Phys. Res. B 186, 116 (2002)
58. *"Hydrogen Redistribution and Voids Formation in Hydrogen Plasma Treated Czochralski Silicon"*
A. G. Ulyashin, R. Job, W. R. Fahrner, D. Grambole, F. Herrmann;
Diffusion & Defect Data Pt. B: Solid State Phenomena 82-84, 315 (2002)
59. *"Raman Spectroscopic Analysis of Hydrogen Plasma Treated Czochralski Silicon"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
Diffusion & Defect Data Pt. B: Solid State Phenomena 82-84, 139 (2002)
60. *"Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon: Application to Low-Temperature Active Defect Engineering"*
A. G. Ulyashin, R. Job, I. A. Khorunzhii, W. R. Fahrner;
Physica B 308-310, 185 (2001)
61. *"Low-Temperature Photoluminescence Characterization of Defects Formation in Hydrogen and Helium Implanted Silicon at Post-Implantation Annealing"*
A. V. Mudryi, F. P. Korshunov, A. I. Patuk, I. A. Shakin, T. P. Larionova,
A. G. Ulyashin, R. Job, W. R. Fahrner, V. V. Emtsev, V. Yu. Davydov, G. Oganessian;
Physica B 308-310, 181 (2001)
62. *"Sensors and Smart Electronics in Harsh Environment Applications"*
W. R. Fahrner, R. Job, M. Werner;
Microsystems Technologies 7, 138 (2001)
63. *"Surface Analysis of Ultra-Precisely Polished Chemical Vapor Deposited Diamond Films Using Spectroscopic and Microscopic Techniques "*
J. A. Weima, R. Job, W. R. Fahrner, G. C. Kosaca, N. Müller, T. Fries;
J. Appl. Phys. 89, 2434 (2001)
64. *"The Evolution of Hydrogen Molecule Formation in Hydrogen Plasma Treated Czochralski Silicon"*
R. Job, A. G. Ulyashin, W. R. Fahrner;
Mater. Sci. Semicond. Proc. 4, 257 (2001)
65. *"Low Temperature Photoluminescence Characterization of Hydrogen and Helium Implanted Czochralski Silicon"*
A. G. Ulyashin, A. V. Mudryi, A. I. Patuk, I. A. Shakin, R. Job, W. R. Fahrner;
Mater. Sci. Semicond. Proc. 4, 297 (2001)

66. *"Experimental Investigation of the Parameter Dependency of the Removal Rate of Thermochemically Polished Polycrystalline CVD Diamond Films"*
J. A. Weima, W. R. Fahrner, R. Job;
J. Solid State Electrochem. 5, 112 (2001)
67. *"Oxygen and Hydrogen Accumulation at Buried Implantation Damage Layers in Hydrogen and Helium Implanted Czochralski Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin, A. I. Ivanov, L. Palmetshofer;
Appl. Phys. (A) 72, 325 (2001)
68. *"The Application of the Hydrogen Plasma Technology for the Modification of Silicon and for the Formation of Silicon Based Device Structures" (in russisch)*
A. G. Ulyashin, A. K. Fedotov, R. Job, W. R. Fahrner A. V. Mazanik;
Physics and Chemistry of Material Treatments 5, 22 (2000)
(fizika i himiya obrabotki materialov)
69. *"Hydrogen-Plasma-Enhanced Oxygen Precipitation in Silicon"*
V. P. Markevich, L. I. Murin, J. L. Lindström, A. G. Ulyashin, R. Job, W. R. Fahrner, V. Raiko;
J. Phys. C: Condens. Matter 12, 10145 (2000)
70. *"Investigation of Non-Diamond Carbon Phases and Optical Centers in Thermochemically Polished Polycrystalline CVD Diamond Films"*
J. A. Weima, A. M. Zaitsev, R. Job, G. Kosaca, F. Blum, G. Grabosch, W. R. Fahrner, J. Knopp;
J. Solid State Electrochem. 4, 425 (2000)
71. *"Low Energy Carbonaceous and Graphite Phases on the Surface of Thermochemically Polished CVD Diamond Films"*
J. A. Weima, R. Job, A. M. Zaitsev, W. R. Fahrner;
J. Appl. Phys. 87, 4553 (2000)
72. *"Electronic Device Fabrication by Simple Hydrogen Enhanced Thermal Donor Formation Processes in P-Type Cz-Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin;
Mater. Sci. Engineer. B 73, 197 (2000)
73. *"The Hydrogen Gettering at Post-Implantation Hydrogen Plasma Treatments of Helium and Hydrogen Implanted Czochralski Silicon"*
A. G. Ulyashin, A. I. Ivanov, R. Job, W. R. Fahrner, F. F. Komarov, A. V. Frantskevich;
Mater. Sci. Engineer. B 73, 64 (2000)
74. *"Characterization of the Oxygen Distribution in Czochralski Silicon by Electrical Measurements using Hydrogen Enhanced Thermal Donor Formation"*
A. G. Ulyashin, I. A. Khorunzhii, R. Job, W. R. Fahrner;
Mater. Sci. Engineer. B 73, 124 (2000)
75. *"Electronic Devices on Ion Implanted Diamond"*
A. M. Zaitsev, A. V. Denisenko, G. Kosaca, R. Job, W. R. Fahrner, A. A. Melnikov, V. S. Varichenko, B. Burchard, J. von Borany, M. Werner;
Journal of Wide Bandgap Materials 7, 4 (1999)
76. *"Rapid Low Temperature Diode Fabrication on the Base of Simple Hydrogen Enhanced Thermal Donor Formation Processes"*
R. Job, J. Weima, G. Grabosch, D. Borchert, W. R. Fahrner, V. Raiko, A. G. Ulyashin;
Diffusion & Defect Data Pt. B: Solid State Phenomena 69-70, 551 (1999)

77. *"The Influence of Low-Energy Argon Implantation and Out-Diffusion Heat Treatments on Hydrogen Enhanced Thermal Donor Formation in P-Type Czochralski Silicon"*
A. G. Ulyashin, A. N. Petlitskii, R. Job, W. R. Fahrner, A. K. Fedotov, A. I. Stognii;
Diffusion & Defect Data Pt. B: Solid State Phenomena 69-70, 409 (1999)
78. *"Hydrogen Redistribution and Enhanced Thermal Donor Formation at Post-Implantation Annealing of P-Type Hydrogen Implanted Czochralski Silicon"*
A. G. Ulyashin, A. I. Ivanov, I. A. Khorunzhii, R. Job, W. R. Fahrner, F. F. Komarov,
A. C. Kamyshan;
Mater. Sci. Engineer. B 58, 91 (1999)
79. *"Thermochemical Polishing of CVD Diamond Films"*
A. M. Zaitsev, G. Kosaca, B. Richarz, V. Raiko, R. Job, T. Fries, W. R. Fahrner;
Diamond and Related Mater. 8, 1108 (1998)
80. *"Characterization of Indium-Tin-Oxide Films by Means of Ion-Implanted Nuclear Probes"*
H. Metzner, S. Habenicht, T. Hahn, M. Uhrmacher, K.-P. Lieb, D. Borchert, R. Job,
W. R. Fahrner;
Thin Solid Films 317, 161 (1998)
81. *"Formation of Deep P-N Junctions in P-Type Czochralski Grown Silicon by Hydrogen Plasma Treatment"*
A. G. Ulyashin, Y. A. Bumay, R. Job, W. R. Fahrner;
Applied Physics (A) 66, 399 (1998)
82. *"Low-Temperature Doping of P-Type Czochralski Silicon due to Hydrogen Plasma Enhanced Thermal Donor Formation"*
A. G. Ulyashin, Yu.A. Bumay, R. Job, G. Grabosch, D. Borchert, W. R. Fahrner,
A. Yu. Diduk;
Diffusion & Defect Data Pt. B: Solid State Phenomena 57-58, 189 (1997)
83. *"Oxygen Gettering on Buried Layers at Post-Implantation Annealing of Hydrogen Implanted Czochralski Silicon"*
R. Job, W. R. Fahrner, A. G. Ulyashin, Yu. A. Bumay, A. I. Ivanov, L. Palmethofer;
Diffusion & Defect Data Pt. B: Solid State Phenomena 57-58, 91 (1997)
84. *"Radiation Response of P-I-P Diodes on Diamond Substrates of Various Types"*
A. Denisenko, U. Strähle, W. R. Fahrner, H. Henschel, R. Job;
IEEE Transact. on Nuclear Science 43, 3081 (1996)
85. *"High Sensitivity Thermal Sensors on Insulating Diamond"*
R. Job, A. V. Denisenko, A. M. Zaitsev, A. A. Melnikov, M. Werner, W. R. Fahrner;
Thin Solid Films 290-291, 165 (1996)
86. *"The Relationship between Resistivity and Boron Doping Concentration of Single and Polycrystalline Diamond"*
M. Werner, R. Job, A. Zaitsev, W. R. Fahrner, W. Seifert, C. Johnston, P. R. Chalker;
phys. stat. solidi (a) 154(1), 385 (1996)
87. *"How to Fabricate Low-Resistance Metal-Diamond Contacts"*
M. Werner, R. Job, A. Denisenko, A. Zaitsev, W. R. Fahrner, C. Johnston, P. R. Chalker,
I. M. Buckley-Golder;
Diamond and Related Mater. 5, 723 (1996)

88. *"Electrical Properties of Lithium Implanted Layers on Synthetic Diamond"*
R. Job, M. Werner, A. Denisenko, A. Zaitsev, W. R. Fahrner;
Diamond and Related Mater. 5, 757 (1996)
89. *"Iron Spin Fluctuation in ^{57}Fe -Doped High- T_c Superconductors $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{2n+4}$ with $n = 2, 3$ "*
Th. Sinnemann, R. Job, M. Rosenberg;
Supercond. Sci. Technol. 5, 139 (1992)
90. *"Reduction of the Zero-Phonon ^{57}Fe Mössbauer Fraction just above T_c in the $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ Superconductor"*
Th. Sinnemann, R. Job, M. Rosenberg;
Phys. Rev. B 45, 4941 (1992)
91. *"A Magnetic Phase Diagram Describing the Pinning Behaviour of the Ceramic $\text{Tl}_2\text{Ba}_2\text{Ca}_2\text{Cu}_3\text{O}_y$ High- T_c Superconductor"*
R. Job, M. Rosenberg, A. V. Niculescu;
Physica C 193, 117 (1992)
92. *"Study of the Vortex State of Bi-2223 by Magnetic Analysis"*
R. Job, M. Rosenberg;
Supercond. Sci. Technol. 5, 7 (1992)
93. *"Magnetic Relaxation and Flux Creep in Ceramic (Bi,Pb) -2223-HTSC"*
M. Mittag, R. Job, M. Rosenberg;
Physica C 174, 101 (1991)
94. *"The Origin of the Strong Curie-Weiss Paramagnetism in the High Temperature Superconductors with Nominal Composition $\text{Y}_{1-x}\text{Na}_x\text{Ba}_2\text{Cu}_3\text{O}_y$ "*
R. Job, M. Rosenberg, K. Nahm, C. K. Kim;
Supercond. Sci. Technol. 4, 77 (1991)
95. *"Lower Critical Field, Remanent Magnetization and Irreversibility Line of Ceramic (Bi,Pb) -2223-HTSC"*
R. Job, M. Rosenberg;
Physica C 172, 391 (1991)
96. *"A Magnetic and Specific Heat Study of $\text{Bi}_{2-x}\text{Pb}_x\text{Sr}_2\text{Ca}_2\text{Cu}_4\text{O}_{11-x/2+y}$ High- T_c Superconductors"*
M. Rosenberg, W. Chojetzki, M. Mittag, R. Job, R. Wernhardt, H. Bach, P. Stauche;
Physica C 162-164, 729 (1989)
97. *"A Magnetic Study of Polycrystalline $\text{Bi}_2\text{Sr}_{1.5-x}\text{Ca}_{1.5+x}\text{Cu}_2\text{O}_{8+y}$ High- T_c Superconductors"*
M. Rosenberg, W. Chojetzki, M. Mittag, R. Job, R. Wernhardt, H. Bach, P. Stauche;
J. Less-Common Met. 151, 171 (1989)
98. *"A Magnetic Study of $\text{Y}_{1-x}\text{R}_x\text{Ba}_2\text{Cu}_3\text{O}_{7-y}$ Ceramic Superconductors with $R = \text{Dy}$ and Er "*
R. Job, M. Rosenberg, K. Nahm;
Physica C 162-164, 43 (1989)
99. *"A Specific Heat and Magnetization Study of High T_c Ceramic Superconductors"*
M. Rosenberg, M. Mittag, R. Job, W. Chojetzki, R. Wernhardt, H. Sabrowsky,
R. Neubauer;
Z. Phys. B 69, 151 (1987)

47 eingeladene Vorträge/Seminare:

1. *"Global Chances"*
27.10.2022, Universidad de Santiago de Chile, Santiago de Chile, Chile
(**'Keynote'**)
2. *"What is our Problem with Energy and Resources"*
20.9.2022, Universidad del País Vasco, San Sebastian, Spain
(**'Keynote'**)
3. *"Teaching Electrochemical Energy Storage to Engineers "*
CHISA 2020 Prag, De Gryuter – CHISA EFCE webinar, 26.11.2020
(**'Webinar'**)
4. *"Climate Chance and Resources, Part I – Part III"*
4.12.2019, Universidade Federal do Rio Grande do Norte, Joao Camara Campus, Natal, Brazil
(**'Seminar'**)
5. *"What is our problem with energy and resources"*
5.12.2019, Universidade Federal do Rio Grande do Norte, Main Campus, Natal, Brazil
(**'Seminar'**)
6. *"What is our problem with energy and resources?"*
7.11.2018, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)
7. *"What is our problem with energy and resources?"*
13.9.2017, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)
8. *"What seems to be the trouble with energy and resources"*
3.3.2017, Universidade Federal do Rio Grande do Norte, Natal, Brazil
Gastgeber: Prof. Dr. Marcio Kreutz
(**'Seminar'**)
9. *"Teaching Informatics"*
6.3.2017, Instituto Federal Rio Grande do Norte, Natal, Brazil
zusammen mit Kathrin Ungru, FH Münster
(**'Workshop'**)
10. *"Teaching Electrochemical Energy Storage for Undergraduate Electrical Engineers"*
7.3.2017, Instituto Federal Rio Grande do Norte, Natal, Brazil
(**'Workshop'**)
11. *"Development Process for MEMS Pressure Sensors with CMOS Read-Out Circuitry"*
'29th Symposium on Integrated Circuits and Systems Design (SBCCI 2016)', Aug. 29th –
Sept. 3rd, 2016, Belo Horizonte, Brazil
(**'Tutorial'**)
12. *"Do we have an Energy Crisis? – A brief discussion on energy and resources"*
24.8.2016, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)

13. *"Integrated Pressure Sensors – Design and Dimensioning"*
23.8.2016, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Gilson Wirth
(**'Tutorial'**)
14. *"Materials, Resources and the Impact on our Societies and Future Technology"*
8.9.2015, Instituto Federal do Rio Grande do Norte, Natal, Brazil
Gastgeber: Solange Thomaz, MSc.
(**'Tutorial'**)
15. *"Dependency on Materials and Resources - How can we reach a sustainable society?"*
29.7.2015, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)
16. *"Elektrisch aktive Defektkomplexe in protonenimplantierten und getemperten Float-Zone-Siliziumwafern"*
19.3.2014, Universität Konstanz, Fachbereich für Physik, Konstanz
Gastgeber: Prof. Dr. G. Hahn
17. *"Optimization of Integrated Pressure Sensor Systems for Widely Spread Applications"*
14.8.2013, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Gilson Wirth
(**'Tutorial'**)
18. *"Materials and Environment"*
14.8.2013, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)
19. *"The Thermal Budget of Hydrogen-related Donor Profiles: Diffusion-limited Activation and Thermal Dissociation"*
'High Purity Silicon 12' (Pacific Rim Meeting on Electrochemical and Solid-State Science, PRIME 2012, joint international meeting: the 222nd Meeting of the Electrochemical Society and 2012 Fall Meeting of the Electrochemical Society of Japan), Oct. 7th – 12th, 2012, Honolulu, USA
20. *"Resources and Environment"*
6.9.2012, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Homero Dewes
(**'Seminar'**)
21. *"Defect Engineering and Analysis of Light-Ion Implanted Float-Zone Silicon"*
4.9.2012, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Gastgeber: Prof. Dr. Gilson Wirth
(**'Tutorial'**)
22. *"Defect Engineering for Modern Power Devices"*
17.5.2012, Symposium A: Advanced Silicon Materials Research for Electronic and Photovoltaic Applications III, E-MRS Spring Meeting, May 14th – 18th, 2012, Strasbourg, France
23. *"Analysis of Electrically Active Defects in Light Ion Implanted Silicon by Simple Spreading Resistance Measurements"*
17.12.2010, Université Paul Cézanne Aix-Marseille III, Marseille, France

24. *"Recent Studies on Electrically Active Defects in Light Ion Implanted Silicon"*
20.5.2010, Centre National de la Recherche Scientifique (CNRS), Conditions Extrêmes et Matériaux: Haute Température et Irradiation (CEMHTI UPR3079), Orléans, France
25. *"Distance Learning at the University Level – The University of Hagen Guided Tour"*
21.5.2010, Université d'Orléans, France
26. *"Detection of Vacancy Distributions by Decoration with Hydrogen"*
'Analytical Techniques for Semiconductor Materials and Process Characterization VI (ALTEC)' (the 216th Meeting of the Electrochemical Society), Oct. 4th – 9th, 2009, Vienna, Austria
27. *"Dotierung von FZ-Silizium durch Implantation mit leichten Ionen und Wasserstoff-plasmabehandlungen"*
26.6.2009, Ruhr-Universität Bochum, Fakultät für Physik und Astronomie, RUBION, Seminar zu Ionenstrahlen und Radionukliden in Wissenschaft und Technik
Gastgeber: PD Dr. J. Meijer
28. *"Demands and Challenges for a Sustainable Energy Supply Concept"*
'1st Yaounde International College on Novel Materials and Technologies, and their Impact on Energy, Environment and Sustainable Development', July 7th – 11th, 2008, Yaounde, Cameroun
(**'Tutorial'**)
29. *"From Smart-Cut to Soft-Cut Processes – Mechanisms of Silicon Layer Exfoliation studied by Micro-Raman Spectroscopy"*
12.05.2006, Centre National de la Recherche Scientifique (CNRS), Centre d'Etudes et de Recherches par Irradiation (C.E.R.I.), Orléans, France
30. *"Defect Analysis of Hydrogen Implanted and Plasma Hydrogenated Czochralski Silicon Wafers by Raman Spectroscopy"*
11.05.2006, Centre National de la Recherche Scientifique (CNRS), Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse (C.S.N.S.M.), Orsay, France
31. *"Micro-Raman Analysis of Ion Implanted and Plasma Hydrogenated Czochralski Silicon Wafers – from Smart-Cut- to Soft-Processes"*
14.3.2006, University of Orléans, Laboratoire d'Électronique, Signaux, Images (L.E.S.I.), Chartres, France
Gastgeber: Prof. Dr. L. Allam, Prof. Dr. E. Ntsoenzok
32. *"Micro-Raman Analysis of Ion Implanted and Plasma Hydrogenated Czochralski Silicon Wafers"*
'XIIIth International Workshop on the Physics of Semiconductor Devices (IWPSD '2005)', Dec. 13th – 17th, 2005, Delhi, India
33. *"Vom "Smart-Cut®" zum "Soft-Cut" – Analyse von auf Wasserstoff basierenden Defekten in ionenimplantierten und plasmabehandelten Siliziumwafern"*
16.11.2005, Ruhr-Universität Bochum, Fakultät für Physik und Astronomie, Vortragsreihe: 'Spektroskopie der kondensierten Materie'
34. *"Hydrogen Related Defects in Czochralski Silicon Close to the Wafer Surface: Defect Analysis and Technological Prospects"*
'20th Symposium on Microelectronics Technology and Devices (SBMicro 2005)', Sept. 4th – 7th, 2005, Florianopolis, Brazil
(**'Tutorial'**)

35. *" μ -Raman Analysis of Hydrogen Related Defects in Czochralski Silicon"*
'20th Symposium on Microelectronics Technology and Devices (SBMicro 2005)', Sept. 4th – 7th, 2005, Florianopolis, Brazil
36. *"Structuring of Silicon Surface and Subsurface Layers by Plasma Hydrogenation - Defect Analysis and Technological Prospects"*
'XIIth International Workshop on the Physics of Semiconductor Devices (IWPSD '2003)', Dec. 16th – 20th, 2003, Chennai/Madras, India
37. *"Low Temperature Doping of Silicon by Hydrogen Plasma Treatments"*
'High Purity Silicon VII' (the 202nd Meeting of the Electrochemical Society), Oct. 20th – 25th, 2002, Salt Lake City, USA
38. *"High Voltage Diodes Prepared by Hydrogen Enhanced Thermal Donor Formation"*
21.10.2002, University of Utah, Department of Physics, Salt Lake City, UT, USA
Gastgeber: Prof. Dr. P. C. Taylor
39. *"A Low Temperature Technology on the Base of Hydrogen Enhanced Thermal Donor Formation for Future High Voltage Applications"*
'XIth International Workshop on the Physics of Semiconductor Devices (IWPSD '2001)', Dec. 10th – 15th, 2001, Delhi, India
40. *"Platelet Formation in Cz Si after Plasma Hydrogenation and Annealing"*
16.11.2001, Wacker Siltronic AG, Burghausen, Germany
Gastgeber: Dr. W. von Ammon
41. *"Modification of Bulk and Surface Properties of Czochralski Silicon by Hydrogen Plasma Treatments at Moderate Temperatures"*
22.2.2001, Kyushu National Industrial Research Institute (KNIRI), Tosu, Japan
Gastgeber: Dr. E. Abe
42. *"Bulk and Surface Properties of Cz-Silicon after Hydrogen Plasma Treatments"*
17.10.2000, PennState University, State College, PA, USA
Gastgeber: Prof. Dr. S. Ashok, Prof. Dr. P. Lenahan
43. *"A Concise Study on Luminescence of Dealuminated Faujasite and the Formation of Nanoclusters in the Zeolite Host Structure"*
'25th Annual Conference of the IEEE Industrial Electronics Society (IECON '99)', 29.11. – 3.12.1999, San Jose, CA, USA
44. *"Active Defect-Engineering by a Controlled Thermal Donor Formation in Cz-Silicon"*
24.7.1998, Kyushu National Industrial Research Institute (KNIRI), Tosu, Japan
Gastgeber: Dr. A. Yoshida
45. *"Aktives Defect-Engineering durch gezielte Erzeugung thermischer Donatoren in Cz-Silizium mit plasmatechnologischen Verfahren"*
20.2.1998, Bergische Universität Wuppertal, Fachbereich E: Elektrotechnik, Informationstechnik, Medientechnik
Gastgeber: Prof. Dr. J. Engemann
46. *"Wasserstoff in Silizium"*
4.7.1997, Ruhr-Universität Bochum, Fakultät für Physik und Astronomie
Gastgeber: Prof. Dr. J. Pelzl

47. *"Some Comments on the Magnetic Phase Diagrams of Bi- and Tl-containing High- T_C Superconductors with Critical Temperatures above 100 K"*
'18th Workshop on High Temperature Superconductivity', Aug. 17th – 19th, 1993,
Yongpyung, Korea

9 Bücher und Buchkapitel:

1. *"Electrochemical Energy Storage – Physics and Chemistry of Batteries"*
R. Job;
Lehrbuch, De Gruyter Verlag (2020)
ISBN 978-3-11-048437-3
2. *"Zeolithe und Nanocluster in Zeolithwirtsittern"*
R. Job;
in: "Nanotechnologie und Nanoprozesse – Einführung und Bewertung", 2. Auflage,
Editor: W. R. Fahrner, Springer-Verlag, Berlin, Heidelberg, New York (2003),
p. 133-148
ISBN 3-540-44212-x
3. *"Zeolites and Nanoclusters in Zeolite Host Lattices"*
R. Job;
in: "Nanotechnology and Nanoelectronics – Materials, Devices, Measurement Techniques", Editor: W. R. Fahrner, Springer-Verlag, Berlin, Heidelberg, New York (2005),
p. 127-141
ISBN 3-540-22452-1
4. *"Defects in Plasma Hydrogenated Crystalline Silicon"*
Y. L. Huang, Y. Ma, W. R. Fahrner, R. Job;
in: "Recent Research Developments in Electrochemistry, Vol. 8", Transworld Research Network, Kerala, India (2005), p. 327-367
ISBN 81-7895-183-5
5. *"The Fabrication of P-N Junction Diodes based on Hydrogen Enhanced TD Formation in Czochralski Silicon"*
Y. L. Huang, Y. Ma, R. Job, W. R. Fahrner;
in: "The World of Electronic Packaging and System Integration", Editoren: B. Michel, R. Aschenbrenner, DDP Goldenbogen Verlag, Dresden, Germany (2004), p. 440-446
ISBN 3-932434-76-5
6. *"Properties of Plasma Hydrogenated Silicon"*
Y. Ma, Y. L. Huang, R. Job, W. R. Fahrner;
in: "The World of Electronic Packaging and System Integration", Editoren: B. Michel, R. Aschenbrenner, DDP Goldenbogen Verlag, Dresden, Germany (2004), p. 432-439
ISBN 3-932434-76-5
7. *"Zeolithe und Nanocluster in Zeolithwirtsittern"*
R. Job;
in: "Nanotechnologie und Nanoprozesse – Einführung und Bewertung", Editor:
W. R. Fahrner, Springer-Verlag, Berlin, Heidelberg, New York (2003), p. 133-148
ISBN 3-540-44212-x
8. *"Plasmaunterstützte Niedertemperaturprozesse für die Siliziumtechnologie / Prozessentwicklung und Defekt-Engineering"*
R. Job;
Bochumer Universitätsverlag (2002), Serie: Halbleiter-Materialforschung (Band 1),
ISBN 3-934453-87-6

9. *"Bonding on Diamond"*

R. Job, H. Gabor;

in: "Handbook of Diamond Technology", Editor: W.R. Fahrner, TTP Trans Tech Publications Ltd., Uetikon-Zürich, Schweiz (2000), p. 584-644

5 Sonstige Veröffentlichungen (Habilitationsschrift, Dissertation, DFG-Bericht, etc.):

1. *"Positionspapier für Bachelorstudiengänge Elektrotechnik und Informationstechnik an HAWen"*
B. Faupel, R. Hönl, O. Jack, R. Job;
Positionspapier der Arbeitsgruppe "Fachqualifikationsrahmen" des Fachbereichstags Elektrotechnik und Informationstechnik e.V., FBTEI (2021)
2. *"Herstellung von 'Silicon-On-Insulator'-Schichten durch Ionenimplantation bei geringen Dosen in Kombination mit anschließenden Plasmabehandlungen"*
R. Job;
Abschlussbericht zum Forschungsprojekt "Soft-Cut" der Deutschen Forschungsgemeinschaft (DFG), DFG-Projekt Nr. Jo/297-1-3 (2008)
3. *"Plasmaunterstützte Niedertemperaturprozesse für die Siliziumtechnologie / Prozessentwicklung und Defekt-Engineering"*
R. Job;
Habilitationsschrift, FernUniversität in Hagen, Fachbereich Elektrotechnik und Informationstechnik (2002)
4. *"Präparation und magnetische Untersuchung des Vortex-Zustandes von Bi- und Tl-haltigen Hochtemperatursupraleitern mit kritischen Temperaturen über 100 K"*
R. Job;
Dissertation, Ruhr-Universität Bochum, Fakultät für Physik und Astronomie (1992)
5. *"Untersuchung von magnetischen Eigenschaften an $Ni_{80-x}Co_xB_{16}Si_4$ -Legierungen"*
R. Job;
Diplomarbeit, Ruhr-Universität Bochum, Fakultät für Physik und Astronomie (1988)

Verhandlungen der Deutschen Physikalischen Gesellschaft (DPG), 25 Abstracts:

1. *"The Influence of Various Physical Parameters on the Removal Rate of Thermochemically Polished CVD Diamond Films"* (HL10.10)
J. A. Weima, R. Job, F. Blum, W. R. Fahrner;
Verhandl. DPG (VI) 35, 507 (2000)
2. *"Non-Diamond Carbon Phases on the Surfaces of Transition Metal Enhanced Polished CVD Diamond Films"* (HL10.9)
J. A. Weima, A. M. Zaitsev, W. R. Fahrner, R. Job, G. Kosaca, F. Blum;
Verhandl. DPG (VI) 35, 507 (2000)
3. *"Optical Examination of the Surfaces of Thermochemically Polished CVD Diamond Films"* (HL10.1)
J. A. Weima, W. R. Fahrner, R. Job, A. M. Zaitsev;
Verhandl. DPG (VI) 35, 505 (2000)
4. *"Optimierung des optischen Auswahlverfahrens von CVD-Diamanten für Sensoranwendungen"* (HL9.2)
F. Blum, G. Kosaca, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 34, 715 (1999)
5. *"N-Dotierung des Diamanten mit Lithium: Versuche mit Ionenimplantation an verschiedenen Diamanten"* (HL9.5)
G. Kosaca, A. Denisenko, A. Zaitsev, F. Blum, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 34, 716 (1999)
6. *"Ätzzraten bei implantierten und getemperten Diamanten"* (HL12.4)
G. Kosaca, A. Denisenko, F. Blum, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 34, 719 (1999)
7. *"Active Defect-Engineering by a Controlled Formation of Thermal Donors in Cz Silicon"* (HL33.8)
R. Job, A. G. Ulyashin, W. R. Fahrner;
Verhandl. DPG (VI) 34, 777 (1999)
8. *"Untersuchung der Temperaturabhängigkeit elektrischer Kennlinien von p-i-p Halbleiter-Teststrukturen auf Diamant"* (HL32.6)
F. Blum, G. Kosaca, R. Job, A. Denisenko, W. R. Fahrner;
Verhandl. DPG (VI) 33, 757 (1998)
9. *"Low-Temperature Doping of p-Type Czochralski Silicon by Hydrogen Plasma Treatment"* (HL38.11)
D. Borchert, A. Ulyashin, Y. Bumay, G. Grabosch, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 32, 765 (1997)
10. *"Thermochemical Polishing of Polycrystalline CVD Diamond Films"* (HL11.12)
A. Zaitsev, G. Kosaca, A. Melnikov, V. Varichenko, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 32, 708 (1997)
11. *"Optimization of Cooling Systems for High Power Laser Diodes with Diamond Heat Spreaders by Numerical Simulation"* (HL4.3)
A. V. Denisenko, A. Podoba, J. Bonhaus, D. Lorenzen, R. Job, W. R. Fahrner;
Verhandl. DPG (VI) 32, 696 (1997)

12. *"Hydrogen plasma induced transformations of the electrical properties of Czochralski-grown silicon"* (HL30.32)
R. Job, A. G. Ulyashin, Yu. A. Bumay, W. R. Fahrner, G. Grabosch, D. Borchert;
Verhandl. DPG (VI) 31, 1544 (1996)
13. *"Wasserstoffplasma-Behandlung von Ionen-implantierten Halbleiterstrukturen auf natürlichen und synthetischen Diamanten"* (HL33.12)
A. V. Denisenko, A. G. Ulyashin, R. Job, G. Grabosch, D. Borchert, A. A. Melnikov,
A. M. Zaitsev, W. R. Fahrner;
Verhandl. DPG (VI) 31, 1576 (1996)
14. *"Herstellung und Charakterisierung von $\mu\text{-Si,C:H}$ Schichten"* (HL28.30)
G. Grabosch, R. Job, M. Reichenberger, D. Borchert, W. R. Fahrner;
Verhandl. DPG (VI) 31, 1501 (1996)
15. *"n-Dotierung von Diamant durch Hochtemperatur-Li-Implantationen"* (HL33.5)
R. Job, A. V. Denisenko, A. M. Zaitsev, W. R. Fahrner;
Verhandl. DPG (VI) 31, 1574 (1996)
16. *"Galvanische Silberverstärkung der Kontaktfinger auf Solarzellen mit Hilfe von zyanidfreien Bädern"* (HL20.24)
G. Grabosch, M. Zimmer, R. Job, D. Borchert, W. R. Fahrner;
Verhandl. DPG (VI) 30, 1222 (1995)
17. *"Charakterisierung und Optimierung von Elektronenstrahl-verdampften Indium-Zinn-Oxid-Schichten (ITO) mit Hilfe von Leitfähigkeits- und Transmissionsmessungen"* (HL6.11)
R. Job, D. Borchert, G. Grabosch, C. Wolffersdorf, W. R. Fahrner;
Verhandl. DPG (VI) 30, 1149 (1995)
18. *"Mößbauerspektroskopische Untersuchungen von 57-Fe-dotierten Hochtemperatur-Supraleitern $(\text{Bi,Pb})_2\text{Sr}_2\text{Ca}_{n-1}\text{Cu}_n\text{O}_{2n+4}$ with $n = 2, 3$ "* (TT20.5)
Th. Sinnemann, R. Job, M. Rosenberg;
Verhandl. DPG (VI) 26, 1485 (1991)
19. *"Relaxationsmessungen zur Untersuchung von Flußkriechen in polykristallinen (Bi,Pb) -2223 und Tl-2223 HTSL"* (TT20.18)
M. Mittag, R. Job, M. Rosenberg, B. Himmerich, H. Sabrowsky;
Verhandl. DPG (VI) 26, 1489 (1991)
20. *"Magnetische Charakterisierung von Tl-1223 Hoch- T_c -Supraleitern"* (TT20.19)
R. Job, M. Mittag, M. Rosenberg, B. Himmerich, H. Sabrowsky;
Verhandl. DPG (VI) 26, 1490 (1991)
21. *"Relaxations- und Widerstandsmessungen zur Untersuchung von Flußkriechen in keramischen Hochtemperatursupraleitern"* (TT7.6)
M. Mittag, R. Job, R. Wernhardt, M. Rosenberg;
Verhandl. DPG (VI) 25, 1201 (1990)
22. *"Untersuchung zur Herstellung von keramischen 2223-Bi,Pb-haltigen Hochtemperatursupraleitern"* (TT14.8)
R. Job, M. Rosenberg, H. Bach, P. Stauche;
Verhandl. DPG (VI) 25, 1255 (1990)

23. *"Irreversibilitätslinie und anomales Verhalten von H_{c1} in keramischen $(Bi,Pb)_2Sr_2Ca_2Cu_3O_y$ Hochtemperatursupraleitern"* (TT14.29)
R. Job, M. Rosenberg;
Verhandl. DPG (VI) 25, 1262 (1990)
24. *"Supraleitende Phasen und Eigenschaften keramischer $Bi_2Sr_{1.5+x}Ca_{1.5-x}Cu_2O_{8+\sigma}$ und $Bi_2Sr_2Ca_2Cu_3O_{10+\sigma}$ -Proben"* (TT12.30)
M. Rosenberg, W. Chojetzki, M. Mittag, R. Job, R. Wernhardt, H. Bach, P. Stauche, R. Ziemann;
Verhandl. DPG (VI) 24, TT57 (1989)
25. *"Supraleitende Phasen und ihre Eigenschaften in dem System $Bi_{2-x}Pb_xSr_2Ca_2Cu_4O_y$ "* (TT13.5)
M. Rosenberg, W. Chojetzki, M. Mittag, R. Job, R. Wernhardt, H. Bach, P. Stauche, R. Ziemann;
Verhandl. DPG (VI) 24, TT77 (1989)

In Vorbereitung:

1. "Renewable Energy" (Arbeitstitel)
Lehrbuch, De Gryuter Verlag, Berlin