Prof. Dr. P. Rudolph
CTC Schönefeld/Germany April 2021

List of Publications

Monographs:

1. P.Rudolph, Profilzüchtung von Einkristallen (in German), [Trans: The Shaped Crystal Growth], Akademie Verlag Berlin 1982.

2. P.Rudolph, 4 chapters in: K.-Th-Wilke, J.Bohm, Kristallzüchtung (in German), Unter Mitwirkung von P. Görnert, M. Jurisch, M. Ritschel, P. Rudolph und W. Schröder [Trans: Crystal Growth], Deutscher Verlag der Wiss. Berlin 1988 und H. Deutsch and Thun, Frankfurt a.M. 1988.

Editions:

3. E.Kasper, E.H.C.Parker, R.Triboulet, P.Rudolph, G.Müller-Vogt (Eds.): Selected Topics in Group IV and II-VI Semiconductors. European Mat. Res. Soc., Symposia Proceedings No. 54, (North Holland,Elsevier, Amsterdam 1996).

4. R.Triboulet, P.Rudolph, G.Müller-Vogt, (Eds.): Purification, Doping and Defects in II-VI Materials. Proceedings of Symposium D on II-VI Materials of the 1995 E-MRS Spring Conference Strasbourg, France, May 22-24, 1995, special issue of Journal of Crystal Growth, Vol.161, Nos. 1-4, April I (1996), Elsevier Science, Pergamon, North-Holland).

5. P. Rudolph, Sub-Editor of the World Directory of Crystallographers and Other Scientists Employing Crystallographic Methods, Eighth Edition 1990, General Editor: E.N. Maslen, Kluwer Academic Publishers, Dordrecht, Boston, London.

6. T. Fukuda, P. Rudolph, S. Uda (eds.), Fiber Crystal Growth from the Melt, Ser. Adv. in Materials Res. 6 (Springer, Berlin 2004) 281 pages.

7. G. Müller, J.-J. Metois, P. Rudolph, (eds.), Crystal Growth – from Fundamentals to Technology (Elsevier, Amsterdam 2004) 422 pages.

8. T. Fukuda, P. Rudolph, S. Uda, Vyraschtschivanie kristallovolokon iz rasplava, perevod iz angliskogo: A.N. Cherepanova i. A.V. Ischtschenko (Fizmatlit, Moskva 2009).

9. P. Capper, P. Rudolph, Crystal Growth Technology. Semiconductors and Dielectrics, WILEY-VCH, Weinheim, 01. August 2010, erste Auflage, 342 Seiten - ISBN-10: 3-527-32593-X, ISBN-13: 978-3-527-32593-1.

10. T. Nishinaga, P. Rudolph, T. Kuech, Handbook of Crystal Growth, Second Edition, Vol IA and B, Fundamentals (ed. by T. Nishinaga), Vol IIA and B, Bulk Growth (ed. by P. Rudolph), Vol IIIA and B, Epitaxy (ed. by T. Kuech), Elsevier, Amsterdam 2015).

Book contributions:

11. P. Rudolph, Melt growth of II-VI Compound Single Crystals, in: M. Isshiki (edit.), Recent Development of Bulk Crystal Growth, chapter 5 (Research Signpost, Trivandum 1998) pp.127-164.

12. P. Rudolph, Elements of Thermodynamics for the Understanding and Design of Crystal Growth Processes, in: R. Fornari, C. Paorici (eds.), Theoretical and Technological Aspects of Crystal Growth (Trans Tech Publications, Switzerland 1998) 1-26.

13. J. C. Brice, P. Rudolph, Crystal Growth, in: Ullmann's Encyclopedia of Industrial Chemistry, Sixth Edition, 2007 Electronic Release (Wiley-VCH, Weinheim 2002 and 2007), 60 pages.

14. P. Rudolph, Theoretical Concepts of Crystal Growth (Thermodynamics and Kinetics) in: R. Fornari and L. Sorba (eds.), Crystal Growth of Materials for Energy Production and Energy-saving Applications (Edizioni ETS, Pisa 2001) 7-26.

15. G. Müller, P. Rudolph, Crystal growth from the melt, in: Encyclopedia of Materials: Science and Technology (Elsevier, Amsterdam 2001) pp. 1866-1873.

16. P. Rudolph, D. Siche, Bulk growth of ZnSe and ZnS, in: Encyclopedia of Materials: Science and Technology (Elsevier, Amsterdam 2001) pp. 9904-9909.

17. P. Rudolph, Thermodynamic fundamentals of phase transition applied to crystal growth processes, in: H.J. Scheel, T. Fukuda (eds.), Crystal Growth Technology (Wiley&Sons, 2003) pp.15-42.

18. P. Rudolph, M. Jurisch, Czochralski growth of high-quality GaAs crystals, in: H.J. Scheel, T. Fukuda (eds.), Crystal Growth Technology (Wiley&Sons, 2003) pp. 294-321.

19. P. Rudolph, What do we want with fiber crystals – an introductory review, in: T. Fukuda, P. Rudolph, S. Uda (eds.), Fiber Crystal Growth from the Melt, Ser. Adv. in Materials Res. 6 (Springer, Berlin 2004) p.1 - 46.

20. P. Rudolph, Stoichiometry related growth phenomena and methods of controlling, in: K. Byrappa, H. Klapper, T. Ohachi, R. Fornari (eds.), Crystal Growth of Technologically Important Electronic Materials (Allied Publishers Pvt., New Delhi 2003) p.407 - 418.

21. P. Rudolph, The state of art of large GaAs crystal growth - topicality and perspectives, in: K. Byrappa, H. Klapper, T. Ohachi, R. Fornari (eds.), Crystal Growth of Technologically Important Electronic Materials (Allied Publishers Pvt., New Delhi 2003) p.432 - 445.

22. J.C. Brice, P. Rudolph, Crystal Growth in: Ullmanns Encyclopedia of Industrial Chemistry, Sixth, Completely Revised Edition, Vol. 10 (Wiley-VCH, Weinheim 2003) p. 47 – 98; 7-th Edition, up-dated chapter 2007 as Electronic Release.

23. D.T.J. Hurle, P. Rudolph, A brief history of defect formation, segregation, faceting, and twinning in melt-grown semiconductors, in: R.S. Feigelson (ed.), 50 Years Progress in Crystal Growth (Elsevier, Amsterdam 2004) p. 109 - 124.

24. G. Müller, J.-J. Metois, P. Rudolph, Preface in: Crystal Growth – from Fundamentals to Technology (Elsevier, Amsterdam 2004) pp. V – VII.

25. P. Rudolph, Thermodynamics, Origin, and Control of Defects in: H. Scheel and P. Capper (eds.), Crystal Growth Technology (Wiley VCH, Weinheim 2008) pp.73-102.

26. P. Rudolph, Defect formation during the crystal growth from melt in: Handbook of Crystal Growth, eds. G. Dhanaraj, K. Byrappa, V. Prasad, M. Dudley, With DVD., Hardcover Springer, July 2010, ISBN: 978-3-540-74182-4., pp. 153 - 202

27. P. Rudolph, Fundamentals of defects in crystals in: Perspectives On Inorganic, Organic And Biological Crystal Growth: From Fundamentals to Applications: 13th International Summer School on Crystal Growth, eds. M. Skowronski, J.J. DeYoreo, Ch. A. Wang (Am. Inst. Phys., AIP Conference Proc. No 916, Melville, N.Y. 2007) 69-92.

28. P. Rudolph, Present state and future tasks of III-V bulk crystal growth in: S. Arai, T. Enoki (Eds.), Indium Phosphide and Related Materials, IEEE, New York 2007, pp. 333-338.

29. P. Rudolph, Ch. Frank-Rotsch, B. Lux, D. Jockel, F.M. Kiessling, M. Czupalla, Proceedings IPRM 2008, IEEE, Electronic Release, ISBN 978-1-4244-2259-3:
A new method to grow III-V crystals from melt in travelling magnetic fields.

30. P. Rudolph, Ch. Frank-Rotsch, F.-M. Kiessling, W. Miller, U. Rehse, O. Klein, Ch. Lechner, J. Sprekels, B. Nacke, H. Kasjanow, P. Lange, M. Ziem, B. Lux, M. Czupalla, O. Root, V. Trautmann, G. Bethin, Proceedings of the International Scientific Colloquium "Modelling for Electromagnetic Processing" (MEP 08), Hanover, October 27-29, 2008, 79-84:
Crystal growth in heater-magnet modules - from concept to use.

31. O. Klein, Ch. Lechner, P.-E. Druet, P. Philip, J. Sprekels, Ch. Frank-Rotsch, F.-M. Kießling, W. Miller, U. Rehse, P. Rudolph, Proc. Internat. Sci. Colloqui. "Modelling for Electromagnetic Processing" (MEP 08), Hanover, October 27-29, 2008, p.91-98:

Numerical simulations of the influence of a traveling magnetic field, generated by an internal heater magnet module, on Czochralski crystal growth.

32. N. Dropka, Ch. Frank-Rotsch, W. Miller, U. Rehse, P. Rudolph, Proceedings of the International Scientific Colloquium "Modelling for Electromagnetic Processing" (MEP 08), Hanover, October 27-29, 2008, p. 263-268:
TMF's in crystal growth and solidification of semiconductors, oxides and fluorides.

33. B. Nacke, H. Kasjanow, A. Krauze, A. Muiznieks, F.-M. Kiessling, U. Rehse, P. Rudolph, in: A. Alemany, J:P Chopart and J. Freibergs (Eds.), Proc. 7th Internat. Pamir Conference on Fundamentals and Applied MHD and COST P17 Annual Workshop, Presqu´ile de Giens, France, September 08 –12, 2008 (SIMAP/EPM/ pamir, France 2008) pp. 643 - 648.:
Three-dimensional transient modeling of the melt flow in a TMF VCz system for GaAs crystal growth.

34. P. Rudolph, M. Czupalla, Ch. Frank-Rotsch, F.-M. Kießling, B. Lux, Proceedings of the 6th International Conference on Electromagnetic Processing of Materials (EPM 2009), ed. by G. Gerbeth, October 19-23, 2009, Dresden, ISBN 978-3-936104-65-3, pp. 22-27:
Crystal Growth from Melt by Combined Heater-Magnet Technology

35. P. Rudolph, Crystal growth kinetics., in: Int. Summer School on Fundamentals and Basic Methods of Crystal Growth, Brasov, Romania, August 24-29th, 2009, Book of Lectures, p. 51-69:

36. P. Rudolph, Chto takoje kristallovolokna? Vvodnyi obzor, in: Vyraschtschivanie kristallovolokon iz rasplava pod red. T. Fukudy, P. Rudolfa, S. Udy, perevod iz angliskogo: A.N. Cherepanova i. A.V. Ischtschenko (Fizmatlit, Moskva 2009) p. 17-83.

37. P. Rudolph, M. Czupalla, Ch. Frank-Rotsch, F.-M. Kiessling, B. Lux, The Growth of Semiconductor Crystals (Ge, GaAs) by the Combined Heater Magnet Technology in: Crystal Growth Technology of Semiconductors and Dielectrics, WILEY-VCH, Weinheim, 2010, p. 101-120.

38. P. Rudolph, API, ISSCG-14, Proceedings (2010)
Transport phenomena of crystal growth – heat and mass transfer,
In: Selected Topics on Crystal Growth – The 14th International Summer School On Crystal Growth in Dalian, China 2010, eds. M. Wang, K. Tsukamoto, D. Wu., AIP Conf. Proc. No. 1270, Melville, New York 2010, pp. 107-132.
ISBN 978-0-7354-0821-0.

39. H. Klapper, P. Rudolph, Defect generation and interaction during crystal growth, in: Handbook of Crystal Growth, Eds. T. Nishinaga, P. Rudolph, T. Kuech, Voll IIB (Elsevier, Amsterdam 2014) pp. 1093-1142.

40. N. Dropka, Ch. Frank-Rotsch, F.M. Kiessling, P. Rudolph in: 55 th Meeting of the Serbian Chemical Society Novi Sad , Serbia, June 8 - 9 , 2018, Editors: Janos Canadi, Sanja Panic, Aleksandar Dekanski:
Intensification of bulk crystal growth by magnetic fields: from lab-scale to commercial size equipment

41. P. Rudolph, in: Synthetic Crystals, ed. by Xutang Tao (China Chemical Industry Press 2021) 90 pages, (manuscript submitted January 22, 2021):
A Compressed Approach to the Theory of Crystal Growth. Thermodynamics, Kinetics and Transport

Paperbacks:

42. V.J.Schevchenko, A.D.Goncharov, V.B.Lazarev, B.Markovich, P.Rudolph, Poluchenie tonkich sloev poluprovodnikovych veschtschestv napravlennoi kristallisatziej rasplava [Preparation of thin semiconductor layers by unidirectional crystallization from the melt], AN SSSR, IONCh, Moskva 1973.

43. J.M.Bergant, K.Jacobs, J.Paitz, A.Preisinger, H.Rauch, P.Rudolph, E.Seidl, K.Untereiner, K.Yvon, Eurocryst - Proposal for a European Centre of Science and Technology for Crystal Growth in Austria, Fed. Ministry of Sci. and Res. in Austria, Vienna 1991 (86 pages).

Review articles:

44. P. Rudolph, F.M. Kiessling, Crystal Res.Technol. 23 (1988) 1207-1224:
The Horizontal Bridgman Method.

45. K. Peters, A. Wenzel, P. Rudolph, Crystal Res.Technol. 25 (1990) 1111-1116:
Phase Diagram of Cd-Te.

46. P. Rudolph, Fundamental Studies on Bridgman Growth of CdTe, in: Progress of Crystal Growth and Characterization, Vol. 29, 1994 (Pergamon Press, Elsevier Science Ltd. 1995) pp. 275-381

47. P.Rudolph, N.Schäfer, T.Fukuda, Material Science Engin. R15 (1995) 85-133:
Crystal Growth of ZnSe From the Melt.

48. P.Rudolph, M. Neubert, S. Arulkumaran, M.Seifert, CRT 32 (1997) 35-50:
Vapour Pressure Controlled Czochralski (VCZ) Method to Produce Electronic Materials with Low -Dislocation Density

49. P.Rudolph, T.Fukuda, Crystal Res.Technol. 34 (1999) 3-40:
Fiber Crystal Growth From the Melt.

50. M. Neubert, P. Rudolph, Progress in Crystal Growth and Charact. of Mat. 43/2-3 (2001) 119-185:
Growth of semi-insulating GaAs crystals in low temperature gradients by using the vapour pressure controlled Czochralski method (VCz).

51. P. Rudolph, Crystal Res. Technol 38 (2003) 542-554:
Non-stoichiometry related defects at the melt growth of semiconductor compound crystals - a review.

52. D.T.J. Hurle, P. Rudolph, J. Crystal Growth 264 (2003) 550-564:
A brief history of defect formation, segregation, faceting, and twinning in melt-grown semiconductors.

53. P. Rudolph, Crystal Res. Technology 40 (2005) 7-20 :
Dislocation Patterning in Semiconductor Compounds.

54. P. Rudolph, J. Functional Materials (Ukraina), 14 (2007) 1-15:
Prosperity and difficulty of bulk crystal growth of semiconductor compounds.

55. P. Rudolph, K. Kakimoto, MRS Bulletin Vol. 34, No. 4 (2009) 251–258.
Crystal growth from melt under external force fields.

56. P. Rudolph, Progress in Crystal Growth and Charact. of Mat. 62 (2016)89-110:
Fundamentals and Engineering of Defects.

57. P. Rudolph, Crystal Research and Technology 52 (2017) 1-15 / DOI 10.1002/crat.201600171
Dislocation patterning and bunching in crystals and epitaxial layers - a review.

58. P. Rudolph, Manuscrupt published as early preprint in ResearchGate under: https://www.researchgate.net/publication/349087856_ :
Crystal Growth Fundamentals. Thermodynamics, Kinetics and Transport
(90 pages)

Original papers:

59. G.B.Bokij, V.Ja.Schevchenko, G.I.Goncharenko, A.D.Goncharov, P.Rudolph, I.M.Olchovskij, A.V.Sandulova, L.D.Chutorjanski, Dokl. AN SSSR, 200 (1971) 72- (in Russian): [Preparation and properties of thin layers of II-V semiconductors].

60. V.Ja.Schevchenko, A.D.Goncharov, P.Rudolph, Electronnaja promyschlennost 3 (1971) 45 (in Russian):
[Method of growth of thin semiconductor layers by unidirectional crystallization].

61. A.V.Sandulova, P.Rudolph, A.D.Goncharov, Izv.AN SSSR, Neorg.mat. 7 (1972) 224-227 (in Russian):
[Doping of semiconductor layers prepared by shaped pressing of a molten drop].

62. A.V.Sandulova, A.D.Goncharov, P.Rudolph, W.Thieme, L.D.Chutorjanskij, V.Ja.Schevchenko, Kristall und Technik 7 (1972) 787-792 (in German): [Preparation of monocrystalline anisotropic semiconductor thin layers by unidirectional crystallization of the melt between two substrates].

63. A.D.Goncharov, M.L.Maslov, O.N.Lapschinov, P.Rudolph, Izv. An SSSR, Maschinostroenie 12 (1972) 92-98 (in Russian): [Temperature field and thermal stresses in an arrangement of anorganic layers].

64. P.Rudolph, A.D.Goncharov, W.Thieme, L.D.Chutorjanski, Vestnik Lvovski Techn. Univ. 77 (1973) 40-43 (in Ukrain.): [Doping behaviour of thin layers of CdSb].

65. V.Ja.Schevchenko, P.Rudolph, G.I Goncharenko, A.D.Goncharov, Electronnaja technika, ser. materialy 7 (1972) 69-74 (in Russian): [Electrical and optical properties of thin layers of Cd_2As_3 and CdSb].

66. A.D.Goncharov, P.Rudolph, W.Thieme, L.D.Chutorjanski, Sbornik nauchn. rabot Lvovskogo Techn Univ. 7 (1973) 148-151 (in Russian): [Thin semiconductor layers on insulating substrates].

67. A.V.Sandulova,P.Rudolph,A.D.Goncharov, Fiz.elektronika 6 (1973) 88-91 (in Russ.): [Properties of Ag-doped CdSb thin layers].

68. A.V.Sandulova, P.Rudolph et al.in: Processy rosta i sintesa poluprovodnikovych kristallov i plenok, tom II, AN SSSR, Novosibirsk 1975, 302-307 (in Russ.), [Features of doped semiconductor thin film growth from the melt between alien substrates].

69. P.Rudolph, D.Kalousek, R.Kleffe, L.Ickert, Kristall und Technik 13 (1976) K7-K8 (in German): [Electronic temperature controller for crystal growth furnaces].

70. L.Ickert, P.Rudolph, Kristall und Technik 13 (1978) 107-112 (in German): [Application of electrical analogous models for investigations of temperature fields in crystal growth arrangements].

71. P.Rudolph, in: Diagnose von Defekten in Halbleitermaterialien und Bauelementstrukturen, Ed. O.Goede, Humboldt Universität Berlin 1980, 76-80 (in German): [Origins of defect generation at the crystal growth from melts].

72. R.Herrmann, P.Rudolph, H.Krüger, G.Schneider, R.Röstel, R.Kuhl, A.S. Okhotin, V.T. Khbyapov, E.V. Markov, I.P. Kazakov, phys. stat. solidi (a) 59 (1980) 51-56: Growing of PbTe Single Crystals from the Vapour Phase Under Micro-Gravity Conditions.

73. R.Herrmann, P.Rudolph et al., Adv. Space Res. 1 (1981) 163-166: First Results of the Growth of PbTe Single Crystals Under Microgravity Conditions.

74. K.Herrmann, P.Rudolph, C.Albers, H.Berger et al., Wiss.Zs.HU Berlin,Math.Nat. Reihe XXX (1981) 107-118 (in German):[Properties of injection lasers of PbSnTe].

75. R.Herrmann, G.Schneider, H.Krüger, P.Rudolph in: Kosmicheskaja technologija i materialovedenije, AN SSSR, IKI, Nauka, Moskva 1982, 17-26 (in Russian):
[Experiments on crystal growth of Bi-Sb mixing crystals under microgravity conditions].

76. P.Rudolph, in: Transport in Verbindungshalbleitern, Wiss. Beitr≅ge MLUniv. Halle/Wittemberg, Halle 1982, 7-26 (in German):
[The origins of microihomogeneities at crystallization from melts].

77. P.Rudolph, in: (see under 33), 27-39 (in German):
[Shaped crystal growth from melt].

78. G.Schneider, R.Herrmann, H.Krηger, P.Rudolph, R.Kuhl, R.R ¯stel, Cryst. Res. Technol. 18 (1983) 1213-1224:
Results of Cystal Growth of Bismuth-Antimony Alloys in Microgravity Environm.

79. P. Gille, P. Rudolph, J. Crystal Growth 64 (1983) 613-614:
Growth of Tl-Doped PbTe Single Crystals by the Travelling Heater Method.

80. P.Gille. P.Rudolph, Crystal Res.Technol. 19 (1984) K61-K63: On a Possibility of Avoiding Axial Segregation in Growing Pseudobinary Alloys from a Liquid Zone.

81. P.Gille, M.Mühlberg, L.Parthier, P.Rudolph, Crystal Res.Technol. 19 (1984) 881-891:
Crystal Growth of PbTe and (Pb,Sn)Te by the Bridgman Method and by THM.

82. P.Rudolph, P.Gille, Ch.Genzel, T.Boeck, Crystal Res.Technol. 19 (1984) 1073-
Investigations of the Process of Crystal Growth from a Liquid Zone.

83. R.Herrmann, P.Rudolph et al. Kosmicheskaja technologija, AN SSSR, IKI, Moskva 1984 (in Russian) 25-30:
[Sublimation of PbTe under microgravity].

84. K.Schwenkenbecher, P.Rudolph, Crystal Res.Technol. 20 (1985) 1609-1613:
Investigation of Convection in the Solution Zone at the Growth of CdTe by THM.

85. T.Boeck, P.Rudolph, J.Cryst.Growth, 79 (1986) 105-110:
The Influenece of Thermal Diffusion on the Travelling Heater Method in a Diffusion Controlled Growth Regime.

86. P.Rudolph, in: Transport in Verbindungshalbleitern, Wiss. Beiträge der MLUniv. Halle/Wittemberg 47, Halle 1985, 9-26 (in German):
[Kinetics of crystal growth of semiconductors from the melt and melt-solution].

87. P.Rudolph, in: Berichte der HU Berlin 4 (1985) 46-49 (in German):
[The application of a laboratory tool system for construction of a industrial Czochralski puller for $LiNbO_3$].

88. P.Reiche, J.Bohm, B.Hermoneit, P.Rudolph, D.Schultze, Crystal Res.Technol. 23 467-474 (in German):
[Growth morphology of $LiNbO_3$ single crystals by Czochralski method with in-situ electrical field].

89. U.Becker, H.Zimmermann, P.Rudolph, R.Boyn, phys. stat. solidi (a), 112 (1989) 569-578: Optical Study of the Impurity Distribution in Vertical Bridgman Grown CdTe Crystals.

90. B.Wermke, M.Mühlberg, A.Engel, P.Rudolph, Crystal Res.Technol. 24 (1989) Comprehesive Characterization of CdTe and (Cd,Zn)Te Single Crystals by Chemical Etchant.

91. E.Pfeifer, P.Rudolph, Crystal Res.Technol. 25 (1990) 3-9:
Investigation of the Crystal Growth of $PbMoO_4$ by the Czochralski Method.

92. H.Zimmermann, R.Boyn, C.Michel, P.Rudolph, phys. stat. solidi (a) 118 (1990) 225-Absorption-Calibrated Determination of Impurity Concentrations in CdTe from Excitonic Photoluminescence.

93. U.Becker, P.Rudolph, R.Boyn, M.Wienecke, I.Utke, phys. stat. solidi (a) 120 (1990) 653-660:
Characterization of p-type CdTe Bridgman Crystals by IR Extinction Spectra.

94. M.Mühlberg, P.Rudolph, C.Genzel, B.Wermke, U.Becker, J.Crystal Growth 101 (1990) 275-280:
Crystalline and Chemical Quality of CdTe and $Cd_{1-x}Zn_xTe$ Grown by the Bridgman Method in Low Temperature Gradients.

95. C.Genzel, P.Gille, I.Hähnert, F.M.Kießling, P.Rudolph, J.Crystal Growth 101 (1990) 232-236:
Structural Perfection of (Hg,Cd)Te Grown by THM.

96. H.Zimmermann, R.Boyn, C.Michel, P.Rudolph, J.Crystal Growth 101 (1990) 691-694:
Mechanism of the Temperature Dependence of Bound-Exciton Photoluminescence of CdTe Crystals.

97. P.Rudolph, in: Transport in Verbindungshalbleitern, MLU Halle 1990, 25-35:
[Real structure at melt growth].

98. P.Reiche, J.Bohm, H.Hermoneit, D.Schultze, P.Rudolph, J.Crystal Growth 108 (1991) 759-764:
The Effect of an Electric Field on the Morphology of $LiNbO_3$ Crystals Grown by the Czochralski Method.

99. P.Rudolph, T.Boeck, in: Forschung unter Weltraumbedingungen, DARA Symposium, Aachen 1991, pp. 107-113 (in German):

[The role of thermodiffusion at the growth of semiconductor alloys from melt-solutions].

100. M.Mühlberg, P.Rudolph, A.Wenzel, in: Crystal Growth Pt.1, 3th European Conference on Crystal Growth, Ed. A. Lörinczy, Trans. Tech. Publications, Zurich 1991, p.129-137:
Improvements of the Quality in Crystal Growth of CdTe and Releated Compounds by the Bridgman Method.

101. P.Rudolph, M.Mühlberg, M. Neubert, T.Boeck, P.Möck, L. Parthier, K. Jacobs, E. Kropp, J.Crystal Growth 118 (1992) 204-212:
Origins and Evolution of Backround Impurity Content of Materials Used in the Preparation of (Hg,Cd)Te LPE Layers on CdTe Substrates.

102. H.Zimmermann, R.Boyn, P.Rudolph, J.Bollmann, A.Klimakow, R.Krause, J. Mat. Sci. Engin. B 16 (1993) 139-144;
New Method for the Determination of V_{Cd}-Concentration in p-CdTe

103. P.Rudolph, M.Mühlberg, J.Mat.Sci.Engin. B 16 (1993) 8-16:
Basic Problems of Vertical Bridgman Growth of CdTe

104. M.Mühlberg, P.Rudolph, M.Laasch, E.Treser, J.Crystal Growth 128 (1993) 571- 575:
The Correlation Between Superheating and Supercooling in CdTe Melts During Unseeded Bridgman Growth

105. P.Rudolph, M.Neubert, M.Mühlberg, J.Crystal Growth 128 (1993) 582-587:
Defects in CdTe Bridgman Monocrystals Caused by Nonstoichiometric Growth Conditions

106. H.Zimmermann, R.Boyn, P.Rudolph, C.Albers, K.W.Benz, D.Sinerius, C.Eiche, B.K.Meyer, D.M.Hofmann, J.Crystal Growth 128 (1993) 593-598 (see also Erratum, J. Crystal Growth 131 (1993) 276):
State and Distribution of Point Defects in Doped and Undoped Bridgman-Grown CdTe Single Crystals

107. I.Baumann, P.Rudolph, D.Krabe, R.Schalge, J.Crystal Growth 128 (1993) 903-908:
Orthoscopic Investigations of the Axial Optical and Compositional Homogeneity of Czochralski Grown $LiNbO_3$ Crystals

108. P.Rudolph, H.Schröter, U.Rinas, H.Zimmermann, R.Boyn, Adv. Mat. for Optics and Electron. 3 (1993) 289-293:
The Control of Stoichiometry and Substitutional Acceptor Density During Crystal Growth of CdTe.

109. P.Peka, M.U.Lehr, J.Dziesiaty, S.Müller, J.Kreissl, P.Rudolph, H.-J-Schulz, Materials Science Forum 143-147 (1993) 435-440:
Optical and Magnetic Properties of Titanium Ions in (CdTe and Cd,Zn)Te.

110. M. Rub, N. Achziger, J. Meier, U. Reislohner, P. Rudolph, M. Wienecke, W. Witthuhn, J.Crystal Growth 138 (1994) 285-289:
Complex Formation in In- and Ag-doped CdTe and ZnSe.

111. P.Rudolph, U.Rinas, K.Jacobs, J.Crystal Growth 138 (1994) 249-254:
Systematical Steps Towards Exact Stoichiometric and Uncompensated CdTe Bridgman Crystals.

112. F.Matsumoto, Y.Okano, I.Yonenaga, K.Hoshikawa, P.Rudolph, T.Fukuda, Sixth International Conference on InP and Related Materials, March 1994 Santa Barbara, USA, IEEE Catalog, p. 367-370:
Growth of <100> InP Single Crystals by the Liquid Encapsulated vertical Bridgman Method Using a Flat-Bottom Crucible.

113. F.Matsumoto, P.Rudolph, T.Fukuda, IACM,WCCM III, The Third World Congress on Computational Mechanics, Extended Abstracts, Vol. 1, August 1-5, 1994, Chiba,Japan, Int. Assoc. for Computational Mechanics, p.787-788:
Computer Optimization of the Semiconductor Compound Growth by the Modified Vertical Bridgman Method with Flat Container Bottom.

114. P.Rudolph, K.Umetsu, H.J.Koh, T.Fukuda, Jpn.J.Appl.Phys. 33 (1994) 1991-1994:
Correlation between ZnSe Crystal Growth Conditions from Melt and Generation of Large-Angle Grain Boundaries and Twins.

115. P.Rudolph, K.Umetsu, H.J.Koh, T.Fukuda, J.Jpn.Assoc.Crystal Growth 21 (1994) 166-173:
The Correlation between Growth Stability and Superheating of the Melt in Semiconductor Compounds.

116. P.Rudolph, K.Umetsu, H.J.Koh, T.Fukuda, J.Crystal Growth 143 (1994) 359-361:
Growth of Twin-Reduced ZnSe Bulk Crystals from the Melt.

117. P.Rudolph, K.Shimamura, T.Fukuda, Crystal Res.Technol. 29 (1994) 801-807:
The Radial Selectivity of In-situ Core-doped Crystal Rods Grown by the Double Die EFG Method.

118. D.H.Yoon, P.Rudolph, T.Fukuda, J.Crystal Growth 144 (1994) 207-211:
Morphological Aspects of Potassium Lithium Niobate Crystals with Accicular Habit Grown by the Micro Pulling Down Method.

119. H.Zimmermann, R.Boyn, M.U.Lehr, H.-J.Schulz, P.Rudolph, J.-Th.Kornack, Semicond. Sci. Technol. 9 (1994) 1598-1603:
The Zeeman Effect on Bound-exciton States of Iridium-related Complex Centres in CdTe.

120. M.Laasch, R.Schwarz, P.Rudolph, K.W.Benz, J.Crystal Growth 141 (1994) 81-88:
CdTe Crystal Growth by a Sublimation Traveling Heater Method.

121. P.Rudolph, A.Engel, I.Schentke, A.Chrochocki, J.Crystal Growth 147(1995) 297 - 304:
Distribution and Genesis of Inclusions in CdTe and (Cd,Zn)Te Single Crystals Grown by the Bridgman Method and by the Travelling Heater Method.

122. P.Rudolph, S.Kawasaki, S.Yamashita, Y.Usuki, Y.Konagaya, S.Matada, S.Yamamoto, T.Fukuda, J.Crystal Growth 149 (1995) 201-206:
Casting of Undoped CdTe Crystals with High Electrical Resistivity.

123. H.J.Koh, Y.Furukawa, P.Rudolph, T.Fukuda, J. Crystal Growth 149 (1995) 236-240:
Oxide Mixed Crystals Grown by Heater-Immersed Zone Melting Method with Multi-Capillary Holes.

124. P.Rudolph, K.Umetsu, H.J.Koh, N.Schäfer, T.Fukuda, Materials Chemistry and Physics 42 (1995) 237-241:
The State of the Art of ZnSe Melt Growth and New Steps towards Twin-Free Bulk Crystals.

125. P.Rudolph, K.Umetsu, H.J.Koh, N.Schäfer, T.Fukuda, in: 1994 IUMRS-International Conference on Electronic Materials, Vol.3, Sensor Materials, Compound Semiconducting Materials, Material Technology for Display, Eds. G.C.Chi, H.Y.Wen, S.C.Shiue (MRS Taiwan, Hsinchu, 1994) pp. 373-378.
The State of Art of ZnSe Melt Growth and New Steps Towards Twin-free Crystals.

126. H.J.Koh, P.Rudolph, T.Fukuda, J.Crystal Growth 154 (1995) 151-155:
Growth of $Bi_{1-x}Sb_x$ Mixed Crystals by a New Melt Injection Technique.

127. T. Fukuda, K.Umetsu, P.Rudolph, H.J.Koh, S.Iida, H.Uchiki, N. Tsuboi, J.Crystal Growth 161 (1996) 45-50:
Growth and Characterization of Twin-free ZnSe Single Crystals by the Vertical Bridgman method.

128. P. Rudolph, S. Kawasaki, S. Yamashita, S. Yamamoto, Y. Usuki, Y. Konagaya, Matada, T. Fukuda, J. Crystal Growth 161 (1996) 28-33:
Attempts to Growth of Undoped CdTe Crystals With High Electrical Resistivity.

129. P. Rudolph, H.J. Koh, N. Schäfer, T. Fukuda, J. Crystal Growth 166 (1996) 578-582:
The Crystal Perfection Depends on the Superheating of the Mother Phase too - Experimental Facts and Speculations on the "Melt Structure" of Semiconductor Compounds.

130. P.Rudolph, F.Matsumoto, T.Fukuda, J.Crystal Growth 158 (1996) 43-48:
Studies on Interface Curvature during Vertical Bridgman Growth of InP in a Flat-Bottom Container.

131. M.Seifert, M. Neubert, W.Ulrici, B.Wiedemann, J.Donecker, J.Kluge, E.Wolf, D.Klinger, P.Rudolph, J. Crystal Growth 158 (1996) 409 - 417:
Studies on Correlation Between the Qualities of GaAs LEC Crystals and the Inert Gas Pressure.

132. H.J.Koh, P.Rudolph, N.Schäfer, K.Umetsu, T.Fukuda, J. Materials Science and Engineering B34 (1995) 199-203:
The Effect of Various Thermal Treatments on the Supercooling of PbTe Melts.

133. M. Seifert, P. Rudolph, M. Neubert, W. Ulrici, J. Donecker, J. Kluge, E. Wolf, D.Klinger, Inst. Phys. Conf. Ser. No 145, Chapter 3, Proc. 22nd Int. Symposium on Semiconductor Compounds, Aug.29-Sept.02, 1995, Cheju Island, Korea (IOP Publishing Limited, Bristol, UK, 1995) p.541-546:
Properties of GaAs LEC Single Crystals Grown at Different Inert Gas Pressures

134. H. Wenisch, K. Schüll, T. Behr, D. Hommel, G. Landwehr, D. Siche,
Rudolph, H. Hartmann, J. Crystal Growth 159 (1996) 26-31:
(Cd,Zn)Se Multi-Qquantum-Well LEDs: Homoepitaxy on ZnSe Substrates and Heteroepitaxy on (In,Ga)As/GaAs Buffer Layers.

135. P. Rudolph, T. Boeck, P. Schmidt, Crystal Res.Technol. 31 (1996) 221-229:
Thermodiffusion and Morphological Stability in Convectionless Crystal Growth Systems From Melts and Melt-Solutions.

136. P. Rudolph, W.Schröder, A.Lüdge, E.Wolf, III-Vs Review - Compound Semiconductors International Vol.9, No.2 (1996) 43-46:
Service and Development of Future Material Science Technologies-The IKZ Berlin.

137. P. Rudolph, III-Vs Review - Compound Semiconductors Intern. 9,4 (1996) 27-32:
The Virtues of Fukuda Laboratory of Crystal Growth.

138. M. Neubert, M. Seifert, P. Rudolph, K. Trompa, M. Pietsch, in: 1996 IEEE Semiconducting and Semi-Insulating Materials Conference, IEEE SIMC-9, Toulouse, 29 April/3 May 1996, IEEE Inc.1996, p.17-20:
First Results of S.I. GaAs Single Crystal Growth Applying the Vapour Pressure Controlled Czochralski Method.

139. P. Rudolph, W.Schröder, J. Jap. Assoc. for Crystal Growth 23 (1996) 60-64.
New Dimensions of Crystal Growth in Japan and of Scientific Cooperation with Germany. Impressions of a visit in May 1996.

140. P.M.Wilde, J.Donecker, M.Seifert, P.Rudolph, Mikrochim. Acta 125 (1997) 251-256:
Microanalytical Characterization of Inclusions in Cr-doped LEC GaAs.

141. M. Neubert, P. Rudolph, M. Seifert in: 1997 IEEE International Symposium on Compound Semiconductors, ed. by M. Melloch and M. A. Reed (Inst. Phys. Publ., Bristol 1998) p. 53-56.
Results of 3" and 4" Low-Gradient SI GaAs Growth by Controlled Vapour Pressure.

142. J. Sato, H. Takeda, H. Morikoshi, K. Shimamura, P. Rudolph, T. Fukuda, J. Crystal Growth 191 (1998) 746-753:
Czochralski Growth of $RE_3Ga_5SiO_{14}$ (RE = La, Pr, Nd) Single Crystals for the Analysis of the Influence of Rare Earth Substitution on Piezoelectricity.

143. B.A. Brunett, J.E. Toney, H. Yoon, P. Rudolph, M. Schieber, F.E. Schlesinger, M.S. Gorsky, R.B. James in: Semiconductors for Room-Temperature Radiation Detector Applications II, edit. by R.B. James et al. (MRS Society, 1998) p. 499 - 503:
Properties of ZnSe Grown by Chemical Vapour Transport and its Application to Room-Temperature Radiation Detection.

144. M. Neubert, P. Rudolph, DGKK-Mitteilungsblatt Nr. 69 (1999) 11-16:
Das VCZ-Verfahren - eine Technologie zum Ziehen defektarmer GaAs- und anderer III-V-Kristalle großer Durchmesser (in German) [trans.: The VCZ-method a Technology to Grow Defect-Reduced GaAs and Other III-V-Crystals of Large Diameters].

145. K. Böttcher, P. Rudolph, M. Neubert, M. Kurz, A. Pusztai, G. Müller, J. Crystal Growth 198/199 (1999) 349-354: Global Temperature Field Simulation of the Vapour Pressure Controlled Czochralski (VCZ) Growth of 3" - 4" Gallium Arsenide Crystals.

146. P. Rudolph, M. Jurisch, J. Crystal Growth 198/199 (1999) 325-335:
Bulk Growth of GaAs - an Overview

147. P. Rudolph, A. Yoshikawa, T. Fukuda, Jpn. J. Appl. Phys. 39 (2000) 5966-5969:
Studies on Meniscus and Diameter Stability during Growth of Fiber Crystals by the Micro-Pulling-Down Method

148. Ch. Frank, K. Jacob, M. Neubert, P. Rudolph, J. Fainberg, G. Müller, J. Crystal Growth 213 (2000) 10-18:
Temperature field simulation and correlation to the structural quality of semi-insulating GaAs crystals grown by Vapor-Pressure-Controlled Czochralski Method.

149. K. Jacob, Ch. Frank, M. Neubert, P. Rudolph, W. Ulrici, M. Jurisch, J. Korb, Cryst. Res. Technol. 35 (2000) 1163-1171:
A study on carbon incorporation in semi-insulating GaAs crystals grown by the vapor pressure controlled Czochralski technique (VCz).

150. U. Rehse, W. Miller, Ch. Frank, P. Rudolph, M. Neubert, J. Crystal Growth 230 (2001) 143-147:
A numerical investigation of the effects of iso- and counter-rotation on the shape of the VCz growth interface.

151. M. Naumann, P. Rudolph, M. Neubert, J. Donecker, J. Crystal Growth 231 (2001) 22-33: Dislocation studies in VCz GaAs by laser scattering tomography.

152. T. Tuomi, L. Knuuttila, J. Riikonen, P.J. McNally, W.-M. Chen, J. Kanatharana, M. Neubert, P. Rudolph, J. Crystal Growth 237 (2002) 350-355:
Synchrotron X-ray topography of undoped VCz GaAs crystals.

153. E.V. Yakovlev, V.V. Kalaev, I.Yu. Evstratov, Ch. Frank, M. Neubert, P. Rudolph, Yu.N. Makarov, J. Crystal Growth 252 (2003) 26-36:
Global heat and mass transfer in vapor pressure controlled Czochralski growth of GaAs crystals.

154. E.V. Yakovlev, O.V. Smirnova, E.N. Bystrova, V.V. Kalaev, Ch. Frank-Rotsch, M. Neubert, P. Rudolph, Yu.N. Makarov, J. Crystal Growth 250 (2003) 195-202:
Modeling analysis of VCz growth of GaAs bulk crystals using 3D unsteady melt flow simulations.

155. P. Rudolph, M. Czupalla, Ch. Frank-Rotsch, U. Juda, F. Kiessling, M. Neubert, M. Pietsch, J. Ceram. Proc. Res. 4 (2003) 1-8:
Semi-insulating 4 - 6-inch GaAs crystals grown in low temperature gradients by the VCz method.

156. F.-M. Kiessling, M. Neubert, P. Rudolph, W. Ulrici, Material Science of Semiconductor Processing 6 (2003) 303-306:
Non-stoichiometric growth of GaAs by the vapour pressure controlled Czochralski (VCz) method without B_2O_3 encapsulation.

157. E.V. Yakovlev, V.V. Kalaev, E.N. Bystrova, O.V. Smirnova, Y.N. Makarov, C. Frank-Rotsch, M. Neubert, P. Rudolph, Crystal Res. Technol 38 (2003) 506-514:
Modeling analysis of liquid encapsulated Czochralski growth of GaAs and InP crystals

158. O. V. Smirnova, V.V. Kalaev, Yu.N. Makarov, Ch. Frank-Rotsch, M. Neubert, P. Rudolph, J. Crystal Growth 266 (2004) 67-73:
3D Computations of Melt Convection and Crystallization Front Geometry during VCz GaAs Growth.

159. P. Rudolph, Ch. Frank-Rotsch, U. Juda, M. Naumann, M. Neubert, J. Crystal Growth 265 (2004) 331-340:
Studies on dislocation patterning and bunching in semiconductor compounds (GaAs).

160. W. Ulrici, F.-M. Kiessling, P. Rudolph, phys. stat. sol. 241 (2004) 1281-1285:
The nitrogen-hydrogen-vacancy complex in GaAs.

161. F.-M. Kiessling, P. Rudolph, M. Neubert, U. Juda, M. Naumann, W. Ulrici, J. Crystal Growth 269 (2004) 218- 228.
Growth of GaAs crystals from Ga-rich melts by the VCz method without liquid encapsulation.

162. L. Fornaro, P. Rudolph, Cryst. Res. Technol. 39 (2004) 831 – 832:
The ISCGChA (Int. School on Crystal Growth, Characterization and Applications) in La Pedrera, Uruguay – Preface.

163. E.N. Bystrova, V.V. Kalaev, Yu.N. Makarov, Ch. Frank-Rotsch, M. Neubert, P. Rudolph, J. Crystal Growth 275 (2004) e507-e514:
2D Simulation of Carbon Transport during LEC Growth of GaAs Crystals.

164. P. Rudolph, Ch. Frank-Rotsch, U. Juda, F.-M. Kiessling, Mat. Science and Engineering A 400 - 401 (2005) 170 - 174:
Scaling of dislocation cells in GaAs crystals by global numeric simulation and their restraints by in situ control of stoichiometry.

165. G. Müller, J.-J. Metois, P. Rudolph, Newsletter of the IUCr 13 (2005) 10-12:
International crystal growth.

166. Ch. Frank-Rotsch, U. Juda, F.-M. Kiessling, P. Rudolph, Mat. Sci. Technol.21 (2005) 1450 - 1454:
Dislocation patterning during crystal growth of semiconductor compounds (GaAs).

167. P. Rudolph, F.-M. Kiessling, J. Crystal Growth 292 (2006) 532-537:
Growth and characterization of GaAs crystals produced by the VCz method without boric oxide encapsulation.

168. F.-M. Kiessling, P. Rudolph, J. Physics and Chemistry of Solids 69 (2008) 289-293:
Defects in boron-reduced and stoichiometry-controlled VCz GaAs crystals.

169. A. Moreno, B. Quiroz-Garcia, F. Yokaichiya, V. Stoanoff, P. Rudolph, Crystal Res. Technology 42 (2007) 231-236:
Protein crystal growth in gels and stationary magnetic fields.

170. P. Rudolph, Ch. Frank-Rotsch, U. Juda, St. Eichler, M. Scheffer-Czygan, phys. state sol. C, 4 (2007) 2934-2939:
Studies on dislocation patterning in 6-inch GaAs crystals.

171. P. Rudolph, J. Crystal Growth 310 (2008) 1298-1306:
Travelling magnetic fields applied to bulk crystal growth from the melt: the step from basic research to industrial scale.

172. E. Saucedo, P. Rudolph, E. Dieguez, J. Crystal Growth 310 (2008) 2067-2071:
Modified Bridgman growth of CdTe crystals.

173. Ch. Frank-Rotsch, D. Jockel, M. Ziem, P. Rudolph, J. Crystal Growth 310 (2008) 1505-1510:
Numerical optimization of the interface shape at the VGF growth of semiconductor crystals in a traveling magnetic field.

174. M. Neubert, P. Rudolph, Ch. Frank-Rotsch, M. Czupalla, K. Trompa, M. Pietsch, M. Jurisch, St. Eichler, B. Weinert, M. Scheffer-Czygan, J. Crystal Growth 310 (2008) 2120-2125:
Crystal growth by a modified vapour pressure controlled Czochralski (VCz) technique.

175. H. Kasjanow, B. Nacke, St. Eichler, D. Jockel, Ch. Frank-Rotsch, P. Lange, F.-M. Kießling, P. Rudolph, J. Crystal Growth 310 (2008) 1540-1545:
3D numerical modeling of asymmetry effects of a heater-magnet module for VGF and LEC growth under traveling magnetic fields.

176. F.-M. Kiessling, M. Albrecht, K. Irmscher, R. Krause-Rehberg, P. Rudolph, W.Ulrici, J. Crystal Growth 310 (2008) 1418-1423:
Defect distribution in boron-reduced GaAs crystals grown by vapour-pressure-controlled Czochralski technique.

177. O. Klein, P. -E. Druet, Ch. Lechner, P. Philip, J. Sprekels, Ch. Frank-Rotsch, F. -M. Kießling, W. Miller, U. Rehse, P. Rudolph, J. Crystal Growth 310 (2008) 1523-1532:
Numerical simulation of Czochralski crystal growth under the influence of a traveling magnetic field generated by internal heater–magnet module (HMM).

178. U. Juda, Ch. Frank-Rotsch, P. Rudolph, J. Mater. Sci: Materials in Electronics 19 (2008) 342-346:
Analysis of dislocation cell patterns in as-grown compound materials (GaAs, CaF_2).

179. Ch. Frank-Rotsch, P. Rudolph, J. Crystal Growth 311 (2009) 2294-2299:
Vertical gradient freeze of 4 inch Ge crystals in a heater-magnet module.

180. B. Nacke, H. Kasjanow, A. Krauze, A. Muiznieks, F.-M. Kiessling, U. Rehse, P. Rudolph, Magnetohydrodynamics 45 (2009) 317-325:
Three-dimensional transient modeling of the melt flow in a TMF VCz system for GaAs crystal growth.

181. O. Klein, Ch. Lechner, P.-E. Druet, P. Philip, J. Sprekels1, Ch. Frank-Rotsch, F.-M. Kießling, W. Miller, U. Rehse, P. Rudolph, Magnetohydrodynamics 45 (2009) 245-255:
Numerical simulations of the influence of a traveling magnetic field, generated by an internal heater-magnet module, on liquid encapsulated Czochralski crystal growth.

182. P. Rudolph, M. Czupalla, B. Lux, J. Crystal Growth 311 (2009) 4543-4548:
LEC growth of semi-insulating GaAs crystals in traveling magnetic field generated in a heater-magnet module

183. M. Holla, T. Arguirov, G. Jia, M. Kittler, Ch. Frank-Rotsch, F. Kiessling, P. Rudolph, Proc. GADEST 2009, Gettering and Defect Engineering in Semiconductor Technology, September 26 - October 02, 2009 in Döllnsee-Schorfheide, Germany, Trans. Tech. Publ., Solid State Phenomena 156-158 (2010) 483-486:
Defect Characterization of Poly-Ge and VGF-grown Ge Material.

184. H. Kirmse, F.-M. Kiessling, I. Häusler, P. Rudolph, Crystal Res. Technology 44 (2009) 1067-1077:
TEM investigation of precipitates in VCz GaAs crystals.

185. P. Rudolph, M.Czupalla, N. Dropka, Ch. Frank-Rotsch, F.-M. Kießling, O. Klein, B. Lux, W. Miller, U. Rehse, O. Root, J. of the Korean Crystal Growth and Crystal Technology 19 (2009) 215-222:
Crystal Growth from Melt in Combined Heater-Magnet Modules.

186. F.-M. Kiessling, M. Albrecht, K. Irmscher, M. Roßberg, P. Rudolph, W. Ulrici , R. Fornari , Physica Status Solidi C 6 (2009) 2778-2784:
Boron- and stoichiometry-related defect engineering during B_2O_3-free GaAs crystal growth.

187. P. Rudolph, M. Czupalla, B. Lux, F. Kirscht, Ch. Frank-Rotsch, W. Miller, M. Albrecht, J. Crystal Growth 218 (2011) 249-254:
The use of heater-magnet module for Czochralski growthof PV silicon crystals with quadratic cross section.

188. N. Dropka, W. Miller, U. Rehse, P. Rudolph, F. Buellesfeld, U. Sahr, O. Klein, D. Reinhardt, J. Crystal Growth 218 (2011) 275-279:
Numerical study of improved melt mixing in silicon melts by double-frequency TMF.

189. H. Bitterlich, Ch. Frank-Rotsch, W. Miller, U. Rehse, P. Rudolph, J. Crystal Growth 318 (2011) 1034-1038:
Homogeneous TMF melt-solution mixing during dipping LPE of (Hg,Cd)Te layers.

190. W. Miller, Ch. Frank-Rotsch, P. Rudolph, J. Crystal Growth 218 (2011) 244-248:
Numerical studies of flow patterns during Czochralski growth of square-shaped Si crystals.

191. B. Ubbenjans, Ch. Frank-Rotsch, J. Virbulis, B. Nacke, P. Rudolph, Extend. Proc. Int. Scienitific Colloquium „Modelling for Material Processing“, Riga, September 16-17, (2010) 79-84:
Influence of ultrasonic treatment on crystal growth from melt.

192. P. Rudolph, Ch. Frank-Rotsch, F.-M. Kießling, Ch. Kudla, J. Ceramic. Proc. Res. Korea 12 (2011) 159-166:
Current and next steps of bulk crystal growth to meet the challenges of photovoltaics.

193. N. Dropka, U. Rehse, P. Rudolph, Int. J. Progress in Computational Fluid Dynamics (2011) – the 8th International Conference on Computational Fluid Dynamics in the Oil & Gas, Metallurgical and Process Industries in Trondheim, Norway June 21.-23. 2011; ISBN 978-82-519-2811-3:
CFD modelling of transport phenomena at directional solidification of mc-silicon for photovoltaic applications (submitted).

194. W. Miller, Ch. Frank-Rotsch, M. Czupalla, P. Rudolph, Cryst. Res. Technol. 47, No.3, 285 -292 (2012) / DOI 10.1002/crat.201100494:
Numeric Modeling of Czochralski Growth of Quadratic Silicon Crystals by Means of TMF.

195. F. Kiessling, F. Büllesfeld, N. Dropka, Ch. Frank-Rotsch, M. Müller, P. Rudolph, J. Crystal Growth 360 (2012) 81-86:
Characterization of mc-Si directionally solidified in travelling magnetic fields.

196. Ch. Frank-Rotsch, U. Juda, B. Ubbenjans, P. Rudolph, J. Crystal Growth 352 (2012) 16-20:
VGF growth of 4 inch Ga-doped germanium crystals under magnetic and ultrasonic fields.

197. N. Dropka, Ch. Frank-Rotsch, P. Rudolph, Cryst. Res. Technol. 47, No. 3, 299 - 306 (2012) / DOI 10.1002/crat.201100483:
Numerical study on double-frequency TMF in Cz silicon growth.

198. N. Dropka, Ch.Frank-Rotsch, W.Miller, P.Rudolph, J. Crystal Growth 338 (2012) 208-213:
Influence of travelling magnetic fields on S–L interface shapes of materials with different electrical conductivities.

199. B. Ubbenjans, Ch. Frank-Rotsch, J. Virbulis, B. Nacke, P. Rudolph, Cryst. Res. Technol. 47, No. 3, 279 - 284 (2012) / DOI 10.1002/crat.201100413:
Numerical analysis of the influence of ultrasonic vibration on crystallization processes.

200. P. Rudolph, E. Talik, Cryst. Res. Technol. 47, No. 3, 228 (2012) / DOI 10.1002/crat.201110228:
Preface, Special Issue Joint German-Polish Conference on Crystal Growth 2011.

201. N. Dropka, Ch. Frank-Rotsch, P. Rudolph, J. Crystal Growth 354 (2012)1-8:
Numerical study on stirring of large silicon melts by Carousel Magnetic Fields

202. Ch. Kudla, A. T. Blumenau, F. Büllesfeld, N. Dropka, Christiane Frank-Rotsch, F. Kiessling, O. Klein, P. Lange, W. Miller, U. Rehse, U. Sahr, M. Schellhorn, G. Weidemann, M. Ziem, G. Bethin, R. Fornari, M. Müller, J. Sprekels, V. Trautmann, P. Rudolph, J. Crystal Growth 365 (2013) 54-58:
Crystallization of 640 kg mc-silicon ingots under traveling magnetic field by using a heater-magnet module..

203. P. Rudolph, Jap. J. Ass. Crystal Growth 39 (2012) 116-121:
Growth and manufacture of Si crystal ingot in rectangular shape for the solar cell application.

204. N. Dropka, Ch. Frank-Rotsch, P. Rudolph, J. Crystal Growth 365 (2013) 64-72:
Comparison of stirring efficiency of various non-steady magnetic fields during unidirectional solidification of large silicon melts.

205. P. Rudolph, Proc. The 6th International workshop on Crystalline Silicon for Solar Cells, October 8-11, 2012, Aix-les-bains, France, pp. 1-4:
What we know about dislocation clustering ?

206. N. Dropka, Ch. Frank-Rotsch, P. Rudolph, J. Crystal Growth 453 (2016) 27-33:
Influence of periphal vibrations and traveling magnetic fields on VGF growth of Sb-doped Ge crystals

207. N. Dropka, Ch. Frank-Rotsch, F. M. Kiessling, P. Rudolph, Extented Proceedings of 55. Savetovanje SHD (55-th SCS Meeting) Novi Sad Srbija 8-9 Juni 2018, p. 06 - 11:
Intensification of bulk crystal growth by magnetic fields: from lab-scale to commercial size equipment

208. L. Stockmeier, C. Kranert, G. Raming, A. Miller, C. Reimann, P. Rudolph, J. Friedrich, J. Crystal Growth 491 (2018) 57-65:
Edge facet dynamics during the growth of heavily doped n-type silicon by the Czochralski-method

209. Ch. Frank-Rotsch, N. Dropka, Fr.-M. Kießling, P. Rudolph, Crystal Research and Technology 55 (2) (2020) 1900115:
Semiconductor Crystal Growth under the Influence of Magnetic Fields

210. W. Miller, H. Klapper, P. Rudolph, A. Danilewsky, Crystal Research and Technology 55 (2) (2020) 1900202:
The History of the German Association for Crystal Growth

Patent publications:

211. 1- A.V.Sandulova, P.Rudolph, A.D.Goncharov; Patent of USSR 1454486 (1972), in Russian: [Method of device production on basis of thin semiconductor layers].

212. 2- P.Rudolph, P.Gille, P.Schmidt; DD 154496 (1980):
Vorrichtung zur Herstellung profilierter Einkristalle aus der Schmelze
[Equipment to produce shaped crystals from the melt].

213. 3- R.Herrmann, P.Rudolph, H.Krüger, G.Schneider; DD 222393 (1980):
Korngrenzenzüchtungsverfahren mit vorgegebenem Verkippungswinkel aus der Gasphase [Growth method of grain boundaries with given tilting angle from gas phase]

214. 4- P.Rudolph, P.Gille, T.Boeck; DD 218638 (1982):
Verfahren zur Herstellung von Kristallen und Schichten aus Schmelzlösungen mittels Thermodiffusion [Method of production of crystals and films from melt-solutions by thermodiffusion].

215. 5- P.Rudolph, P.Gille, M.Mühlberg; DD 228145 (1983):
Verfahren zur Herstellung von Kristallen aus Schmelzlösungszonen [Method of production of crystals from melt-solutions].

216. 6- P.Rudolph, P.Gille, T.Boeck; DD 222046 (1983):
Verfahren zur thermoelektrischen Proze□kontrolle von Halbleiter-Kristallzüchtungsvorgängen [Method of thermoelectr. control of semicond. crystal growth processes].

217. 7- M.Schenk, P.Rudolph; GP DD vom 2.7.1984:
Monolitische integrierte IR-Bildaufnahme- und Ausleseanordnung [Monolithic integrated IR-recording and reading array].

218. 8- P.Rudolph, P.Reiche, D.Schultze, B.Hermoneit; DD 235890 (1985):
Verfahren zur Z□chtung von oxidischen Einkristallen nach dem Czochralski-Verfahren [Method for the growth of oxide single crystals by the Czochralski method].

219. 9- M.Mühlberg, P.Rudolph; DD 301 112 (1988):
Verfahren zur Z□chtung perfekter CdTe-, CdZnTe und CdTeSe-Einkristalle aus der Schmelze [Method to grow perfect CdTe, CdZnTe and CdTeSe single crystals from the melt].

220. 10- P.Rudolph, M.Mühlberg; DD 298 293 (1988):
Einrichtung zur Züchtung perfekter Halbleiterkristalle nach der vertikalen Bridgmanmethode [Equipment to grow perfect semiconductor crystals by the vertical Bridgman method].

221. 11- P.Rudolph, M.Mühlberg; DD 298 533 (1988):
Züchtungsampulle zur Züchtung perfekter Halbleiterkristalle nach der vertikalen Bridgmanmethode [Growth ampoule for growth of perfect semiconductor crystals].

222. 12- P.Rudolph, M.Mühlberg, J.Reichow, A.Klimakow; DD 298 533 (1988):
Verfahren zur Herstellung des Ausgangsmaterials für die Züchtung hochreiner stöchiometrischer CdTe-Einkristalle [Method to produce starting materials for the growth of high-purity stoichiometric CdTe single crystals].

223. 13- E.Pfeifer, P.Rudolph; DD 290 226 (1989):
Verfahren zur Züchtung transparenter oxidischer Einkristalle hoher Brechungszahl nach der Czochralski-Methode [Method to grow transparent oxide single crystals with large refractive index using the Czochralski technique].

224. 14- P.Rudolph, K.Umetsu, T.Fukuda, Japanese Patent, 06023765, January 25, 1994, publ. Number 07206597 A:
Process for Producing Single-Crystal Bulk Zink Selenide (see also DE 19502029).

225. 15- T. Fukuda, P.Rudolph, K.Umetsu, USA Patent, SN 08/376,896, January 23, 1995:
Method for Producing ZnSe Bulk Single Crystals.

226. 16- T. Fukuda, P.Rudolph, K.Umetsu, DE 19502029 A1, 24. 01. 1994 :
Verfahren zur Herstellung von Einkristall-Zinkselenid in Masse.

227. 17- T, Fukuda, P. Rudolph, K. Umetsu, US000005554219A, 10.09.1996:
Process for producing single-crystal bulk zinc selenide

228. 18- P.Rudolph, S.Kawasaki, S.Yamashita, S.Yamamoto, T.Fukuda, Japanese Patent:
Method for Growth of High Resistivity Semiconductor Crystals and Devices.

229. 19- H.Trompa, M.Neubert, M.Seifert, P.Krause, P.Rudolph, M. Jurisch, P. Prause DE 196 027 C1, application date 24.01.96, disclosed 23.10.97:
Vorrichtung zur dampfdruckkontrolliereten Czochralski-Züchtung von AIII-BV-Kristallen [Equipment for the vapour pressure controlled Czochralski growth of AIII-BV crystals].

230. 20- H. Trompa, M. Pietsch, P. Rudolph, M. Neubert, M. Arendt, M.Jurisch, DE 19731 590 A1, application date 17.07.97, disclosed 21.01.99:
Anordnung und Verfahren zur Beobachtung der Züchtung von Halbleiterkristallen mit einer flüchtigen Komponente [Equipment and method to observe the growth of semiconductor crystals with volatile component].

231. 21- P. Rudolph, M. Neubert, Ch. Frank-Rotsch, U. Kupfer, M. Czupalla, M. Pietsch, DE 10 255 981 A1, application:26.11.2002, disclosed: 17. 06. 2004:
Vorrichtung zum Ziehen von Kristallen nach der Czochralski-Methode [Equipment for pulling of crystals by the Czochralski method].

232. 22- M. Ziem, P. Rudolph, P. Lange, DE 10 2007 020 239 B4, submitted 10.02.2006, inn. Priorität 24.04.06, disclosed 25.10.07, Offenlegung 25.10.07, Erteilungsbeschluss: 09. 04. 2009, urkundliche **Erteilung** 03. 09. 09:
Vorrichtung zum Züchten von Einkristallen aus elektrisch leitfähigen Schmelzen [Appliance for growth of single crystals from melts of electrical conductivity]

233. 23- D. Jockel, P. Rudolph, P. Lange, Ch. Frank-Rotsch, DE 10 2007 046 409 B4, submitted 14. 02. 2007, Anmldg. 24.09.2007, Offenlegung 09. 04. 2009, Erteilungsbeschluss 26. 02. 09, urkundliche **Erteilung** 23. 07. 09:
Vorrichtung zur Kristallzüchtung aus elektrisch leitfähigen Schmelzen [Appliance for for crystal growth of single crystals from melts of electrical conductivity]

234. 24- P. Lange, D. Jockel, M. Ziem, P. Rudolph, F. Kießling, Ch. Frank-Rotsch, M. Czupalla, B. Nacke, H. Kasjanow, DE 10 2007 028 547 B4, submitted 30. 01. 2007, Anmldg. 18.06.07, Offenlegung 24. 12. 2008, Erteilungsbeschluss 16. 06. 2009, WO 2008155138 A2 und A3, EP 000002162570, urkundliche **Erteilung** 08. 10. 09:
Vorrichtung zur Herstellung von Kristallen aus elektrisch leitenden Schmelzen [Appliance for crystal growth from electrically conductive melts].

235. 25- Ch. Frank-Rotsch, P.Rudolph, O. Klein, P. Lange, B. Nacke, DE 10 2007 028 548 B4, submitted 30. 01. 2007, Anmldg. 18.06.07, Offenlegung: 24. 12. 2008, Erteilungsbeschluss 13.03.2009, WO2008155137 A1, EP 2162571 B4, urkund. **Erteilung** 16.07.09:
Vorrichtung und Verfahren zur Herstellung von Kristallen aus elektrisch leitenden Schmelzen [Appliance and method of crystal growth from electrically conductive melts].

236. 26- P. Rudolph, Ch. Frank-Rotsch, EM08-IKZ-1, DE 10 2008 034 029 A1, submitted 18. 01. 2008, Offenlegung 21.01.2010:
Vorrichtung und Verfahren zur Züchtung von Einkristallen aus elektrisch leitenden Schmelzen in Mehrtiegelanordnungen [Appliance and method for single crystal

growth from melts of electrical conductivity in multi-crucible arrangements].

237. 27- Ch. Frank-Rotsch, M. Miller, U. Rehse, P. Rudolph, M. Ziem, DE 10 2008 027 359 B4, Anmldg. 04. 06. 2008, Offenlegung: 17. 12. 2009, **Erteilung** 12.04.12:
Verfahren zur Durchmischung von elektrisch leitenden Schmelzen bei Kristallisationsprozessen [Method for mixing of electrical conducting melts at processes of crystallization].

238. 28- P. Rudolph and KRISTMAG-Team from IKZ, WIAS, Steremat, Auteam, Markenanmeldung der Bezeichnung KRISTMAG, AZ 307 27 628.7, **Erteilung** 19.10.07; European Application 09. 06. 2008 [brand label protection].

239. 29- M. Ziem, P. Lange, P. Rudolph, EM08-IKZ 4, PAT 08-115247 DE (2008), DE 10 2008 035 439 B4, Anmldg. 24. 09. 08, Offenlegung 28.01.2010, **Erteilung** 16.06.11:
Vorrichtung zur Kristallisation aus elektrisch leitenden Schmelzen [Appliance for crystallization of electrically conducting melts].

240. 30- N. Dropka, W. Miller, U. Rehse, P. Rudolph, F. Büllesfeld, U. Sahr, DE 10 2008 059 521 B4, Anmldg. 27.11.2008 (WSS), 13.11.2008 (FVB eV), Offenlegung 10. 06. 2010, Int. Anmldg. WO2010060802 A3, EP2370617, US 2011309555 A1, TW 201035391 A (A2), **Erteilung** 17.11.11 :
Verfahren zum Erstarren einer Nichtmetall-Schmelze [Method for solidification of non-metallic melts].

241. 31- M. Czupalla, F.-M. Kießling, F. Kirscht, O. Klein, P. Lange, B. Lux, W. Miller P. Rudolph, M. Ziem, Meldung an FVB 27. 04. 2009, DE 10 2009 027 436 A1, Anmldg. 04. 07. 09, Offenlegung 13. 01. 2011 **Erteilung** 02.04.14 :
Verfahren und Vorrichtung zur Züchtung von Kristallen aus elektrisch leitenden Schmelzen, die in der Diamant- und Zinkblendestruktur kristallisieren [Method and appliance for growth of crystals from electricallly conducting melts having diamond and zincblende structure].

242. 32- P. Lange, M. Ziem, P. Rudolph, EM09-IKZ 3, Anmldg.beim FVB: 23. 07. 09, hinterlegt.: 14. 10. 09, DE 10 2009 045 680 B4, Offenlegung 28. 04. 2011, **Erteilung** (15.11.11) 22.03.12 :
Vorrichtung und Verfahren zur Herstellung von Siliziumblöcken aus der Schmelze durch gerichtete Erstarrung [Appliance and method for production of silicon blocks from melt by unidirectional solidification].

243. 33- V. Trautmann, P. Rudolph, F.-M. Kießling, R. Fornari, Anmldg.: 16. 09. 09, hinterlegt: 18. 11. 2009, DE 10 2009 046 845 A1, Offenlegung 01. 06. 2011:
Kristallisationsanlage und Kristallisationsverfahren, vorher: Anordnung zur Züchtung von Kristallen aus elektrisch leitfähigen Schmelzen in simultan erzeugten magnetischen Wanderfeldern [Appliance for growth of crystals from electrically conducting melts within simultaneously generated travelling magnetic fields].

244. 34- N. Dropka, P. Rudolph, U. Rehse, EM10-IKZ1, PAT-10, IKZ 54, DE 10 2010 028173 B4, Anmldg.: 26.04.2010, Offenlegung: 27.10.2011, Int. Anmldg. WO

2012/038432 A1, 29. 03. 2012, **Erteilung** 18.07.12 und.publ. 29.11.12:
Verfahren und Anordnung zur Herstellung von Kristallblöcken hoher Reinheit und dazugehörige Kristallisationsanlage [Method for production of crystal ingots of high purity].

245. 35- N. Dropka, Chr. Frank-Rotsch, P. Rudolph, R.-P. Lange, U. Rehse, PAT-10 IKZ 55, DE 10 2010 041 061 B4., Anmldg.20.09.2010, Int. Anmldg.PCT/EP2011/066332, Offenlegung 22.03.2012, **Erteilung** am 24.10.2013:
Kristallisationsanlage und Kristallisationsverfahren zur Herstellung eines Blocks aus einem Material, dessen Schmelze elektrisch leitend ist [Crystallization equipment and crystallization appliance for production of an ingot made of material with electrically conducting melt].

246. 36- F.-M. Kiessling, Ch. Frank-Rotsch, N. Dropka, P. Rudolph, EM11-IKZ1, Anmeldg. 11.04. 2011, DE 10 2011 076 860.2. (01. 06. 2011), Offenlegung 06.12.12:
Verfahren zur Herstellung von Kristallblöcken mit großer Kornstruktur. **Erteilung** am 28.09.2015:

Popular publications:

247. P.Rudolph, Mitteilungsheft der Vereinigung für Kristallographie (VfK), 22, 3 (1987) 3-5
Zur Tätigkeit des Nationalkomitees für Kristallographie

248. P.Rudolph, Mitteilungsheft der VfK, 22, 3 (1987) 24-30
Kristallographie und Materialforschung in Spanien

249. G.Keller, G.Kühn, G.Kötitz und P.Rudolph, Sonderheft der VfK, 25, 1/2 (1990)
Die Entwicklung der Kristallzüchtung

250. P.Rudolph, Deutschen Gesellschaft für Kristallzüchtung und Kristallwachstum, Mitteilungsblatt Nr.51 (1990) 7-12: Kristallzüchtung in der DDR

251. P.Rudolph, Deutsche Gesellschaft fur Kristallzüchtung und Kristallwachstum (DGKK), Mitteilungsblatt Nr. 1 (1994) 3:
Brief an den Vorstand der DGKK (Bericht über Japan).

252. P.Rudolph, Inst. for Materials Research of Tohoku University in Sendai (Japan), IMR News 19 (1994) 16-17: The Virtues of Fukuda Laboratory.

253. P. Rudolph in: Kin-Ken (students' journal of the IMR of Tohoku University), July 06, 1994:
Impressions on the visiting stay at the Tohoku University and Fukuda laboratory.

254. P. Rudolph, K. Böttcher, DGKK Mitteilungsblatt Nr.62, November 1995, 23-26:
Bericht über die "International School on Advanced Electronic Materials" vom 6. bis 15. 2. 1995 in Madras/Indien.

255. P. Rudolph, P. Reiche, W. Schröder, DGKK Mitteilungsblatt Nr. 63, Mai 1996, 10-13:
Die Entwicklung der Kristallzüchtung unter Obhut der AG "Kristallisation" der VfK.

256. P. Rudolph, W. Schröder, DGKK Mitteilungsblatt Nr. 64 (1996) 16-22:
Bericht über einen Besuch bei wissenschaftlichen und industriellen Einrichtungen zur Kristallzüchtung in Japan vom 4. - 19. Mai 1996.

257. P. Rudolph, DGKK Mitteilungsblatt Nr. 64 (1996) 22-24:
Materialwissenschaft und Kristallzüchtung in Israel - Impressionen eines Forschungsbesuches vom 6. bis 20. Oktober 1996.

258. P. Rudolph, DGKK Mitteilungsblatt Nr. 66 (1997) 12-15:
Kristallzüchtung in Süd-Korea - Impressionen vom 12. Meeting der KACCG, bis 13. Juni 1997 in Seoul.

259. P.Rudolph, Annual Report 1997/98 of Fukuda Laboratory, IMR of Tohoku University, Sendai, Japan, 2 pages:
The Advanced Concept of Fukuda Laboratory

260. P. Rudolph, DGKK Mitteilungsblatt Nr.68 (1998) 15-17:
Auswertung der ICCG-12 in Jerusalem 1998.

261. H.-J. Rost, P. Rudolph, DGKK Mitteilungsblatt Nr.68 (1998) 21-26:
First International School on Crystal Growth Technology (ISCGT-1) im Berner Oberland - eine Gratwanderung in den Höhen der Kristallzüchtungstechnologie.

262. P. Rudolph, DGKK Mitteilungsblatt Nr. 69 (1999) 21-22:
Denkanstöße zur Kinetik des Kristallwachstums.

263. P. Rudolph, DGKK Mitteilungsblatt Nr. 70 (1999) 24-26:
Eleventh American Conference on Crystal Growth & Epitaxy (ACCGE-11) vom 01. bis 06. August 1999 in Tucson (USA).

264. H. Klapper, P. Rudolph, DGKK Mitteilungsblatt Nr. 70 (1999) 28-29:
International School on Crystal Growth and Advanced Materials in Brazil, July 18 - 23, 1999 in Campinas/Brasilien.

265. P. Rudolph, DGKK Mitteilungsblatt Nr. 72 (2000) 33-36:
Bericht über die „Second International School on Crystal Growth Technology – SCGT-2“ vom 24. bis 29. August 2000 in Zao (Japan).

266. P. Rudolph, DGKK Mitteilungsblatt Nr. 73 (2001) 11-13:
2. Kinetikseminar der DGKK am 22.-23.02.01an der Universität Erlangen-Nürnberg

267. P. Rudolph, DGKK Mitteilungsblatt Nr. 75 (2002) 11-12:
3. Kinetikseminar in Dresden

268. P. Rudolph, DGKK Mitteilungsblatt Nr. 75 (2002) 24-26:
Tsuguo Fukuda – 15 Jahre erfolgreiche Züchtungstechnologie am IMR der Tohoku-Universität in Sendai (Japan).

269. P. Rudolph, DGKK Mitteilungsblatt Nr. 77 (2003) 13-15:
„Das Spiel des Kristallwachstums mit Quanteneffekten hat begonnen“
Bericht über das 4. Kinetikseminar der DGKK in Duisburg

270. P. Rudolph, DGKK Mitteilungsblatt Nr. 78 (2003) 29-31:
Bericht über die !5th American Conference on Crystal Growth and Epitaxy (ACCGE-15), 20 – 24 July 2003 in Keystaone, Colorado, USA.

271. P. Rudolph, DGKK Mitteilungsblatt Nr. 79 (2003) 8-10:
5. Kinetikseminar der DGKK am 18. März 2004 in Jena

272. P. Rudolph, DGKK Mitteilungsblatt Nr. 80 (2004) 11-14:
12. Internationale Sommerschule für Kristallzüchtung (ISSCG-12) in Berlin

273. P. Rudolph, DGKK Mitteilungsblatt Nr: 82 (2005) 18-22
Ein technologischer Herbst 2005 - Bericht über zwei internationale Meetings zur Kristallzüchtungstechnologie

274. P. Rudolph, DGKK Mitteilungsblatt Nr: 83 (2006) 12-15:
7. Kinetikseminar der DGKK vom 15. bis 16. Februar 2006 in Halle/Saale

275. P. Rudolph, W. Miller, DGKK Mitteilungsblatt Nr: 85 (2007) 12-14:
Die Kinetik wird von der Nanokristallisation neu herausgefordert – Bericht vom 8. Kinetikseminar der DGKK vom 22. bis 23. Februar 2007 in Bochum.

276. P. Rudolph, DGKK Mitteilungsblatt Nr: 85 (2007) 22-25:
Öffentliches Statusseminar des Kristmag-Projektes, 18.-20. Juni 2007 am Dämeritzsee.

277. P. Rudolph, DGKK Mitteilungsblatt Nr. 88 (2009) 22-26:
KRISTMAG – vom Traum zum Transfer.

278. P. Rudolph, DGKK Mitteilungsblatt Nr. 88 (2009) 8:
Brief des künftigen Vorsitzenden der DGKK

279. P. Rudolph, DGKK Mitteilungsblatt Nr. 89 (2009) 13-14
Die DGKK muss an Signifikanz gewinnen!

280. P. Rudolph, DGKK Mitteilungsblatt Nr. 90 (2010) 3
Bemerkungen des Vorsitzenden (Leitartikel).

281. P. Rudolph, DGKK Mitteilungsblatt Nr. 91 (2010) 3
Bemerkungen des Vorsitzenden (Leitartikel).

282. P. Rudolph, DGKK Mitteilungsblatt Nr. 91 (2010) 20-21
IOCG-Preise 2010.

283. P. Rudolph, DGKK Mitteilungsblatt Nr. 92 (2010) 3
Bemerkungen des Vorsitzenden (Leitartikel).

284. P. Rudolph, DGKK Mitteilungsblatt Nr. 93 (2010) 3
Bemerkungen des Vorsitzenden (Leitartikel).

285. P. Rudolph, DGKK Mitteilungsblatt Nr. 93 (2010) 3
The 18-th American Conference on Crystal Growth and Apitaxy (ACCGE-18)

286. P. Rudolph, DGKK Mitteilungsblatt Nr. 95 (2012) 17-20
6-th International Workshop on Crystalline Silicon Cells

287. P. Rudolph, H. Klapper, DGKK Mitteilungsblatt Nr. 100 (2015) 12-18
Die Entwicklung der DGKK

288. W. Miller, P. Rudolph, DGKK Mitteilungsblatt Nr. 100 (2015) 40-42
Wachstumskinetik und Nanostrukturen.

289. P. Rudolph, L. Bohaty, DGKK Mitteilungsblatt Nr. 107 (2019) 18-19
Prof. Dr. Manfred Mühlberg zum 70. Geburtstag

290. P. Rudolph, B. Weinert, St. Eichler, DGKK-Mitteilungsblatt Nr. 1ü9 (2020)
Ein Mann, der die gesamte Kristallzüchtung im Kopf hat. Zum 80. Geburtstag von Dr. Manfred Jurisch

291. P. Rudolph, DGKK-Mitteilungsblatt Nr. 111 (2021)
„Meine Heimat ist die Wissenschaft “ - zum 90. Geburtstag von Prof. Dr. A. A. Chernov

Published book reviews:

292. P.Rudolph, in Crystal Res.Technol. 7 (1987) 876 on:
B.Feuerbacher et al., Material Science in Space, Springer Vlg. 1986

293. P.Rudolph, in Crystal Res.Technol 7 (1987) 1120 on:
E.I.Givargizov, Highly Anisotropic Crystals, D.Reidel Publ. 1987

294. P.Rudolph, in Crystal Res.Technol. 11 (1987) 1396 on:
L.Regel, Material Science in Space, Helstedt Press 1987

295. P.Rudolph, in Crystal Res.Technol. 23 (1988) 508 on:
G.Müller, Inhomogenitäten in der Kristallz□chtung, Selisch FB Vlg. 1986

296. P.Rudolph, in Crystal Res.Technol. 23 (1988) 488 on:
A.Weiss, H.Wenzl, Rhein.-Westf.AdW Vorträge N 335, Westdt.Vlg. 1987

297. P.Rudolph, in Crystal Res.Technol. 23 (1988) 1280 on:
A.Ohno, Solidification, Springer Vlg.1987

298. P.Rudolph, in Crystal Res.Technol. 24 (1989) 570 on:
Properties and Applications, Bd.11, Ed.H.C.Freyhardt, Springer Vlg. 1987

299. P.Rudolph, in Crystal Res.Technol. 24 (1989) 722 on:
V.P.Zlomanov, A.V.Novoseleva, P-T-x-diagrammy sostojanija sistem metall-chalkogen, Nauka, Moskva 1987

300. P.Rudolph, in Crystal Res.Technol. 25 (1990) 770 on:
H.Pfeiffer, T.Klupsch, W.Haubenrei□er, Microscopic Theory of Crystal Growth, Akd.Vlg. 1989

301. P.Rudolph, in Crystal Res.Technol. 25 (1990) 920 on:
R.Staufenbiel, P.R.Sahm, Rhein.-Westf. AdW Vortr□ge N 373, 1989

302. P.Rudolph, in Crystal Res.Technol 27 (1992) 824 on:
B.N.Roy, Crystal Growth from melts, J.Wiley & Sons, 1992

303. P.Rudolph, in Crystal Res.Technol 28 (1993) 942 on:
D.Schangguan, Cellular Growth of Crystals, Lecture Notes in Earth Sciences, Vol.36, Springer Vlg. 1991

304. P. Rudolph, in Acta Crystallographica A53 (1997) 403-404 on:
Hurle (edit.): Handbook of Crystal Growth, Vol.2: Bulk Crystal Growth. a: Basic Techniques; b: Growth Mechanisms and Dynamics, Elsevier, 1994