

List of Publications

Hans-Rainer Trebin

Academic Issues:

1. Trebin H-R 1972
Diplomarbeit Universität München
Untersuchung der Bandstruktur von Titankarbid
2. Trebin H-R 1976
Dissertation Universität Regensburg
Polaronen und Exziton-Phonon-Wechselwirkung bei Valenzbandentartung
3. Trebin H-R 1982
Habilitationsschrift Universität Regensburg
The topology of non-uniform media in condensed matter physics

Books

1. Issues dedicated to Professor Dr. Alfred Seeger in honour of his 60th birthday
physica status solidi (a) 104 No. 1
physica status solidi (b) 144 No. 1
Guest Editors: Kröner E, Kronmüller H, Trebin H-R, Wilkens M
Akademie-Verlag Berlin 1987
2. "Theories of Matter", A Festschrift for Prof. Joseph L. Birman
Editor Solomon A, Co-Editors Balkanski M, Trebin H-R
World Scientific 1994
3. Proceedings of the 7th International Conference on Quasicrystals
Materials Science and Engineering A294-296
Guest Editors: Gähler F, Kramer P, Trebin H-R, Urban K
Elsevier Science 2000
4. "Quasicrystals: Structure and Physical Properties"
Editor Trebin H-R
Wiley-VCH 2003
5. "Recent Developments in Magnetism and Modern Magnetic Materials"
Dedicated to Manfred Fähnle on the occasion of his 60th birthday
Special issue physica status solidi (b) 248 No. 10
Guest Editors: Kronmüller H, Seeger A, Schütz G, Trebin H-R
Wiley-VCH 2011

Publications:

1. Tongendorff J, Trebin R, Ruhenstroth-Bauer G 1975
Am. J. Path. **80** 519–24
Critique of the critical mass hypothesis of the regeneration of liver cells
2. Trebin H-R, Bross H 1975
J. Phys. **C8** 1181–8
MAPW band-structure calculations for TiC with muffin-tin and angular-dependent potentials

3. Trebin H-R, Rössler U 1975
phys. stat. sol. (b)**70** 717–26
Polarons in the degenerate-band case
4. Trebin H-R 1977
phys. stat. sol. (b)**81** 527–34
Polarons in the degenerate-band case II
5. Ranvaud R, Pollak FH, Rössler U, Trebin H-R 1977
in: Proceedings of the 13th Int. Conf. on the Physics of Semiconductors Rome 1976, ed. Fumi FG (Tipografia Marves, Rome) p. 1171
Evidence for stress-induced k-linear terms for QCR data in p-InSb
6. Trebin H-R, Cardona M, Ranvaud R, Rössler U 1978
in: Proceedings of the III. Int. Conference on the Physics of Narrow Band-Gap Semiconductors, Warszawa 1977, ed. Rauluszkiewicz J, Gorska M, Kaczmarek-Morawiec E (North-Holland, Amsterdam) p. 227
Stress-induced k-linear terms in the band-structure of InSb
7. Trebin H-R 1979
phys. stat. sol. (b)**92** 601–10
Exciton-phonon interaction in the degenerate-band case
8. Trebin H-R, Rössler U 1979
J. Magnetism. Magn. Mat. **11** 76–9
Landau levels in uniaxially stressed compounds of zinc-blende structure
9. Trebin H-R, Rössler U, Ranvaud R 1979
Phys. Rev. **B20** 686–700
Quantum resonances in the valence bands of zincblende semiconductors. I. Theoretical aspects
10. Ranvaud R, Trebin H-R, Rössler U, Pollak FH 1979
Phys. Rev. **B20** 701–15
Quantum resonances in the valence bands of zincblende semiconductors. II. Results for p-InSb under uniaxial stress
11. Trebin H-R, Cummins HZ, Birman JL 1981
Phys. Rev. **B23** 597–606
Excitons in cuprous oxide under uniaxial stress
12. Trebin H-R 1981
MATCH **10** 211–22
Investigation of defects in ordered media by methods of algebraic topology
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Phys. Rev. **B23** 1961–70
Exchange and polaron corrections for excitons in the degenerate-band case
14. Jänich K, Trebin H-R 1981
in: "Physics of Defects", Proceedings of Session XXXV of the Summer School for Theoretical Physics, Les Houches 1980, eds. Balian R, Kléman M, Poirier J-P, North-Holland, p. 421–29
Disentanglement of line defects in ordered media
15. Trebin H-R, Kutka R 1981
J. Physique Lettr. **42** L421–3
Restricted homotopies and focal conic textures
16. Trebin H-R 1981
J. Physique **42** 1573–6
Elastic energies of a directional medium
17. Trebin H-R 1982
Adv. Phys. **31** 195–254
The topology of non-uniform media in condensed matter physics

18. Mysyrowicz A, Trauernicht DP, Wolfe JP, Trebin H-R 1983
Phys. Rev. **B27** 2562–4
Stress dependence of the paraexciton in Cu_2O
19. Trebin H-R 1983
Phys. Rev. Lett. **50** 1381–4
Configurations in crystals, rod lattices, and lamellar systems
20. Wolfstädter B, Trebin H-R, Pascher H 1983
in: Lecture Notes in Physics **177**, ed. Landwehr G (Springer, Berlin) p. 340-3
Optically pumped recombination radiation in zincblende semiconductors under crossed magnetic and strain fields
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J. Phys. F: Met. Phys. **14** 1453–69
Electron density and density of states for TiC
22. Trebin H-R 1984
Phys. Rev. **B30** 4338–42
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23. Kutka R, Trebin H-R 1984
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25. Birman JL, Trebin H-R 1985
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"Statistical" symmetry with applications to phase transitions
26. Trebin H-R 1985
in: "Spontaneous Symmetry Breakdown and Related Subjects", Proceedings of the XXI Winter School of Theoretical Physics, Karpacz 1985, eds. Michel L, Mozrzykmas J, Pękaliski A, World Scientific, p. 61–79
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27. Trebin H-R 1986
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The topology of semidefects and solitons
28. Bohsung J, Trebin H-R 1987
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Disclinations in quasicrystals
29. Longa L, Monselesan D, Trebin H-R 1987
Liq. Cryst. **2** 769–96
An extension of the Landau-Ginzburg-deGennes theory for liquid crystals
30. Trebin H-R, Longa L, Salzgeber B 1987
phys. stat. sol. (b) **144** 73–84
Metallic glasses and chiral nematic liquid crystals
31. Trebin H-R, Wolfstädter B, Pascher H, Häfele HG 1988
Phys. Rev. **B37** 10249–55
Electrons and holes in InSb under crossed magnetic and stress fields. I. Theory
32. Wolfstädter B, Trebin H-R, Pascher H, Häfele HG 1988
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38. Trebin H-R 1988
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39. Rössler U, Schmitz J, Trebin H-R 1989
in: Proceedings of the 19th Int. Conference on the Physics of Semiconductors Warsaw, 1988, ed. Zawadzki W, Pol. Acad. of Science, Warsaw, p. 916
A focus of Landau-levels in HgSe
40. Longa L, Trebin H-R 1989
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J. Phys. France **50** 861–85
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Temperature dependence of the elastic constants for biaxial nematic liquid crystals
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Stability of monatomic and diatomic quasicrystals and the influence of noise

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Tetracoordinated quasicrystals
49. Kramer P, Trebin H-R 1990
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Feasibility of fast particle channeling in quasicrystals
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58. Hirning R, Funk W, Trebin H-R, Schmidt M, Schmiedel H 1991
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Threshold behaviour and electro-optical properties of twisted nematic layers with weak anchoring in the tilt and twist angle
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Planes and rows in quasilattices
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