

### **publications from G. Kasner**

1. Böttger, H.; Bradl, I.; Kasner, G.: Vibrational Spectra of Fibonacci Chains with Defects *phys. stat. sol. (b)* 151 , 521 (1989)
2. Böttger, H.; Kasner, G.: Vibrational properties of fibonacci chains, in *Phonons 89* (Hrsg. S. Hunklinger, W. Ludwig, G. Weiss; World Scientific, Singapore, (1990), S. 567
3. Böttger, H.; Kasner, G.: Electronic and vibrational properties of fibonacci chains, in *Quasicrystals* (Hrsg. M. V. Jaric , S. Lundquist; World Scientific, Singapore, 1990), S. 459
4. Böttger, H.; Kasner, G.: Self-similarity of the density of states of electron and phonon models in fibonacci chains *Phys stat. sol. (b)* 158, 143 (1990)
5. Böttger, H.; Kasner, G.: Multifractal, localized and extended wave functions in generalized fibonacci chains *Phys. stat sol. (b)* 162, 489 (1990)
6. Böttger, H.; Kasner, G.: Multifractal analysis of wave function in generalized fibonacci chains *Superlattices and Microstructures* 10, 305 (1991)
7. Kasner, G.; Wegener, D.; Böttger, H.: Structural and electronic properties of Danzer`s Model of a quasicrystal *Z. Phys B* 83, 259 (1991)
8. Böttger, H.; Kasner, G.: Quasicrystals(Review-Artikel) *Phys. stat. sol. (b)* 164, (1991)
9. Böttger, H.; Kasner, G.: Multifractal analysis of wave function in generalized fibonacci chains *Superlattices and Microstructures* 10, 305 (1991)
10. Kasner, G.; Wegener, D.; Böttger, H.: Structural and electronic properties of Danzer`s model of a quasicrystal *Z. Phys B* 83, 259 (1991)
11. Kasner, G.; Böttger, H.: Lattice dynamics of an f-type icosahedral quasicrystal *Int. J. Mod. Phys. B* 7, 1487, (1993)
12. Kasner, G. Untersuchungen zu strukturellen und dynamischen Eigenschaften ikosaedrischer Quasikristallmodelle Dissertation Universiät Magdeburg (1994)
13. Böttger, H. Kasner, G.: Abschlußbericht an das BMFT: Untersuchung der Gitterdynamik von Quasikristallen durch Computersimulation an realitätsnahen Modellsystemen und Neutronenstreuexperimente. (1995)
14. Kasner, G.; Schwabe, H.; Böttger, H.:Electronic properties of icosahedral systems: Energy spectrum, wave functions and dc- conductance, *Phys. Rev. B* 51, 10454, (1995)
15. Kasner, G.; Schwabe, H.; Böttger, H.: DC-conductance of icosahedral systems; Aperiodic `94, an intern. conf. on aperiodic crystals, ed: G. Chapuis, World Scientific, Singapore, S. 202 (1995)
16. Böttger, H.; Kasner, G.: Vibrational density of states, Dynamical structure factor and eigenstates of icosahedral model *Physica B* 219 & 220 (1996), S. 339
17. Schwabe, H.; Kasner, G.; Böttger, H.:Electronic properties of two- and tree-dimensional quasicrystalline model system in a magnetic field, *Phys. Rev. B* 56, 8026, (1997)
18. Kasner, G.; Papadopolos, Z.; Kramer, P.; Bürgler, D. E.: The surface structure of AlPdMn, *Phys. Rev. B* 60, 3899, (1999)

19. Schwabe, H.; Kasner, G.; Böttger, H.: Influence of Phason Flips on Electronical Properties of Quasicrystalline Model Systems, *Phys. Rev. B* 59, 861 (1999)
20. Papadopolos, Z.; Kramer, P.; Kasner, G.; Bürgler, D. E.: The KGdeBE Model applied to the surface of icosahedral AlPdMn *Mat.Res.Soc. Symp.Proc. Vol.553, Quasicrystals*, Edits. Jean-Marie Dubois, Patricia A. Thiel, An-Pang Tsai, Knut Urban, Warrendale PA 1999 pp. 231-236 ISBN 1-55899-459-9
21. Kasner, G.; Papadopolos, Z.; Kramer, P. : Atomic decoration of the Katz-Gratias-de Boissieu-Elser Model applied to the surface structure of i-AlPdMn. *Material Science and Engineering* **294-296**, 355-360 (2001)
22. Schwabe, H.; Kasner, G. Böttger, H.: Influence of Phason Flips on Electronical Properties of Quasicrystalline Model Systems, *Material Science and Engineering* **294-296**, 568-571 (2001)
23. Papadopolos, Z.; Kasner, G.: Delone Covering of Canonical Tilings  $\check{T}^{(D6)}$ , *Ferroelectrics*, Vol. **250**, pp. 409-412, (2001)
24. Kasner, G. Papadopolos, Z.: The model for icosahedral AlPdMn based on the canonical, from D6 projected tiling, MR: Fall Meeting 2000 Boston, *MRS Fall 2000 Proceedings Volume 643: Quasicrystals: Preparation, Properties and Applications* , Eds.: E. Belin-Ferre, P.A. Thiel, A-P. Tsai, K. Urban, ISBN: 1-55899-533-6, pp. K9.7
25. Kasner, G.; Schwabe, H.; Böttger, H.: Electron transport in a magnetic field in : *Quasicrystals; An Introduction to Structure, Physical Properties, and Application of Quasicrystalline Alloys* by J. B. Suck, P. Häussler, M. Schreiber, Springer-Verlag TELOS; ISBN: 3540642242 (2002), pp. 379-392
26. Ledieu, J.; McGrath, R.; Diehl, R. D.; Lograsso, T. A.; Delaney, D. W.; Papadopolos, Z.; Kasner, G.: Bulk termination of the quasicrystalline five-fold surface of  $Al_{70}Pd_{21}Mn_9$  , *Surface Science Letters*, Vol 492/3, pp L729-L734
27. Papadopolos, Z. and Kasner, G.; Ledieu, J. and Cox, E. J.; Richardson N.V. and Chen Q.; Diehl, R.D.; Lograsso, T.A. and Ross, A.R.; McGrath, R.: Bulk Termination of the Quasicrystalline Five-Fold Surface of  $Al_{70}Pd_{21}Mn_9$ , *Phys. Rev.* 66 (2002) 184207-1..13
28. Papadopolos, Z.; Kasner, G. : The fivefold planes of AlPdMn of the model based on the  $\check{T}^{(D6)}$  tiling, in : *Proceedings of the Symposium on Condensed Matter Physics 2001, Arandjelovac, October 2001*, Eds: L. Dobrosavlevic, G.I. Savic, Institute of Physics, Belgrade, ISBN 86-82441-10-1, pp. 57-64
29. Papadopolos, Z.; Kasner, G.: The efficiency of the Delone-coverings of canonical tilings, in *Coverings of Discrete quasiperiodic sets - Theory and applications to Quasicrystals* Eds: Kramer, P. Papadopolos, Z. Springer-Verlag Berlin 2002 , ISBN 3-540-43241-8, pp. 165-184
30. Papadopolos, Z.; Kasner, G. : Tilings and coverings embedded into the canonical decagonal tiling  $\check{T}^{(A4)}$ , Group 24: *Physical and Mathematical Aspects of Symmetries*, Edited by J P Gazeau, R Kerner, J-P. Antoine, S. Metens, and J-<sup>1</sup>Thibon, IOP Conf. Series No 173, pp. 213-17
31. G. Kasner, H. Wegmann, H. Böttger : Electronical properties of quasicrystalline model systems -- influence of phason flips, in: *Quasicrystals*, H.-R. Trebin (Editor), Wiley-Vch, ISBN 52740399X, (2003), pp 272-288
32. G. Kasner, Z. Papadopolos, P. Kramer, D. E. Bürgler : The surface structure of i-AlPdMn, a modeling approach based on the  $\check{T}^{(2F)}$  tiling, in: *Quasicrystals*, H.-R. Trebin (Editor), Wiley-Vch, ISBN 52740399X, (2003), pp 123-139
33. Z. Papadopolos, P. Pleasants, G. Kasner, V. Fournee, C. Jenks, J. Ledieu, R. McGrath : A maximum density rule for surfaces of quasicrystals, *Phys. Rev. B* 69, 224201 (2004)
34. Z. Papadopolos, P. Pleasants, G. Kasner : A maximum density rule for surfaces of quasicrystals, *Ferroelectrics* 305, 24 (2004)
35. Z. Papadopolos, G. Kasner : Bravais' rule for quasicrystals, in: *Proceedings volume of the 25th International Colloquium on Group Theoretical Methods in Physics Cocoyoc, Mexico, 2-6 August 2004*, Edited by: G. S. Pogosyan, L. E. Vicen<sup>1</sup> and K. B. Wolf, IOP Conference Series, pp. 445-450
36. Z. Papadopolos, G. Kasner : Bulk terminations of quasicrystals, *XVI National Symp. on Condensed Matter Physics, Sokobanja 2004*, pp. 5-8
37. G. Kasner : *Habilitationsschrift, Universität Magdeburg, Fakultät für Naturwissenschaften* (2005)

38. Z. Papadopolos, G. Kasner : Thick atomic layers of maximum density as bulk terminations of quasicrystals, Phys. Rev B 72, 094206 (2005)
  39. G. Kasner, Z. Papadopolos : Local configurations on surfaces of icosahedral quasicrystals, Philosophical Magazine, Vol. 86, Nos. 6-8, pp. 813-818 (2006)
  40. Z. Papadopolos, G. Kasner : Stability of clusters in icosahedral quasicrystals, in "Quantum theory and Symmetries IV" Volume 2, ed. V.K. Dobrev, Heron Press, Sofia (2006), ISBN-10: 954-580-195-6, ISBN-13: 978-954-580-195-6, pp. 8: 850
-