

H. Föll: List of Publications

First installment: Running Number 1 - 60

Support

Below you find the first installment of my publication list (actually in parts the list of my group). Continue to the next installment via the links at the top or bottom. Some of these papers can be accessed here in a pdf format via the links on the authors. Many more can be accessed from my old [home page](#) that the **CAU** still keeps running (as of Aug. 2023)

The list contains a few papers that do not show me as author. These are mostly papers written by members of my group and still there in order not to mess up the numbering used on my old home page. These papers **shown in purple**.

Moreover, some of these papers shown are not "real" papers but, for example, texts written in a non-scientific context. These papers shown **in green**.

- While working on this archive, I realized that one could find the number of citations for a paper by using Google scholar. That hasn't interested me before but I became curious after I learned that one of my rather minor papers (I thought) was cited a lot while some major papers were hardly noticed. I give you the Google scholar numbers for the papers as far I could find them in **red**. Remarkable numbers are high-lighted.
- Whenever I am the first author, you can be sure that I had a large part in the research or at least in writing the paper. If I'm second or third out of three authors, or somewhere in the middle if there are many authors, I did some work for the paper. If I'm the last author of many - well, you know what that means.
- On occasion I supply some personal comments **in brown**. Either for common interest or just for fun.

Links to:

[First installment \(No. 1 - 60\)](#)
[Second installment \(No. 61 -120\)](#)
[Third installment \(No. 121 - 180\)](#)
[Fourth installment \(No. 181 - 240\)](#)
[Fifth installment \(No. 241 - 300\)](#)
[Sixth installment \(No. 3001- 363\)](#)

- FÖLL, H.: Nachweis der Comptonstreuung mit Gamma Quanten. Praxis 18 (1968) 202
- [FÖLL, H.](#): High-voltage electron microscope studies of low-temperature radiation damage in silicon. Inst. of Physics Conf. Series No. 23 (1975) 319
- FÖLL, H., KOLBESEN, B.O.: Application of HVEM to the investigation of point defect clusters in Si. Fourth Int. Conf. HVEM, Toulouse 1975, p. 273
- FÖLL, H., KOLBESEN, B.O., FRANK, W.: The nature of swirls and its significance for understanding point defects in Si. Phys. Stat. Sol. (a) 29 (1975) K83 (**97 citations**)
- [FÖLL, H., WILKENS, M.](#): A simple method for the analysis of dislocation loops. Phys. Stat. Sol. (a) 31 (1975) 519 (**97 citations**)
- [FÖLL, H., KOLBESEN, B.O.](#): Agglomerate von Zwischengitteratomen (Swirl-Defekte) in Silizium - Ihre Bedeutung für Grundlagenforschung und Technologie. Jahrbuch der Akademie der Wissenschaften in Göttingen (1976), p. 27 (invited paper)
We got a prize from the venerable academy - that's why the paper counts as "invited"
- [FÖLL, H., KOLBESEN, B.O.](#): Formation and nature of swirl defects in silicon. Appl. Physics 8 (1975) 319 (**257 citations**)
Part of my Ph.D thesis. Made me "famous".
- SEEGER, A., FÖLL, H., FRANK, W.: Vacancies, interstitials and their clusters in Si and Ge. Inst. of Physics Conf. Series No. 31 (1977) 12
- [FÖLL, H., GÖSELE, U., KOLBESEN, B.O.](#): The formation of swirl defects in Si by agglomeration of Si self-interstitials. J. Crystals Growth 40 (1977) 50 (**195 citations**)
- FÖLL, H., GÖSELE, U., KOLBESEN, B.O.: Swirl defects in Si. Semiconductor Silicon (1977), p. 565
The "Semiconductor Silicon" books, also known as the blue bible, are conference proceedings but apparently not known to Google Scholar
- [FÖLL, H., KOLBESEN, B.O.](#): Advantages in the study of crystal defects in Si starting materials and devices by use of a HVEM. Semiconductor Silicon (1977), p.740
- [FÖLL, H., WILKENS, M.](#): TEM studies of dislocation loops in heavy ion irradiated H.C. P. Cobalt. Phys. Stat.

- Sol. (a) 39 (1977) 561 (41 citations)
Diploma thesisstuff. (together with No. 5 and 13. Surprisingly well received)
13. [WILKENS, M., FÖLL, H.](#): The black-white vector I of small dislocation loops on TEM images. Phys. Stat. Sol. (a) 49 (1978) 555 (5 citations)
 14. FÖLL, H., AST, D.G.: High-resolution TEM of grain boundaries in Si. Proc. Ninth Int. Congress Electron Microscopy (1978), p. 428
 15. CARTER, C.B., FÖLL, H.: The contrast from incoherent twin interfaces observed using the weak-beam technique. Scripta Met. 12 (1978) 1135 (15 citations)
 16. FÖLL, H., CARTER, C.B., WILKENS, M.: On the contrast from stacking faults. Proc. EMSA (1979), p. 690
 17. FÖLL, H., AST, D.G., SASS, S.: Electron microscopy and diffraction studies of grain boundaries. Proc. EMSA (1979), p. 686
 18. [FÖLL, H., CARTER, C.B.](#): Direct TEM determination of intrinsic and extrinsic stacking fault energies in Si. Phil. Mag. 40 (1979) 497 (100 citations)
A surprisingly large number of citations!
 19. [FÖLL, H., AST, D.G.](#): TEM observations on grain boundaries in sintered Si. Phil. Mag. 40 (1979) 589 (103 citations)
 20. CARTER, C.B., FÖLL, H., AST, D.G., SASS, S.: Electron diffraction and microscopy studies of the structure of grain boundaries in Si. Phil. Mag. 43 (1981) 441 (42 citations)
 21. [FÖLL, H., CARTER, C.B., WILKENS, M.](#): Weak beam contrast of stacking faults in TEM. Phys. Stat. Sol. (a) 74 (1982) 353 (42 citations)
 22. [FÖLL, H.](#): Anodic etching of defects in p-type Si. J. Electrochem. Soc. 127 (1980) 1925 (9 citations)
Together with No. 24 one of my more important papers (I think). Not well received. Probably defect etching was (and is) counted among the black arts and practiced by only a few practioners who do not care about the "theory".
 23. FÖLL, H., GÖSELE, U., KOLBESEN, B.O.: Microdefects in Si and their relation to point defects. J. Crystal Growth 52 (1981) 907 (eingeladener Beitrag) (44 citations)
 24. [FÖLL, H.](#): Anodic etching of p-type Si as a method for discriminating electrically active and inactive defects. Appl. Phys. Lett. 37 (1980) 316 (6 citations)
 25. [FÖLL, H., HO, P., TU, K.N.](#): Cross-sectional TEM of silicon-silicide interfaces. J. Appl. Phys. 52 (1981) 25 (146 citations)
The paper that contains the very first high-resolution pictures of heterogeneous interfaces (together with No. 42). Unfortunately you can't see anything anymore in the printed version and that was one reason why I started this archive.
 26. TAN, T.Y., FÖLL, H., HU, S.M.: On the diamond-cubic to hexagonal phase transformation in Si. Phil. Mag. A 44 (1981) 127 (128 citations)
This paper was mostly written by T. Tan; I just had a minor part. It was amazingly successful.
 27. FÖLL, H., TAN, T.Y., KRAKOW, W.: Undissociated dislocations and intermediate defects in As + ion damaged silicon. Symposia Proc. MRS, "Defects in Semiconductors", eds. J. Narayan and T.Y. Tan, North Holland 1981, p. 173 (1 citations)
 28. [TAN, T.Y., FÖLL, H., MADER, S., KRAKOW, W.](#): A tentative identification of the nature of $\langle 113 \rangle$ stacking faults in Si - model and experiment. as 27), p. 179 (2 citations)
 29. KRAKOW, W., TAN, T.Y., FÖLL, H.: Detection of point defect chains in ion irradiated silicon. as 27), p. 185 (9 citations)
 30. [TAN, T.Y., FÖLL, H., KRAKOW, W.](#): Detection of extended interstitial chains in ion-damaged Si. Appl. Phys. Lett 37 (1980) 1102 (22 citations)
 31. [FÖLL, H.](#): Kann man Atome sehen? Funkschau 20 (1981) 53 (Sonderpreis im Funkschau Wettbewerb: Kompliziertes verständlich verstehen)
I was motivated for writing and submitting this "paper" to a contest of a non-scientific journal because a colleague (and friend) was doing that and challenged me: Both of us got a prize
 32. KRAKOW, W., TAN, T.Y., FÖLL, H., CHERNS, D., SMITH, D.A.: Point defects and interface imaging at the atomic resolution level. Proc. 39th EMSA Meeting, eds. G.W. Bailey (Claitors Publ. Div.), Atlanta 1981, p.116
 33. TAN, T.Y., FÖLL, H., KRAKOW, W.: Intermediate defects in silicon and germanium. Inst. Phys. Conf. Ser. No. 60 (1981) 1 (7 citations)
 34. KRAKOW, W., TAN, T.Y., FÖLL, H.: The identification of atomic defect chain configurations in ion irradiated Si by high resolution electron microscopy. as 33), p. 23 (7 citations)
 35. CARTER, C.B., FÖLL, H.: Dissociated dislocations in $\langle 111 \rangle$ twist boundaries. Proc. Int. Conf. on Disl. Modelling of Physical Systems, eds. M.F. Ashby et al. (Pergamon Press), Gainesville (Fla) 1980, p.554
 36. EIZENBERG, M., TU, K.N., FÖLL, H.: Formation of shallow silicide contacts to Si using Pt-Si and Pd-Si alloy films. J. Appl. Phys. 52 (1981) 861 (53 citations)
 37. EIZENBERG, M., FÖLL, H., TU, K.N.: Shallow silicide contacts formed by using codeposited Pt₂Si and Pt_{1,2}Si. Appl. Phys. Lett. 37 (1980) 547 (23 citations)
 38. GÖSELE, U., MOREHEAD, F., FÖLL, H., FRANK, W. STRUNK, H.: The predominant intrinsic point defect in Si: Vacancies or self-Interstitials? Semiconductor Silicon 1981, eds. H.R. Huff et. al. (EDS, Proc. Vol. 81-5) 766 WILKENS, M.,
 39. FÖLL, H., CARTER, C.B.: A further comment on the weak-beam contrast of stacking faults in Si. Phys. Stat. Sol. (a) 73 (1982) K 15 (5 citations)

40. FÖLL, H.: Lattice imaging of silicide-silicon interfaces. Jap. J. Appl. Phys. Oyo Buturi (50th Anniversary Issue) 51 (1982) 221; invited paper in jap. language
41. FÖLL, H.: Lattice imaging of silicides-silicon interfaces. Phy. Stat. Sol. (a) 69 (1982) 779 (28 citations)
Somewhat disappointing. I was convinced that I had addressed (and partially solved) a major topic in interface defects here.
42. FÖLL, H., HO, P.S., TU, K.N.: Transmission electron microscopy of the formation of nickel silicides. Phil. Mag. A 45 (1982) 31 (167 citations)
43. FÖLL, H., HO, P.S.: Transmission electron microscopy investigation of silicide formation on slightly oxidized silicon substrates. J. Appl. Phys. 52 (1981) 5510 (47 citations)
44. HO, P.S., SCHMIDT, P.E., FÖLL, H.: Stoichiometric and structural origin of electronic states at the Pd₂Si-Si interface. Phys. Rev. Lett. 46 (1981) 782 (88 citations)
45. SCHMIDT, P.E., HO, P.S., FÖLL, H., RUBLOFF, G.W.: Electronic states and atomic structure at the Pd₂Si-Si interface. J. Vac. Sci and Tech. (55 citations)
46. FÖLL, H.: Transmission electron microscopy of Si-silicide interfaces. Extended Abstracts ESC spring meeting, Minneapolis 1981, p. 716
47. FÖLL, H.: Discriminating electronically active and inactive defects by anodic etching. as 46), p. 781
48. GRABMAIER, J.G., FÖLL, H., AULICH, H.A., FREIENSTEIN, B.: The supported-web method for growing silicon sheets at high velocity. Proc. 3rd Symp. on Mat. and New Processes. Techn. for Photovoltaics, eds. J.P. Dismukes et. al. (ECS Proc. Vol. 82-8), p. 391
First publications concerning the (in)famous "S-Web". Even so a vast amount of money has been spent on this technology, it never made it to a major publication.
49. GRABMAIER, J.G., FÖLL, H., FREIENSTEIN, B., GEIM, K.: Fast Si-sheet growth with the supported-web method. Proc. 4th E.C. Photovoltaic Energy Conf., eds. W.H. Bloss and G. Grassi (D. Reidel Publ. Co), Stresa 1982, p. 976
50. FÖLL, H., KUAN, T.S.: ~~Structural properties of silicide/Si interfaces: Transmission electron microscopy in: Metal/Si and Silicide/Si interfaces~~, eds. P.S. Ho and G.J. Rubloff (Elsevier), in press, invited paper (contribution finished, but book never published)
Let this be a warning to young researchers: Never trust your bosses! Writing this article for a book proposed by our bosses was a lot of work that lead exactly nowhere.
51. TU, K.N., OTTAVIANI, G., GÖSELE, U., FÖLL, H.: Intermetallic compound formation in thin-film and in bulk samples of the Ni-Si binary system. J. Appl. Phys. 54 (1983) 758 (128 citations)
52. GRABMAIER, J.G., FALCKENBER, R., FREIENSTEIN, B., GEIM, K., FÖLL, H.: Si-ribbon growth with the S-web technique. Proc. 5th E.C. Photovoltaic Solar Energy Conf., eds. W. Palz and F. Fittipaldi (D. Reiche Publ.), Athens 1983, p. 1058
53. SCHMIDT, P.E., HO, P.S., FÖLL, H., TAN, T.Y.: Effects of variations of silicide characteristics on the Schottky-Barrier height of silicide-silicon interfaces. Phys. Rev. B. 28 (1983) 4593 (44 citations)
54. FÖLL, H., PAPP, A., KOLBESEN, B.O.: Basic aspects of process-induced defects in silicon devices. Techn. Proc. Semicon/Eur. 1984 (Zürich), p. 67 (invited paper)
55. LEHMANN, V., FÖLL, H., BERNEWITZ, L., GRABMAIER, J.G.: A high-speed characterization technique for solar silicon. In: Proc. Flat Plate Solar Array Project Res. Forum on the High-Speed Growth and Characterization of Crystals for Solar Cells; Florida 1983 (JPL Publ. 84-23), (1984) 527
56. GRABMAIER, J.G., FÖLL, H.: The S-web technique for high-speed growth of Si-sheets. as 55), p. 261
57. FÖLL, H.: Hochtemperatur-Supraleiter als Leiterbahnmaterial. me Bd. 2 (1988) Heft 4, 166 (invited paper)
58. LEHMANN, V., FÖLL, H.: Minority carrier diffusion length mapping in silicon wafers using a Si-electrolyte-contact. J. Electrochem. Soc., 135 (1988) 2831 E (155 citations)
This paper describes the invention of the "ELYMAT". There was also a patent and a commercialization.
59. FÖLL, H., LEHMANN, V., GELSDORF, F., ZOTH, G., GÖTTINGER, B.: In-line control of metal contamination of silicon wafers using the "electrolytical metal tracer" (ELYMAT). GME Fachbericht (Hrsgb. H. Rebstock; Productronica 1989, München), 75 (invited paper)
60. V. LEHMANN, V., FÖLL, H.: Formation mechanism and properties of electrochemically etched trenches in n-type silicon. J. Electrochem. Soc., 137 (1990) 653 (1 133 citations)
Hard to beat? Well the race is still on. Look at No. 135

 [Next installment \(No. 61 - 120\)](#)

Statistics

Just for fun. The first table will yield my "Hirsch Factor" (look it up). The second table gives some idea of how one develops as an author. What defines "good journals" is not so clear. Here it is just my bias and must be seen as rather approximate.

No. citation	Inst. 1	Inst. 2	Inst. 3	Inst. 4	Inst. 5	Inst. 6
>80	14					
>70						
>60						
>50	2					
>40	8					

	Inst. 1	Inst. 2	Inst. 3	Inst. 4	Inst. 5	Inst. 6
First Author	35					
Good Journals	34					