

## Dieter W. Pohl: Publications and Patents

### A) All Journal and Book Publications

The publications of the time 1968 – 98 at IBM are grouped in the sections NFO, Instruments, AFM-, STM-, and Miscellaneous. The later publications are in temporal order (newest → oldest).

### B) Patents

### A) All Journal and Book Publications

- 121     **Optics at the Nanometer Scale**  
D.W. Pohl  
*in "Nano-Optics and Near-Field Optical Microscopy" by A. Zayats and D. Richards (Edtrs.), Artech House Series Nanoscale Science and Engineering (Boston London 2009)*
- 120     **From Near-Field Optics to Optical Antennas**  
D. W.Pohl  
*in "Optical Antennas" by M. Agio and A. Alu (Edtrs.), Cambridge University Press (2013).*
- 119     **Stacked optical antennas**  
D. W. Pohl, S. G. Rodrigo and L. Novotny,  
*Applied Physics Letters 98, 023111 (2011)*
- **Basel publications** -----
- 118     **A simple method for producing flattened atomic force microscopy tips**  
P. Biagioni, J. N. Farahani, P. Mühlischlegel, H.-J. Eisler, D. W. Pohl, and B. Hecht,  
*Rev. Scient. Instr. 79, 016103 (2008)*
- 117     **Bow-tie optical antenna probes for single-emitter scanning near-field optical microscopy**  
J.N. Farahani, H.-J. Eisler, D.W. Pohl, M. Pavius, Ph. Flückiger, Ph. Gasser and B. Hecht,  
*Nanotechn. 18, 125506 (2007)*
- 116     **Vacuum ion emission from solid electrolytes: An alternative source for focused ion beams**  
C. Escher, S. Thomann, C. Andreoli, H.-W. Fink, J. Toquant and D. W. Pohl,  
*Appl. Phys. Lett. 89, 053513 (2006)*
- 115     **Direct Evidence for Conduction Pathways in a Solid Electrolyte**  
C. Escher, T. Latychevskaia, H.-W. Fink, and D. W. Pohl,  
*Phys. Rev. Lett. 97, 136601 (2006)*
- 114     **Single Quantum Dot Coupled to a Scanning Optical Antenna: A Tunable Superemitter**  
J.N. Farahani, D. W. Pohl, H.-J. Eisler and B. Hecht,  
*Phys. Rev. Lett. 95, 017402 (2005)*

- 113 **Resonant Optical Antennas**  
P. Muehlschlegel, H.-J. Eisler, O.J.F. Martin, B. Hecht and D.W. Pohl,  
*Science* 308, 1607 (2005)
- 112 **Near field optics and the surface plasmon polariton**  
D. W. Pohl,  
in "Near-Field Optics and Surface Plasmon Polaritons", EDITOR S. Kawata, Series "Topics in Appl. Physics", Vol.81,p.1 -14, (Springer, ISBN 0303-4216, Berlin), 2001
- 111 **Near field optics seen as an antenna problem**  
D. W. Pohl,  
in "Near-Field Optics: Principles and Applications / The Second Asia-Pacific Workshop on Near Field Optics, Beijing, China October 20 -23, 1999", EDITOR M. Ohtsu and X. Zhu, (World Scientific, ISBN 981-02-4365-0, Singapore,p.9 - 21), 2000
- 110 **Method and apparatus for the controlled conditioning of scanning probes**  
D.W. Pohl and A. Bouhelier,  
*European Patent Application EP 1 146 376 A1, 2001*
- 109 **Electrolytic formation of nanoapertures for scanning near-field optical microscopy**  
A. Bouhelier, J. Toquant, H. Tamaru, H.-J. Güntherodt, D.W. Pohl and G. Schider,  
*Appl.Phys.Lettt* 79, 683, 2001
- 108 **Propagation and diffraction of locally excited Plasmons: Optics of structured Silver Films,**  
F.I. Baida, D. Van Labeke, A. Bouhelier, Th. Huser, H. Tamaru and D.W. Pohl,  
*J. Opt. Soc. Am. A* 18, 1552, 2001
- 107 **Plasmon Optics of structured Silver Films**  
A. Bouhelier, Th. Huser, H. Tamaru, H.-J. Güntherodt, D.W. Pohl, F.I. Baida and D. Van Labeke,  
*Phys.Rev.B*, 63, 155404-1, 2001
- 106 **Plasmon transmissivity and reflectivity of narrow grooves in a silver film**  
A. Bouhelier, Th. Huser, J.M. Freiland, H.J. Güntherodt & D.W. Pohl  
*J. Microscopy* 194, Pt 2/3, pp. 571 – 573 (1999).
- 105 **Influence of detection conditions on near-field optical imaging**  
B. Hecht, H. Bielefeldt, D. W. Pohl, L. Novotny, and H. Heinzelmann  
*J. Appl. Phys.* 84, 5873 (1998); doi: 10.1063/1.368902
- 104 **Implications of high resolution to near-field optical microscopy**  
Lukas Novotny, Bert Hecht, Dieter W. Pohl  
*Ultramicroscopy* 71, 341 – 344 (1998)

----- **IBM publications** -----

----- **NFO / Plasmonics** -----

- 103 **Optical Microscopy in the Nano-World**  
D.W. Pohl et al.  
*Chimia* 51 (1997) 760-767
- 102 **Interference of Locally Excited Surface Plasmons**  
L. Novotny, B. Hecht, and D.W. Pohl,  
*J. Appl.Phys.* 81(4), 1798-1806 (1997).
- 101 **Facts and Artifacts in Near-Field Optical Microscopy**  
B. Hecht, H. Bielefeldt, L. Novotny, Y. Inouye and D.W. Pohl,  
*J. Appl.Phys.* 81(6), 2492-2498 (1997).
- 100 **Local Excitation, Scattering, and Interference of Surface Plasmons**  
B. Hecht, H. Bielefeldt, L. Novotny, Y. Inouye and D.W. Pohl  
*Phys.Rev.Lett.* 77(9), 1889-1892 (1996).
- 99 **'Tunnel' Near-Field Optical Microscopy: TNOM-2**  
B. Hecht, D.W. Pohl, H. Heinzelmann and L. Novotny,  
*Ultramicroscopy*, 61(1-4), 99-104 (1996).
- 98 **Light Confinement in Scanning Near-Field Optical Microscopy**  
L. Novotny, D.W. Pohl and B. Hecht,  
*Ultramicroscopy* 61(1-4), 1-9 (1996).
- 97 **Radiation Coupling and Image Formation in Scanning Near-Field Optical Microscopy**  
D.W. Pohl, L. Novotny, B. Hecht and H. Heinzelmann,  
*Thin Solid Films* 273, 161-167 (1996).
- 96 **Local Excitation of Surface Plasmons by 'TNOM'**  
B. Hecht, D.W. Pohl and L. Novotny,  
*in Optics at the Nanometer Scale, NATO ARW on Near-Field Optics: Recent Progress and Perspectives, Madrid, Spain, Sept.11-15, 1995, edited by M. Nieto--Vesperinas and N. Garcia (Kluwer,Dordrecht, 1996) pp.151-161.*
- 95 **Scanning Near-Field Optical Microscopy in Basel, Rüslikon, and Zürich**  
H. Heinzelmann, T. Huser, T. Lacoste, H.-J. Güntherodt, D.W. Pohl, B. Hecht, L. Novotny, O.J.F. Martin, C.V. Hafner, H. Baggenstos, U.P. Wild and A. Renn,  
*Optical Eng.* 34(8), 2441-2454 (1995).
- 94 **Near-Field Optics: Light for the World of Nano-Scale Science**  
D.W. Pohl,  
*Thin Solid Films* 264(4), 250-254 (1995).
- 93 **Scanning Near-Field Optical Probe with Ultrasmall Spot Size**  
L. Novotny, D.W. Pohl and B. Hecht,  
*Optics Lett.* 20(9), 970-972 (1995).
- 92 **Forbidden Light Scanning Near-Field Optical Microscopy**  
H. Heinzelmann, B. Hecht, L. Novotny and D.W. Pohl,

*J. Microscopy* 177, Pt.2, 115-118 (1995).

- 91 **Combined Aperture SNOM/PSTM: Best of Both Worlds?**  
B. Hecht, H. Heinzelmann and D.W. Pohl,  
*Ultramicroscopy* 57(2/3), 228-234 (1995).
- 90 **Near-Field, Far-Field and Imaging Properties of the 2D Aperture SNOM**  
L. Novotny, D.W. Pohl and P. Regli,  
*Ultramicroscopy* 57(2/3), 180-188 (1995).
- 89 **Resolving Near-Field Microscopy History**  
D.W. Pohl, U. Dürig and P. Guéret,  
*Physics Today* 48(1), 74-75 (1995).
- 88 **Near-Field Optical Spectroscopy of Individual Molecules in Solids**  
W.E. Moerner, T. Plakhotnik, T. Irngartinger, U.P. Wild, D.W. Pohl and B. Hecht,  
*Phys.Rev.Lett.* 73(20), 2764-2767 (1994).
- 87 **Scanning Near-Field Optical Microscopy**  
H. Heinzelmann and D.W. Pohl,  
*Appl.Phys.A* 59(2), 89-101 (1994).
- 86 **Near-Field Optics: Light for the World of NANO**  
D.W. Pohl and L. Novotny,  
*J. Vac.Sci.Technol.B* 12(3), 1441-1446 (1994).
- 85 **Light Propagation through Nanometer-Sized Structures: The Two-Dimensional-Aperture Scanning Near-Field Optical Microscope**  
L. Novotny, D.W. Pohl and P. Regli,  
*J. Opt.Soc.Am.A* 11(6), 1768-1779 (1994).
- 84 **The 90° prism edge as a model snom probe - near-field, photon tunneling, and far field properties**  
A. Dereux and D.W.Pohl  
*in Proc.NATO ARW on Near Field Optics (SNOM), Besancon, France, Oct.26-28, 1992, edited by D.W. Pohl and D. Courjon (Kluwer, Dordrecht,1993) pp.189 - 198*
- 83 **Optical Tunneling through an Adjustable Liquid Metal Gap**  
D.W. Pohl, D. Courjon, C. Bainier, A. Dereux and H. Heinzelmann,  
*in Proc.NATO ARW on Near Field Optics (SNOM), Besancon, France, Oct.26-28, 1992, edited by D.W. Pohl and D. Courjon (Kluwer, Dordrecht,1993) pp.51-58.*
- 82 **Near Field Optics**  
D. W. Pohl and D. Courjon (Edtrs.)  
*Proc. of the NATO Advanced Research Workshop on Near Field Optics, NATO ASI Series E 242, Kluwer Academic Publishers, Dordrecht 1993.*
- 81 **Near-Field Optics: Microscopy with Nanometer--Size Fields**  
W. Denk and D.W. Pohl,

- J. Vac. Sci. Technol. B* 9(2), 510-513 (1991).
- 80     **Scanning Near-Field Optical Microscopy (SNOM)**  
D.W. Pohl,  
*Advances in Optical and Electron Microscopy* 12, 243-312 (1991).
- 79     **Scanning Near-Field Microscopies**  
W. D. Pohl and J. K. Gimzewski  
*SPIE* 1319, 480 "Optics in Complex Systems" (1990).
- 78     **Scanning Near Field Optical Microscopy (SNOM) in Reflection or Scanning Optical Tunneling Microscopy (SOTM)**  
U. Ch. Fischer, D.W. Pohl, and U.T. Dürig,  
*Scanning Microscopy* 3(1), 1-7 (1989).
- 77     **Observation of Single-Particle Plasmons by Near-Field Optical Microscopy**  
U.Ch. Fischer and D.W. Pohl,  
*Phys.Rev.Lett.*62(4), 458-461 (1989).
- 76     **Scanning Near-Field Optical Microscopy (SNOM)**  
D.W. Pohl, U. Ch. Fischer and U. Dürig,  
*J. Microscopy* 152, Pt 3, 853-861 (1988).
- 75     **Scanning near-field microscopy (SNOM): Basic principles and some recent developments"**  
D.W. Pohl, U.Ch. Fischer and U. Dürig,  
*SPIE* 897, "Scanning Microscopies Techniques and Applications", pp. 84 - 90.
- 74     **Near-Field Optical Scanning Microscopy in Reflection**  
D.W. Pohl, U.Ch. Fischer and U. Dürig,  
*Appl.Phys.Lett.*52(4), 249-251 (1988).
- 73     **Near-Field Optical Scanning Microscopy and Enhanced Spectroscopy with Submicron Apertures**  
D.W. Pohl, U.Ch. Fischer and U. Dürig,  
*Scanning Microscopy, Suppl. 1*, 47-52 (1987).
- 72     **Near-Field Optical Scanning Microscopy with Tunnel—Distance Regulation**  
U. Dürig, D.W. Pohl and F. Rohner,  
*IBM J. Res.Develop.*30(5), 478-483 (1986).
- 71     **Near-Field Optical Scanning Microscopy**  
U. Dürig, D.W. Pohl and F. Rohner,  
*J. Appl.Phys.*59(10), 3318-3327 (1986).
- 70     **Optical Stethoscopy: Imaging with  $\lambda/20$**   
D.W. Pohl, W. Denk and U. Dürig,  
*in Micron and Submicron Integrated Circuit Metrology, Proc. SPIE, San Diego, CA, Aug.22-23, 1985, edited by K.M. Monahan, (SPIE, Bellingham, 1985) Vol.565, pp.56-61.*
- 69     **Optical Stethoscopy: Image Recording with Resolution  $\lambda/20$**

D.W. Pohl, W. Denk and M. Lanz,  
*Appl.Phys.Lett.*44(7), 651-653 (1984).

68 **Optical Near-field scanning microscope**

Wolfgang D. Pohl,  
*European Patent EP82111974.0 (Dec.27,1982), US Patent 4,604,520 (Dec.20, 1983)*

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67 **Instrumental Developments and Recent Experiments in Near-Field Optical Microscopy**

H. Heinzelmann, Th. Lacoste, Th. Huser, H.J. Güntherodt, B. Hecht and D.W. Pohl,  
*Thin Solid Films* 273, 149-153 (1996).

66 **Some Thoughts about Scanning Probe Microscopy, Micromechanics, and Storage**

D.W. Pohl,  
*IBM Res.Develop.*39(6), 701-711 (1995).

65 **Sawtooth Nanometer Slider: A Versatile Low-Voltage Piezoelectric Translation Device**

D.W. Pohl,  
*Surf.Sci.(Special Issue)* 181(1/2), 174-175 (1987).

64 **Dynamic Piezoelectric Translation Device**

D.W. Pohl,  
*Rev. Sci. Instrum.* 58(1), 54-57 (1987).

63 **Some Design Criteria in Scanning Tunneling Microscopy**

D.W. Pohl,  
*IBM J. Res.Develop.*30(4), 417-427 (1986).

----- AFM related -----

62 **Local Electric Dissipation Imaged by Scanning Force Microscopy**

W. Denk and D.W. Pohl,  
*Appl.Phys.Lett.*59(17), 2171-2173 (1991).

61 **Observation of Metallic Adhesion Using the Scanning Tunneling Microscope**

U. Dürig, O. Züger and D.W. Pohl,  
*Phys.Rev.Lett.*65(3), 349-352 (1990).

60 **Force Sensing in Scanning Tunneling Microscopy: Observation of Adhesion Forces on Clean Metal Surfaces**

U. Dürig, O. Züger and D.W. Pohl,  
*J. Microscopy* 152, Pt. 1, 259-267 (1988).

59 **Experimental Observation of Forces Acting during Scanning Tunneling Microscopy**

U. Dürig, J.K. Gimzewski and D.W. Pohl,  
*Phys.Rev.Lett.*57(19), 2403-2406 (1986).

----- STM related -----

- 58 **'Tracking' Tunneling Microscopy**  
D.W. Pohl and R. Möller,  
*Rev.Sci.Instrum.59(6), 840-842 (1988).*
- 57 **Transition from Tunneling to Point Contact Investigated by Scanning Tunneling Microscopy and Spectroscopy**  
J.K. Gimzewski, R. Moeller, D.W. Pohl and R.R. Schlittler,  
*Surf.Sci.(Special Issue) 189/190, 15-23 (1987).*
- 56 **Scanning Tunneling Microscopy and Potentiometry on a Semiconductor Heterojunction**  
P. Mural, H. Meier, D.W. Pohl and H. Salemink  
*Appl.Phys.Lett.50(19), 1352-1354 (1987).*
- 55 **Wide--Range, Low--Operating--Voltage, Bimorph STM: Application as Potentiometer**  
P. Mural, D.W. Pohl and W. Denk,  
*IBM J. Res. Develop. 30(5), 443-450 (1986).*
- 54 **Scanning Tunneling Microscopy of Nanocrystalline Silicon Surfaces**  
D.W. Pohl, J.K. Gimzewski, A. Humbert and S. Veprek,  
*Surf.Sci.168(1/3), 795-800 (1986).*
- 53 **Scanning Tunneling Potentiometry**  
P. Mural and D.W. Pohl,  
*Appl.Phys.Lett.48(8), 514-516 (1986).*
- 52 **Surface Topography Studies of Nanocrystalline Si by STM**  
D.W. Pohl, J.K. Gimzewski, A. Humbert and S. Veprek,  
*in Micron and Submicron Integrated Circuit Metrology, Proc. SPIE, San Diego, CA, Aug.22-23, 1985, edited by K.M. Monahan, (SPIE, Bellingham, 1985) Vol.565, pp.98-101.*
- Miscellaneous -----
- 51 **Photons and Forces II: Forces Influence Light**  
D. W. Pohl  
*in Proc.NATO ASI on „Forces in Scanning Probe Methods,“ Schluchsee, Germany, March 7-18, 1994, edited by H.-J. Güntherodt et al.(Kluwer, Dordrecht, 1995) pp.249-262.*
- 50 **Photons and Forces I: light generates force**  
D. W. Pohl  
*in Proc.NATO ASI on „Forces in Scanning Probe Methods,“ Schluchsee, Germany, March 7-18, 1994, edited by H.-J. Güntherodt et al.(Kluwer, Dordrecht, 1995) pp.235-248.*
- 49 **Laser--Induced Dynamic Gratings**  
H.J. Eichler, P. Günter and D.W. Pohl,  
*Springer Series in Optical Sciences 50, (Springer, Berlin,1986).*
- 48 **Critical Behavior in Gels Saturated with Binary Liquid Mixtures**  
D.W. Pohl, J.V. Maher, W.I. Goldberg and M. Lanz,

- Phys.Rev.Lett.*53(1), 60-63 (1984).
- 47 **All--Glass Vacuum--Insulated Liquid--Nitrogen Cooled CO Laser**  
E. Haupt, V. Irniger, D.W. Pohl and W. Herrmann,  
*Rev.Sci.Instrum.*53(9), 1374-1375 (1982).
- 46 **Wetting Transition in Lutidine--Water Mixtures**  
D.W. Pohl and W.I. Goldberg,  
*Phys.Rev.Lett.*48(16), 1111-1114 (1982). *Erratum: Phys.Rev.Lett.*50(8), 623 (1983).
- 45 **Forced Rayleigh Scattering in a Critical Binary Liquid Mixture**  
D.W. Pohl,  
*in Light Scattering in Liquids and Macromolecular Solutions, edited by V. Degiorgio, M. Corti and M. Giglio, (Plenum, New York, 1980), pp.287-291.*
- 44 **First Stage of Spinodal Decomposition Observed by Forced Rayleigh Scattering**  
D.W. Pohl,  
*Phys.Lett.*77A(1), 53-54 (1980).
- 43 **Trace Analysis in Gases by Laser-Induced Schlieren Technique**  
W. Herrmann and D.W. Pohl,  
*Infrared Physics* 19, 455-459 (1979).
- 42 **Forced Rayleigh Scattering**  
D.W. Pohl,  
*IBM J. Res.Develop.*23(5), 604-614 (1979).
- 41 **Anomalies in the Forced Rayleigh Scattering in Glasses**  
D.W. Pohl,  
*Phys.Rev.Lett.*43(2), 143-146 (1979).
- 40 **Spurenanalyse in Gasen mit laserinduzierter Schlierentechnik(Traced Analysis in Gases with a Laser--Induced Schlieren Technique)**  
W. Herrmann and D.W. Pohl,  
*Helv.Phys.Acta* 52(1), 81 (1979).
- 39 **Forced Rayleigh Scattering**  
D.W. Pohl,  
*Proc.4th EPS Gen.Conf.Trends in Physics, 1979, pp.115-118.*
- 38 **Spectrophonic Humidity--Tracer Detection in Hydrogen and Air**  
D.W. Pohl, V. Irniger and W. Herrmann,  
*Appl.Phys.*17(4), 361-365 (1978).
- 37 **Forced Thermal Scattering as a Tool for the Study of Excitations in the Hydrodynamic Regime**  
D.W. Pohl,  
*in Lattice Dynamics, edited by M. Balkanski, (Flammarion, Paris, 1978), pp.782-784.*
- 36 **A Note on the Polarization of Light Scattered from Entropy and LA Fluctuations in Solids**



- D.W. Pohl,  
*Solid State Commun.*23(7), 447-451 (1977).
- 35 **Valence Transition of Sm<sub>1-x</sub>La<sub>x</sub>S and Related Compounds**  
D.W. Pohl,  
*Phys.Rev.B* 15(8), 3855-3862 (1977).
- 34 **Falicov--Kimbal Modell für Sm<sub>1-x</sub>R<sub>x</sub>S (R = Seltene Erde oder Übergangsmetall (Falicov--  
Kimbal Model for Sm<sub>1-x</sub>R<sub>x</sub>S (R = Rare Earth or Transition Metal)**  
D.W. Pohl,  
*Helv.Phys.Acta* 50(2), 158 (1977).
- 33 **Birefringence in the Surface Layer of Cubic BaTiO<sub>3</sub>**  
U.T. Höchli and D.W. Pohl,  
*Ferroelectrics* 13(1-4), 403-405 (1976).
- 32 **Multiphonon Absorption in Alkalihalides**  
D.W. Pohl and H. Beck,  
*in Phonon Scattering in Solids, edited by L.J. Challis, V.W. Rampton, and A.F.G. Wyatt  
(Plenum, New York, 1976) pp.361-363.*
- 31 **Optical and Electrical Properties of Metallic SmS Films**  
D.W. Pohl, R. Jaggi, K. Gisler and H. Weibel,  
*Solid State Commun.*17(6), 705-708 (1975).
- 30 **Laser Writing--Reading with SmS Thin Films**  
D.W. Pohl and F.Holtzberg,  
*Appl.Opt.*14(5), 1060-1061 (1975).
- 29 **Multiphonon--Absorption in NaF**  
D.W.Pohl, P.F. Meier and T.F. McNelly,  
*Helv.Phys.Acta* 47(4),395(1974).
- 28 **Forced Rayleigh Scattering**  
D.W.Pohl, S.E. Schwarz and V. Irniger,  
*Helv.Phys.Acta* 47(1), 26 (1974).
- 27 **Multiphonon Optical Spectrum of NaF**  
T.F. McNelly and D.W. Pohl,  
*Phys.Rev.Lett.*32(23), 1305-1308 (1974).
- 26 **Spektroskopie von SmS in der Nähe der druckinduzierten Phasen—Umwandlung  
(Spectroscopy of SmS near Pressure—Induced Phase Transformation)**  
D.W. Pohl and K. Gisler,  
*Verhandl.DPG VI(9), 600 (1974).*
- 25 **Optische Datenspeicherung in Samariumsulfid (Optical Data Storage in Samariumsulfide)**  
D.W. Pohl and K. Gisler,  
*Verhandl.DPG VI(9), 532 (1974).*

- 24 **Multiphonon--Absorption in NaF**  
D.W. Pohl and P.F. Meier,  
*Verhandl.DPG VI(9), 569 (1974).*
- 23 **Stacked Optical Memories**  
D.W. Pohl,  
*Appl.Opt.13(1), 341-346 (1974).*
- 22 **Laser-Induced Phase Transition in the Surface of SmS Crystals**  
D.W. Pohl, R. Baderscher, K.A. Mueller and P. Wachter,  
*Appl.Opt.13(1), 95-97 (1974).*
- 21 **Multiphonon Absorption in NaF**  
D.W. Pohl and P.F. Meier,  
*Phys.Rev.Lett.32(2), 58-61 (1974).*
- 20 **Laser--induzierte Phasenuebergaenge in der Oberflache von SmS (Laser--Induced Phase Transitions in an SmS Surface)**  
D.W. Pohl, R. Badertscher, K.A. Muller and P. Wachter,  
*Helv.Phys.Acta 46(4), 436 (1973).*
- 19 **Forced Rayleigh Scattering**  
D.W. Pohl,S.E. Schwarz and V. Irniger,  
*Phys.Rev.Lett.31(1), 32-35 (1973).*
- 18 **Thermo-- and Elasto--Optic Parameters of NaF and Their Implications for Light Scattering from Second Sound**  
D.W. Pohl and S.E. Schwarz,  
*Phys.Rev.B 7(6), 2735-2739 (1973).*
- 17 **Generation and Application of TE and TM Modes at Optical Frequences**  
D.W. Pohl,  
*Proc.6th USSR Symp.on Nonlinear Optics, Minsk, June 27- July 1, 1972, pp.230.*
- 16 **Induced Birefringence and Longitudinal Field Components: Influence on Nonlinear Light Propagation**  
D.W. Pohl,  
*Proc.6th USSR Symp.on Nonlinear Optics, Minsk,June 27- July 1, 1972, pp.230.*
- 15 **TE and TM Modes at Optical Frequencies: Generation and Self--Focusing**  
D.W. Pohl,  
*Digest of Technical Papers, IEEE Catalog No.72 CHO-603-1-QECON, Abstract No.0.6, pp.70.*
- 14 **Self--Focusing of TE<sub>01</sub> and TM<sub>01</sub> Light Beams: Influence of Longitudinal Field Components**  
D.W. Pohl,  
*Phys.Rev.A 5(4), 1906-1909 (1972).*
- 13 **Operation of a Ruby Laser in the Purely Transverse Electric Mode TE<sub>01</sub>**

D.W. Pohl,  
*Appl.Phys.Lett.*20(7), 266-267 (1972).

12 **Stimulated Thermal Scattering of Light**

D.W. Pohl, I.P. Batra and R.H. Enns  
*Phys.State Sol.(b)* 48(11), 11-63 (1971).

11 **Vectorial Theory of Self--Trapped Light Beams**

D.W. Pohl  
*Opt.Comm.*2(7), 305-308 (1970).

10 **Pikosekunden--Lichtimpulse (Picosecond Light Pulses)(1970), S. 3-7.**

D.W. Pohl,  
*Vorabdrucke der Fachberichte (Nachträge), 35. Physikertagung 1970 Hannover, B.G. Teubner, Stuttgart*

----- **Munich publications** -----

9 **Time--Resolved Investigations of Stimulated Brillouin Scattering in Transparent and Absorbing Media: Determination of Phonon Life--Times**

D.W. Pohl and W. Kaiser,  
*Phys.Rev.B, Solid State* 1(1), 31-43 (1970).

8 **Stimulated Thermal Scattering of Short Light Pulses**

D.W. Pohl,  
*Phys.Rev.Lett.*23(13), 711-714 (1969).

7 **Time and Frequency Dependence of Stimulated Thermal Rayleigh Scattering**

W. Rother, D.W. Pohl and W. Kaiser,  
*Phys.Rev.Lett.*22(18), 915-918 (1969).

6 **Experimental Observation of Stimulated Thermal Brillouin Scattering**

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