

7 Literatur

1. Duffey RJ. U.S. Trends in Refractive Surgery: 2006 ASCRS Survey. *ASCRS Symposium on Cataract, IOL and Refractive Surgery, April 2007*. San Diego, Kalifornien; 2007.
2. Axenfeld P. *Lehrbuch und Atlas der Augenheilkunde*. Stuttgart, New York: Gustav Fischer Verlag; 1980.
3. Hollwich F. *Augenheilkunde*. Stuttgart: Thieme Verlag; 1988.
4. Reim M. *Augenheilkunde*. Stuttgart: Thieme; 2000.
5. Grehn F, Leydhecker W. *Augenheilkunde*. Berlin, Heidelberg, New York: Springer-Verlag; 1995.
6. Boyd B, Agarwal A, Alio J, Krueger R, Wilson S. *Wavefront Analysis, Aberrometers & Corneal Topography: Highlights of Ophthalmology*; 2003.
7. Bille JF, Harner CFH, Loesel FH. *Aberration-Free Refractive Surgery: New Frontiers in Vision*. Heidelberg, Berlin, New York: Springer Verlag; 2003.
8. Benninghoff A. *Anatomie 2: Urban & Schwarzenbert Verlag*; 1994.
9. Oyster CW. *The Human Eye: Structure and Function*: Sinauer Associates Inc. Publishers; 1999.
10. Lieberman D, Grierson J. The Lids Influence on Corneal Shape. *Cornea*. 2000;19(3):336-342.
11. Read SA, Collins MJ, Carney LG, Franklin RJ. The Topography of the Central and Peripheral Cornea. *Investigative Ophthalmology and Vision Science*. 2006;47(4):1404-1415.
12. Boettner E, Wolter JR. Transmission of the Ocular Media. *Investigative Ophthalmology and Vision Science*. 1962;1(6):776-783.
13. Kitai MS, Popkov VL, Semchischen VA, Kharizov AA. The physics of uv laser cornea ablation. *IEEE Journal of Quantum Electronics*. 1991;27(2):302-307.
14. Trokel S, Srinivasan R, Braren B. Excimer Laser Surgery of the Cornea. *American Journal of Ophthalmology*. 1983;96(6):710-715.
15. Munneryn CR. Photorefractive keratectomy: A technique for laser refractive surgery. *J CATARACT REFRACT SURG*. 1988;14(1):46-52.
16. Lembares A, Hu X, Kalmus GW. Absorption spectra of corneas in the far ultraviolet region. *IOVS*. 1997;38(6):1283-1287.
17. Pettit GH, Ediger MN, Weiblinger RP. Dynamic optical properties of collagen-based tissue during ArF excimer laser ablation. *Applied Optics*. 1993;32(4).
18. Staveteig PT, Walsh JT. Dynamic 193-nm optical properties of water. *Applied Optics*. 1996;35(19).
19. Pettit GH, Ediger MN. Pump/Prob Transmission Measurement of Corneal Tissue During Excimer Laser Ablation. *Lasers in Surgery and Medicine*. 1993;13(3):363-367.
20. Pettit GH, Ediger MN. Corneal-tissue absorption coefficients for 193- and 213-nm ultraviolet radiation. *Applied Optics*. 1996;35(19):3386-3391.
21. Ringvold A. Corneal epithelium and UV-protection of the eye. *Acta Ophthalmologica Scandinavica*. 1998;76:149-153.
22. Tuft S, Al-Dhahir R, Dyer P, Zehao Z. Characterization of the fluorescence spectra produced by excimer laser irradiation of the cornea. *IOVS*. 1990;31(8):1512-1518.
23. Seiler T, Bende T, winckler K, Wollensak J. Side effects in excimer corneal surgery. DNA damage as a result of 193nm excimer laser radiation. *Graefe's Archive for Clinical and Experimental Ophthalmology*. 1988;226(3):273-276.

24. Costagliola C, Balestrieri P, Fioretti F, et al. ArF 193 nm Excimer Laser Corneal Surgery as a Possible Risk Factor in Cataractogenesis. *Exp. Eye Res.* 1994;58(4):453-457.
25. Müller-Stolzenburg N, Schründer S, Helfmann J, Buchmann HJ, Müller G. Fluoreszenzverhalten der Hornhaut unter 193nm Excimerlaserbestrahlung. *Fortschritte der Ophthalmologie.* 1990;87:653-658.
26. Lubatschowski H, Kermani O. 193 nm Excimerlaserphotoablation der Hornhaut. *Ophthalmologie.* 1992;89:134-138.
27. Wachtlin J, Blasig I, Schründer S, Langenbeck K, Hoffmann F. PRK and LASIK-Their Potential Risk of Cataractogenesis: Lipid Peroxidation Changes in the Aqueous Humor and Crystalline Lens of Rabbits. *Cornea.* 2000;19(1):75-79.
28. Uma L, Sharma Y, Balasubramanian D. Fluorescence Properties of Isolated Intact Normal Human Corneas. *Photochemistry and Photobiology.* 1996;63(2):213-216.
29. Phillips AF, McDonnell P. Laser-induced Fluorescence During Photorefractive Keratectomy: A Method for Controlling Epithelial Removal. *American Journal of Ophthalmology.* 1997;123(1):42-47.
30. Cohen D, Chuck R, Bearman G, McDonnell P, Grundfest W. Ablation spectra of the human cornea. *Journal of Biomedical Optics.* 2001;6(3):339-343.
31. Mejía-Barbosa Y, Malacara-Hernández D. A Review of Methods for Measuring Corneal Topography. *Optometry and Vision Science.* 2001;78(4):240-253.
32. Seitz B. Corneal Topography. *Curr Opin Ophthalmol.* 1997;8(4):8-24.
33. Smith T. Corneal Topography. *Documenta Ophthalmologica.* 1977;43(2):249-276.
34. Jongsma F, Brabander Jd, Hendrikse F. Review and Classification of Corneal Topographers. *Lasers in Medical Science.* 1999;14:2-19.
35. Binder P. Videokeratography. *CLAO J.* 1995;21:133-144.
36. Levene JR. The True Inventors of the Keratoscope and Photokeratoscope. *British Journal for the History of Science.* 1965;2:324-341.
37. Scheiner C. Oculus, hoc est: Fundamentum opticum. Innsbruck; 1620.
38. Helmholtz H. Handbuch der physiologischen Optik. Hamburg: Leopold Voss; 1909.
39. Placido A. Novo instrumento de exploracao da cornea. *Periodico D'Oftalmologica Practica, Lisbon.* 1880;5:27-30.
40. Javal A, Schiötz J. Un ophthalmomètre pratique. *Trans. Int. Med. Congr.* Vol 3. London; 1881:30.
41. Gullstrand A. Photographisch-ophthalmometrische und klinische Untersuchungen über die Hornhautrefraction. *Schwedische Akademie der Wissenschaften.* 1896;28(7).
42. Dekking H. Zur Photographie der Hornhautoberfläche. *Graefe's Archiv für Klinische und Experimentelle Ophthalmologie.* 1930;124(4).
43. Bonnet R, Grand YL, Rapiilly C. *La Topographie Corneenne.* Paris: N. Desroches; 1964.
44. Mandell R. Keratometry and contact lens practice. *The Optometric Weekly.* 1965(May 6):69-75.
45. Mandell R. Corneal Contour of the human infant. *Archives of Ophthalmology.* 1967;1967(77).
46. Mandell R. Mathematical model of the corneal contour. *Brit J Physiol Opt.* 1971;26(3):183-197.
47. Rowsey J, Reynolds A, Brown R. Corneal Topography: Corneascope. *Archives of Ophthalmology.* 1981;99(6):1093-1100.

48. Doss J, Hutson R, Rowsey J, Brown D. Method for calculation of corneal profile and power distribution. *Archives of Ophthalmology*. 1981;99(7):1261-1265.
49. Cohen K, Tripoli N, Pellom A, Kupper L, Fryczkowski A. A New Photogrammetric Method for Quantifying Corneal Topography. *Investigative Ophthalmology and Vision Science*. 1984;25(3):323-330.
50. Klyce SD. Computer-Assisted Corneal Topography. *Investigative Ophthalmology and Vision Science*. 1984;25(12):1426-1435.
51. Maguire L, Singer D, Klyce S. Graphic presentation of computer-analyzed keratoscope photographs. *Archives of Ophthalmology*. 1987;105(2):223-230.
52. Wilson S, Klyce S. Quantitative descriptors of corneal topography: A clinical study. *Archives of Ophthalmology*. 1991;100(3):349-353.
53. Wilson S, Klyce S, Hussein Z. Standardized color-coded maps for corneal topography. *Ophthalmology*. 1993;100(11):1723-1727.
54. Mattioli R, Tripoli N. Corneal Geometry Reconstruction with the Keratron Videokeratograph. *Optometry and Vision Science*. 1997;74(11):881-894.
55. Brown N. An advanced slit-image camera. *British Journal of Ophthalmology*. 1972;56(8):624-631.
56. Warnicki J, Rehkopf P, Curtin D, Burns S, Arffa R, Stuart J. Corneal topography using computer analyzed raserstereographic images. *Applied Optics*. 1988;27(1135-1140).
57. Belin M, Litoff D, Strods S, Winn S, Smith R. The PAR technology corneal topography system. *Refractive Corneal Surgery*. 1992;8(1):88-96.
58. Kawara T. Corneal topography using moiré contour fringes. *Applied Optics*. 1979;18(21):3675-3678.
59. Jongsma F, Brabander Jd, Hendrikse F, Stultiens B. Development of a wide field height eye topographer: validation on models of the anterior eye surface. *Optometry and Vision Science*. 1998;75:89-77.
60. Windecker R, Tiziani H. Topometry of technical and biological objects by fringe projection. *Applied Optics*. 1995;34(19):3644-3650.
61. Windecker R. Corneal topometry by fringe projection - limits and possibilities. *SPIE*. 1992;2628.
62. Sakimoto T, Rosenblatt M, Azar D. Laser eye surgery for refractive errors. *Lancet*. 2006;367(9520):1432-1447.
63. Walter K, Stevenson A. Effect of environmental factors on myopic LASIK enhancement rates. *Journal of Cataract and Refractive Surgery*. 2004;30(4):798-803.
64. Perlman E, Reinert S. Factors Influencing the Need for Enhancement After Laser in situ Keratomileusis. *Journal of Refractive Surgery*. 2004;20(6):783-789.
65. Vogel A, Venugopalan V. Mechanisms of Pulsed Laser Ablation of Biological Tissues. *Chemical Reviews*. 2003;103(2):577-644.
66. Manns F, Milne P, Parel J-M. Ultraviolet Corneal Photoablation. *Journal of Refractive Surgery*. 2002;18(5):S610-S614.
67. Netto MV, Mohan RR, Ambrosio R, Hutcheon AE, Zieske JD, Wilson SE. Wound Healing in the Cornea: A Review of Refractive Surgery Complications and New Prospects for Therapy. *Cornea*. 2005;24(5):509-522.
68. Nejima R, Miyata K, Tanabe T, et al. Corneal barrier function, tear film stability, and corneal sensation after photorefractive keratectomy and laser in situ keratomileusis. *American Journal of Ophthalmology*. 2005;139(1):64-71.

69. Lee H, Lee K, Kim H, Lee S, Kim E. Nerve growth factor concentration and implications in photorefractive keratectomy vs laser in situ keratomileusis. *American Journal of Ophthalmology*. 2005;139(6):965-971.
70. Goto T, Zheng X, Klyce S, et al. A new method for tear film stability analysis using videokeratography. *American Journal of Ophthalmology*. 2003;135(5):607-612.
71. Goto T, Zheng X, Okamoto S, Ohashi Y. Tear film stability analysis system: introducing a new application for videokeratography. *Cornea*. 2004;23(8):S65-70.
72. Goto T, Zheng X, Klyce S, et al. Evaluation of the tear film stability after laser in situ keratomileusis using the tear film stability analysis system. *American Journal of Ophthalmology*. 2005;137(1):116-120.
73. Belmonte C. Eye dryness sensations after refractive surgery: impaired tear secretion or "phantom" cornea? *Journal of Refractive Surgery*. 2007;23(6):598-602.
74. Fisher B. *Investigation of interactions between the 193.nm argon-fluoride excimer laser and corneal tissue*. Gainesville: Department of Mechanical and Aerospace Engineering, University of Florida; 2004.
75. Kim W-S, Jo J-M. Corneal Hydration Affects Ablation During Laser In Situ Keratomileusis Surgery. *Cornea*. 2001;20(4):394-397.
76. Dougherty PJ. Excimer Laser Ablation Rate and Corneal Hydration. *American Journal of Ophthalmology*. 1994;118(2):169-176.
77. Huebscher H-J, Genth U, Seiler T. Determination of Excimer Laser Ablation Rate of the Human Cornea Using In Vivo Scheimpflug Videography. *Investigative Ophthalmology and Vision Science*. 1996;37(1):42-46.
78. Feltham M, Stapleton F. The effect of water content on the 193 nm excimer laser ablation. *Cinical & Experimental Ophthalmology*. 2002;30(2):99-103.
79. Fisher B, Hahn D. Development and numerical solution of a mechanistic model for corneal tissue ablation with the 193 nm argon fluoride excimer laser. *Journal of the Optical Society of America A*. 2007;24(2):265-277.
80. Patel S, Alio J, Pérez-Santoja J. Refractive Index Change in Bovine and Human Corneal Stroma before and after LASIK: A Study of Untreated and Re-treated Corneas Implicating Stromal Hydration. *Investigative Ophthalmology and Vision Science*. 2004;45(10):3523-3530.
81. Mrochen M, Seiler T. Influence of corneal curvature on calculation of ablation pattern used in photorefractive laser surgery. *Journal of Refractive Surgery*. 2001;17:S584-S587.
82. Anera RG, Villa C, Jiménez JR, Gutiérrez R, Barco LJd. Differences between real and predicted corneal shapes after aspherical corneal ablation. *Applied Optics*. 2005;44(21):4528-4532.
83. Dorransoro C, Cano D, Merayo-Llodes J, Marcos S. Experiments on PMMA models to predict the impact of corneal refractive surgery on corneal shape. *Optics Express*. 2006;14(13):6142-6156.
84. Roberts C. The Cornea is Not a Piece of Plastic. *Journal of Refractive Surgery*. 2000;16(4):407-413.
85. Salvia J, Mataboscha C, Fofib D, Foresta J. A review of recent range image registration methods with accuracy evaluation. *Image and Vision Computing*. 2007;25(5):578-596.
86. Wang M, Maloney R. Epithelial ingrowth after laser in situ keratomileusis. *American Journal of Ophthalmology*. 2000;129:746-751.

87. Tang W, Collins M, Carney L, Davis B. The Accuracy and Precision Performance of Four Videokeratoscopes in Measuring Test Surfaces. *Optometry and Vision Science*. 2000;77(9):483-491.
88. Koop N, Langholz M, Birngruber R, Geerling G, Bastian G. Vergleichende Untersuchungen verschiedener kornealer Topographiemeßgeräte. *Ophthalmologe*. 1997;94(2):120-126.
89. Roberts C. The Accuracy of 'Power' Maps to Display Curvature Data in Corneal Topography Systems. *Investigative Ophthalmology and Vision Science*. 1994;35(9):3525-3532.
90. Klein S, Mandell R. Shape and Refractive Powers in Corneal Topography. *Investigative Ophthalmology and Vision Science*. 1995;36(10):2096-2109.
91. Klein S. Axial curvature and the skew ray error in corneal topography. *Optometry and Vision Science*. 1997;74:931-944.
92. Klein S. Corneal topography reconstruction algorithm that avoids the skew ray ambiguity and the skew ray error. *Optometry and Vision Science*. 1997;74:945-962.
93. Turuwhenua J, Henderson J. A Novel Low-Order Method for Recovery of the Corneal Shape. *Optometry and Vision Science*. 2004;81(11):E863.
94. Sicam V, v.d.Heijde R. Topographer Reconstruction of the Nonrotation-Symmetric Anterior Corneal Surface Features. *Optometry and Vision Science*. 2006;83(12):910-918.
95. Chairns G, McGhee C. Orbscan computerized topography: Attributes, applications, and limitations. *Journal of Cataract and Refractive Surgery*. 2005;31:205-220.
96. Lackner B, Schmidinger G, Pieh S, Funovics M, Skorpik C. Repeatability and Reproducibility of Central Corneal thickness Measurement With Pentacam, Orbscan, and Ultrasound. *Optometry and Vision Science*. 2005;82(10):892-899.
97. Lackner B, Schmidinger G, Skorpik C. Validity and Repeatability of Anterior Chamber Depth Measurements With Pentacam and Orbscan. *Optometry and Vision Science*. 2005;82(9):858-861.
98. Creath K. Phase measurement interferometry techniques. In: Wolf E, ed. *Progress in optics*. Vol XXVI. Amsterdam: Elsevier Science Publishers; 1998:349-393.
99. Kujawinska M. Spacial phase measurement methods. In: Robinson D, Reid G, eds. *Interferogram Analysis*. Bristol: IOP Publishing; 1993:141-193.
100. Schründer S. Verfahren und Vorrichtung zur Ermittlung der Oberflächenform von biologischem Gewebe. Deutsches Patent DE19837932, 1998.
101. Böhnke M. High-precision, high-speed measurement of excimer laser keratectomies with a new optically pachymeter. *German Journal of Ophthalmology*. 1997;5(6):338-342.
102. Wirbelauer C, Pham D. Continuous monitoring of corneal thickness changes during LASIK with online optical coherence pachymetry. *Journal of Cataract and Refractive Surgery*. 2004;30:2559-2568.
103. Moser C, Kampmeier J, McDonnell P, Psaltis D. Feasibility of Intraoperative Corneal Topography Monitoring During Photorefractive Keratectomy. *Journal of Refractive Surgery*. 2000;16(2):148-154.
104. Bradley JC, McCartney DL, Craenen GA. Continuous intraocular pressure recordings during lamellar microkeratotomy of enucleated human eyes. *Journal of Cataract and Refractive Surgery*. 2007;33(5):869-872.
105. Wachtlin J, Schründer S, Pham DT, Hoffmann F, Hartmann C. Intraocular tension increase in microkeratome sections (LASIK) and in keratoplasty with the GTS trephine system. *Der Ophthalmologe*. 1998;95(3):137-141.

-
- 106.** Haw W, Manche E. Effect of preoperative pupil measurements on glare, halos, and visual function after photoastigmatic refractive keratectomy. *Journal of Cataract and Refractive Surgery*. 2001;27:907-916.
- 107.** O'Brart D, Lohmann C, Fitzke F, Smith S, Kerr-Muir M, Marshall J. Night vision after excimer laser photorefractive keratectomy: haze and halos. *European Journal of Ophthalmology*. 1994;4:443-451.