

UNIVERSIDAD DE BARCELONA
FACULTAD DE MEDICINA
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**“SENSIBILIDAD AL CONTRASTE
TRAS LASIK CONVENCIONAL Y
PERSONALIZADO”**

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8- BIBLIOGRAFÍA

8.1- BIBLIOGRAFÍA POR ORDEN DE APARICIÓN

- 1- Kohnen T. Measuring vision in refractive surgery. *J Cataract Refract Surg* 2001; 27: 1897-8.
- 2- Kahle G, Seiler T, Wollensak J. Report of psychosocial finding and satisfaction among patients 1 year after excimer laser photorefractive keratectomy. *Refract Corneal Surg* 1992; 8: 286-289.
- 3- Bourque LB, Cosand BB, Drews C, Waring GO III, Lynn M, Cartwright C. Reported satisfaction, fluctuation of vision, and glare among patients one year after surgery in the Prospective Evaluation of Radial Keratotomy (PERK) Study. *Arch Ophthalmol* 1986; 104: 356-63.
- 4- Holladay JT, Dudeja DR, Chang J. Functional vision and corneal changes after laser in situ keratomileusis determined by contrast sensitivity, glare testing and corneal topography. *J Cataract Refract Surgery* 1999; 25: 663-9.
- 5- Niesen UM, Businger U, Schipper I. Disability glare after excimer laser photorefractive keratectomy for myopia. *J Refract Surg* 1996; 12 (suppl): S267-8.
- 6- Montes-Mico R, Charman WN. Mesopic contrast sensitivity function after excimer laser photorefractive keratectomy. *J Refract Surg* 2002; 18: 9-13.
- 7- Munnerlyn CR, Koons SJ, Marshall J. Photorefractive keratectomy: a technique for laser refractive surgery. *J Cataract Refract Surg* 1988; 14: 46-52.
- 8- Nio YK, Jansonius NM, Fidler V, Geraghty E, Norrby S. Spherical and irregular aberrations are important for the optimal performance of the human eye. *Ophthalmic Physiol Opt* 2002; 22 (2): 103-12.
- 9- Guirao A, Porter J, Williams DR, Cox IG. Calculated impact of high-order monochromatic aberrations on retinal image quality in a population of human eyes. *J Opt Soc Am A Opt Image Sci Vis* 2002; 19 (3): 620-8.
- 10- Hong X, Thibos LN. Longitudinal evaluation of optical aberrations following laser in situ keratomileusis surgery. *J Refract Surg* 2000; 16 (5): S647-50.
- 11- Marcos S. Aberrations and visual performance following standard laser correction. *J Refract Surg* 2001; 17 (5): S596-601.
- 12- McLeod SD. Beyond Snellen Acuity. The assessment of visual function after refractive surgery. *Arch Ophthalmol* 2001; 119: 1371-3. (Letter).

- 13- Miller D. Glare and contrast sensitivity testing. In Duane's, Ophthalmology Clinical volume 1 chapter 35. Hagerstown, MD: Lippincott-Raven Publishers, Inc.; 1996.
- 14- Cardona Ausina C, Perez Santonja JJ, Ayala Espinosa MJ, Claramonte Meseguer P, Artola Roig A, Alio JL. Contrast sensitivity after laser in situ keratomileusis for myopia (LASIK-M). *Arch Soc Esp Oftalmol* 2000; 75 (8): 541-6.
- 15- Moreno-Barriuso E, Lloves JM, Marcos S, Navarro R, Llorente L. Ocular aberrations before and after myopic corneal refractive surgery: LASIK-induced changes measured with laser ray tracing. *Invest Ophthalmol Vis Sci* 2001; 42 (6): 1396-403.
- 16- Applegate RA, Howland HC. Refractive surgery, optical aberrations, and visual performance. *J Refract Surg* 1997; 13(3): 295-9.
- 17- Martínez CE, Applegate RA, Klyce SD, McDonald MB, Medina JP, Howland HC. Effect of pupillary dilation on corneal optical aberrations after photorefractive keratectomy. *Arch Ophthalmol* 1998; 116: 1053-62.
- 18- Oshika T, Miyata K, Yokunaga T, Samejima T, Amano S, Tanaka S, Hirohara Y, Mihashi T, Maeda N, Fujikado T. Higher order wavefront aberrations of cornea and magnitude of refractive correction in laser in situ keratomileusis. *Ophthalmology* 2002; 109 (6): 1154-8.
- 19- Oshika T, Klyce SD, Applegate RA, Howland HC, El Danasuory M. Comparison of corneal wavefront aberrations after photorefractive keratectomy and laser in situ keratomileusis. *Am J Ophthalmol* 1999; 127 (1): 1-7.
- 20- Seiler T, Kaemmerer M, Mierdel P, Krinke H. Ocular optical aberrations after photorefractive keratectomy for myopia and myopic astigmatism. *Arch Ophthalmol* 2000; 118 (1): 17-21.
- 21- Mrochen M, Kaemmerer M, Seiler T. Wavefront-guided laser in situ keratomileusis: early results in three eyes. *J Refract Surg* 2000; 16 (2): 116-23.
- 22- Mc Donald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented at the Annual Meeting of the International Society of Refractive Surgery in Orlando, Florida, U.S.A., in October 1999.
- 23- Mc Donald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented in the Refractive Interest Group Subspecialty Day, in Texas, U.S.A., in October 2000.

- 24- Applegate RA. Limits to vision: can we do better than Nature?. *J Refract Surg* 2000; 16 (5): S547-51.
- 25- Mrochen M, Kaemmerer M, Mierdel P, Krinke HE, Seiler T. Principles of Tscherning Aberrometry. *J Refract Surg* 2000; 16 (suppl.): S570-1.
- 26- Mrochen M, Seiler T. Fundamentals of wavefront-guided refractive corneal surgery. *Ophthalmologe* 2001; 98 (8): 703-14.
- 27- Seiler T, Mrochen M, Kaemmerer M. Operative correction of ocular aberrations to improve visual acuity. *J Refract Surg* 2000; 16 (suppl.): S619-22.
- 28- Cózar Mata JL. Deficiencia Visual: Intervención Psicopedagógica. Facultad de Ciencias de la Educación de la Universidad de Granada. <http://www.psicopedagogia.com/articulos/?articulo=459>.
- 29- Durán de la Colina JA. Defectos de refracción. En: "Oftalmología Clínica". Kanski JJ. Edición en español. Mosby/Doyma Libros, SA, 1996: 409-421.
- 30- Spalton DJ, Hitchings RA, Holder GE. Métodos de exploración ocular. En: "Atlas de Oftalmología clínica. 2^a edición. Mosby, Singapore 1995.
- 31- Sisquella M, Nolla A. Exploraciones especiales en la alta miopía: Agudeza visual. En: Corrección quirúrgica de la alta miopía. Menezo JL, Güell JL. Barcelona. Espaxs 2001.
- 32- Palomo Alvarez C, Cuiña Sardiña R, García Feijoó J, García Sanchez J. Dioptria ocular y optotipos. En: "Refracción ocular y baja visión". LXXIX Ponencia Oficial de la Sociedad Española de Oftalmología, 2003: 27-42.
- 33- Furlan W, García Monreal JG, Muñoz Escrivá L. Introducción al examen subjetivo. En: "Fundamentos de Optometría. Refracción ocular". Valencia: Puertes SL; 2000: 141-81.
- 34- Davidson DW. Visual acuity. En: Eskridge JB, Amos JF, Bartlett JD. Clinical procedures in optometry. Philadelphia: Halliday Lithograph Corp 1991: 17-29.
- 35- Sloan LL. Clinical measurement of visual acuity. Whitcomb MA, Benson W eds. 1968
- 36- Owsley C, Sloane ME. Contrast sensitivity, acuity and the perception of "real-world" targets. *Br J Ophthalmol* 1987; 71: 791-6.
- 37- Nadler DJ. Glare and contrast sensitivity in cataracts and pseudophakia. In: Nadler MP, Miller D, Nadler DJ, eds. Glare and contrast sensitivity for clinicians. New York: Springer-Verlag 1990; 53-65.

- 38- Marmor MF. Contrast sensitivity versus visual acuity in retinal disease. *Br J Ophthalmol.* 1986; 70(7): 553-9.
- 39- Ginsburg AP. The evaluation of contact lenses and refractive surgery using contrast sensitivity. In Dabezie OH, ed. Contact lenses. The CLAO guide to basic science and clinical practice. New York: Grune & Stratton, 1987; 56: 1-19.
- 40- Koch DD. Glare and contrast sensitivity for the clinician. *Ophthalmol Clin N Am* 1989; 2(3): 415-29.
- 41- Aguilar M, Mateos F. Sensibilidad al contraste. En: Aguilar M, Mateos F, eds. Óptica Fisiológica. Universidad Politécnica de Valencia-Servicio de Publicaciones ed. 1994; 15: 77-112.
- 42- Fleishman JA, Beck RW, Linares OA, Klein JW. Deficits in visual function after resolution of optic neuritis. *Ophthalmology* 1987; 94: 1029-35.
- 43- Wall M. Contrast sensitivity testing in pseudotumor cerebri. *Ophthalmology* 1986; 93: 4-7.
- 44- Kupersmith MJ, Nelson JL, Seiple WH, Carr RE. The 20/20 eye in multiple sclerosis. *Neurology* 1983; 33: 1015-20.
- 45- Kayazawa F, Yamamoto T, Itoi M. Temporal contrast sensitivity in central serous choroidopathy. *Ann Ophthalmol* 1982; 14: 272-5.
- 46- Argento C, Cosentino MJ, Rodríguez E. Contrast sensitivity assessment using the visual performance tester. *J Cataract Refract Surg* 2000; 26: 806-9.
- 47- Prager T. Essential factors in testing for glare. In: Nadler MP, Miller D, Nadler DJ (eds). Glare and contrast sensitivity for clinicians. New York: Springer-Verlag, 1990; 33-34.
- 48- Miller D. Optics and Refraction: A user-friendly guide. In: Podos SM, Yanoff M, eds. *Textbook of Ophthalmology*. London: CV Mosby 1994; 1 (7): 14-24.
- 49- Jindra LF, Zemon V. Contrast sensitivity testing: A more complete assessment of vision. *J Cataract Refract Surg* 1989; 15: 141-8.
- 50- Vázquez M, Güell JL. Exploraciones especiales en la alta miopía: Sensibilidad al contraste en cirugía refractiva. En: Corrección quirúrgica de la alta miopía. Menezo JL, Güell JL. Barcelona. Espaxs 2001.
- 51- Pelli DG, Robson JG, Wilkin AJ. The design of a new letter chart for measuring contrast sensitivity. *Clin Vis Sci* 1988; 2: 187-99.

- 52- Derefeldt G, Lennerstrand G, Lundh B. Age variations in normal human contrast sensitivity. *Acta Ophthalmol (Copenh)*. 1979; 57(4): 679-90.
- 53- Yates JT, Harrison JM, O'Connor PS, Ballantine C. Contrast sensitivity: characteristics of a large, young, adult population. *Am J Optom Physiol Opt*. 1987; 64(7): 519-27.
- 54- Beazley LD, Illingworth DJ, Jahn A, Greer DV. Contrast sensitivity in children and adults. *Br J Ophthalmol*. 1980 Nov;64(11):863-6.
- 55- Hemenger RP. Intraocular light scatter in normal lens with age. *Appl Optics* 1984; 23: 1972-74.
- 56- Maffei L, Fiorentini A. The visual cortex as a spatial frequency analyzer. *Vis Res* 1973; 13: 1255-67.
- 57- Owsley C, Sekuler R, Siemsen D. Contrast sensitivity throughout adulthood. *Vis Res* 1983; 23: 689-99.
- 58- Risse JF, Saint-Blancat P, Boissonnot M, Grillot L. Spatial contrast sensitivity in patients with severe myopia. *J Fr Ophthalmol* 1996; 19: 271-7.
- 59- Bradly A, Hook J, Haeseker J. A comparison of clinical acuity and contrast sensitivity charts: effect of uncorrected myopia. *Ophthalmic Physiol Opt* 1991; 11: 218-26.
- 60- Thorn F, Corwin TR, Comerford JP. High myopia does not affect contrast sensitivity. *Curr Eye Res* 1986; 5: 635-9.
- 61- Collins JW, Carney LG. Visual performance in high myopia. *Curr Eye Res* 1990; 3: 217-23.
- 62- Hope GM, Rubin ML. Night myopia. *Surv Ophthalmol* 1984; 29: 129-36.
- 63- Charman WN. Night myopia and driving. *Ophthalmic Physiol Opt* 1996; 16: 474-85.
- 64- Fejer TP, Girgis R. Night myopia: implications for the young driver. *Can J Ophthalmol* 1992; 27: 172-6.
- 65- Chan JW, Edwards MH, Woo GC, Woo CP. Contrast sensitivity after laser in situ keratomileusis. One year follow-up. *J Cataract Refract Surg* 2002; 28 (10): 1774-9.
- 66- Wachler BS, Krueger RR. Normalized contrast sensitivity values. *J Refract Surg* 1998; 14(4): 463-9.

- 67- Malley DS, Steinert RF, Pulafito CA. Immunofluorescence study of corneal wound healing after excimer laser anterior keratectomy in the monkey eye. *Arch Ophthalmol* 1990; 108: 1316-22.
- 68- Lohmann CP, Timberlake G, Fitzke FW. Corneal light scattering after laser photorefractive keratectomy: the objective measurements of haze. *Refract Corneal Surg* 1992; 8: 114-21.
- 69- Essente S, Passarelli N, Falco L, Guidi D. Contrast sensitivity under photopic conditions in photorefractive keratectomy: a preliminary study. *Refract Corneal Surg* 1993; 9 (suppl): S70-2.
- 70- Maguen E, Machat J. Complications of photorefractive keratectomy, Primarily with the VISX excimer laser. In: Salz JJ, McDonnell PJ, McDonald MB, eds. *Corneal laser surgery*. St. Louis: CV Mosby, 1995; 143-58.
- 71- Doane JF, Cavanaugh TB, Durrie DS, Hassanein KM. Relation of visual symptoms to topographic ablation zone decentration after excimer laser photorefractive keratectomy. *Ophthalmology* 1995; 102: 42-7.
- 72- Parker PJ, Klyce SD, Ryan B. Central topographic islands following photorefractive keratectomy. *Invest Ophthalmol Vis Sci* 1993; 34 (suppl): 803.
- 73- Gaith AA, Hussein AH, Stulting RD. Comparison of the effect of radial keratotomy and photorefractive keratectomy on contrast sensitivity and glare disability. Tesis Doctoral, universidad de Alejandría 1995.
- 74- Gatinel D, Hoang-Xuang T, Azar DT. Determination of corneal asphericity after myopia surgery with the Excimer Laser: A mathematical model. *Invest Ophthalmol Vis Sci* 2001; 42: 1736-42.
- 75- Mandell RB, St. Helen R. Mathematical model of the corneal contour. *Br J Physiol Opt* 1971; 26: 183-97.
- 76- Holladay JT, Dudeja DR, Chang J. Functional vision and corneal changes after laser in situ keratomileusis determined by contrast sensitivity, glare testing and corneal topography. *J Cataract Refract Surgery* 1999; 25: 663-9.
- 77- Cardona Ausina C, Perez Santonja JJ, Ayala Espinosa MJ, Claramonte Meseguer P, Artola Roig A, Alio JL. Contrast sensitivity after laser in situ keratomileusis for myopia (LASIK-M). *Arch Soc Esp Oftalmol* 2000; 75 (8): 541-6.
- 78- Langrova H, Hejcmanova D, Peregrin J. Visual functions after photorefractive keratectomy. *Acta Medica* 1997; 40: 47-9.

- 79- Niesen UM, Businger U, Hartmann P, Senn P, Schipper I. Glare sensitivity and visual acuity after excimer laser photorefractive keratectomy for myopia. British J Ophthalmol 1997; 81: 136-40.
- 80- Verdon W, Bullimore M, Maloney RK. Visual performance after photorefractive keratectomy. Am J Ophthalmol 1996; 114: 1465-72.
- 81- Niesen UM, Businger U, Schipper I. Disability glare after excimer laser photorefractive keratectomy for myopia. J Refract Surg 1996; 12 (suppl): S267-8.
- 82- Hodkin MJ, Lemos MM, McDonald MB, Holladay JT, Shahidi SH. Near vision contrast sensitivity after photorefractive keratectomy. J Refract Surg 1997; 23: 192-5.
- 83- Wang Z, Chen J, Yang B. Comparison of laser in situ keratomileusis and photorefractive keratectomy to correct myopia from -1.25 to -6.00 diopters. J Refract Surg 1997; 13: 528-34.
- 84- Perez Santonja JJ, Sakla HF, Alio JL. Contrast sensitivity after laser in situ keratomileusis. J Cataract Refract Surg 1998; 24 (2): 183-9.
- 85- Mutyala S, McDonald MB, Scheinblum KA, Ostrick MD, Brint SF, Thompson H. Contrast sensitivity evaluation after laser in situ keratomileusis. Ophthalmology 2000; 107 (10): 1864-7.
- 86- Montes-Mico R, Charman WN. Choice of spatial frequency for contrast sensitivity evaluation after corneal refractive surgery. J Refract Surg 2001; 17 (6): 646-51.
- 87- Tumbocon JA, Suresh P, Slomovic A, Rootman DS. The effect of laser in situ keratomileusis on low contrast vision. J Refract Surg. 2004; 20 (5 Suppl): S689-92.
- 88- Donders FC. On the Anomalies of Acomodation and Refraction of the Eye. London: New Sydenham Society; 1864.
- 89- Duke-Elder. Miopía. En: Duke-Elder, Abrams D, eds. Refracción, teoría y práctica. Barcelona: JIMS, 1985: 59-69.
- 90- Manero F, Güell JL. Aspectos básicos y particularidades de la alta miopía. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 13-26.
- 91- Rodríguez JL. Noticias Médicas. 1998; 3688: 38.

- 92- Goldsmidt E, Jensen H. Pharmaceutical agents in the control of myopia. Res Clin Forums 1987; 9: 43-51.
- 93- Stone AS, Lin TP, Iuvone M, Laties AM. Postnatal control of ocular growth: dopaminergic mechanisms. En: Myopia and the control of eye growth. J Wiley & Sons, Chichester 1990; 45-62.
- 94- Grosvenor T, Goss DA. The role of bifocal and contact lenses in myopia control. Acta Ophthalmol Suppl 1988; 185: 162-6.
- 95- Ashton GC. Segregation analysis of ocular refraction and myopia. Hum Hered 1985; 35: 232-9.
- 96- Sato T. The cause and prevention of school myopia. Excerpta Medica 1993. Amsterdam: 7-11.
- 97- Majima A, Nakajima A, Ichikawa H. Prevalence of ocular anomalies among schoolchildren. Am J Ophthalmol 1960; 50: 139-46.
- 98- Trevor-Roper T. The eye and its disorders. Blackwell, Oxford, 1974.
- 99- Hirsch MJ, Weymouth FW. Prevalence of refractive anomalies. En: Grosvenor T, Flom M. "Refractive anomalies research and clinical applications". Butterworth-Heinemann, Boston, 1990: 15-37.
- 100- Curtin BJ. The myopia: Basic science and clinical management. Harper and Row, Philadelphia, 1985.
- 101- Moreu Gonzalez-Pola, A. Concepto y tratamiento moderno de la miopía maligna. Medicamenta. Septiembre 1934 año XII; 259: 151-156.
- 102- Brodstein RS, Brodstein DE, Olson RJ. The treatment of myopia with atropine and bifocals; a long-term prospective study. Ophthalmology 1984; 91: 1373-1378.
- 103- Gil del rio, E. La refracción del ojo y sus anomalías. Ed. "Tip.Cat.Casals", 1957.
- 104- Menezo JL, Cisneros AL. Técnicas quirúrgicas limitadas. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs, Barcelona 2001: 113-29.
- 105- Barraquer JI. Bases de la queratoplastia refractiva. Arch Soc Am Ophthalmol Optom 1965; 5: 179.
- 106- Kaufman HE. The correction of aphakia. Lathing of corneal tissue. Curr Eye Res 1981; 1: 123-9.

- 107- Werblin TP. Epikeratophakia: the surgical correction of aphakia. Lathing of corneal tissue. *Curr Eye Res* 1981; 1: 123-9.
- 108- Barraquer JI. Epikeratoplasty. *Cornea* 1982; 1: 251-4.
- 109- Kaminski SL, Biowski R, Koyuncu D, Lukas JR, Grabner G. Ten-year follow-up of epikeratophakia for the correction of high myopia. *Ophthalmology* 2003; 110: 2147-52.
- 110- Sato T, Akiyama K, Shibata H. A new surgical approach to myopia. *Am J Ophthalmol* 1953; 36: 823-9.
- 111- Harto MA, España E, Menezo JL. Queratotomía radial. En: "Corrección quirúrgica de la alta miopía". Menezo JL, Güell JL. Espaxs, Barcelona 2001: 130-44.
- 112- Arrowsmith PN, Mark RG. Evaluating the predictability of radial keratotomy. *Ophthalmology* 1985; 92: 331-8.
- 113- Rowsey JJ, Balyeat HD. Preliminary results and complications of radial keratotomy. *Am J Ophthalmol* 1982; 93: 437-55.
- 114- Fleming JF, Reynolds AE, Kilmer L, Burris TE, Abbott RL, Schanzlin DJ. The intrastromal corneal ring: two cases in rabbits. *J Refract Surg* 1987; 3; 227-232.
- 115- Schanzlin DJ, Asbell PA, Durrie DS. ICR segments: preliminary results from a phase II study of the 360° ICR in myopic eyes. ASCRS Meeting. Seattle. 1996.
- 116- Durrie DS, Asbell PA, Burris TE, Schanzlin DJ. Reversible refractive effect: data from the phase II study of the 360° ICR in myopic eyes. ASCRS Meeting. Seattle 1996.
- 117- Colin J, Cochener B, Savary G, Malet F. INTACS® para el tratamiento del queratocono. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 164-8.
- 118- Nose W, Neves RA, Burris TE, Schanzlin DJ, Belfort R jr. Intrastromal corneal ring: 12-months sighted myopic eyes. *J Refract Surg* 1996; 12: 20-28.
- 119- Gris O, Güell JL. Queratomileusis en fresco y de congelación. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 168-70.
- 120- Barraquer JI. Queratomileusis para la corrección de la miopía. *Arch Soc Oftalmol Optom* 1964; 5: 27-48.

- 121- Swinger CA, Krumeich J, Cassiday D. Planar lamellar refractive keratoplasty. *J Refract Surg* 1986; 2: 17-24.
- 122- Zavala EY, Krumeich J, Binder PS. Laboratory evaluation of freeze vs nonfreeze lamellar refractive keratoplasty. *Arch Ophthalmol* 1987; 105: 1125-8.
- 123- Laroche L, Gauthier L, Thenot JC. Nonfreeze myopic keratomileusis for myopia in 158 eyes. *J Refract Corneal Surg* 1994; 10. 400-12.
- 124- Güell JL, Vázquez M. Queratomileusis in situ asistida con laser excimer (LASIK): técnica quirúrgica. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs SA, Barcelona 2001: 223-50.
- 125- Buratto L, Ferrari M, Genisi C. Myopic keratomileusis with the excimer laser: one-year follow up. *Refract Corneal Surg* 1993; 9: 12-9.
- 126- Trokel SL, Srinivasan R, Braran B. Excimer laser surgery of the cornea. *Am J Ophthalmol* 1983; 96(6): 710-715.
- 127- Seiler T, Wollensak J. Myopic photorefractive keratectomy with the excimer laser; one year follow-up. *Ophthalmology* 1991; 98: 1156-63.
- 128- Pallikaris IG, Papatzanaki ME, Stathi EZ. Laser in situ keratomileusis. *Lasers Surg Med* 1990; 10: 463-8.
- 129- Pallikaris IG, Papatzanaki ME, Siganos DS, Tsilimbaris MK. A corneal flap technique for laser in situ keratomileusis. Human studies. *Arch Ophthalmol* 1991; 109: 1699-702.
- 130- Pallikaris IG, Siganos DS. Excimer laser in situ keratomileusis and photorefractive keratectomy for correction of high myopia. *J Refract Corneal Surg* 1994; 10: 498-510.
- 131- Camellin M. Laser epithelial keratomileusis for myopia. *J Refract Surg*. 2003; 19 (6): 666-70.
- 132- Gabler B, Winkler von Mohrenfels C, Dreis A. Vitality of epithelial cells after alcohol exposure during laser-assisted subepithelial keratectomy flap preparation. *J Cataract Refract Surg* 2002, 28: 1841-1846.
- 133- Soler Ferrández FL. De PRK a LASEK y de LASEK a PRK. *Arch Soc Esp Oftalmol* 2003; 78 (5): 239-240.
- 134- Belda JI, Díaz-Llopis M. Cirugía intraocular en la alta miopía. Ventajas e inconvenientes frente a la cirugía corneal. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs SA, Barcelona 2001: 285-90.

- 135- Fukala V. Operative behandlung der hochstgradigen myopie dur apakie. Graefe's Arch Ophthalmol 1890; 36: 230-44.
- 136- Menezo JL, Cisneros A, Harto M. Extracapsular cataract extraction and implantation of a low power lens for high myopia. J Cataract Refract Surg 1988; 14: 409-12.
- 137- Goldberg MF. Clear lens extraction of axial myopia: an appraisal. Ophthalmology 1987; 94: 571-82.
- 138- Gris O, Güell JL. Extracción del cristalino transparente. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 371-80.
- 139- Strampelli B. Soportabilitá di lenti acriliche in camera anteriore nella afachia e nei vizi di refrazione. Ann Ottalmol Clin Oculist 1954; 80: 75-82.
- 140- Mimouni F, Colin J, Koffi V, Bonnet P. Damage to the corneal endothelium from anterior chamber intraocular lenses in phakic myopic eyes. Refract Corneal Surg 1991; 7: 277-81.
- 141- Fechner PU, Worst JGF. A new concave intraocular lens for the correction of high myopia. Eur J Implant Refract Surg 1989; 1: 41-3.
- 142- Joly P, Baikoff G, Bonnet P. Mise en place d'un implant négatif de chambre antérieure chez des sujets phakes. Bull Soc Ophthalmol Fr 1989; 5: 727-33.
- 143- Baikoff G. The refractive IOL in a phakic eye. Ophthalmic Practice 1991; 9: 58-61.
- 144- Marinho A, Ceu Pinto M, Vaz F. LIO fáquica, criterios de selección. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 331-40.
- 145- Pérez Santonja JJ, Iradier MT, Sanz Iglesias L, Serrano JM, Zato MA. Endothelial changes in phakic eyes with anterior chamber intraocular lenses to correct high myopia. J Cataract Refract Surg 1996; 22: 1017-22.
- 146- Fechner PU, Strobel J, Wichman W. Correction of myopia by implantation of a concave Worst-iris claw lens into phakic eyes. Refract Corneal Surg 1991; 7: 286-98.
- 147- Menezo JL, Cisneros A, Cervera M, Harto M. Iris-claw phakic lens: intermediate and long-term corneal endothelial changes. Eur J Implant Refract Surg 1994; 6: 195-9.

- 148- Pérez Santonja JJ. Lentes de cámara anterior en ojos fáquicos para la corrección de altas miopías. Tesis Doctoral. Facultad de Medicina. Universidad Complutense de Madrid. Madrid 1995.
- 149- Alió JL, de la Hoz F, Pérez Santonja JJ. Phakic anterior chamber for the correction of myopia. A 7-year cumulative analysis of complications in 263 cases. *Ophthalmology* 1999; 106: 458-66.
- 150- Fyodorov SN, Zuyev VK, Tumanyan ER. Modern approach to the stagewise complex surgical therapy of high myopia. J Transactions of International Symposium of IOL implantation and Refractive Surgery. Moscow, RSFSP Ministry of Health 1987: 274-9.
- 151- Menezo JL, Cisneros AL. Lentes fáquicas epicapsulares. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs, Barcelona 2001: 341-69.
- 152- Skorpick CH, Scholz U, Weghaupt H, Zehetmayer M. Clinical results with a posterior chamber implantable foldable collagen collamer lens for correction of high myopia. Abstract ARVO, 1996.
- 153- Herrera Piñero R, Amigó Rodríguez A. PRL. Resultados tras 2 años de seguimiento. *Arch Soc Canar Oftal* 2004; 15.
- 154- Maldonado MJ, Lohman C. Cirugía de la miopía mediante el uso del láser. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 177-94.
- 155- Maiman TH. Simulated optical radiation in ruby. *Nature* 1960; 187: 493-6.
- 156- Campbell CJ, Rittler MC, Koester CJ. The optical maser as retina photocoagulator: an evaluation. *Trans Am Acad Ophthalmol Otolaryngol* 1963; 67: 158-63.
- 157- Zweng HC. Experimental laser photocoagulation. *Am J Ophthalmol* 1964; 58: 353-60.
- 158- L'Esperance FA. An ophthalmic argon laser photocoagulation system: design, construction and laboratory investigations. *Trans Am Ophthalmol Soc* 1968; 66: 827-34.
- 159- Early Treatment Diabetic Retinopathy Study Research Group Report Number 1. Photocoagulation for diabetic macular edema. *Arch Ophthalmol* 1985; 103: 1796-1800.

- 160- Early Treatment Diabetic Retinopathy Study Research Group Report Number 2. Treatment techniques and clinical guidelines for photocoagulation of diabetic macular edema. *Ophthalmology* 1987; 94: 760-6.
- 161- Branch Vein Occlusion Study Group. Argon laser scatter photocoagulation for prevention of neovascularitation and vitreous hemorrhage in branch vein occlusion. *Arch Ophthalmol* 1986; 104: 34-40.
- 162- Abraham RK, Miller GL. Outpatient argon laser iridectomy for angle closure: a two year study. *Trans Am Acad Ophthalmol Otolaryngol* 1975; 75: 529-34.
- 163- Wise JB, Winter SL. Argon laser therapy for open-angle glaucoma: a pilot study. *Arch Ophthalmol* 1979; 97: 319-34.
- 164- Fankhauser F. Clinical studies of the efficiency of high power laser radiation upon some structures of the anterior segment of the eye. *Int Ophthalmol* 1981; 3: 129-34.
- 165- McHugh JDA, Marshall J, Fytche TJ. Initial clinical experiments using diode laser in the treatment of retinal vascular disease. *Eye* 1989; 3: 516-21.
- 166- Stern D, Schoenlien RW, Puliafito CA. Corneal ablation by nanosecond, picosecond and femtosecond lasers at 532 and 625 nm. *Arch Ophthalmol* 1989; 107: 587-92.
- 167- L'Esperance FA. Ophthalmic lasers. Photocoagulation, photoradiation and surgery. St. Louis, CV Mosby. 1983: 22-25.
- 168- Ruderman W. Excimer lasers in photochemistry. *Laser Focus* 1979; 68-9.
- 169- Taboada J, Archibald CJ. An extreme sensitivity in the corneal epithelium to far UV ArF excimer laser pulses. *Pro Sci Progr Aero Med Assoc* 1981. San Antonio, Texas.
- 170- Srinivasan R. Kinetics of the ablative photodecomposition of organic polymers in the far ultraviolet (193 nm). *J Vas Sci Technol Bull* 1983; 4: 923-926.
- 171- Srinivasan R, Braren B. Excimer laser surgery of the cornea. *Am J Ophthalmol* 1983; 96: 710-715.
- 172- Seiler T, Wollensak J. In vivo experiments with excimer laser technical parameters and healing processes. *Ophthalmologica*. 1986; 1920: 65-70.

- 173- Seiler T, Bende T, Wollensak J. Excimer laser keratectomy for correction of astigmatism. *Am J Ophthalmology* 1988; 10: 117-125.
- 174- Steinert RF. Therapeutic keratectomy: corneal smoothing. En: Thompson FB, McDonnell PJ (eds): *Color Atlas / Text of excimer laser surgery*. Igaku-Shoin. New York. 1993.
- 175- McDonald MB, Frantz JM, Klyce SDI. One year refractive results of central photorefractive keratectomy for myopia in non-human primate cornea. *Arch Ophthalmol* 1990; 108: 40-7.
- 176- McDonald MB, Frantz JM, Klyce SDI. Central photorefractive keratectomy for myopia. The blind eye study. *Arch Ophthalmol* 1990; 108: 799-808.
- 177- McDonald MB, Liu JC, Byrd TJL. Central photorefractive keratectomy for myopia: Partially sighted and normally sighted eyes. *Ophthalmology* 1991; 98: 1327-37.
- 178- Munnerlyn CR, Koons SJ, Marshall J. Photorefractive keratectomy: a technique for laser refractive surgery. *J Cataract Refract Surg* 1988; 14: 46-52.
- 179- Stein HA, Cheskes A, Stein RM. History of the excimer laser in ophthalmology. En: Stein HA, Cheskes A, Stein RM (eds). *The excimer: Fundamentals and clinical use*. De SLACK, Inc, Thorofare, NY. 1995.
- 180- McDonnell PJ, Moreire H, Garbus J. Photorefractive keratectomy to create toric ablations for correction of astigmatism. *Arch Ophthalmol* 1991; 109: 710.
- 181- Dausch D, Klein R, SchroderE. Excimer laser photorefractive keratectomy for hyperopia. *Refract Corneal Surg* 1993; 9: 20-8.
- 182- Dausch D, Klein R, Landesz M. Photorefractive keratectomy to correct astigmatism with myopia or hypermetropia. *J Cataract Refract Surg* 1994; 20 (Suppl) :252-7.
- 183- Lang GK, Naumann GOH. Corneal trephination with the excimer laser for penetrating keratoplasty. En: Thompson FB, McDowell PJ (eds): *Color Atlas / Text of excimer laser surgery*. Igaku-Shoin. New York 1993: 131-136.
- 184- Smith KC. Ultraviolet radiation effects on molecules and cells. En: Smith KC. *The Science of Photobiology*. Plenum, New York: 1977.

- 185- Stevens B, Hutton E. Radiative life time of the pyrene dimer and the possible role of excited dimers in energy transfer processes. *Nature* 1960; 186: 1045-9.
- 186- Velasco JE, Setser DW. Bound-free emission spectra of diatomic xenon halides. *J Chem Phys* 1975; 62: 1990-6.
- 187- Grundfest WS, Litvack F, Forrester JS. Laser ablation of human atherosclerotic plaque without adjacent tissue injury. *J Am Coll Cardiol* 1985; 5: 429-36.
- 188- Lane RJ, Wynne JJ. Medical applications of excimer lasers. *Lasers Appl* 1984; 3: 59-65.
- 189- Muller D, Svriluga R. Excimer lasers offer promise in surgical applications. *Laser Focus* 1985; 21: 71-6.
- 190- Dyer PE, Srinivasan R. Nanosecond photoacoustic studies on ultraviolet laser ablation of organic polymers. *Appl Phys Lett* 1983; 48: 445-51.
- 191- Znotis TA, Poulin D, Reid J. Excimer lasers: an emerging technology in materials processing. *Laser Focus* 1987; 23: 54-7.
- 192- March WF. Ophthalmic Lasers. Ed. SLACK, Inc. Thorofare 1984.
- 193- Krauss JM, Puliafito CA, Steinert RF. Laser interactions with the cornea. *Surv Ophthalmol* 1986; 31: 37-53.
- 194- Güell Villanueva, JL. Queratomileusis in situ asistida con el láser. Desarrollo de la técnica para la corrección de la miopía y el astigmatismo. Tesis doctoral. Barcelona 1999.
- 195- Marshall J, Trokel SL, Rothery S, Krueger RR. Photoablation reprofiling of the cornea using an excimer laser: photorefractive keratectomy. *Lasers and Light in Ophthalmology* 1986; 1: 21-48.
- 196- Lang GK, Schroeder E, Koch E. Excimer laser keratoplasty: basic concepts. *Ophthalmic Surg* 1989; 20: 262-70.
- 197- Marshall J, Trokel SL, Rothery S, Krueger RR. Long therm healing of the central cornea after photorefractive keratectomy using an excimer laser. *Ophthalmolgy* 1988; 95: 1411-5.
- 198- Sher NA, Bowers RA, Zabel RW. Clinical use of the 193 nm excimer laser in the treatment of corneal scars. *Arch Ophthalmol* 1991; 109: 491-5.
- 199- McDonnell PJ, Seiler T. Phototherapeutic keratectomy with the excimer laser for Reis-Bückler corneal dystrophy. *Refract Corneal Surg* 1992; 8: 306-10.

- 200- Campos M, Nielson S, Szerenky K. Clinical follow-up of phototherapeutic keratectomy for treatment of corneal opacities. Am J Ophthalmol 1993; 115: 433-7.
- 201- Örndahl M, Fagerholm P, Fitzsimmons T. Treatment of corneal dystrophies with the excimer laser. Acta Ophthalmol 1994; 72: 235-40.
- 202- Trokel SL, Munnerlyn CR. Excimer laser Ophthalmic delivery systems. Lasers Ophthalmol 1989; 2: 157-63.
- 203- Buratto L, Perone G. El Excimer Laser para LASIK. En: LASIK: técnicas quirúrgicas y complicaciones. Colombia: SLACK Incorporated, 2000: 299-338.
- 204- Schroder E. Ophthalmic excimer laser delivery system for corneal surgery. Laser 1986; 2: 44-51.
- 205- L'Esperance FA. History and development of the excimer laser. En: Thompson B, McDonnell PJ, eds. Excimer Laser Surgery: The Cornea. Ed. Igaku-Shoin, New York, 1993.
- 206- Hanna K, Chastang JC, Pouliquen Y. A rotating slit delivery system for excimer laser refractive keratoplasty. Am J Ophthalmol 1987; 103: 474-81.
- 207- Krueger RR, Trokel SL. Quantitation of corneal ablation by ultraviolet laser light. Arch Ophthalmol 1985; 103: 1741-2.
- 208- Aron Rosa D, Boulnoy J, Carre F. Excimer laser surgery of the cornea: qualitative and quantitative aspects of photoablation according to the energy density. J Cataract Refract Surg 1986; 12: 27-33.
- 209- Mugler C. Les origines de la science grecque chez Homère. Paris 1964.
- 210- Aristote. Petits traités d'histoire naturelle. Translation to French. Paris 1953.
- 211- Henri-Martine T. Hypothèse astronomique de Pythagore. Rome 1872.
- 212- Miéli A. La science arabe et son rôle dans l'évolution scientifique mondiale, réédition. Leiden 1966.
- 213- Wiedermann E. "Zu Ibn al-Haithams Optik". Archiv f Geschichte der Naturwissenschaft III, 1960: 1-53.
- 214- Helmholtz H. Popular Scientific Lectures. New York: Dover 1962.
- 215- Hamam H. Las aberraciones y su impacto en la calidad de la visión. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.

- 216- Welford W. Aberrations of optical systems. Adam Hilger. Bristol 1962.
- 217- Noll RJ. Zernike polynomials and atmospheric turbulence. J Opt Soc Am 1976; 66 (3): 207-11.
- 218- Gatell J. Tratamiento personalizado de la miopía. Tesis Doctoral. Universidad Autónoma de Barcelona. 2002.
- 219- Wilson M, Campbell M, Simonet P. Changes of pupil centration with change of illumination and pupil size. Opt Vis Sci 1992; 69: 129-36.
- 220- Doane JF, Morris S, Border AD, EuDaly LS, Denning JA, Probst LE. Análisis del frente de onda. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- 221- Liang J, Williams DR. Aberrations and retinal image quality of the normal human eye. J Opt Soc Am A 1997; 14: 2873-83.
- 222- Artal P. Corneal spherical aberration do not change significantly. J Opt Soc Am 2000.
- 223- Sarver EJ, Applegate RA. Modeling and predicting visual outcomes with VOL-3D. J Refract Surg 2000; 16 (suppl.): S611-8.
- 224- Kaemmerer M, Mrochen M, Mierdel P, Krinke HE, Seiler T. Clinical experience with the Tscherning aberrometer. J Refract Surg 2000; 16 (suppl.): S584-7.
- 225- Oshika T. Quantitative assessment of quality of vision. Nippon Ganka Gakkai Zashi 2004; 108: 770-807.
- 226- Glasser A, Campbell CW. Presbyopia and the optical changes in the human crystalline lens with age. Vision Res 1998; 38 (2): 209-29.
- 227- Atchison DA, Collins MJ, Wildsoet CF. Measurement of monochromatic ocular aberrations of human eyes as a function of accommodation by the Howland aberroscope technique. Vision Res 1995; 35: 313-23.
- 228- Artal P, Fernandez EJ, Manzanera S. Are optical aberrations during accomodation a significant problem for refractive surgery? J Refract Surg 2002; 18: S563-S566.
- 229- He JC, Burns SA, Marcos S. Monochromatic aberrations in the accomodated human eye. Vision Res 2000; 40: 41-8.

- 230- Miller JM, Anwaruddin R, Straub J, Schwiegerling J. Higher order aberrations in normal, dilated, intraocular lens and LASIK corneas. *J Refract Surg* 2002; 18: S579-S583.
- 231- He JC, Marcos S, Webb RH, Burns SA. Measurements of the wave-front aberration of the eye by a fast psychophysical procedure. *J Opt Soc Am A* 1998; 15 (9): 2449-56.
- 232- Seiler T, Dastjerdi MH. Customized corneal ablation. *Curr Opinion Ophthalmol* 2002; 13 (4): 256-60.
- 233- Panagopoulou SI, Pallikaris IG. Wavefront customized ablations with the WASCA Asclepio workstation. *J Refract Surg* 2001; 17 (5): S608-12.
- 234- Schwiegerling J, Snyder RW. Corneal ablation patterns to correct for spherical aberration in photorefractive keratectomy. *J Cataract Refract Surg* 2000; 26: 214-21.
- 235- Miller JM, Anwaruddin R, Straub J, Schwiegerling J. Higher order aberrations in normal, dilated, intraocular lens and LASIK corneas. *J Refract Surg* 2002; 18: S579-S583.
- 236- Liang J, Grimm B, Goetz S, Bille JF. Objective measurement of wave aberrations of the human eye with the use of a Hartmann-Shack wave-front sensor. *J Opt Soc Am A* 1994; 11: 1949-57.
- 237- Applegate RA, Hilmantel G, Howland HC, Tu EY, Starck T, Zayac J. Corneal first surface optical aberrations and visual performance. *J Refract Surg* 2000 (5); 16: 507-14.
- 238- Babcock HW. The possibility of compensating astronomical seeing. *Publ Astron Soc Pac* 1953; 65: 229.
- 239- Thibos LN. Principles os Hartmann-Shack Aberrometry. *J Refract Surg* 2000; 16 (suppl): S563-5.
- 240- Tscherning M. Die monochromatischen aberrationen des menschlichen auges. *Z Psycol Physiol Sinne* 1884; 6: 456-71.
- 241- Hartmann J. Bemerkungen über den bau und Die Justirung von Spektrographen. *Z Instrumentenkde* 1900; 20: 47.
- 242- Howland B. Use of crossed cylinder lens in photographic lens evaluation. *Appl Optics* 1960; 7: 1587-8.

- 243- Shack RV, Platt BC. Production and use of a lenticular Hartmann screen. Optical Sciences Center, University of Arizona, Tucson, Spring Meeting. Optical Society of America 1971: 656.
- 244- Howland HC, Howland B. A subjective method for measurement of chromatic aberrations of the eye. J Opt Soc Am 1977; 67: 1508-18.
- 245- Walsh G, Charman WN, Howland HC. Objective technique for the determination of monochromatic aberrations of the human eye. J Opt Soc Am A 1984; 1: 987-92.
- 246- Molebny VV, Panagopoulou SI, Molebny SV, Wakil YS, Pallikaris IG. Principles of Ray Tracing Aberrometry. J Refract Surg 2000; 16 (suppl.): S572-5.
- 247- Burns SA. The spatially resolved refractometer. J Refract Surg 2000; 16 (suppl.): S566-9.
- 248- Born M. Principles of Optics. Pergamon Press, 1975: 464-66.
- 249- Carvalho LA, Castro JC, Chamon W, Schor P, Carvalho LAV. Entendiendo las aberraciones ópticas del ojo y los principios de su medición. En: “Wavefront analysis”: Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- 250- Charman WN, Walsh G. Variations in the local refractive correction of the eye across in entrance pupil. Opt Vis Sci 1989; 66: 34-40.
- 251- Hamam H. A quick method for analyzing Hartmann-Shack patterns: application to refractive surgery. J Refract Surg 2000; 16 (suppl.): S636-42.
- 252- Thibos LN, Applegate RA, Schwiegerling JT, Webb R. Report from the VSIA Taskforce on standards for reporting optical aberrations of the eye. J Refract Surg 2000; 16 (suppl.): S654-5.
- 253- Williams D, Yoon GY, Porter J, Guirao A, Hofer H, Cox I. Visual benefit of correcting higher order aberrations of the eye. J Refract Surg 2000; 16 (suppl.): S554-9.
- 254- Goodman JW. Introduction to Fourier optics. McGraw-Hill Edition, 1968.
- 255- Malacara D. Optical Shop Testing. 2/E, Wiley-Interscience Edition. 1992.
- 256- Artal P, Marcos S, Navarro R, Williams DR. Odd aberrations and double pass measurements of retinal image quality. J Opt Soc Am A 1995; 12: 195-201.

- 257- Wang JY, Silva DE. Wave interpretation with Zernike polynomials. *Applied Optics* 1980; 19 (9): 1510-8.
- 258- Agarwal A, Kanjani N, Jacob S, Agarwal A, Agarwal S, Agarwal T. Aberropía: una nueva entidad refractiva. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- 259- Klein SA, García DD. Line of sight and alternative representations of aberrations of the eye. *J Refract Surg* 2000; 16 (suppl.): S630-5.
- 260- Schwiegerling J. Theoretical limits to visual performance. *Surv Ophthalmol* 2000; 45 (2): 139-46.
- 261- Williams DR. Aliasing in human foveal vision. *Vision Res* 1985; 25: 195-205.
- 262- Thibos LN. The prospects for perfect vision. *J Refract Surg* 2000; 16 (suppl.): S540-6.
- 263- Yudelis C, Hendrickson A. A qualitative and quantitative analysis of the human fovea during development. *Vision Res* 1986; 26: 847-855.
- 264- Bailey IL. Visual acuity. In: Benjamin WJ, ed, Borish's Clinical Refraction. Philadelphia, PA, WB Saunders 1998; 179-202.
- 265- Applegate RA, Thybos LN, Hilmantel G. Optics of aberroscopy and supervision. *J Cataract Refract Surg* 2001; 27: 1093-1107.
- 266- Miller DT. Retinal imaging and vision at the frontiers of adaptive optics. *Physics today* 2000; 53: 31-6.
- 267- MacRae S. Supernormal vision, hypervision, and customized corneal ablation. *J Cataract Refract Surg* 2000; 26: 154-7.
- 268- Seiler T. Treatments based on Wavefront guided Custom Cornea Corrections. Presented at the International Society of Refractive Surgery Mid-Summer Meeting in Miami, Florida, U.S.A., in July 1999.
- 269- Kanjani N, Jacob S, Agarwal A, Agarwal A, Agarwal S, Agarwal T, Doshi A, Doshi S. Wavefront- and topography-guided ablation in myopic eyes using Zyoptix. *J Cataract Refract Surg* 2004; 30: 398-402.
- 270- Alessio G, Boscia F, La Tegola MG, Sborgia C. Topography-driven Photorefractive Keratectomy. Results of corneal interactive Programmed topographic ablation software. *Ophthalmology* 2000; 107 (8): 1578-87.

- 271- Buzard KA, Fundingsland BR. Treatment of irregular astigmatism with a broad beam excimer laser. *J Refract Surg* 1997; 13: 624-36.
- 272- Gimbel HV, Stoll SB. Photorefractive keratectomy with customized segmental ablation to correct irregular astigmatism after laser in situ keratomileusis. *J Refract Surg* 2001; 17 (2 Suppl): S229-32.
- 273- Knorz M, Neuhann T. Treatment of myopia and myopic astigmatism by customized laser in situ keratomileusis based on corneal topography. *Ophthalmology* 2000; 107 (11): 2072-6.
- 274- Alessio G, Boscia F, La Tegola MG, Sborgia C. Corneal interactive programmed topographic ablation customized photorefractive keratectomy for correction of postkeratoplasty astigmatism. *Ophthalmology* 2001; 108 (11): 2029-37.
- 275- Lafond G, Solomon L. Retreatment of central islands after photorefractive keratectomy. *J Cataract Refract Surg* 1999; 25: 188-96.
- 276- Manche EE, Maloney RK, Smith RJ. Treatment of topographic central islands following refractive surgery. *J Cataract Refract Surg* 1998; 24: 464-70.
- 277- Knorz M, Jendritza B. Topographically-guided laser in situ keratomileusis to treat corneal irregularities. *Ophthalmology* 2000; 107: 1138-43.
- 278- Guirao A, Redondo M, Artal P. Optical aberrations of the human cornea as a function of age. *J Opt Soc Am A Opt Image Sci Vis* 2000; 17 (10): 1697-702.
- 279- McLellan JS, Marcos S, Burns SA. Age-related changes in monochromatic wave aberrations of the human eye. *Invest Ophthalmol Vis Sci* 2001; 42: 1390-95.
- 280- Krueger RR. Diferencias entre varios sistemas de aberrometría. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- 281- Rabinowitz YS, Rasheed K. KISA index: a quantitative videokeratography algorythm embodying minimal topographic criteria for diagnosis of keratoconus. *J Cataract Refract Surg* 1999; 25: 1327-35.
- 282- Mc Donald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented at the Annual Meeting of the International Society of Refractive Surgery in Orlando, Florida, U.S.A., in October 1999.

- 283- Mrochen M, Kaemmerer M, Seiler T. Clinical results of wavefront-guided laser in situ keratomileusis 3 months after surgery. *J Cataract Refract Surg* 2001; 27: 201-7.
- 284- McDonald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented in the Refractive Interest Group Subspecialty Day, in Texas, U.S.A., in October 2000.
- 285- Awwad ST, El-Kateb M, Bowman RW, Cavanagh HD, McCulley JP. Wavefront-guided laser in situ keratomileusis with the Alcon CustomCornea and the VISX CustomVue: three-month results. *J Refract Surg* 2004; 20 (5): S606-13.
- 286- Phusitphoykai N, Tungsiripat T, Siriboonkoom J, Vongthongsri A. Comparison of conventional versus wavefront-guided laser in situ keratomileusis in the same patient. *J Refract Surg* 2003; 19 (suppl.): S217-20.
- 287- Vongthongsri A, Phusitphoykai N, Naripathan P. Comparison of wavefront-guided ablation versus conventional ablation in laser in situ keratomileusis. *J Refract Surg* 2002; 18 (suppl.): S332-5..
- 288- El Danasoury MA, el Maghraby A, Klyce SD, Mehrez K. Comparison of photorefractive keratectomy with excimer laser in situ keratomileusis in correcting low miopía (from -2 to -5.5 D). A randomized study. *Ophthalmology* 1999; 106 (2): 411-20; discussion 420-1.
- 289- El-Maghraby A, Salah T, Waring III GO, Klyce S, Ibrahim O. Randomized bilateral comparison of excimer laser in situ keratomileusis and photorefractive keratectomy for 2.5 to 8.00 diopters of myopia. *Ophthalmology* 1999; 106: 447-57.
- 290- Chalita MR, Chavala S, Xu M, Krueger RR. Wavefront analysis in post-LASIK eyes and its correlation with visual symptoms, refraction and topography. *Ophthalmology* 2004; 111; 447-53.
- 291- Elliott DE, Whitaker D. Clinical contrast sensitivity chart evaluation. *Ophthalmic Physiol Opt* 1992; 12: 275-80.
- 292- Whitaker D, Elliot DB, MacVeigh D. Spatiotemporal contrast sensitivity decline with age. *Invest Ophthalmol Vis Sci* 1989; 30 (suppl.): 406-10.
- 293- Liou SW, Chiu CJ. Myopia and contrast sensitivity function. *Curr Eye Res* 2001; 22 (2): 81-4.

- 294- Kim T, Yang S, Tchah H. Bilateral comparison of wavefront-guided versus conventional laser in situ keratomileusis with Bausch & Lomb Zyoptix. *J Refract Surg* 2004; 20: 432-8.
- 295- Kaiserman I, Hazarbassanow R, Varssano D, Grinbaum A. Contrast Sensitivity after Wave Front-Guided LASIK. *Ophthalmology* 2004; 111: 454-7.
- 296- Quesnel NM, Lovasik JV, Ferremi C, Boileau M, Ieraci C. Laser in situ keratomileusis for myopia and the contrast sensitivity function. *J Cataract Refract Surg* 2004; 30: 1209-18.
- 297- Montes-Micó R, España E, Menezo JL. Mesopic Contrast Sensitivity Function After Laser in situ Keratomileusis. *J Refract Surg* 2003; 19: 353-6.
- 298- Puell Marín MC, Sánchez Ramos C, Barra Lázaro F, Villena Cepeda C. Visión de contraste mesópica con y sin deslumbramiento en sujetos operados de miopía con la técnica LASIK. *Archivos Optométricos* 2001; 5 (2): 92-100.
- 299- Pallikaris IG, Kymionis GD, Panagopoulou SI, Siganos CS, Theodorakis MA, Pallikaris AI. Induced optical aberrations following formation of a laser in situ keratomileusis flap. *J Cataract Refract Surg* 2002; 28 (10): 1737-41.
- 300- Sugar A, Rapuano CJ, Culbertson WW, Huang D, Varley GA. Laser in situ keratomileusis for myopia and astigmatism: safety and efficacy. *Ophthalmology* 2002; 109: 175-87.
- 301- Hersh PS, Brint SF, Maloney RK, Durrie DS, Gordon M, Michelson MA, Thompson VM, Berkeley RB, Schein OD, Steinert RF. Photorefractive keratectomy versus laser in situ keratomileusis for moderate to high myopia. A randomized prospective study. *Ophthalmology* 1998; 105: 1512-22, discussion 1522-3.
- 302- Nuijts RM, Nabar VA, Hament WJ, Eggink FA. Wave-front versus standard laser in situ keratomileusis to correct low to moderated myopia. Presented at the XIXth Congress of the European Society of Cataract & Refractive Surgeons, Amsterdam, The Netherlands, September 2001.
- 303- Durrie DS, Stahl J. Randomized comparison of Custom Laser in situ Keratomileusis with the Alcon CustomCornea and the Bausch & Lomb Zyoptix Systems: one-month results. *J Refract Surg* 2004; 20 (suppl.): S614-8.

8.2- BIBLIOGRAFÍA POR ORDEN ALFABÉTICO:

- Abraham RK, Miller GL. Outpatient argon laser iridectomy for angle closure: a two year study. *Trans Am Acad Ophthalmol Otolaryngol* 1975; 75: 529-34.
- Agarwal A, Kanjiani N, Jacob S, Agarwal A, Agarwal S, Agarwal T. Aberropía: una nueva entidad refractiva. En: “Wavefront analysis”: Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- Aguilar M, Mateos F. Sensibilidad al contraste. En: Aguilar M, Mateos F, eds. Óptica Fisiológica. Universidad Politécnica de Valencia-Servicio de Publicaciones ed. 1994; 15: 77-112.
- Alessio G, Boscia F, La Tegola MG, Sborgia C. Corneal interactive programmed topographic ablation customized photorefractive keratectomy for correction of postkeratoplasty astigmatism. *Ophthalmology* 2001; 108 (11): 2029-37.
- Alessio G, Boscia F, La Tegola MG, Sborgia C. Topography-driven Photorefractive Keratectomy. Results of corneal interactive Programmed topographic ablation software. *Ophthalmology* 2000; 107 (8): 1578-87.
- Alió JL, de la Hoz F, Pérez Santonja JJ. Phakic anterior chamber for the correction of myopia. A 7-year cumulative analysis of complications in 263 cases. *Ophthalmology* 1999; 106: 458-66.
- Applegate RA. Limits to vision: can we do better than Nature?. *J Refract Surg* 2000; 16 (5): S547-51.
- Applegate RA, Hilmantel G, Howland HC, Tu EY, Starck T, Zayac J. Corneal first surface optical aberrations and visual performance. *J Refract Surg* 2000; 16: 507-14.
- Applegate RA, Howland HC. Refractive surgery, optical aberrations, and visual performance. *J Refract Surg* 1997; 13: 295-9.
- Applegate RA, Thybos LN, Hilmantel G. Optics of aberroscopy and supervision. *J Cataract Refract Surg* 2001; 27: 1093-1107.
- Argento C, Cosentino MJ, Rodríguez E. Contrast sensitivity assessment using the visual performance tester. *J Cataract Refract Surg* 2000; 26: 806-9.
- Aristote. Petits traités d'histoire naturelle. Translation to French. Paris 1953.

- Aron Rosa D, Boulnoy J, Carre F. Excimer laser surgery of the cornea: qualitative and quantitative aspects of photoablation according to the energy density. *J Cataract Refract Surg* 1986; 12: 27-33.
- Arrowsmith PN, Mark RG. Evaluating the predictability of radial keratotomy. *Ophthalmology* 1985; 92: 331-8.
- Artal P. Corneal spherical aberration do not change significantly. *J Opt Soc Am*, February 2000.
- Artal P, Fernandez EJ, Manzanera S. Are optical aberrations during accomodation a significant problem for refractive surgery? *J Refract Surg* 2002; 18: S563-S566.
- Artal P, Marcos S, Navarro R, Williams DR. Odd aberrations and double pass measurements of retinal image quality. *J Opt Soc Am A* 1995; 12: 195-201.
- Ashton GC. Segregation analysis of ocular refraction and myopia. *Hum Hered* 1985; 35: 232-9.
- Atchison DA, Collins MJ, Wildsoet CF. Measurement of monochromatic ocular aberrations of human eyes as a function of accommodation by the Howland aberroscope technique. *Vision Res* 1995; 35: 313-23.
- Awwad ST, El-Kateb M, Bowman RW, Cavanagh HD, McCulley JP. Wavefront-guided laser in situ keratomileusis with the Alcon CustomCornea and the VISX CustomVue: three-month results. *J Refract Surg* 2004; 20 (5): S606-13.
- Babcock HW. The possibility of compensating astronomical seeing. *Publ Astron Soc Pac* 1953; 65: 229.
- Baikoff G. The refractive IOL in a phakic eye. *Ophthalmic Practice* 1991; 9: 58-61.
- Bailey IL. Visual acuity. In: Benjamin WJ, ed, *Borish's Clinical Refraction*. Philadelphia, PA, WB Saunders 1998; 179-202.
- Barraquer JI. Bases de la queratoplastia refractiva. *Arch Soc Am Ophthalmol Optom* 1965; 5: 179.
- Barraquer JI. Epikeratoplasty. *Cornea* 1982; 1: 251-4.
- Barraquer JI. Queratomileusis para la corrección de la miopía. *Arch Soc Oftalmol Optom* 1964; 5: 27-48.
- Beazley LD, Illingworth DJ, Jahn A, Greer DV. Contrast sensitivity in children and adults. *Br J Ophthalmol*. 1980 ; 64: 863-6.

- Belda JI, Díaz-Llopis M. Cirugía intraocular en la alta miopía. Ventajas e inconvenientes frente a la cirugía corneal. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 285-90.
- Born M. Principles of Optics. Pergamon Press, 1975: 464-66.
- Bourque LB, Cosand BB, Drews C, Waring GO III, Lynn M, Cartwright C. Reported satisfaction, fluctuation of vision, and glare among patients one year after surgery in the Prospective Evaluation of Radial Keratotomy (PERK) Study. Arch Ophthalmol 1986; 104: 356-63.
- Bradly A, Hook J, Haeseker J. A comparison of clinical acuity and contrast sensitivity charts: effect of uncorrected myopia. Ophthalmic Physiol Opt 1991; 11: 218-26.
- Branch Vein Occlusion Study Group. Argon laser scatter photocoagulation for prevention of neovascularitation and vitreous hemorrhage in branch vein occlusion. Arch Ophthalmol 1986; 104: 34-40.
- Brodstein RS, Brodstein DE, Olson RJ. The treatment of myopia with atropine and bifocals; a long-term prospective study. Ophthalmology 1984; 91: 1373-1378.
- Buratto L, Ferrari M, Genisi C. Myopic keratomileusis with the excimer laser: one-year follow up. Refract Corneal Surg 1993; 9: 12-9.
- Buratto L, Perone G. El Excimer Laser para LASIK. En: LASIK: técnicas quirúrgicas y complicaciones. Colombia: SLACK Incorporated, 2000: 299-338.
- Burns SA. The spatially resolved refractometer. J Refract Surg 2000; 16 (suppl.): S566-9.
- Buzard KA, Fundingsland BR. Treatment of irregular astigmatism with a broad beam excimer laser. J Refract Surg 1997; 13: 624-36.
- Campbell CJ, Rittler MC, Koester CJ. The optical maser as retina photocoagulator: an evaluation. Trans Am Acad Ophthalmol Otolaryngol 1963; 67: 158-63.
- Campos M, Nielson S, Szerenky K. Clinical follow-up of phototherapeutic keratectomy for treatment of corneal opacities. Am J Ophthalmol 1993; 115: 433-7.
- Camellin M. Laser epithelial keratomileusis for myopia. J Refract Surg. 2003; 19 (6): 666-70.

- Cardona Ausina C, Perez Santonja JJ, Ayala Espinosa MJ, Claramonte Meseguer P, Artola Roig A, Alio JL. Contrast sensitivity after laser in situ keratomileusis for myopia (LASIK-M). Arch Soc Esp Oftalmol 2000; 75 (8): 541-6.
- Carvalho LA, Castro JC, Chamon W, Schor P, Carvalho LAV. Entendiendo las aberraciones ópticas del ojo y los principios de su medición. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- Chalita MR, Chavala S, Xu M, Krueger RR. Wavefront analysis in post-LASIK eyes and its correlation with visual symptoms, refraction and topography. Ophthalmology 2004; 111; 447-53.
- Chan JW, Edwards MH, Woo GC, Woo CP. Contrast sensitivity after laser in situ keratomileusis. One year follow-up. J Cataract Refract Surg 2002; 28 (10): 1774-9.
- Charman WN. Night myopia and driving. Ophthalmic Physiol Opt 1996; 16: 474-85.
- Charman WN, Walsh G. Variations in the local refractive correction of the eye across in entrance pupil. Opt Vis Sci 1989; 66: 34-40.
- Colin J, Cochener B, Savary G, Malet F. INTACS® para el tratamiento del queratocono. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 164-8.
- Collins JW, Carney LG. Visual performance in high myopia. Curr Eye Res 1990; 3: 217-23.
- Cózar Mata JL. Deficiencia Visual: Intervención Psicopedagógica. Facultad CC EE de la Universidad de Granada. <http://www.psicopedagogia.com/articulos/?articulo=459>.
- Curtin BJ. The myopia: Basic science and clinical management. Harper and Row, Philadelphia, 1985.
- Dausch D, Klein R, SchroderE. Excimer laser photorefractive keratectomy for hyperopia. Refract Corneal Surg 1993; 9: 20-8.
- Dausch D, Klein R, Landesz M. Photorefractive keratectomy to correct astigmatism with myopia or hypermetropia. J Cataract Refract Surg 1994; 20 (Suppl) :252-7.
- Davidson DW. Visual acuity. En: Eskridge JB, Amos JF, Bartlett JD. Clinical procedures in optometry. Philadelphia: Halliday Lithograph Corp 1991: 17-29.

- Derefeldt G, Lennerstrand G, Lundh B. Age variations in normal human contrast sensitivity. *Acta Ophthalmol (Copenh)*. 1979; 57(4): 679-90.
- Doane JF, Cavanaugh TB, Durrie DS, Hassanein KM. Relation of visual symptoms to topographic ablation zone decentration after excimer laser photorefractive keratectomy. *Ophthalmology* 1995; 102: 42-7.
- Doane JF, Morris S, Border AD, EuDaly LS, Denning JA, Probst LE. Análisis del frente de onda. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- Donders FC. On the Anomalies of Acomodation and Refraction of the Eye. London: New Sydenham Society; 1864.
- Duke-Elder. Miopía. En: Duke-Elder, Abrams D, eds. Refracción, teoría y práctica. Barcelona: JIMS, 1985: 59-69.
- Durán de la Colina JA. Defectos de refracción. En: "Oftalmología Clínica". Kanski JJ. Edición en español. Mosby/Doyma Libros, SA, 1996: 409-421.
- Durrie DS, Asbell PA, Burris TE, Schanzlin DJ. Reversible refractive effect: data from the phase II study of the 360° ICR in myopic eyes. ASCRS Meeting. Seattle 1996.
- Durrie DS, Stahl J. Randomized comparison of Custom Laser in situ Keratomileusis with the Alcon CustomCornea and the Bausch & lomb Zyoptix Systems: one-month results. *J Refract Surg* 2004; 20 (suppl.): S614-8.
- Dyer PE, Srinivasan R. Nanosecond photoacoustic studies on ultraviolet laser ablation of organic polymers. *Appl Phys Lett* 1983; 48: 445-51.
- Early Treatment Diabetic Retinopathy Study Research Group Report Number 1. Photocoagulation for diabetic macular edema. *Arch Ophthalmol* 1985; 103: 1796-1800.
- Early Treatment Diabetic Retinopathy Study Research Group Report Number 2. Treatment techniques and clinical guidelines for photocoagulation of diabetic macular edema. *Ophthalmology* 1987; 94: 760-6.
- El Danasoury MA, el Maghraby A, Klyce SD, Mehrez K. Comparison of photorefractive keratectomy with excimer laser in situ keratomileusis in correcting low miopía (from -2 to -5.5 D). A randomized study. *Ophthalmology* 1999; 106 (2): 411-20; discussion 420-1.

- El-Maghraby A, Salah T, Waring III GO, Klyce S, Ibrahim O. Randomized bilateral comparison of excimer laser in situ keratomileusis and photorefractive keratectomy for 2.5 to 8.00 diopters of myopia. *Ophthalmology* 1999; 106: 447-57.
- Elliott DE, Whitaker D. Clinical contrast sensitivity chart evaluation. *Ophthalmic Physiol Opt* 1992; 12: 275-80.
- Essente S, Passarelli N, Falco L, Guidi D. Contrast sensitivity under photopic conditions in photorefractive keratectomy: a preliminary study. *Refract Corneal Surg* 1993; 9 (suppl): S70-2.
- Fankhauser F. Clinical studies of the efficiency of high power laser radiation upon some structures of the anterior segment of the eye. *Int Ophthalmol* 1981; 3: 129-34.
- Fechner PU, Strobel J, Wichman W. Correction of myopia by implantation of a concave Worst-iris claw lens into phakic eyes. *Refract Corneal Surg* 1991; 7: 286-98.
- Fechner PU, Worst JGF. A new concave intraocular lens for the correction of high myopia. *Eur J Implant Refract Surg* 1989; 1: 41-3.
- Fejer TP, Girgis R. Night myopia: implications for the young driver. *Can J Ophthalmol* 1992; 27: 172-6.
- Fleishman JA, Beck RW, Linares OA, Klein JW. Deficits in visual function after resolution of optic neuritis. *Ophthalmology* 1987; 94: 1029-35.
- Fleming JF, Reynolds AE, Kilmer L, Burris TE, Abbott RL, Schanzlin DJ. The intrastromal corneal ring: two cases in rabbits. *J Refract Surg* 1987; 3: 227-232.
- Fukala V. Operative behandlung der hochstgradigen myopie dur apakie. *Graefe's Arch Ophthalmol* 1890; 36: 230-44.
- Furlan W, García Monreal JG, Muñoz Escrivá L. Introducción al examen subjetivo. En: "Fundamentos de Optometría. Refracción ocular". Valencia: Puertas SL; 2000: 141-81.
- Fyodorov SN, Zuyev VK, Tumanyan ER. Modern approach to the stagewise complex surgical therapy of high myopia. *J Transactions of International Symposium of IOL implantation and Refractive Surgery. Moscow, RSFSP Ministry of Health* 1987: 274-9.
- Gabler B, Winkler von Mohrenfels C, Dreis A. Vitality of epithelial cells after alcohol exposure during laser-assisted subepithelial keratectomy flap preparation. *J Cataract Refract Surg* 2002, 28: 1841-1846.

- Gaith AA, Hussein AH, Stulting RD. Comparison of the effect of radial keratotomy and photorefractive keratectomy on contrast sensitivity and glare disability. Tesis Doctoral, universidad de Alejandría 1995.
- Gatell J. Tratamiento personalizado de la miopía. Tesis Doctoral. Universidad Autónoma de Barcelona. 2002.
- Gatinel D, Hoang-Xuang T, Azar DT. Determination of corneal asphericity after myopia surgery with the Excimer Laser: A mathematical model. Invest Ophthalmol Vis Sci 2001; 42: 1736-42.
- Gil del rio, E. La refracción del ojo y sus anomalías. Ed. "Tip.Cat.Casals", 1957.
- Gimbel HV, Stoll SB. Photorefractive keratectomy with customized segmental ablation to correct irregular astigmatism after laser in situ keratomileusis. J Refract Surg 2001; 17 (2 Suppl): S229-32.
- Ginsburg AP. The evaluation of contact lenses and refractive surgery using contrast sensitivity. In Dabezie OH, ed. Contact lenses. The CLAO guide to basic science and clinical practice. New York: Grune & Stratton, 1987; 56:1-19.
- Glasser A, Campbell CW. Presbyopia and the optical changes in the human crystalline lens with age. Vision Res 1998; 38 (2): 209-29.
- Goldberg MF. Clear lens extraction of axial myopia: an appraisal. Ophthalmology 1987; 94: 571-82.
- Goldsmidtt E, Jensen H. Pharmaceutical agents in the control of myopia. Res Clin Forums 1987; 9: 43-51.
- Goodman JW. Introduction to Fourier optics. McGraw-Hill Edition, 1968.
- Grosvenor T, Goss DA. The role of bifocal and contact lenses in myopia control. Acta Ophthalmol Suppl 1988; 185: 162-6.
- Gris O, Güell JL. Extracción del cristalino transparente. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 371-80.
- Gris O, Güell JL. Queratomileusis en fresco y de congelación. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 168-70.
- Grundfest WS, Litvack F, Forrester JS. Laser ablation of human atherosclerotic plaque without adjacent tissue injury. J Am Coll Cardiol 1985; 5: 429-36.

- Güell Villanueva, JL. Queratomileusis in situ asistida con el láser. Desarrollo de la técnica para la corrección de la miopía y el astigmatismo. Tesis doctoral. Barcelona 1999.
- Güell JL, Vázquez M. Queratomileusis in situ asistida con laser excimer (LASIK): técnica quirúrgica. En: Menezo JL, Güell JL. Corrección quirúrgica de la alta miopía. Espaxs SA, Barcelona 2001: 223-50.
- Guirao A, Redondo M, Artal P. Optical aberrations of the human cornea as a function of age. J Opt Soc Am A Opt Image Sci Vis 2000; 17 (10): 1697-702.
- Guirao A, Porter J, Williams DR, Cox IG. Calculated impact of high-order monochromatic aberrations on retinal image quality in a population of human eyes. J Opt Soc Am A Opt Image Sci Vis 2002; 19 (3): 620-8.
- Hamam H. A quick method for analyzing Hartmann-Shack patterns: application to refractive surgery. J Refract Surg 2000; 16 (suppl.): S636-42.
- Hamam H. Las aberraciones y su impacto en la calidad de la visión. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of Ophthalmology International, Panamá 2003.
- Hanna K, Chastang JC, Pouliquen Y. A rotating slit delivery system for excimer laser refractive keratoplasty. Am J Ophthalmol 1987; 103: 474-81.
- Hartmann J. Bemerkungen über den Bau und die Justierung von Spektrographen. Z Instrumentenkde 1900; 20: 47.
- Harto MA, España E, Menezo JL. Queratotomía radial. En: "Corrección quirúrgica de la alta miopía". Menezo JL, Güell JL. Espaxs, Barcelona 2001: 130-44..
- He JC, Burns SA, Marcos S. Monochromatic aberrations in the accommodated human eye. Vision Res 2000; 40: 41-8.
- He JC, Marcos S, Webb RH, Burns SA. Measurements of the wave-front aberration of the eye by a fast psychophysical procedure. J Opt Soc Am A 1998; 15 (9): 2449-56.
- Helmholtz H. Popular Scientific Lectures. New York: Dover 1962.
- Hemenger RP. Intraocular light scatter in normal lens with age. Appl Optics 1984; 23: 1972-74.
- Henri-Martine T. Hypothèse astronomique de Pythagore. Rome 1872.

- Herrera Piñero R, Amigó Rodríguez A. PRL. Resultados tras 2 años de seguimiento. Arch Soc Canar Oftal 2004; 15.
- Hersh PS, Brint SF, Maloney RK, Durrie DS, Gordon M, Michelson MA, Thompson VM, Berkeley RB, Schein OD, Steinert RF. Photorefractive keratectomy versus laser in situ keratomileusis for moderate to high myopia. A randomized prospective study. Ophthalmology 1998; 105: 1512-22, discussion 1522-3.
- Hirsch MJ, Weymouth FW. Prevalence of refractive anomalies. En: Grosvenor T, Flom M. "Refractive anomalies research and clinical applications". Butterworth-Heinemann, Boston, 1990: 15-37.
- Hodkin MJ, Lemos MM, McDonald MB, Holladay JT, Shahidi SH. Near vision contrast sensitivity after photorefractive keratectomy. J Refract Surg 1997; 23: 192-5.
- Holladay JT, Dudeja DR, Chang J. Functional vision and corneal changes after laser in situ keratomileusis determined by contrast sensitivity, glare testing and corneal topography. J Cataract Refract Surgery 1999; 25: 663-9.
- Hong X, Thibos LN. Longitudinal evaluation of optical aberrations following laser in situ keratomileusis surgery. J Refract Surg 2000; 16 (5): S647-50.
- Hope GM, Rubin ML. Night myopia. Surv Ophthalmol 1984; 29: 129-36.
- Howland B. Use of crossed cylinder lens in photographic lens evaluation. Appl Optics 1960; 7: 1587-8.
- Howland HC, Howland B. A subjective method for measurement of chromatic aberrations of the eye. J Opt Soc Am 1977; 67: 1508-18.
- Jindra LF, Zemon V. Contrast sensitivity testing: A more complete assessment of vision. J Cataract Refract Surg 1989; 15: 141-8.
- Joly P, Baikoff G, Bonnet P. Mise en place d'un implant négatif de chambre antérieure chez des sujets phakes. Bull Soc Ophthalmol Fr 1989; 5: 727-33.
- Kaemmerer M, Mrochen M, Mierdel P, Krinke HE, Seiler T. Clinical experience with the Tscherning aberrometer. J Refract Surg 2000; 16 (suppl.): S584-7.
- Kahle G, Seiler T, Wollensak J. Report of psychosocial finding and satisfaction among patients 1 year after excimer laser photorefractive keratectomy. Refract Corneal Surg 1992; 8: 286-289.

- Kaiserman I, Hazarbassanow R, Varssano D, Grinbaum A. Contrast Sensitivity after Wave Front-Guided LASIK. *Ophthalmology* 2004; 111: 454-7.
- Kaminski SL, Biowski R, Koyuncu D, Lukas JR, Grabner G. Ten-year follow-up of epikeratophakia for the correction of high myopia. *Ophthalmology* 2003; 110: 2147-52.
- Kanjani N, Jacob S, Agarwal A, Agarwal A, Agarwal S, Agarwal T, Doshi A, Doshi S. Wavefront- and topography-guided ablation in myopic eyes using Zyoptix. *J Cataract Refract Surg* 2004; 30: 398-402.
- Kaufman HE. The correction of aphakia. Lathing of corneal tissue. *Curr Eye Res* 1981; 1: 123-9.
- Kayazawa F, Yamamoto T, Itoi M. Temporal contrast sensitivity in central serous choroidopathy. *Ann Ophthalmol* 1982; 14: 272-5.
- Kim T, Yang S, Tchah H. Bilateral comparison of wavefront-guided versus conventional laser in situ keratomileusis with Bausch & Lomb Zyoptix. *J Refract Surg* 2004; 20: 432-8.
- Klein SA, García DD. Line of sight and alternative representations of aberrations of the eye. *J Refract Surg* 2000; 16 (suppl.): S630-5.
- Knorz M, Jendritza B. Topographically-guided laser in situ keratomileusis to treat corneal irregularities. *Ophthalmology* 2000; 107: 1138-43.
- Knorz M, Neuhann T. Treatment of miopía and myopic astigmatism by customized laser in situ keratomileusis based on corneal topography. *Ophthalmology* 2000; 107 (11): 2072-6.
- Koch DD. Glare and contrast sensitivity for the clinician. *Ophthalmol Clin N Am* 1989; 2(3): 415-29.
- Kohnen T. Measuring vision in refractive surgery. *J Cataract Refract Surg* 2001; 27: 1897-8.
- Krauss JM, Puliafito CA, Steinert RF. Laser interactions with the cornea. *Surv Ophthalmol* 1986; 31: 37-53.
- Krueger RR. Diferencias entre varios sistemas de aberrometría. En: "Wavefront analysis": Aberrómetros y Topografía Corneal. Edición en español. Highlights of *Ophthalmology International*, Panamá 2003.

- Krueger RR, Trokel SL. Quantitation of corneal ablation by ultraviolet laser light. *Arch Ophthalmol* 1985; 103: 1741-2.
- Kupersmith MJ, Nelson JL, Seiple WH, Carr RE. The 20/20 eye in multiple sclerosis. *Neurology* 1983; 33: 1015-20.
- L'Esperance FA. An ophthalmic argon laser photocoagulation system: design, construction and laboratory investigations. *Trans Am Ophthalmol Soc* 1968; 66: 827-34.
- L'Esperance FA. History and development of the excimer laser. En: Thompson B, McDonnell PJ, eds. *Excimer Laser Surgery: The Cornea*. Ed. Igaku-Shoin, New York, 1993.
- L'Esperance FA. Ophthalmic lasers. Photocoagulation, photoradiation and surgery. St. Louis, CV Mosby. 1983: 22-25.
- Lafond G, Solomon L. Retreatment of central islands after photorefractive keratectomy. *J Cataract Refract Surg* 1999; 25: 188-96.
- Lane RJ, Wynne JJ. Medical applications of excimer lasers. *Lasers Appl* 1984; 3: 59-65.
- Lang GK, Naumann GOH. Corneal trephination with the excimer laser for penetrating keratoplasty. En: Thompson FB, McDowell PJ (eds): *Color Atlas / Text of excimer laser surgery*. Igaku-Shoin. New York 1993: 131-136).
- Lang GK, Schroeder E, Koch E. Excimer laser keratoplasty: basic concepts. *Ophthalmic Surg* 1989; 20: 262-70.
- Langrova H, Hejcmanova D, Peregrin J. Visual functions after photorefractive keratectomy. *Acta Medica* 1997; 40: 47-9.
- Laroche L, Gauthier L, Thenot JC. Nonfreeze myopic keratomileusis for myopia in 158 eyes. *J Refract Corneal Surg* 1994; 10. 400-12.
- Liang J, Grimm B, Goelz S, Bille JF. Objective measurement of wave aberrations of the human eye with the use of a Hartmann-Shack wave-front sensor. *J Opt Soc Am A* 1994; 11: 1949-57.
- Liang J, Williams DR. Aberrations and retinal image quality of the normal human eye. *J Opt Soc Am A* 1997; 14: 2873-83.

- Liou SW, Chiu CJ. Myopia and contrast sensitivity function. *Curr Eye Res* 2001; 22 (2): 81-4.
- Lohmann CP, Timberlake G, Fitzke FW. Corneal light scattering after laser photorefractive keratectomy: the objective measurements of haze. *Refract Corneal Surg* 1992; 8: 114-21.
- MacRae S. Supernormal vision, hypervision, and customized corneal ablation. *J Cataract Refract Surg* 2000; 26: 154-7.
- Maffei L, Fiorentini A. The visual cortex as a spatial frequency analyzer. *Vis Res* 1973; 13: 1255-67.
- Maguen E, Machat J. Complications of photorefractive keratectomy, Primarily with the VISX excimer laser. In: Salz JJ, McDonnell PJ, McDonald MB, eds. *Corneal laser surgery*. St. Louis: CV Mosby, 1995; 143-58.
- Maiman TH. Simulated optical radiation in ruby. *Nature* 1960; 187: 493-6.
- Majima A, Nakajima A, Ichikawa H. Prevalence of ocular anomalies among schoolchildren. *Am J Ophthalmol* 1960; 50: 139-46.
- Malacara D. *Optical Shop Testing*. 2/E, Wiley-Interscience Edition. 1992.
- Maldonado MJ, Lohman C. Cirugía de la miopía mediante el uso del láser. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs SA, Barcelona 2001: 177-94.
- Malley DS, Steinert RF, Pulafito CA. Immunofluorescence study of corneal wound healing after excimer laser anterior keratectomy in the monkey eye. *Arch Ophthalmol* 1990; 108: 1316-22.
- Manche EE, Malone RK, Smith RJ. Treatment of topographic central islands following refractive surgery. *J Cataract Refract Surg* 1998; 24: 464-70.
- Mandell RB, St. Helen R. Mathematical model of the corneal contour. *Br J Physiol Opt* 1971; 26: 183-97.
- Manero F, Güell JL. Aspectos básicos y particularidades de la alta miopía. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs SA, Barcelona 2001: 13-26.
- March WF. *Ophthalmic Lasers*. Ed. SLACK, Inc. Thorofare 1984.

- Marcos S. Aberrations and visual performance following standard laser correction. *J Refract Surg* 2001; 17 (5): S596-601.
- Marinho A, Ceu Pinto M, Vaz F. LIO fáquica, criterios de selección. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs SA, Barcelona 2001: 331-40.
- Marmor MF. Contrast sensitivity versus visual acuity in retinal disease. *Br J Ophthalmol*. 1986; 70(7): 553-9.
- Marshall J, Trokel SL, Rothery S, Krueger RR. Long therm healing of the central cornea after photorefractive keratectomy using an excimer laser. *Ophthalmoligy* 1988; 95: 1411-5.
- Marshall J, Trokel SL, Rothery S, Krueger RR. Photoablation reprofiling of the cornea using an excimer laser: photorefractive keratectomy. *Lasers and Light in Ophthalmology* 1986; 1: 21-48.
- Martínez CE, Applegate RA, Klyce SD, McDonald MB, Medina JP, Howland HC. Effect of pupillary dilation on corneal optical aberrations after photorefractive keratectomy. *Arch Ophthalmol* 1998; 116: 1053-62.
- McDonald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented at the Annual Meeting of the International Society of Refractive Surgery in Orlando, Florida, U.S.A., in October 1999.
- Mc Donald MB. Treatments based on Wavefront guided Custom Cornea Corrections. Presented in the Refractive Interest Group Subspecialty Day, in Texas, U.S.A., in October 2000.
- McDonald MB, Frantz JM, Klyce SD. Central photorefractive keratectomy for myopia. The blind eye study. *Arch Ophthalmol* 1990; 108: 799-808.
- McDonald MB, Frantz JM, Klyce SD. One year refractive results of central photorefractive keratectomy for myopia in non-human primate cornea. *Arch Ophthalmol* 1990; 108: 40-7.
- McDonald MB, Liu JC, Byrd TJ. Central photorefractive keratectomy for myopia: Partially sighted and normally sighted eyes. *Ophthalmology* 1991; 98: 1327-37.
- McDonnell PJ, Moreire H, Garbus J. Photorefractive keratectomy to create toric ablations for correction of astigmatism. *Arch Ophthalmol* 1991; 109: 710-3.

- McDonnell PJ, Seiler T. Phototherapeutic keratectomy with the excimer laser for Reis-Bückler corneal dystrophy. *Refract Corneal Surg* 1992; 8: 306-10.
- McHugh JDA, Marshall J, Fytche TJ. Initial clinical experiments using diode laser in the treatment of retinal vascular disease. *Eye* 1989; 3: 516-21.
- McLellan JS, Marcos S, Burns SA. Age-related changes in monochromatic wave aberrations of the human eye. *Invest Ophthalmol Vis Sci* 2001; 42: 1390-95.
- McLeod SD. Beyond Snellen Acuity. The assessment of visual function after refractive surgery. *Arch Ophthalmol* 2001; 119: 1371-3. (Letter).
- Menezo JL, Cisneros A, Cervera M, Harto M. Iris-claw phakic lens: intermediate and long-term corneal endothelial changes. *Eur J Implant Refrat Surg* 1994; 6: 195-9.
- Menezo JL, Cisneros A, Harto M. Extracapsular cataract extraction and implantation of a low power lens for high myopia. *J Cataract Refract Surg* 1988; 14: 409-12.
- Menezo JL, Cisneros AL. Lentes fáquicas epicapsulares. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs, Barcelona 2001: 341-69.
- Menezo JL, Cisneros AL. Técnicas quirúrgicas limitadas. En: Menezo JL, Güell JL. *Corrección quirúrgica de la alta miopía*. Espaxs, Barcelona 2001: 113-29.
- Miéli A. *La science arabe et son rôle dans l'évolution scientifique mondiale*, réédition. Leiden 1966.
- Miller D. Optics and Refraction: A user-friendly guide. In: Podos SM, Yanoff M, eds. *Textbook of Ophthalmology*. London: CV Mosby 1994; 1 (7): 14-24.
- Miller DT. Retinal imaging and vision at the frontiers of adaptive optics. *Physics today* 2000; 53: 31-6.
- Miller D. Glare and contrast sensitivity testing. In Duane's, *Ophthalmology Clinical* volume 1 chapter 35. Hagerstown, MD: Lippincott-Raven Publishers, Inc.; 1996.
- Miller JM, Anwaruddin R, Straub J, Schwiegerling J. Higher order aberrations in normal, dilated, intraocular lens and LASIK corneas. *J Refract Surg* 2002; 18: S579-S583.
- Mimouni F, Colin J, Koffi V, Bonnet P. Damage to the corneal endothelium from anterior chamber intraocular lenses in phakic myopic eyes. *Refract Corneal Surg* 1991; 7: 277-81.

- Molebny VV, Panagopoulou SI, Molebny SV, Wakil YS, Pallikaris IG. Principles of Ray Tracing Aberrometry. *J Refract Surg* 2000; 16 (suppl.): S572-5.
- Montes-Mico R, Charman WN. Choice of spatial frequency for contrast sensitivity evaluation after corneal refractive surgery. *J Refract Surg* 2001; 17 (6): 646-51.
- Montes-Mico R, Charman WN. Mesopic contrast sensitivity function after excimer laser photorefractive keratectomy. *J Refract Surg* 2002; 18: 9-13.
- Montes-Micó R, España E, Menezo JL. Mesopic Contrast Sensitivity Function After Laser in situ Keratomileusis. *J Refract Surg* 2003; 19: 353-6.
- Moreno-Barriuso E, Lloves JM, Marcos S, Navarro R, Llorente L. Ocular aberrations before and after myopic corneal refractive surgery: LASIK-induced changes measured with laser ray tracing. *Invest Ophthalmol Vis Sci* 2001; 42 (6): 1396-403.
- Moreu Gonzalez-Pola, A. Concepto y tratamiento moderno de la miopía maligna. Medicamenta. Septiembre 1934 año XII; 259: 151-156.
- Mrochen M, Kaemmerer M, Mierdel P, Krinke HE, Seiler T. Principles of Tscherning Aberrometry. *J Refract Surg* 2000; 16 (suppl.): S570-1.
- Mrochen M, Kaemmerer M, Seiler T. Clinical results of wavefront-guided laser in situ keratomileusis 3 months after surgery. *J Cataract Refract Surg* 2001; 27: 201-7.
- Mrochen M, Kaemmerer M, Seiler T. Wavefront-guided laser in situ keratomileusis: early results in three eyes. *J Refract Surg* 2000; 16 (2): 116-23.
- Mrochen M, Seiler T. Fundamentals of wavefront-guided refractive corneal surgery. *Ophthalmologe* 2001; 98 (8): 703-14.
- Mugler C. Les origines de la science grecque chez Homère. Paris 1964.
- Muller D, Svrluga R. Excimer lasers offer promise in surgical applications. *Laser Focus* 1985; 21: 71-6.
- Munnerlyn CR, Koons SJ, Marshall J. Photorefractive keratectomy: a technique for laser refractive surgery. *J Cataract Refract Surg* 1988; 14: 46-52.
- Mutyala S, McDonald MB, Scheinblum KA, Ostrick MD, Brint SF, Thompson H. Contrast sensitivity evaluation after laser in situ keratomileusis. *Ophthalmology* 2000; 107 (10): 1864-7.

- Nadler DJ. Glare and contrast sensitivity in cataracts and pseudophakia. In: Nadler MP, Miller D, Nadler DJ, eds. *Glare and contrast sensitivity for clinicians*. New York: Springer-Verlag 1990; 53-65.
- Niesen UM, Businger U, Hartmann P, Senn P, Schipper I. Glare sensitivity and visual acuity after excimer laser photorefractive keratectomy for myopia. *British J Ophthalmol* 1997; 81: 136-40.
- Niesen UM, Businger U, Schipper I. Disability glare after excimer laser photorefractive keratectomy for myopia. *J Refract Surg* 1996; 12 (suppl): S267-8.
- Nio YK, Janssonius NM, Fidler V, Geraghty E, Norrby S. Spherical and irregular aberrations are important for the optimal performance of the human eye. *Ophthalmic Physiol Opt* 2002; 22 (2): 103-12.
- Noll RJ. Zernike polynomials and atmospheric turbulence. *J Opt Soc Am* 1976; 66 (3): 207-11.
- Nose W, Neves RA, Burris TE, Schanzlin DJ, Belfort R jr. Intrastromal corneal ring: 12-months sighted myopic eyes. *J Refract Surg* 1996; 12: 20-28.
- Nuijts RM, Nabar VA, Hament WJ, Eggink FA. Wave-front versus standard laser in situ keratomileusis to correct low to moderated myopia. Presented at the XIXth Congress of the European Society of Cataract & Refractive Surgeons, Amsterdam, The Netherlands, September 2001.
- Örndahl M, Fagerholm P, Fitzsimmons T. Treatment of corneal dystrophies with the excimer laser. *Acta Ophthalmol* 1994; 72: 235-40.
- Oshika T, Klyce SD, Applegate RA, Howland HC, El Danasoury M. Comparison of corneal wavefront aberrations after photorefractive keratectomy and laser in situ keratomileusis. *Am J Ophthalmol* 1999; 127 (1): 1-7.
- Oshika T, Miyata K, Yokunaga T, Samejima T, Amano S, Tanaka S, Hirohara Y, Mihashi T, Maeda N, Fujikado T. Higher order wavefront aberrations of cornea and magnitude of refractive correction in laser in situ keratomileusis. *Ophthalmology* 2002; 109 (6): 1154-8.
- Oshika T. Quantitative assessment of quality of vision. *Nippon Ganka Gakkai Zashi* 2004; 108: 770-807.

- Owsley C, Sekuler R, Siemsen D. Contrast sensitivity throughout adulthood. *Vis Res* 1983; 23: 689-99.
- Owsley C, Sloane ME. Contrast sensitivity, acuity and the perception of “real-world” targets. *Br J Ophthalmol* 1987; 71: 791-6.
- Pallikaris IG, Kymionis GD, Panagopoulou SI, Siganos CS, Theodorakis MA, Pallikaris AI. Induced optical aberrations following formation of a laser in situ keratomileusis flap. *J Cataract Refract Surg* 2002; 28 (10): 1737-41.
- Pallikaris IG, Papatzanaki ME, Siganos DS, Tsilimbaris MK. A corneal flap technique for laser in situ keratomileusis. Human studies. *Arch Ophthalmol* 1991; 109: 1699-702.
- Pallikaris IG, Papatzanaki ME, Stathi EZ. Laser in situ keratomileusis. *Lasers Surg Med* 1990; 10: 463-8.
- Pallikaris IG, Siganos DS. Excimer laser in situ keratomileusis and photorefractive keratectomy for correction of high myopia. *J Refract Corneal Surg* 1994; 10: 498-510.
- Palomo Alvarez C, Cuiña Sardiña R, García Feijoó J, García Sanchez J. Dioptria ocular y optotipos. En: “Refracción ocular y baja visión”. LXXIX Ponencia Oficial de la Sociedad Española de Oftalmología, 2003: 27-42.
- Panagopoulou SI, Pallikaris IG. Wavefront customized ablations with the WASCA Asclepio workstation. *J Refract Surg* 2001; 17 (5): S608-12.
- Parker PJ, Klyce SD, Ryan B. Central topographic islands following photorefractive keratectomy. *Invest Ophthalmol Vis Sci* 1993; 34 (suppl): 803.
- Pelli DG, Robson JG, Wilkin AJ. The design of a new letter chart for measuring contrast sensitivity. *Clin Vis Sci* 1988; 2: 187-99.
- Pérez Santonja JJ. Lentes de cámara anterior en ojos fáquicos para la corrección de altas miopías. Tesis Doctoral. Facultad de Medicina. Universidad Complutense de Madrid. Madrid 1995.
- Pérez Santonja JJ, Iradier MT, Sanz Iglesias L, Serrano JM, Zato MA. Endothelial changes in phakic eyes with anterior chamber intraocular lenses to correct high myopia. *J Cataract Refract Surg* 1996; 22: 1017-22.
- Perez Santonja JJ, Sakla HF, Alio JL. Contrast sensitivity after laser in situ keratomileusis. *J Cataract Refract Surg* 1998; 24 (2): 183-9.

- Phusitphoykai N, Tungsiripat T, Siriboonkoom J, Vongthongsri A. Comparison of conventional versus wavefront-guided laser in situ keratomileusis in the same patient. *J Refract Surg* 2003; 19 (suppl.): S217-20.
- Prager T. Essential factors in testing for glare. In: Nadler MP, Miller D, Nadler DJ (eds). *Glare and contrast sensitivity for clinicians*. New York: Springer-Verlag, 1990; 33-34.
- Puell Marín MC, Sánchez Ramos C, Barra Lázaro F, Villena Cepeda C. Visión de contraste mesópica con y sin deslumbramiento en sujetos operados de miopía con la técnica LASIK. *Archivos Optométricos* 2001; 5 (2): 92-100.
- Quesnel NM, Lovasik JV, Ferremi C, Boileau M, Ieraci C. Laser in situ keratomileusis for myopia and the contrast sensitivity function. *J Cataract Refract Surg* 2004; 30: 1209-18.
- Rabinowitz YS, Rasheed K. KISA index: a quantitative videokeratography algorythm embodying minimal topographic criteria for diagnosis of keratoconus. *J Cataract Refract Surg* 1999; 25: 1327-35.
- Risse JF, Saint-Blancat P, Boissonnot M, Grillot L. Spatial contrast sensitivity in patients with severe myopia. *J Fr Ophthalmol* 1996; 19: 271-7.
- Rodríguez JL. *Noticias Médicas*. 1998; 3688: 38.
- Rowsey JJ, Balyeat HD. Preliminary results and complications of radial keratotomy. *Am J Ophthalmol* 1982; 93: 437-55.
- Ruderman W. Excimer lasers in photochemistry. *Laser Focus* 1979; 68-9.
- Sarver EJ, Applegate RA. Modeling and predicting visual outcomes with VOL-3D. *J Refract Surg* 2000; 16 (suppl.): S611-8.
- Sato T, Akiyama K, Shibata H. A new surgical approach to myopia. *Am J Ophthalmol* 1953; 36: 823-9.
- Sato T. The cause and prevention of school myopia. *Excerpta Medica* 1993. Amsterdam: 7-11.
- Schanzlin DJ, Asbell PA, Durrie DS. ICR segments: preliminary results from a phase II study of the 360° ICR in myopic eyes. ASCRS Meeting. Seattle. 1996.
- Schroder E. Ophthalmic excimer laser delivery system for corneal surgery. *Laser* 1986; 2: 44-51.

- Schwiegerling J. Theoretical limits to visual performance. *Surv Ophthalmol* 2000; 45 (2): 139-46.
- Schwiegerling J, Snyder RW. Corneal ablation patterns to correct for spherical aberration in photorefractive keratectomy. *J Cataract Refract Surg* 2000; 26: 214-21.
- Seiler T. Treatments based on Wavefront guided Custom Cornea Corrections. Presented at the International Society of Refractive Surgery Mid-Summer Meeting in Miami, Florida, U.S.A., in July 1999.
- Seiler T, Bende T, Wollensak J. Excimer laser keratectomy for correction of astigmatism. *Am J Ophthalmology* 1988; 10: 117-125.
- Seiler T, Dastjerdi MH. Customized corneal ablation. *Curr Opinion Ophthalmol* 2002; 13 (4): 256-60.
- Seiler T, Kaemmerer M, Mierdel P, Krinke H. Ocular optical aberrations after photorefractive keratectomy for myopia and myopic astigmatism. *Arch Ophthalmol* 2000; 118 (1): 17-21.
- Seiler T, Mrochen M, Kaemmerer M. Operative correction of ocular aberrations to improve visual acuity. *J Refract Surg* 2000; 16 (suppl.): S619-22.
- Seiler T, Wollensak J. In vivo experiments with excimer laser technical parameters and healing processes. *Ophthalmologica*. 1986; 1920: 65-70.
- Seiler T, Wollensak J. Myopic photorefractive keratectomy with the excimer laser; one year follow-up. *Ophthalmology* 1991; 98: 1156-63.
- Shack RV, Platt BC. Production and use of a lenticular Hartmann screen. Optical Sciences Center, University of Arizona, Tucson, Spring Meeting. Optical Society of America 1971: 656.
- Sher NA, Bowers RA, Zabel RW. Clinical use of the 193 nm excimer laser in the treatment of corneal scars. *Arch Ophthalmol* 1991; 109: 491-5.
- Sisquella M, Nolla A. Exploraciones especiales en la alta miopía: Agudeza visual. En: *Corrección quirúrgica de la alta miopía*. Menezo JL, Güell JL. Barcelona. Espaxs 2001.
- Skorpick CH, Scholz U, Weghaupt H, Zehetmayer M. Clinical results with a posterior chamber implantable foldable collagen collamer lens for correction of high myopia. Abstract ARVO, 1996.
- Sloan LL. Clinical measurement of visual acuity. Whitcomb MA, Benson W eds. 1968

- Smith KC. Ultraviolet radiation effects on molecules and cells. En: Smith KC. The Science of Photobiology. Plenum, New York: 1977.
- Soler Ferrández FL. De PRK a LASEK y de LASEK a PRK. Arch Soc Esp Oftalmol 2003; 78 (5): 239-240.
- Spalton DJ, Hitchings RA, Holder GE. Métodos de exploración ocular. En: "Atlas de Oftalmología clínica. 2^a edición. Mosby, Singapore 1995.
- Srinivasan R. Kinetics of the ablative photodecomposition of organic polymers in the far ultraviolet (193 nm). J Vas Sci Technol Bull 1983; 4: 923-926.
- Srinivasan R, Braren B. Excimer laser surgery of the cornea. Am J Ophthalmol 1983; 96: 710-715.
- Stein HA, Cheskes A, Stein RM. History of the excimer laser in ophthalmology. En: Stein HA, Cheskes A, Stein RM (eds). The excimer: Fundamentals and clinical use. De SLACK, Inc, Thorofare, NY. 1995.
- Steinert RF. Therapeutic keratectomy: corneal smoothing. En: Thompson FB, McDonnell PJ (eds): Color Atlas / Text of excimer laser surgery. Igaku-Shoin. New York. 1993.
- Stern D, Schoenlien RW, Puliafito CA. Corneal ablation by nanosecond, picosecond and femtosecond lasers at 532 and 625 nm. Arch Ophthalmol 1989; 107: 587-92.
- Stevens B, Hutton E. Radiative life time of the pyrene dimer and the possible role of excited dimers in energy transfer processes. Nature 1960; 186: 1045-9.
- Stiles WS, Crawford BH. The luminous efficiency of rays entering the eye pupil at different points. Proc R Soc Lond B Biol Sci 1933; 112: 428-50.
- Stone AS, Lin TP, Iuvone M, Laties AM. Postnatal control of ocular growth: dopaminergic mechanisms. En: Myopia and the control of eye growth. J Wiley & Sons, Chichester 1990; 45-62.
- Strampelli B. Soportabilitá di lenti acriliche in camera anteriore nella afachia e nei vizi di refrazione. Ann Ottalmol Clin Oculist 1954; 80: 75-82.
- Sugar A, Rapuano CJ, Culbertson WW, Huang D, Varley GA, et al. Laser in situ keratomileusis for myopia and astigmatism: safety and efficacy. Ophthalmology 2002; 109: 175-87.

- Swinger CA, Krumeich J, Cassiday D. Planar lamellar refractive keratoplasty. *J Refract Surg* 1986; 2: 17-24.
- Taboada J, Archibald CJ. An extreme sensitivity in the corneal epithelium to far UV ArF excimer laser pulses. *Pro Sci Progr Aero Med Assoc* 1981. San Antonio, Texas.
- Thibos LN. Principles os Hartmann-Shack Aberrometry. *J Refract Surg* 2000; 16 (suppl): S563-5.
- Thibos LN. The prospects for perfect vision. *J Refract Surg* 2000; 16 (suppl.): S540-6.
- Thibos LN, Applegate RA, Schwiegerling JT, Webb R. Report from the VSIA Taskforce on standards for reporting optical aberrations of the eye. *J Refract Surg* 2000; 16 (suppl.): S654-5.
- Thorn F, Corwin TR, Comerford JP. High myopia does not affect contrast sensitivity. *Curr Eye Res* 1986; 5: 635-9.
- Trevor-Roper T. The eye and its disorders. Blackwell, Oxford, 1974.
- Trokel SL, Munnerlyn CR. Excimer laser Ophthalmic delivery systems. *Lasers Ophthalmol* 1989; 2: 157-63.
- Trokel SL, Srinivasan R, Braran B. Excimer laser surgery of the cornea. *Am J Ophthalmol* 1983; 96(6): 710-715.
- Tscherning M. Die monochromatischen aberrationen des menschlichen auges. *Z Psycol Physol Sinne* 1884; 6: 456-71.
- Tumbocon JA, Suresh P, Slomovic A, Rootman DS. The effect of laser in situ keratomileusis on low contrast vision. *J Refract Surg*. 2004; 20 (5 Suppl): S689-92.
- Vázquez M, Güell JL. Exploraciones especiales en la alta miopía: Sensibilidad al contraste en cirugía refractiva. En: *Corrección quirúrgica de la alta miopía*. Menezo JL, Güell JL. Barcelona. Espaxs 2001.
- Velasco JE, Setser DW. Bound-free emission spectra of diatomic xenon halides. *J Chem Phys* 1975; 62: 1990-6.
- Verdon W, Bullimore M, Maloney RK. Visual performance after photorefractive keratectomy. *Am J Ophthalmol* 1996; 114: 1465-72.
- Vongthongsri A, Phusitphoykai N, Naripthapan P. Comparison of wavefront-guided ablation versus conventional ablation in laser in situ keratomileusis. *J Refract Surg* 2002; 18 (suppl.): S332-5..

- Wachler BS, Krueger RR. Normalized contrast sensitivity values. *J Refract Surg* 1998; 14(4): 463-9.
- Wall M. Contrast sensitivity testing in pseudotumor cerebri. *Ophthalmology* 1986; 93: 4-7.
- Walsh G, Charman WN, Howland HC. Objective technique for the determination of monochromatic aberrations of the human eye. *J Opt Soc Am A* 1984; 1: 987-92.
- Wang Z, Chen J, Yang B. Comparison of laser in situ keratomileusis and photorefractive keratectomy to correct myopia from -1.25 to -6.00 diopters. *J Refract Surg* 1997; 13: 528-34.
- Wang JY, Silva DE. Wave interpretation with Zernike polynomials. *Applied Optics* 1980; 19 (9): 1510-8.
- Welford W. Aberrations of optical systems. Adam Hilger. Bristol 1962
- Werblin TP. Epikeratophakia: the surgical correction of aphakia. Lathing of corneal tissue. *Curr Eye Res* 1981; 1: 123-9.
- Wiedermann E. "Zu Ibn al-Haithams Optik". *Archiv f Geschichte der Naturwissenschaft* III, 1960: 1-53.
- Williams DR. Aliasing in human foveal vision. *Vision Res* 1985; 25: 195-205.
- Williams D, Yoon GY, Porter J, Guirao A, Hofer H, Cox I. Visual benefit of correcting higher order aberrations of the eye. *J Refract Surg* 2000; 16 (suppl.): S554-9.
- Wilson M, Campbell M, Simonet P. Changes of pupil centration with change of illumination and pupil size. *Opt Vis Sci* 1992; 69: 129-36.
- Wise JB, Winter SL. Argon laser therapy for open-angle glaucoma: a pilot study. *Arch Ophthalmol* 1979; 97: 319-34.
- Whitaker D, Elliot DB, MacVeigh D. Spatiotemporal contrast sensitivity decline with age. *Invest Ophthalmol Vis Sci* 1989; 30 (suppl.): 406-10.
- Yates JT, Harrison JM, O'Connor PS, Ballantine C. Contrast sensitivity: characteristics of a large, young, adult population. *Am J Optom Physiol Opt.* 1987; 64(7): 519-27.
- Yoon GY, Williams DR. Visual performance after correcting the monochromatic and chromatic aberrations of the eye. *J Opt Soc Am A Opt Image Sci Vis* 2002; 19 (2): 266-75.

- Yudelis C, Hendrickson A. A qualitative and quantitative analysis of the human fovea during development. *Vision Res* 1986; 26: 847-855.
- Zavala EY, Krumeich J, Binder PS. Laboratory evaluation of freeze vs nonfreeze lamellar refractive keratoplasty. *Arch Ophthalmol* 1987; 105: 1125-8.
- Znotis TA, Poulin D, Reid J. Excimer lasers: an emerging technology in materials processing. *Laser Focus* 1987; 23: 54-7.
- Zweng HC. Experimental laser photocoagulation. *Am J Ophthalmol* 1964; 58: 353-60.